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Industrial Feasibility Studies

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FURNISHING FABRIC PRODUCTION IN INDIA

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Industrial Promotion Office - Milan

FEASIBILITY STUDY

OF AN INDUSTRIAL PROJECT FOR

FURNISHING FABRIC PRODUCTION

IN INDIA

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May 1997

UNIDO

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IN INDIA

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This Feasibility Study was carried out, on behalf of UNIDO,
by a Project Team whose components were:

- Mr G. Bosetti Carcano, project leader and market analyst
- Mr F. Anania, financial analyst
- Mr E. Gheza, legal expert

May 1997

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I Executive Summary

The Project Idea

The Italian company Molteni & Co - a textile manufacturer of upholstering Jaquard fabric - is aimed at increasing its production volume and turnover. To achieve the goal the company has to access larger markets (specially USA) with respect to the Italian and European presently addressed. The largest the market the most standard and cheapest are products. At the same time the competition is much stronger on products with less added value (low end of the market). Tapping wider markets is not a feasible operation on the present Italian industrial conditions, mainly because of the labour cost. According to the analysis of the company, such an activity could be carried out within the framework of a direct investment on new industrial facilities in an emerging country where low cost of labour and, possibly, of raw materials will allow acceptable production cost.

The structure of a Joint Venture with a local partner provides the highest probability of a permanent success. In this respect, the selection of an industrial well-known partner permits to the Italian company to focus on the strategic task of taking charge of the creative side, of product definition, market access and exploration while contributing to the joint venture its well established company name and technology.

The Indian Partner, The Modern Group, a very large integrated textile conglomerate. It is going through an impressive growth process that requires to consolidate its market access capabilities in order to take full profit from the strong, integrated, polyester granule and yarn production capacity. This will also be achieved by closing a final product range gap in its line while entering the market for quality furnishing fabric manufactured with Jaquard technology and with design of an international level. That quality and technology is just appearing in India at present and the fastest and most efficient way for Modern to keep its position is to secure the immediate and lasting support of an internationally reputed and technologically capable partner.

A new factory will be set up in India by the two Partners, under a joint Venture scheme to manufacture **Jaquard furnishing fabric** of different blends/mixes:

A) polyester / cotton
B) polyester / viscose
C) viscose/cotton.

The production of the JV will be exported from India by approximately 75% thus getting the benefit of the 100% Export Oriented Unit (EOU) registration. A 100% EOU is defined as an industrial unit offering its entire production for export, only excluding the permitted levels of domestic Tariff Area (DTA) sales and rejects.

Some of the general conditions, incentives and facilities applicable to those Units are hereinafter mentioned:

- the units undertake to export their entire production usuallly for a 10-year period. Production sales, in value terms, up to 25%, are permitted
- import of all industrial imput such as: capital goods, raw materials, office equipment, material handling equipment etc are exempt from custom duty. This includes domestic supply (from Domestic Tariff Area) exempt from excise duty. No import Licence is required
- for import of second hand capital goods, the importer must provide a certificate reporting about the equipment's residual life and age. The second hand capital goods must not be more then 7 years old and must have a residual life of 5 years
- of EOU are permitted to sell up to 5% of production rejects in the DTA, subject to applicable duties
- automatic approval of up to 100% foreign equity
- EOU are exempted from payment of corporate income tax for a a continous 5-year period, at their option, during the first 8 years of operations. Exemption from taxes on import earnings even after the period of tax holiday is possible.

The Joint Venture will target mainly two markets: the USA for a basic, mass segment and India, Europe and other East Asia for a superior, high quality segment. The USA will receive most of the exported production and namely the basic, low cost type of products.

The project is aimed at producing about **980,000 mtl of fabrics per year** (mtl = linear meters, width 140 cm)

The Market

Production Capacity and Markets

The analysis carried out shows that the potential market is already existing, has greater size than the JV present and future production capacity, shows a stable, constant growth, and can be accessed at the conditions proposed, in USA and India.

At a preliminary stage, the production activity of the new factory is scheduled as follows:

Fabric type	Market	Price USD/m	Pct. of tot. prod
Gobelins basic	Mass production USA	3.2	90% Gobelin Basic
Damasc basic	Mass production USA	2.9	60% Damasc Basic
Gobelins high	Average segment India - Eu. - Asia	8	10% Gobelin
Damasc high	Average segment India - Eu. - Asia	7	40% Damasc
Lampass	High segment India - Eu. - Asia	8.6	100%
Matelassé	High segment India - Eu. - Asia	8	100%

Market Strategy in the USA

The J/V will select a limited number of distribution channels and target a few large dealers.

Products will be mainly the relatively simple types of product, Orissa and Ballata type. For the others the focus will be on a reduced number of warp and weft.

Market Strategy in India

The JV will offer PCJ on a very wide high level and quality range of products. Using design and experience from the Italian partner it will enter the market with a most remarkable product, extremely appealing to the upmarket segment.

The price level on the contrary will be on line with that of the local manufactured fabric, making use of the same raw materials and labor and adding the use of modern quality machinery.

Raw materials and supplies

The production of the new Company will make use of the yarns of Polyester, Viscose and Cotton.

Packaging materials

A) Polyester continuous yarn

Polyester continuous yarn (PFY) is a rather commonly available type of commodity in India. It is produced in the Country in very large quantities and fully adequate quality. The polyester yarn will be mostly employed for the fabric warp.

Price of polyester yarn

There are two prices to be taken into consideration: one is for the production to be exported and the other for the production addressed to the domestic market: in this case excise tax and local tax have to be included.

Including transport to the factory, the expected price per kg is the following:

	Export USD/Kg	Domestic Rs.
Polyester yarn	3.75	177 (=USD 5.05)

the total quantity required by the factory during one year of operation will be approximately 202,000 kg. and the total cost to the company will be approximately (considering 75% of exports) 860,000 USD.

The price of polyester yarn fluctuates according to the fluctuations of the world commodities utilised in the manufacturing.

Several large Indian companies are in effect integrating backward setting up very large PET, PFY, PSF production plants to control this part of the production process. The Modern Group is at present producing very large quantities of polyester yarn and will be in an optimal position to supply its local new Joint Venture Company.

C) Viscose spun yarn

It is produced in the Country in large quantities and fully adequate quality. Again it is also produced by the Modern Group itself through its controlled company Modern Threads.

Price of viscose yarn

Also for this yarn there are two prices to take into consideration: one is for the production to be exported and the other for the production addressed to the domestic market: in this second case excise tax and local tax have to be included.

Including transport to the factory the expected price per kg is the following:

	Export USD/Kg	Domestic Rs.
Viscose yarn	3.65-3.90	160-173 (=4.7 USD)

The total quantity required by the factory during one year of operation will be approximately 42,000 Kg. and the total cost to the company will be approximately (considering 75% of exports) 172,000 USD.

Location

Two alternative locations are presently under consideration:

The first one is close to Alwar in Rajasthan, at approximately 150 Km from New Delhi, neighboring the factories of Modern Syntex and Modern Suitings the Yarn and fabric manufacturers of the Group.

The second is close to Navsari, Surat, in the Ahmedabad district of Gujarat, not far from the POY factory of Modern Petrofils and at about 250 Km from Bombay.

Logistics

In both the locations proposed by the Indian Partner - Rajasthan and Gujarat - several similar textile factories have been located; both the locations are reasonably served by communication means, and provide sites with good connection to power, telephone lines, water.

Human labour is available in both locations at equivalent conditions; furthermore, the closeness to other plants of the Indian partner makes it easier to train the staff and the management of the new plant.

Engineering and Technology

The Production Process

Starting from the Yarn Warehouse by Windering and Warping cones and warp beams are prepared. Positioning of warp beams at looms is followed by a Knotting phase and then by Weaving. After this, Quality control takes place before the Fabric Warehouse.

The Proposed Production Plant

A preliminary layout has been prepared and the following schedule indicates the allocated areas (including service, ancillary areas):

- Yarn Warehouse
- Warping/Windering
- Weaving
- Laboratory
- Workshop
- Fabric warehouse

The last area will accommodate up to one month stock.

This brings up to 3,000 sqm the surface strictly dedicated to production.

Air conditioning will be needed for Cotton and Viscose processing.

Technology and Know How involved in the project and its transfer

1 Textile elaboration, i.e. the technology to transform a fabric design and drawing into a textile production plan for the Jaquard looms. This operation will continue to be performed at the M&C technology center; the working instructions for the electronic Jaquard looms will be provided in the form of magnetic/electronic form (diskettes).

2 Looms set up and tuning, is done for each specific fabric design at the beginning of the weaving operation and this will be operated by technicians at the new factory, according to specific training.

3 Textile production for the drawings requested, over a selection of a limited number of warp beams/chains, possibly 4, especially for the product range to be covered. The same for the combination of Jaquard machines to be installed on each loom. These units can be in sets of two or four, allowing smaller or larger patterns to be waved.

4 Design and engineering of a textile factory

5 Style/market know how: different drawings are appropriate for different markets. For example classic design is for UK, USA prefer fantasy, Germany likes modern, etc.

Organizational Design

The Company will be organized according to a traditional pyramidal scheme - on two levels of top management and supervisors - which suits the management style of the two originating Companies and should allow the fast decision making and tight operating control needed during the start up phases.

The Board of Directors will express the President (the Indian Partner) and the Vice President (the Italian Partner).

1 - Relationship with the Foreign Partner

The Foreign Partner - represented by the Vice President - will have functions and powers allowing him the specific control of his direct contribution to the J/V: financial, technical and related to the export markets as well as to the trade mark issues. He will be together, with the Technical Manager, the main mean to transfer market and product know-how to the local operations. He will be full time assisted by an Indian expert, mainly dealing with all issues relating to the Indian market aspects.

The Technical and Production Manager, with responsibilities also for Procurement and Quality Management, will be appointed by the Foreign partner, with clearance of the Foreign partner.

Remoteness from design/marketing

The Joint Venture itself and the production facility - in North West India - will be located in a relatively remote area - several thousands miles, and with 8 hours time zone difference - from Europe, where the design development and main marketing effort will be made and still away from the USA, that will be the main target market. This implies a certain redundancy in the control positions and a sensible communication cost in the whole system of which the J/V is part.

The Production Manager, located physically at the main Factory, will have to control purchasing - raw materials, consumable etc.-, logistics and local warehouse/service and transports and shipping.

The Technical Manager located at the Factory site, will have to organize a fairly equipped and well trained, autonomous service and maintenance unit to reduce as much as possible the external interventions, especially from Europe.

The JV for the creative definition of products and for international marketing purpose, will make use of the facilities of the Italian Partner Molteni. Another very important industrial operation for the J/V - sample making (swatches) - will also take place in the Indian plant.

Human Resources

Entrepreneurial and Management requirements

The two Parties are one a very large industrial Group (the Indian Modern Group) with a fully developed management and corporate structure and one a medium size high technology/quality European Company - (the Italian Molteni &C.) with a small but

effective independent management structure that still reflects the owners family presence.

The intention and capability to enter into such an entrepreneurial undertaking conceived are easily evident into the two organizations.Cultural differences between the two organizations, and personal motivation of management, will anyway have to be accounted for.

In any case the two parties will be in the position to provide sufficient capable management resources for the project implementation and operation.

During the project setup and construction phase the operation will be managed by the Project Management Unit which will take care to provide the Human resources needed to:

- Manage the project
- Provide the temporary resources needed only in this first phase
- Gradually staff the Company

The personnel will be distributed in the different functions according to the following table:

	Initial Phase	Operating Regime
Management	3	3
Administration	2	7
Technical	3	2
Production	20	31
Clerical and Services	5	9
Factory Workshop	5	5
Total	33	57
Expatriate Tech. + Mgmt.	2+1	1

Implementation

The major concern from possible difficulties in project implementation is the impact delays can have on the market prospect.

The Indian market for Jaquard fabric is developing very fast and at least two other similar operations - with the same productive size- have been announced on the press. The market will accommodate four or five players but not many more.

The USA market is more controlled by the Italian partner but a delay of six or twelve months could mean the closing of an opportunity window that could be taken by other companies.

In the world many investments are being planned to modernize existing plants and to increase production capacity of Jaquard fabric: a delay of several months could sensibly damage the very good market opportunities presently open to the new Joint Venture.

There should be not any major cost increase effects due to a delay in implementation. The two Partners expect to implement the project in seven months from start.

BUDGET

Total plant design, engineering and construction plus equipment costs have been estimated at around 5,455,000 USD, of which the major portion is accounted by plant machinery & equipment estimated at 3,890,000 USD (part of which has to be imported) and 1,015,000 USD for land, civil works, structure & buildings. The balance of 550,000 USD is allocated as pre-production expenditure.

As verified with from similar Italian and Indian manufacturers, the technical/industrial life of this kind of fixed assets is around 10 years; thus a depreciation rate of 10%/yr. (straight-line method) has been selected.

INVESTMENTS COSTS	**Invest. outlay ('000USD)**		**Depr. rate (%)**
Land, civil works, buildings		1,015,000	5%
Plant machinery & equipment			
- Italian/European origin	2,860,000		
- Technology	400,000		
- Indian machinery	630,000		
Total Equipment		3,890,000	10%
Pre-production expenditure		550,000	10%
TOTAL		**5,455,000**	

The investment outlay will be financed by equity capital (870,000 USD, that is 40% contributed by the Italian investors and 1,306,000 USD, that is 60%, contributed by the Indian Investor) and through two long term loans: one in foreign currency and one in Rupees. Equity will be paid in cash.

SOURCES of FINANCE	**('000USD)**
Equity:	
Italian Partner	870,000
Indian Partner	1,306,000
TOTAL EQUITY CAPITAL	**2,176,000**
Loans:	
FX Loan	2,000,000
Rs Loan	1,279,000
TOTAL LOANS	**3,279,000**
TOTAL SOURCE OF FINANCE	**5,455,000**

Financial analysis and investment appraisal

The financial evaluation has been carried out assuming a basic reference configuration for the investment project, defined by the cost estimation summarised in the previous paragraphs. This basic version does not include any inflation rate. The related printout are enclosed in the Annex 1 to the Chapter X. The main consideration that can be pinpointed are the following:

i) Given the general assumptions of the project, the Net Present Value (NPV), calculated at 15% of discount rate over a 12 years planning horizon, is positive (636,413 USD), thus confirming to the investors that the industrial project can provide a remuneration higher than required. However, the turning point of the NPV cumulating occurs at the very last year of the project, being the discounted payback period evaluated as 11 years long.

ii) The internal rate of return IRR looks positive (17.48%), which represents a calculated 2.5% spread over the required discount rate.

iii) The Net Income Statement starts to show positive net profit from the second year, while the balance of the Cumulative Cash Flow requires the additional inflow of a certain level of overdraft in the first three years. The net profit results in acceptable level of ROE since the third year.

iv) The operational margin is positive from the first year, and reaches about 24.5% of sales at the full capacity reference year.

v) A break-even analysis was performed on this base case. First, costs were allocated according to their variable and direct cost contribution. The JV operation was determined to break-even when it reached 56.2% of its operating capacity.

vi) The sensitivity analysis shows that only very few permanent variations (less than 5%) of the main parameters (sales price, production costs, investment costs) can be suffered without affecting the positive results of the NPV - IRR criteria. However, it should be underlined that both the interest rate structure and the sale price projections have been selected with quite pessimistic assumptions, therefore granting additional margin of profitability to the project.

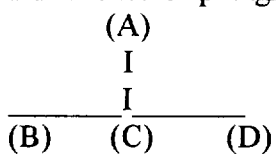
Legal Framework of the Project

The legal and corporate framework for the project was also explored, to a certain extent, to provide the Investor with an extended understanding that would further reduce the risk of failure in this international joint Venture.
These issues have been identified by the Italian partner and discussed with the Indian partner during several meetings. Clarification were provided by the Indian Partner and by its lawyers; several joint decision were taken and the resulting cooperation scheme was then drafted in the form of a group of agreements.

The Agreements
The master agreement is the **Joint Venture agreement** (A).

This is accompanied by a

- Technology transfer Agreement (B), a
- Licence and Trademark Agreement (C) and a
- Marketing and distributorship Agreement (D)



These agreements have been drafted by the Parties in turn (A and B by the Indian Party and C and D by the Italian Party), revised by the Parties Lawyers and agreed in principle by both Investors.

II PROJECT BACKGROUND AND BASIC IDEA

A) Description of the project idea

To increase its production volume and turnover, the Italian Partner Company Molteni&C. - a textile manufacturer of upholstering Jaquard fabric - must address larger markets (specially USA). There these products are more standardized, cheaper, but the competition is stronger. This operation will be possible through direct investments in industrial facilities in emerging countries where low cost of labor and, possibly, of raw materials will allow acceptable product cost.
This will be best done associating with local industrial partners so that the strategic task of Molteni &C. becomes that of taking charge of the creative side, of product definition, market access and exploration while contributing to the joint venture its well established company name and technology.

The Indian Partner, The Modern Group, a very large integrated textile conglomerate, is going through an impressive growth process that requires to consolidate its market access capabilities in order to take full profit from the strong, integrated, polyester granule and yarn production capacity. This will also be achieved by closing a final product range gap in its line while entering the market for quality furnishing fabric manufactured with Jaquard technology and with design of international level. This quality and technology is just appearing in India at present and the fastest and most efficient way for Modern to keep its position is to secure the immediate and lasting support of an internationally reputed and technologically capable partner.

A new factory will be set up in India by the two Partners, under a joint Venture scheme to manufacture **Jaquard furnishing fabric** of different blends/mixes:

A) polyester / cotton
B) polyester / viscose
C) viscose/cotton.

The fabric structure will be Gobelin and Damasc, mainly of two types:

high quality: 28/34 weft by 68 threads per cm. (av. 30 weft at 20.000 warps)
base quality: 18/20 weft by 68 threads per cm. (av. 20 weft at 20.000 warps).

Gobelin will have a composition of 58% cotton (weft) and 42 % polyester (warp).
Damasc will have a composition of 53% cotton (weft) and 47 % polyester (warp).

The production of the JV will be exported from India by approximately 75%.
The Joint Venture will target mainly two markets: the USA for a basic, mass segment and India, Europe and other East Asia for a superior, high quality segment.
The USA will receive most of the exported production and namely the basic, low cost type of products.

At the present stage, the manufacturing activity of the new factory will be as follows:

Expected production volumes, in linear meters (mtl), width 140 cm, per year will be

980,000 mtl

divided between 771,000 basic and 209.000 quality.

All this production is expected to be sold by the concerted efforts of the two partners.

Fabric	mtl/YEAR 1	mtl /YEAR 2	mtl /YEAR 3	mtl/YEAR 4 - 5
Gobelin basic	115000	369000	462000	462000
Gobelin high	12500	40000	50000	50000
Damasc basic	77250	247200	309000	309000
Damasc high	12500	40000	50000	50000
Lampass	14750	47200	59000	59000
Matelassé	12500	40000	50000	50000
Total	**244,500**	**783,400**	**980,000**	**980,000**

The expected product market destination is the following (thousand meters):

Fabric	USA	India	Europe	Totals
Gobelins basic	(90%) 416		(10%) 46	462
Gobelins high		(100%) 50		50
Damasc basic	(60%) 185		(40%) 124	309
Damasc high		(100%) 50		50
Lampass		(100%) 59		59
Matelassé		(100%) 50		50
Total	601	209	174	980

B) Project promoters

The Project promoters are Molteni & C. Italian Company and The Modern Group of India

Molteni & C. S.p.A., *the Italian Partner*

Molteni & C. Spa was established in the 20'S in the Brianza Region, in Northern Italy between Milan and the Alps, by its founder Francesco Molteni. The production centered from the beginning on fabrics for upholstery furniture using jacquard hand-looms. The furnishing market represented an original vocation which still persists.

Molteni & C. Spa is world wide famous for its large range of strictly jacquard complex fabrics.
To satisfy the different market opportunities that require tailored industrial answers the Company originated a number of fully controlled spin-off industries creating thus a large and articulated industrial group.

In order to provide an answer to the specific market demand, Molteni & C. entrusted its associate Company F.A.S.A. Srl with the task producing classical and stylish plain fabrics. In the 50's jacquard fabrics have been joined by plain furnishing fabrics.
In more recent years, the group successfully started the development of three other typical modern textile sectors, thanks to the furnishing fabrics:

- **The Clothing Sector** which, after some years of in-house studies with a line of web looms, led to the establishment of a new, fully controlled Company Nero su Nero Spa in 1988.

- **Car Fabrics,** channeled through the car manufacturing companies, and through the after market, with a line of seat covers now independently manufactured by M & T Spa (1994) and distributed both by that same company and by Molteni Denmark APS (1991) throughout Scandinavia.

- **Technical Fabrics** for the contract sector, operative within Molteni since 1984 with an independent division.

Production and sales diversification has been the leading strategy which has marked the development of M. & C. activities.

Using over 100 looms in a manufacturing area of 15.000 sqm, and with 250 employees, the company supplies the market with over 2 million meters of furnishing fabrics and velvets yearly.

M. & C. strategy is to respond to an ever more exacting demand, led by a growing request for exclusive customized fabrics. Lampass, liseré, Gobelin, Damasc, plain and jacquard velvet in 200 different qualities, with 2500 available designs and 15 variations per design witness to the diversity of a sample range to meet a whole variety of tastes and needs.

These developments have led Molteni & C. to focus on a medium/high market segment characterized by high quality and careful service.

Today such aims are achieved through integrated technical and stylistic design based on state of the art CAD-CAM systems, through a wide range of products and through the UNI-EN-ISO 9001 quality project launched in 1994.
For several years now, a fully equipped laboratory has been operating within the company to carry out tests on incoming materials and outgoing products.

Another mainstay of company strategy and constant development has been export of production.

Today Molteni & C. exports 70% of its production for the furnishing sector not only to Europe but also to Asian and American markets.

The Molteni & C. business figure, for the last few years, has been growing constantly as can be seen from the attached table.

	1993	1994	1995
Sales, Million Liras	39,272	40,133	43,700
Meters (Mtl)	2,048,000	2,440,000	2,619,900
Num. of Clients	668	752	727
Gross Profit, Mil. Liras	2,928	2,953	2,640
Personnel	211	219	221
Investments, Mil, Liras	360	2,639	2,409
Domestic Sales (%)	44,3	48,3	46,6
Foreign Sales (%)	55,7	51,7	53,4
USA sales Mil. Liras	851	2,122	2,393
USA sales as % of total	2,2	5,3	5,5

Internationalization Strategy

The general crisis of the demand in the sector - upholstery fabric - is partly due to the economic stagnation, but that can also be largely attributed to a structural market saturation; it leads to consider the production cost as the most critical factor for development.

Molteni & C. is a company with a very strong experience and capacity in marketing, proposing and developing new, up-to-date and fashionable product lines, including a full range of textile products for interior decoration and furnishing within a medium high market positioning.

The extension of product diversification while allowing favorable market approach (through a very large possibility of choice) reflects in a negative way in the production side. In turn, it causes fragmentation of the production process, reduced standardization of programs and an overall sub-optimal efficiency.

The integration of the company production cycle has made use of the most advanced systems to counter the mentioned difficulties. Product design and innovation through CAD CAM is a completely acquired capacity that allows the company to carry out with its own resources all the textile elaboration and to produce the electronic supports needed to drive the production equipment.

The key elements of the Molteni &C structure profile are the following:

- Wide range of products
- Customized proposal to client
- High/medium value of product (cost/price)
- Small average size of orders
- Frequent production program changes
- Low standardization
- Reduced efficiency for large orders.

The strategic choice of Molteni & C. is to keep and to improve, where possible, this profile inside the existing Italian structure. This is a niche profile with a specific stylistic and production know-how. But this profile will not allow the present structure to increase substantially production volumes and turnover.

To increase volume and turnover the company must penetrate larger markets where products are more standardized, cheaper but where the competition is stronger. To enter this market making use of the existing productive set up will require price levels that would be mostly non remunerative.

The way to grow with success will depend on the capacity to organize production, through direct investments, in emerging countries with low cost of labor and, possibly, of raw materials.

This will be best done associating with local partners so that the strategic task of Molteni &C. becomes that of taking charge of the creative side, product definition, market access and exploration while contributing to the joint venture its well established company name.

These are the main reasons for the internationalization process of the company in which the main targets will be:

- a high production capacity
- a fast market/production turnaround
- low cost/prices
- quality higher than the existing standard.

The Modern Group, *the Indian Partner*

Twenty years ago, in 1973, Mr. H.S. Ranka started a small textile enterprise in Bhilwara, Rajasthan that developed in today's MODERN Group, a rs. 4,000 million business conglomerate among the largest and most reputed in the country.

From small beginnings the Modern Group has grown now incorporating five companies, with eight manufacturing units, each one a profit center and a very successful story.

Modern Woollens, the flagship company of the Group started off in 1973 as a unit for spinning carpet yarn. Very soon, it became India's largest manufacturer of carpet yarn and achieved pioneering status as an exporter of woolen carpet yarn.

In 1987, Modern Woollens diversified into the manufacture of all wool and worsted blended yarn with technical assistance from Platt Saco Lowell Ltd., UK.

In 1989, the company further diversified into the manufacture of wool tops and also doubled the capacity of worsted blended yarn.

Modern Syntex, started in 1977, became the first Indian Company to export fiber dyed synthetic blended yarn to Europe.
With an installed capacity of 26,880 spindles it ranks amongst the largest producers of synthetic blended yarn in India.
To further boost the growth of the company and to enhance the international competitive edge, a modernization scheme of Rs. 90 millions in the yarn division is now nearing completion.

Modern Suitings, set up in 1979, produces a wide range of synthetic fabrics.
It is the high profile unit in the Group making its presence felt through the brand name "Amadeus" - quality terry wool suiting. They are distributed through the special Amadeus men's fashion centers, that have sprung up all over the country.

To meet the projected domestic and international demand a modernization scheme of Rs. 150 million is under way to enhance the production and further improve the quality.

Modern Threads commenced production in 1981 using Auto Coners and two for one Twisters.
Its spins dyed and fancy yarns have gained the local markets and also found acceptance in the sophisticated export markets.

Modern Threads has set up a 100% EOU plant with 5,760 spindles for spinning polyester viscose gray yarn of premium quality aimed at the high profile, exclusive customers.
Even better results are expected from the full working of the 100% EOU division which is India's only EOU for manufacturing synthetic yarn.

The Bureau of Indian Standards has awarded the 100% Unit of Modern Threads with the ISO 9002 certification.

Modern Insulators is the diversification of the Modern Group, from textiles to EHV Aluminia based insulators.
The project is set up jointly with Rajasthan State Industrial and Investment Corporation.
Technical collaboration is from Siemens AG of Germany.

These Aluminia base insulators are suited to 220 KV and 400 KV power transmission lines and the high voltage 500 KV and 760 KV lines.
Diversification into Polymer insulators and expansion in the installed capacity by 1000 tons per annum is considered to meet the nation's growing demand for these insulators.

Modern Denim started in 1990, uses the latest rope dyeing technology to produce indigo blue denim.
Technical collaboration with Ten Cate Group of Holland has equipped the product with international quality, with marketing support from Atlantic Mills, Ireland.
Modern Denim is a very advanced and efficient plant, equipped with combination of Reiters open end spinning machines and Sulzer heavy duty looms and sanforizing machines. Further, international tie-ups are being considered.

Modern Terry Towels is a 100% EOU, the largest in Asia, set up by Modern Woollens; it is a fully integrated unit incorporating all processes from cotton spinning to weaving and from dyeing to processing.

Technical and marketing collaboration with Ashtons, a division of Courtaulds Textile PLC of UK, the world leaders in Terry Towels, ensures state-of-the-art manufacturing facilities and world-wide acceptance of the branded products.

Future plans envisage the attainment of optimum capacity of 5000 tons and diversification into sports and casual wear, bathrobes, beach towels, bath sheets & linens etc.

Modern Petrofils launched by Modern Syntex (I) Ltd. will be another landmark of the Group - a fully integrated international size plant incorporating all facilities from polymerization to polyester chips and POY to PFY.
It involves a capital outlay of 5130 million and is scheduled to produce 52,500 TPA of POY/PFY specialty and microfilaments.

The technical link with Zimmer AG of Germany, part of the Lurgi Group and export tie-up with Novalfa SAS of the Sinterama Group of Italy ensure international acceptance, both on the quality and the marketing fronts.

MODERN GROUP BUSINESS FIGURES (Rs. in millions)

	ACTUAL		PROJECTIONS	
	1993-94	1994-95	1995-96	1996-97
Turnover	4120	5250	8050	11350
Net Worth	2790	4460	6420	7390
Gross Profit	540	760	1300	1880
Net Profit	420	580	970	1450
Exports	660	1400	1800	2050

C) Project History

In August 1995 the Indian Modern Group started an tentative contact with Molteni & C. to verify the possibility of a collaboration. The idea was to extend Modern's product range and diversify while securing a new technology through a technologically advanced and proven partner, well established in the international markets..
After some correspondence a meeting took place in Italy while the Indian Company managers visited the ITMA exhibition.
The original idea was considered worthwhile studying further and Mr. F. Molteni visited the Indian Company and its industrial facilities in March 1996.Market aspects were considered and the visit focused on technical aspects of the factories spinning polyester/viscose.
In fact the Modern Group could very well be a direct supplier of Molteni &C. in Italy for raw material, namely polyester yarn and some business developed on this line.

During the visit in India - March 1996 - a Letter of Intent was signed between the Parties setting out the main guidelines to study, to explore the feasibility and to prepare

an industrial collaboration to manufacture in India products of the Molteni C. production range. These products would be marketed in the USA, India and in other countries.

This original LOI was later complemented with a Non Disclosure Agreement to guarantee an improved protection of the proprietary technology and market know how of the two parties.
The agreements reached included a statement of objectives, a programme for the studies and for the preparation of the future J/V.

Feasibility study

In June 1996 Molteni & C. appointed UNIDO to carry out a feasibility Study for the project with the scope of:

- Verifying project assumptions
- Establishing the feasibility of the industrial collaboration
- Assisting the partners in formulating a viable business and industrial structure
- Producing a sound, bankable, investment Report to be submitted to Financial Institutions for project financing.

UNIDO appointed a Project Team to carry out the work with the assumption that the study had to be completed by December 1996.

The project was delayed a few weeks after its take off by a change in management of the Indian Partner. This didn't affect the overall intention of the Indian Party to proceed - fully confirmed at the highest level - but caused a real block of all the local interaction for more than two months.

D) INDIA, An Economic Profile of Five Years of Stabilization and Reform

Based on the Ministry of Finance 1995-96 Economic Survey, the new government's Common Minimum Program of June 1996 identifies the key challenges ahead: reducing the country's chronically high fiscal deficits, further liberalizing the economy, agriculture in particular, meeting the infrastructure challenge, and ensuring social justice.

India Has Fundamentally Altered Its Development Strategy

India's pre-1991 planned approach to development helped the country escape from the massive illiteracy, recurrent famines, fertility rates of about 7 children per woman, and secular stagnation prevailing before Independence. However, it also led to an over-extended public sector, responsible for half of the country's gross investment, and created severe financial imbalances which are yet to be corrected. It isolated the country from the rest of the world with the result that from 2 percent in the 1950s, India's share of world trade had declined to less than half of one percent in the late 1980s. It forced Indian consumers to pay higher prices for goods of lower quality and deprived the country of the benefits of foreign direct investment and modern

technology. It discouraged production for exports, created recurrent shortages of foreign exchange, and made the balance of payments extremely vulnerable to external circumstances. Most important of all. it held back the country's growth and thus the pace at which poverty could have been reduced.

In June 19991, in the midst of severe fiscal and external imbalances, which had generated double-digit inflation and put the country on the verge of defaulting on its external debt obligations, a new government undertook the major task of stabilizing and liberalizing the economy. Over the past five years, reform of the investment, exchange-rate and trade regimes, of the financial sector, and of the tax system have ended four decades of planning and have initiated a quiet economic revolution. With these reforms, India has joined the growing group of countries which, starting in the 1970s and 1980s, have gradually but persistently taken measures to deregulate their domestic markets, increase their integration with the global economy, and reduce the role of government.

Highlights of Five Years of Stabilization

Initially, growth declined sharply in response to the devaluation and shrinking fiscal and monetary policies. Then, helped by an unprecedented sequence of good monsoons, a relaxation in fiscal policies, and a strong supply-response to the reforms, growth accelerated to 5 percent in 1992-94, 6 percent in 1994-95 and 7 percent in 1995-96. With growth rates exceeding 10 percent in the last two years, the industrial recovery has been particularly strong. Because it is being driven by exports and private investment, and is being accompanied by an increase in domestic savings, the recovery has thus far not put pressure on inflation or the external accounts.
Inflation has declined from the high 14-15 percent levels prevailing in 1991-92 to below 5 percent in 1996.

The external accounts, both current and capital, have improved significantly. In response to a sharp depreciation of the real exchange rate and reduction of import tariffs, and therefore of the anti-export bias implicit in the previous trade regime, exports grew at rates in excess of 20 percent for the past three years, and prospects for 1996-97 are equally encouraging.

At USD 2 billion in 1995-96 foreign direct investment is 15 times higher than it was before the economy was liberalized.
However, fiscal adjustment has yet to take place.

Highlights of Five Years of Structural Reforms

The liberalization of the investment regime is nearly complete. Five years ago, investment in the most important areas of the economy was a public sector monopoly and foreign investment was discouraged.
Currently, there are few areas where private investors, domestic or foreign, cannot invest and India's foreign investment regime is as investor friendly as that of the East Asian countries.

This progress notwithstanding, the remaining licensing restrictions mainly to protect small scale industry, including ago-industry, have considerable negative repercussions.

In addition, in many instances, investing in India remains difficult because of mostly state-level regulations and administrative burdens that are far from transparent and differ from state to state--and affect domestic and foreign investors alike.

The trade and foreign exchange regimes have been substantially liberalized, but protection levels are still high.
Several rounds of trade reforms have lifted all licensing restrictions on imports of intermediate and capital goods, liberalized marginally imports of consumer goods, and reduced maximum tariffs to 50% and the average to 27%.
Tariffs for imports of capital goods have been reduced more rapidly than for other items. In parallel, the exchange-rate regime has been liberalized, and full convertibility has been established for current account transactions.

A significant liberalization of the financial sector-but the public sector remains dominant.
Until very recently, the financial sector had been dominated by public banks which had limited discretion in allocating their lending. Publicly-owned insurance companies still have to hold more than half of their portfolio in government-designated securities.

Interest rates are now market determined for most transactions. However, while progress has been achieved in relaxing controls, reducing government's pre-emption of financial savings, and reestablishing the soundness of the financial system, much remains to be done.
Public sector banks continue to hold around 90% of the sector's assets. As a result, financial intermediation costs remain excessive.

The tax regime has been simplified and strengthened.

Prior to 1991, India's tax base was very much dependent on custom revenues, and was characterized by taxes with a multiplicity of high rates falling on a narrow base. Several steps have been taken to address this problem. In the 1994-95 budget, taxes on corporate income were unified at 46% for widely held companies and 55% for branches of foreign banks.

A major reform of excises was implemented to make it more closely resemble a value-added tax and address its major problems.
Meanwhile, the Government extended the coverage of MODVAT (a modified value-added tax) to include manufacturing sectors thus far excluded, and, for the first time, some services.
These reforms considerably simplified and modernized India's tax system and made it possible for the Central Government to focus its efforts on improving tax administration.

The 1995-96 budget further reduced peak excises and continued the emphasis on simplification, strengthened compliance, lower rates, and greater buoyancy. Further and significant tax reforms were introduced in the 1996-97 budget including the full incorporation of the textile sector into the VAT.

Highlights of the 1996-97 Budget

On July 22, the Minister of Finance presented to Parliament the 1996-97 budget, the first of the 13 parties United Front (UF) government. The budget takes several steps to implement the Common Minimum Program (CMP) and makes it clear that this government intends to continue the reforms started in 1991.

Reform of the tax regime has continued.
Several tax measures have been taken to continue the broadening the tax base, reduce rates and improve tax administration. This has been particularly important in the case of excises and corporate taxation. Corporate taxation has been reduced from 46% to 43%, and a new Minimum Alternate Tax has been introduced to bring into the tax net corporations that avoid paying taxes on corporate income or benefit from excessive exemptions.
The long-term capital gains tax for domestic companies has been reduced to 20% in line with that for foreign companies.

The *foreign investment regime has been further liberalized* by allowing portfolio investors to invest in non-listed securities, and by raising the limit of the maximum of equity they can hold in any given company.
Regarding the *trade regime,* import tariffs have been reduced on a number of items with the result that the maximum tariff for non-consumer goods is now 40% but it will be important for India to continue to lower tariffs to be able to compete with the more open economies of East Asia, Latin America, and the emerging European former socialist economies.

At present, Indian producers continue to pay higher costs for capital goods and intermediate inputs than their competitors. In addition, important anomalies persist in the tariff structure that can only be corrected by a significant reduction of tariffs.

India is facing an imminent crisis in infrastructure. An unprecedented power supply deficit, and growing freight transport congestion problems (in road, ports, and railways), threaten to undermine the supply response to the country's stabilization and reform efforts. To address the major infrastructure needs, the 1991-96 reforms ended decades of public sector monopolies (with the exception of railways), and the government has invited the private sector to play a significant role in raising the level of infrastructure investment and the efficiency of infrastructure services

The response of the shipping industry and air transport has been strong and positive--with dramatic improvements in the quality and quantity of services.
In telecommunications, private operators have been inducted in cellular services and other private services are expected to be licensed shortly. However, in other critical areas such as power (except for captive capacity), roads, and ports, few private investments have been brought to closure under the new national policies. The Indian Partner for the proposed project, The Modern Group, is itself planning to invest and set up and operate a large power plant.

External Economic Environment and Implications for India

India faces a broadly favorable external environment over the coming decade, characterized by continued moderate world inflation, low real interest rates, stable economic growth and increasing trade openness and financial integration.

Among industrial countries, which take about 60% of India's exports, real annual growth is projected at 2.9% over the coming decade. Growth in the EU, India's largest industrial country market, is expected to rebound in 1996-97. Recovery is expected to strengthen in Japan where the scope for expansion is considerable: India sells only 8% of its exports to Japan.

Policies implemented under the Uruguay Round should improve India's access to industrial country markets, notably for textiles and garments and for agriculture. *The benefits from phase-out of the Multi Fibers Agreement in particular will be substantial.*

Commodities Prices. After a sharp fall in 1996-97, commodity prices are expected to remain relatively constant over 1998-2005. This may have a relatively minor effect on India's terms of trade since India's exports are dominated by manufacturers whose export prices are expected to increase in dollar terms at about the same rate as those of the industrial countries manufacturers' exports. (2.5% a year over the period).

More significant, however, is the oil price, a major important item whose price is not expected to fall as it did in the 1980s and early 1990s, contributing to the 1.5% a year terms of trade gains India experienced in 1985-90 and an estimated 5-6% a year gain over 1991-93.

In the absence of these windfall gains India's terms of trade are expected to be flat in the projection period. The external environment will therefore be both more supportive of continued reforms but more challenging in competitive terms.

Outlook for Export Earnings. On present trends, India's real average export growth is expected to stabilize around 10% over 1996-2005.

Many of the key weaknesses in integration, for example the remaining anti-export bias imparted by high trade protection or the loss of competitiveness due to poor infrastructure, are the main factors expected to slow export growth.

Prospects for Textile Export Sector

Garments, followed closely by textiles, are India's largest net foreign exchange earner. The competitiveness of the small and informal sector where the bulk of Indian garment exports are produced has attracted an influx of international clothing manufactures (including Levis, Benetton, Lacoste and Pierre Cardin).

This structure is well suited to the fashion garment sector where cheap, temporary labor provides flexibility to produce small batches of garments tailored to precise customer specifications.
The recent change in policy to allow large-scale units to enter the garment industry if they undertake an export obligation of 50% of their production will help the industry

diversify its product mix. But limiting investment in fixed assets to Rs 30 million will keep out the large foreign investments that could help upgrade quality and improve technology.

The extent to which India can benefit from textile and garment trade liberalization depends on its current cost competitiveness, and on its ability to increase productivity and move up the value-added chain in the medium to long term.

As indicated by World Bank Data, India's actual total labor cost in the clothing industry is substantially higher than in many competitor countries after taking into account factors such as productivity, absenteeism, management and transport costs. India's cost per standard minute is higher than in Indonesia, Thailand, China, and even Korea, based on this measure.

Another constraint to more rapid garment export growth is India's concentration in cotton garments. This leads to a high degree of seasonality in demand and also keeps the value-addition lower than could be attained using synthetic fibers.

Cotton garment exports amount to only about 15% of world clothing trade and demand growth is also slower than for man-made fiber blended garments.
The price and quality of domestic synthetic fiber yarns and fabrics in India has not been internationally competitive. While imports were allowed through the licensing system, procedures were cumbersome and costly and a constraint on Indian exports of synthetic fiber garments.

Improving the internal efficiency of synthetic fiber producers and fully liberalizing imports of man-made fiber fabrics could strengthen the growth potential of the industry.

E) India's Textile Industry

The textile industry is the largest industrial subsector in India, accounting for 20% of industrial production and over a quarter of total export earnings.

Textiles account for about 10% of the value added in manufacturing and about 19% of employment in the organized sector. If employment in the unorganized sector is taken into account, its share in total industrial employment is much larger.

The weaving sector of the industry spans the entire range of technology and corporate organization from organized sector mills at one end to a decentralized traditional handloom sector at the other, with a very substantial decentralized powerloom sector in the middle, where individual units are small but use modern technology in the form of powerlooms.

Resource base
The textile industry in India continues to be predominantly cotton-based although the share of cotton in the total raw material requirements declined from 93% in 1970/71 to 83% in 1993/94. The share of polyester fiber in the total fiber consumption of the

textile industry increased from less than 1% in 1970/71 to 2% in 1980/81 and further 8% in 1993/94.

India produces a very wide range of cotton varieties and generally has a surplus of long and extra long-staple cotton which is in high demand for exports.
India's cotton yields are much lower than those prevailing in other major cotton growing countries because of the inefficient use of land for growing cotton in India.
Cotton prices in India are generally lower than world prices.

Production, consumption and export of cotton, 1980/81-1993/94, selected years. (Million tons).

Cotton Year	Production	Consumption	Exports
1980/81	1.33	1.30	0.12
1990/91	1.99	1.96	0.20
1991/92	2.02	1.75	0.01
1992/93	2.30	2.11	0.23
1993/94	2.30	1.98	0.05

(Source: Ministry of Textiles)

The man-made fiber industry grew substantially after the establishment of large petrochemical plants in the late 1970s. The production of man-made fibers and yarns (excluding tyre yarns) increased more than four times, at the rate of 11.7 % per annum, from 187,900 tons in 1980/81 to 787,600 tons in 1993/94.

This group includes both cellulose and synthetic fibers and yarns. The production of cellulose fiber and yarn increased relatively slowly, at the rate of 4.7% per annum, from 124,000 tons to 225,000 tons.

However, the production of synthetic fibers and yarns increased much faster, at the rate of 18.2% per year, from 63,900 tons to 562,500 tons (see Table MM1).

In the 1980s India developed a significant domestic capacity for production of synthetic fibers and yarns, but much of the capacity was of a high-cost nature with suboptimal-scale plants supported by high protective walls. India has no particular resource advantage in producing synthetic fibers and yarns, being a net importer of petroleum products, but over time a synthetic fibers or yarn industry has developed and improved its competitiveness as part of a growing petrochemical industry.

Production and imports of man-made fibers and yarn, 1980/81-1993/94, selected years. (Thousand tons).

Years	80/81	85/86	90/91	91/92	92/93	93/94
Production	187.9	304.6	616.9	639.4	716.5	787.6
Cellulose fiber/yarn	124.0	132.0	211.1	210.8	210.4	225.1
Viscose staple fiber	82.7	90.0	160.1	158.1	162.5	175.1
Viscose filament yarn	41.4	42.0	50.9	52.7	48.5	50.0
Synthetic fiber/yarn	63.9	172.6	405.7	428.6	506.1	562.5
Nylon filament yarn	20.7	39.4	39.8	30.9	32.5	34.7
Polyester staple fiber	22.4	42.8	134.2	135.9	161.8	188.5
Polyester filament yarn	10.7	67.4	185.3	207.6	246.5	277.1
Acrylic staple fiber	10.1	21.8	42.5	47.0	55.0	62.3
Imports						
Polyester staple fiber	4.3	16.1	10.5	8.4	8.7	--
Polyester filament yarn	1.5	2.1	1.1	0.4	0.3	--
Acrylic staple fiber	11.1	7.8	26.8	3.9	3.3	--

(Source: Ministry of Textiles)

Recent trends.

Trends in production in the textile industry have been powerfully affected by the policy regime.

The policy of protecting cotton as a raw material by high taxation of synthetics, combined with high-cost production behind protective walls, has meant that the Indian textile industry is much more cotton-based than it would otherwise have been.

Nevertheless the production of synthetic fabrics and blended fabrics has increased rapidly. The production of cotton yarn increased by only 3.3% per annum between 1980/81 and 1993/94 whereas blended yarns increased at 5.9% and filament yarns at 13.1%.

This trend is repeated in the statistics on fabric production. The production of cotton fabrics between 1980/81 and 1993/94 increased at an annual rate of 4.5%, whereas the production of blended fabrics increased at the rate of 6.2% and non-cotton fabrics at a very much faster rate of 11.2%.

Recent trends in textile production, 1980/81-1993/94 (source UNIDO)

Years	80/81	82/83	90/91	91/92	92/93	93/94
Yarn (thousand tons)	1,371	1,263	2,100	2,097	2,222	2,428
Spun yarn	1,298	1,179	1,824	1,806	1,895	2,066
Cotton	1,067	966	1,510	1,450	1,523	1,624
Blends	144	129	207	234	247	304
Non-cotton	87	84	107	122	125	138
Filament yarn	73	82	276	291	372	362
Polyester	11	24	185	207	247	277
Viscose	41	33	51	53	48	50
Nylon	21	25	40	31	32	35
Fabrics ('000 sq.mt)	12,444	11,635	22,928	22,588	25,045	25,942
By sector						
Mills	4,533	3,006	2,589	2,376	2,000	1,990
Power looms	4,802	5,445	16,044	16,089	17,828	18,482
Hand looms	3,109	3,234	4,295	4,123	5,219	5,470
By material						
Cotton	9,488	8,764	15,431	14,674	16,343	16,716
Blends	1,391	1,334	2,371	2,712	2,683	3,030
Non-cotton	1,565	1,587	5,126	5,229	6,019	6,196

Compound growth rates (% per annum); Source: Ministry of Textiles

Years	81/82-90/91	90/91-93/94	81/82-93/94
Yarn	4.4	5.0	4.5
Spun yarn	3.5	4.2	3.6
Cotton	3.5	2.5	3.3
Blends	3.7	13.7	5.9
Non-cotton	2.1	8.8	3.6
Filament yarn	14.2	9.5	13.1
Polyester	32.7	14.4	28.2
Viscose	2.2	-0.6	1.5
Nylon	6.6	-4.3	4.0
Fabrics (By sector)	6.3	4.2	5.8
Mill	-5.3	-8.4	-6.0
Power looms	12.8	5.0	10.9
Hand looms	3.3	8.5	4.5
By material			
Cotton	4.9	2.7	4.5
Blends	5.5	7.7	6.2
Non-cotton	12.3	6.7	11.2

The structure of the textile industry has also been affected by the deliberate government policy of discriminating against mills over many years. The weaving capacity of mills was tightly controlled, ostensibly to help handloom production. Handlooms were seen as a key labor-intensive sector which required protection against the onslaught of the more capital-intensive mill sector.

In the event, the beneficiary of this policy was the powerloom sector. This sector, by virtue of being decentralized, did not suffer from licensing and capacity restrictions placed on the organized sector mills. The technology in powerlooms was comparable to that of the mill sector, except perhaps at the most advanced end of the technology, and it did not suffer from restrictive labor regulations which handicapped the mill sector.

As a result, the mill sector has increasingly consisted of spinning mills. Weaving survives only in the composite spinning and weaving mills, and these have declined over time.
In 1960, about 11% of the world's installed spindleage was located in India. This increased to 15% in 1987 with virtually all the expansion in the specialized spinning mill sector. India has the largest number of spindles (26.41 million in 1989) in the world.

Production in the mill sector actually declined from 4.5 million square metres in 1980/81 to just below 2.0 million square metres in 1993/94. Production in the handloom sector increased from 3.1 million square metres to 5.5 million square metres, but the share of handlooms in total production of fabrics declined from around 25% in 1980/81 to about 20% in 1993/94. The powerloom sector in this period grew at an annual rate of 10.9% and actually increased its share in fabric production from 38.6% to 71.2%.

The export performance of textiles improved in the 1980s, with exports growing at the rate of 15.8% per annum between 1983/84 and 1993/94.
In the fourfold increase in earnings from textile exports in the decade ending 1993/94, the dominant contribution was made by cotton textiles. However, exports of textiles from man-made fibers also increased in importance so as to increase their share from less than 7% in 1983/84 to almost 20% in 1993/94.

Modern Group, an export-oriented unit for denim fabrics with a capacity of 10.5 million metres per annum, started production in 1991 with the technical collaboration of Atlantic Mills of the United States.

While the high energy costs at present are a constraining factor, the potential for exports is substantial. A major boost to the denim industry has been provided by the setting up of production centers in India by top brand names.

Exports of textiles, 1981/82-1993/94 (USD million)

Year	Cotton textiles (man-made/ power loom) incl.yarn	Cotton textiles (handloom)	Man-made fiber textiles	Woolen textiles	Silk textiles	Total
1981/82	316.8	137.4	41.7	168.9	77.7	742.5
1982/83	325.2	133.8	57.1	178.5	85.7	780.3
1983/84	308.9	121.8	49.7	119.2	91.4	691.0
1984/85	396.6	141.6	45.4	128.3	103.4	815.3
1985/86	384.0	131.9	40.8	124.7	127.7	809.1
1986/87	438.6	129.7	53.4	135.5	152.4	909.6
1987/88	796.6	184.1	122.3	125.3	153.8	1,382.1
1988/89	730.2	196.2	185.8	187.8	189.2	1,489.2
1989/90	890.8	205.3	353.9	261.0	189.1	1,900.1
1990/91	1,143.3	227.0	354.2	51.4	243.0	2,013.0
1991/92	1,284.3	281.6	445.1	68.1	274.2	2,353.3
1992/93	1.256.0	339.1	338.0	102.5	236.2	2,355.5
1993/94	1,594.5	413.7	585.8	142.9	252.5	2,989.4

Compound growth rates (Percentage per annum)

	1981/82 1990/91	1990/91 1993/94	1983/84 1993/94
Cotton textiles (man-made/power loom) including yarn	15.3	11.7	17.8
Cotton textiles (handloom)	5.7	22.1	13.0
Man-made fiber textiles	26.8	18.3	28.0
Woolen textiles	-12.4	40.6	1.8
Silk textiles	13.5	12.9	10.7
Total	11.7	14.1	15.8

(Source: Ministry of Textiles)

The competitiveness of the textile industry can be gauged by the rush of foreign investments in this sector in the post-reform period. Between August 1991 and June 1994, foreign investment proposals worth Rs 3.9 billion were approved for this sector. The approvals for textile production (including garments) numbered 148, of which 50 were technical and 98 were financial collaborations.

Major highlights of textile policy.

India's textile policy has traditionally favored cotton over man-made fibers. The highly projectionistic policy towards the production of synthetic fibers and yarns, combined with a domestic industrial policy which encouraged fragmentation of capacity, ensured that domestic production of synthetic fibers and yarns was much more costly than in the rest of the world. This was compounded by a tax policy which treated synthetic fibers and yarns as luxury goods and subjected them to much higher rates of taxation.

Restraints were placed on the expansion of mills to help the handloom sector which was viewed as an employment-intensive sector. In fact the principal beneficiary of this policy has been the powerloom sector which has expanded rapidly at the expense of both the mills and the handloom sector.

Government policy in the 1960s and 1970s favored production for the domestic market rather than exports. This was because the policies brought about higher relative profitability in the protected domestic market for a number of reasons, including an overvalued currency. Exports were primarily viewed as a means to acquire licenses/permission to import equipment and consumable for the profitable up-market segment of the domestic economy.

The following are some of the significant policy changes since July 1991:

(i) The textile industry was delicensed in August 1991 under the New Industrial Policy. The Textile Control Order, 1986, was repealed in December 1992 and was finally replaced by the Textiles (Development and Regulation) Order 1993. Under the new policy, no prior approval of the Government is required to set up textile mills, including powerlooms. Restrictions on wool and silk powerlooms have also been removed.

(ii) Machinery for textiles can be imported at a concessional customs duty rate of 15% by exporters subject to an export obligation of four times the value of the machinery. The access to modern textile machinery at reasonable prices through imports is significant because of one of the problems faced by textile mills in the earlier protective regime has been the lack of availability of modern textile machinery within reasonable delivery schedules.

(iii) Customs duty rates on imports of raw materials and intermediates have been reduced substantially. (See the following box)

Custom duties: textiles (Percentage)

	Pre-1991	Present
Polyester filament yarn	180	65
Nylon filament yarn	100	65
Polyester fibers	180 (plus Rs 7/kg)	65
Viscose fiber	40	25
Viscose filament yarn	45	40
Acrylic fiber	150	65
Blended yarns	150	65
Woollen yarn	110	65
Cotton yarn	105	25

Constraints and prospects.

The introduction of Modified Value Added Tax (MODVAT) to textiles, as recommended by the Tax Reform Committee, should help reduce the working capital requirement and hence the interest cost of the organized textile mills.

In meeting the challenges of globalization more emphasis has to be placed on quality production for exports. The decentralized system of production prevalent in India has an advantage of lower labor costs and of freedom from excessively rigid labor laws that deny manufacturers, in the organized sector, the flexibility they need to retrench labor in times of difficulty.
But this system of manufacture is not suitable for high quality standardized products.
High value products which are marketed under leading brands names demand the highest standards in fabrics and freedom from defects, which cannot be achieved in the decentralized sector.
A successful export drive will therefore have to be based to a much greater extent on production from modern mills, while the bulk of the domestic demand for fabrics could be met by the powerloom sector. The handloom sector will have to concentrate more on high value products for domestic as well as export markets.

Increased competition in the international arena is leading to product specialization in textiles. Countries are trying for niche markets to boost their textile exports.

The Uruguay Round Agreement to phase out the Multi Fiber Arrangement (MFA) over ten years holds out the prospect of a liberalized world trade regime in textiles. Countries which have a competitive edge should be able to do well. The textile industry in India must modernize rapidly if it is to meet this challenge.

Investments in the modernization of textile and garment factories are needed to improve quality and diversify exports, particularly of cotton-based products, where India enjoys competitive strength. Even though redeployment of textiles and garments production from high-wage economies (Taiwan and Hong Kong) to low-wage countries is already taking place within the Asian region, Indian textile and clothing

industries will face fierce competition from other developing countries, especially Bangladesh, China, Indonesia, Pakistan, Sri Lanka and Viet Nam, in a quota-free world. This will once again provide Indian textiles with an opportunity to regain their position in world trade.

F) Globalization tendencies in the World Textile Industry

Introduction

This chapter examines not only the technological changes in plant and equipment that affected scale and costs of production, but also marketing and other software developments that increasingly influence the responsiveness of producers and exporters to market developments.

Textile and Apparel Industries: An Overview

Textile manufacturing has typically been one of the first operations in a country's process of industrialization. Compared to the developed economies, where the textile industry has diminished in importance, textile manufacturing is significant in the industrial sector in developing countries and contributes as much as one-half of some countries' manufacturing output.
Over time, the development of the textile industry has been in phases, with each country progressing as follows: (a) the first or the preliminary phase, which is characterized by cottage and/or very traditional production of simple goods for domestic use; (b) the second or the basic phase, which is marked by production of standard gray yarn and cloth for domestic consumption using early technology; (c) the third or the developing phase, which is characterized by a larger production size, use of intermediate level technology, and a more diversified product profile for the domestic market and the lower-end export market; (d) the fourth or the developed phase, which is characterized by the use of advanced technology, high capital intensity, export competitiveness, and so on; and (e) the final or declining phase, which is characterized by substantial downsizing of firms, production capacity and employment.

Box 2.2: A Generalized Categorization of Countries in Different Phases of Development

Phase

(a)*Preliminary:*	Burma, Lao People's Democratic Republic, and many countries of Africa
(b)*Basic:*	Malaysia, Philippines, Tanzania, Kenya, Nigeria, Egypt, and many countries of Latin America and Asia
(c)*Developing:*	**India**, Pakistan, China, Indonesia, Brazil and Turkey
(d)*Developed:*	**Italy**, Korea, Taiwan (China)
(e)*Declining:*	Many Western European countries (United Kingdom, France, Sweden and so on) and Japan.

As a basic industry in both industrial and developing countries, the textile industry has attracted significant attention from governments, and its global operation is today

heavily affected by government policies in trade and investment and by public involvement in textile production itself. In industrial countries, government involvement in the industry has generally been restricted to establishing trade policies, both on a unilateral basis and within the context of the Multi-Fibre Arrangement (MFA), and with the exception of the United States, to supporting the restructuring of the domestic industry through protection and investment incentives. Particularly in socialist countries government has been involved directly in textile production through public enterprises. There has been a greater tendency for governments to establish public enterprises in textiles rather than in apparel production, generally for import substitution and employment reasons. In many developing countries, this involvement has produced textile industries that have not kept pace with global developments in technology, production, marketing and trade.

Trends in Global Production and Consumption of Textiles and Apparel

Overall global growth in textiles and apparel has been accompanied by very significant shifts in capacity and production among individual countries. This reflects the growing importance of developing countries in the production process and the fact that there is an increasingly specialized global market, with a number of important producers gearing their investment and production explicitly to exporting and to particular market niches.

The bulk of the global market for textiles and garments continues to remain concentrated in industrial countries, while the production base has shifted significantly from industrial countries, while the production base has shifted significantly from industrial countries to developing countries. Since 1960 the European Economic Community has closed more than half of its textile and apparel industry, and substantial capacity has also disappeared in the United States and Japan. Capacity in Asia has more than doubled over the same period, with a small number of countries (India, China, Taiwan, Indonesia, Hong Kong and Korea) growing the most rapidly:

It is important to note that the shifts in location of production represent two separate developments: first, the elimination of particular companies in industrial countries, and second, survival of companies through relocating production capacity in countries with lower wages.

These shifts of productive capacity toward developing countries have led to greater international specialization. Industrial economies that retain a textile and garment industry increasingly concentrate on capital and technology intensive primary textiles and fashion textile products. This is because marketing and design sophistication, along with geographic proximity to major markets, gives advantages even to high-wage producers. The developing countries have taken over much of the global market for apparel: in some cases they have emerged as subcontractors of firms from industrial economies looking for low-cost production capacity.

Technological Developments in the Textile Industry

As with other well-established industries, the rising costs of labor and inputs in industrial economies provided an opportunity for the developing economies.

It was in the 1960s that the globalization of the textile and apparel industry and the relocation of production facilities began. At the same time, this increased pressure on producers in industrial countries stimulated them to make technical innovations, which resulted in a trend toward the use of more sophisticated and faster automated equipment.

Important developments have occurred at all stages of yarn formation, mainly for saving labor.
The main focus of technological progress has been the final spinning process by the introduction of "open-end" spinning.
The main thrust of technological progress in weaving has been to increase weaving machine productivity and to reduce labor cost. The bulky and friction-producing shuttle has been replaced by shuttleless weaving machines, operating on various non-shuttle principles, such as projectile, rapier (rigid or flexible), air jet, and water jet.
The major emphasis in finishing process technology has been on automation, energy conservation, recycling of chemicals and waste water, and reduction in the length of the production cycle.
The intricacies of modern finishing processes are such that relatively few developing countries are capable of exporting finished fabrics to industrial country markets.

Process of Adjustment in the Industrial Countries

The textile and clothing sectors industry in Western Europe and Japan underwent more dramatic adjustments through downsizing than did these sectors in the United States. Since 1971, total employment in the two sectors has declined by 50% to 60% in the Federal Republic of Germany, France, the United Kingdom and the Netherlands, and by about one-third in Japan. In contrast, the United States is in a relatively more favorable tier with Italy, with employment cutbacks limited to the range of 15 to 20 percent.
The chief lessons of the adjustment experience in industrial countries can be summarized as follows:

. Trade protection has not prevented the industry from shedding labor and from relocating away from the regions that were supposed to be the beneficiaries of the protectionist measures.
. Precisely those segments of the industry have prospered where protection was least needed or where a genuine comparative advantage existed.
In Italy design and quality-oriented segments have prospered.
. The high volume, standard product, mass market strategy has been a failure despite heavy automation.
. Small-scale units, which have emphasized process flexibility, product diversity, and product quality, have been very successful.

Recent Trends in Textile and Apparel Trade

Today, total trade in textiles and apparel amounts to approximately USD128 billion, and it is growing rapidly. With the exception of Italy and the Federal Republic of Germany, all industrial economies have become larger net importers of textiles over the period, with the United States taking the lead, while a small group of developing countries (Korea, Taiwan, China, Hong Kong and Turkey) have increased their standing as major net exporters.
The Federal Republic of Germany has eliminated most manufacturing at the lower end of the market in favor of outward processing and now depends largely on imports from developing countries to meet its demands for low value added products. Its production is concentrated at the high value added and high quality end of the market. A similar pattern of restructuring and specialization is observed for Italy and Japan.

Among the developing economies, the NIEs, particularly Korea, Taiwan, and China have emerged as major exporters of low-to-medium value added textiles. Hong Kong is a large net importer of textiles from the developing countries, for re-export after finishing or for garment manufacturing.
World trade in textiles (and clothing) is heavily influenced by trade barriers in many industrial and developing countries. Many developing countries have high tariff barriers and import bans to protect domestic textile and apparel manufacturers; these enterprises frequently provide a significant share of industrial employment. In recent years several developing countries that have attempted to liberalize imports and to expose their industries to greater international competition have excluded the textile (and more so the apparel) industry from such reforms. They claim that such trade barriers can only be reduced as reciprocity for renegotiation or abolition of the most significant of the non-tariff barriers erected by industrial countries against textile and apparel imports, the Multi-Fibre Agreement (MFA). The MFA was signed in 1973 and renewed in 1977, 1982 and 1986 and is a legal framework within which countries agree to bilateral restraints on trade, and is now going on a complex process that will lead to its abolition.

Cross-Country Production Participation

One significant development in the global textile industry has been that production previously carried on in one country or even within one factory is increasingly being distributed to several production sites in different countries. This practice (off-shore production), which involves increased transshipment of intermediate products, is the outcome of a variety of factors: (a) the development of production capacity in many developing countries; (b) country of origin regulations; (c) rapid shifts in comparative advantage; (d) increased scope for rapid and inexpensive international movement of goods; and (e) the existence of particular cost advantages in different locations:
The increased interest of industrial country firms in this type of production-sharing offers opportunities for companies in developing countries to enter the world market and to become acquainted with modern technology and production processes.

Companies that engage in offshore production have adopted several devices to promote it: (a) foreign direct investment; (b) licensing; and (c) sub-contracting. Many transnational corporations are involved in more than one form of production participation.
Foreign Direct Investment (FDI) has been prominent in the man-made fiber sector.

Licensing has been more prominent in the man-made fiber sector and in luxury clothing, although there is some activity in branded textile products. In the MMF industry, licensing represents a complement to foreign direct investment. It has proved to be important for transnational corporations trying to maximize their returns from technology creation in the face of entry barriers in developing country markets.
Subcontracting involves a business relationship between two firms - a principal and a subcontractor - that are based in different countries. International subcontracting is more significant in the clothing industry than in any other sector except, perhaps, electronics. Typically, there are two types of subcontracting: (a) of the whole process; and (b) of a discrete process. Subcontracting of a whole process means that fabric or clothing is totally made abroad and brought in. Subcontracting of a single process takes the form of outward processing with, for example, yarn sent abroad for weaving and the finished fabric returned to the supplier. More common, however, is to send cut

or uncut fabric to the supplier for garment making, and afterward the final product goes back to the supplier.

The following box provides a general picture of some of the important cross-country production links for the fibers, textiles, and clothing sectors between companies in the principal countries and companies in the host countries.

Forms of Cross-Country Production Participation

Sector	*Form of Activity*	*Major principal countries*	*Major host countries*	*Influencing factor*
Man-made fiber	FDI	US, Japan	Mexico, Canada Belgium	Expanding demand in host countries
	Licensing	UK,FRG, France, Netherlands	India,Pakistan Thailand,Korea	Market access in face of tariff barriers
Textile	FDI	Japan	Malaysia,Thailand Indonesia	Host countries incentives and assured market
		Korea	Sri Lanka	
Clothing	Sub-contracting	US, Japan	S. Americas South East Asia	Low labor costs
		FRG	East Europe Mediterranean countries	Proximity, low labor cost
	Licensing	US, UK	S. Americas Southeast Asia	As above

Marketing and Distribution

This section deals briefly with the value added in the chain of processes for the conversion of textiles fibers through yarn, textiles production, garmenting, and markup associated with textile marketing and distribution channels.

A. Value Added

The selling prices of standardized basic textile materials (cotton yarn, gray cloth, and bleached fabric, which form the bulk of textile exports from developing countries) have not changed much over the last decade. The following box presents estimates of value added at each stage of production from raw materials to garmenting. In view of the intensified competition and low margins in the global textile industry, all the pressure in the basic textile manufacturing industry has shifted toward cost control and management.

Value Added in the Sequence of Textile Processes in the Developing Countries

From	*To*	*Process*	*Value added (%)*	*Influencing factors*
Raw material	Yarn	Spinning	15-25	Yarn type and count
Yarn	Gray cloth	Weaving	20-30	Type,width,and cloth construction
Gray cloth	Finished cloth	Finishing	25-35	Type of finishing
Cloth	Garment	Clothing	35-60	Type,design, etc.

Source: Boston Consulting Group, Polish Textile Industry Restructuring, 1991 and discussions with various experts.

B. Marketing and Distribution Margins

In contrast, it is in the marketing and distribution of textiles and garments where value added can be increased. Textile marketing involves several layers of middlemen before the goods reach the consumer: wholesaler; semiwholesaler; retailer; and so on. Typically, in domestic marketing and distribution (from the mill gate to the retailer), the markup could be in the region of 80 to 100 percent over the mill gate price, whereas in the international distribution the markup is typically 200 to 300 percent. The following box provides a general indication of the margins at each major link of the distribution chain.

Margin Analysis at Different Stages of Distribution (Mill Gate Price = 100)

Product	*Market*	*Wholesale*	*Semi-wholesale*	*Retail*
Yarn	Domestic	110	120	140
	International	115	135	160
Gray cloth	Domestic	115	135	170
	International	120	145	180
Finished cloth	Domestic	120	145	180
	International	150	200	280
Clothing	Domestic	125	150	200
	International	150	220	350-400

(Source: International Business Consultant, Ireland, and personal discussion with several textile consultants).

As evident from above, with the markup in clothing distribution being the highest, the main technological innovations recently in the clothing industry have been related less

to production and more to marketing and distribution and have been driven primarily by the changing characteristics of markets in the major consuming countries.

Italian Textile Industry de-localization process

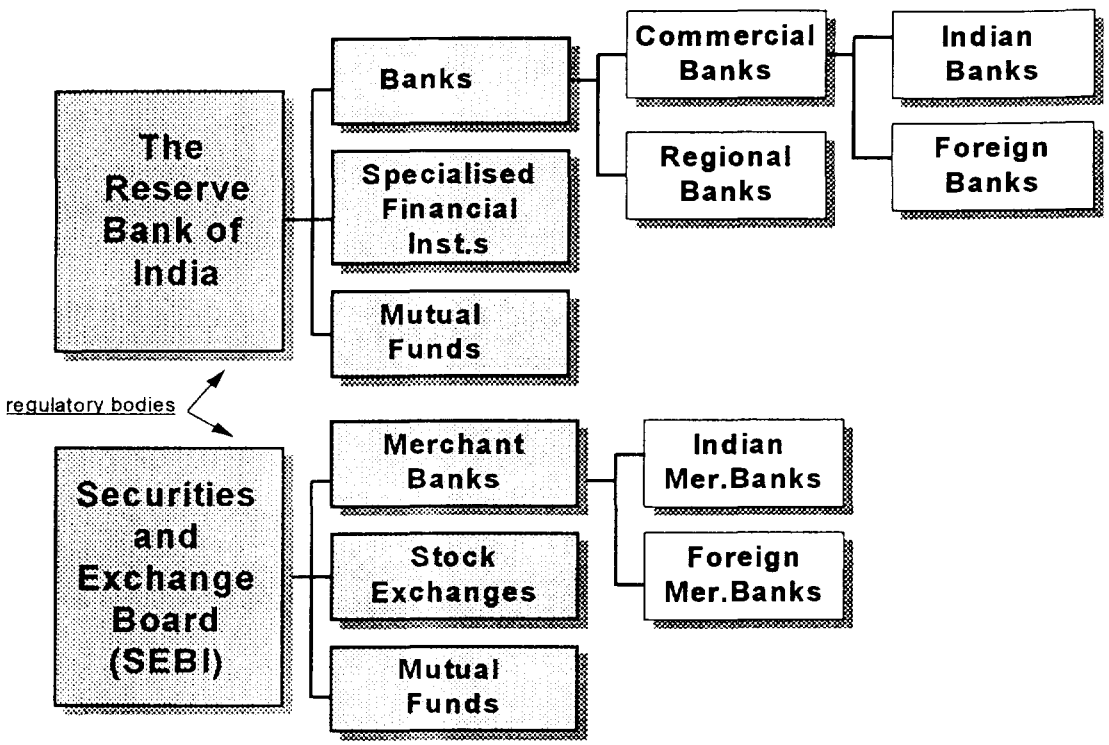
The textile/garment industrial sector is driving the process of FDI Foreign Direct Investment of Italian Industry.
There are 115 fully controlled subsidiaries, 19 joint ventures fifty/fifty and 22 minority participations.
The majority, over 60%, of all these operations are in the garment/fashion sector.
Workers employed are over 23,000 and turnover is 2,500 million USD
Although this is the most dynamic sector there is no clear strategy yet: the trend is relatively recent - after 1991 - and there is a very limited participation of the upstream sectors of the industry: spinning and weaving. While there is no case yet in the finishing sector.
In effect the Italian Textile industry just completed a major renovation and modernization of its equipment and organization and delocalization is forced only where cost of labor is more important as in garment manufacturing.

G) India's Financial market

Overview

India has a sophisticated financial sector with an extensive banking network and a well-developed capital market. Several leading international banks operate profitably in India. Foreign investors can raise financial resources in the domestic market from commercial banks and from the capital markets.

Organized financial markets have existed in India for more than a century. Today, markets of varying maturity exist in equity, debts, and foreign exchange. In India there are 25 stock markets.



The Indian Financial System - An Overview

Capital market - The Primary Market

Funds raised from the primary market have grown rapidly in the last decade. The most important instruments are equity shares, fully convertible, partially convertible, and non convertible debentures.
In addition to the roughly 20 million individual investors in the capital markets, institutions such as mutual funds, foreign institutional investors, Indian insurance companies are the major investors in these instruments.

A large number of merchant banks provides intermediary services for the issuers.

The Capital Market - The Secondary Market

There are, at present, 22 recognized stock exchanges in 21 cities in India. These exchanges trade through 6.000 brokers in scrips of nearly 7000 companies, the second highest listing in the world after USA. The entry of over 200 foreign institutional investors since 1992 and the sharply increasing presence of Indian mutual funds have provided strength to the market.
While a large number of debt issues are floated in the primary market, the secondary market in debt instruments has not developed very well. However, with the increase in number of institutional investors and collective investments scheme this market is likely to pick up.

The Capital Market - Stock Exchanges

The capital market has been an important source of finance for industry especially in recent years. India has a long experience with stock market, the Bombay Stock Exchange being over a hundred years old. However, as recently as 1980 the total volume of resources mobilised from the capital market was only Rs 2 billion. By 1984/85 the resources raised by the capital market increased to Rs 8.6 billion, and since then there has been a virtual explosion, the volume of the funds raised reaching Rs 218 billion in 1993/94. The securities scam of 1992 exposed many weaknesses of the system in coping with the fast changing requirements of the time. A Securities and Exchange Board of India (SEBI) is now functioning to provide a fair transparent and effective regulatory structure for the continued expansion of the capital market. The National Stock Exchange (NSE) was set up in 1993 to function as an exchange up to international standards. With a fully automated screen based trading system, the NSE commenced operations in June 1994.

A significant development during 1993/94 was that for the first time the amount raised in equity was higher than the amount raised in debt. An Over The Counter Exchange Of India (OTCEI) has been established, along the lines of NASDAQ to enable small companies and entrepreneurs to access the capital market.

Nowadays the capital market in India has a considerable depth, and there are 23 stock exchanges, trading in scrips of nearly 7,000 companies, the second highest listing in the world after the USA. With over 20 million of shareholders, India has the third largest investor base in the world after USA and Japan. Among the others, the most important stock markets are situated in Bombay, Calcutta, Delhi, Madras and Bangalore. The Stock Exchanges are served by 3.000 brokers and 20.000 sub-brokers.

In Bombay there are mentioned 3 stock exchanges:

- *Bombay Stock Exchange;*
- *National Stock Exchanges;*
- *Over the Counter Exchange of India*

The Bombay Stock Exchange (BSE)

Of the 22 stock exchanges in the country, Bombay is the largest, with over 6.000 stocks listed. The BSE accounts for over two thirds of the total trading volume in the country. Established in 1875, the BSE is also the oldest in Asia. Approximately 7.000 deals are executed on daily basis. There are around 3.500 companies in the country which are listed and have a serious trading volume. The market capitalization of the BSE is RS 5 trillion.

The National Stock Exchange of India (NSE)

Currently, there are 200 large companies traded on the NSE; that list is expected to gradually grow. The NSE, established in 1993, is a computerized market for debts and equity instruments. The number of members trading on NSE has increased from 227 (1993), to 600 (1995). The market is still nascent, but trading volumes are steadily increasing. Average daily turnover has increased from Rs. 70 million (1993), to 990 million (1995).

The Over the Counter Exchange Of India (OTCEI)

OTCEI allows listing of small and medium enterprises. The minimum issued share capital required for a company that wants to be listed is Rs 3 million, and the maximum Rs 250 million. Companies listed on any other recognized stock exchange in India are not eligible for listing on OTCEI.

Banks and Financial Institutions

Commercial Banks

The Indian banking system has shown remarkable growth over the past two decades. Public banks dominate the banking sector and account for much of the rapid growth. Of the 274 commercial banks in India, 223 are in the public sector. The extensive network of commercial banks in India provides short term finance to industry for working capital and long term finance for fixed asset investments.

Specialised Financial Institutions

The role of commercial banks is complemented by a number of specialised financial institutions rendering financial assistance to agriculture, industry and trade. Institutions which have functioned as industrial development banks include the *Industrial Development Bank of India* (IDBI), the *Industrial Finance Corporation of India* (IFCI), the *Industrial Credit and Investment Corporation of India* (ICICI), the *Industrial Reconstruction Bank of India* (IRBI), the *Small Industries Development Bank of India* (SIDBI) and the *Shipping Credit and Investment Corporation of India* (SCICI). The *Unit Trust of India* (UTI), the *Life Insurance Corporation of India* (LIC) and the *General Insurance Corporation of India* (GIC) are the main investment institutions. Then there are specialised financial institutions like the *Export Import Bank of India* (EXIM), the *Export Credit and Guarantee Corporation of India* (ECGC) and the *National Bank for Agriculture and Rural Development* (NABARD) which supports agro-industry.

In addition, there is a network of 18 State Financial Corporations (SFCs) and 27 State Industrial Development Corporations (SIDCs), which cater to the needs of small and medium enterprises in their respective states. These institutions meet the long and medium term financing needs of industrial projects through a variety of financial products, including project loans, underwriting and direct subscriptions to shares and bonds of industrial units.

The development banks provide direct assistance largely in the form of project loans, both in rupees and in foreign currency (usually the share is based on the share of foreign capital goods acquisition). Indirect assistance in the form of refinance and bill rediscounting is also provided by the IDBI and SIDBI. The investment institutions make direct subscription to shares and debentures and privately placed debentures, undertake underwriting and provide special deposit loans. Their investments in the corporate sector account for about 40 percent of their portfolio, the rest being taken up by the government securities, bank deposits and other investments in banks.

The IDBI is the largest development bank in India. Its sanctions and disbursements in 1993/94 amounted to Rs 129.4 billion and Rs 81 respectively. IDBI was established on July, 1st 1964 as the principal financial institution for industrial finance in the country.

IDBI provides assistance to the medium and large scale industries by way of a variety of products under direct finance, refinance or industrial loans. Over time, IDBI has diversified its range of products and services . Besides introducing new products such as asset credit, equipment finance, equipment leasing and bridge loans, IDBI also provides merchant banking services to the corporate sector.
IDBI gets its financing through World Bank, International Monetary Fund, Central Bank of India.

The *Industrial Credit and Investment Corporation of India* (ICICI), is India second biggest development bank, with an asset of USD 7 billion. Conceived in 1955, by the Indian Government and the World Bank, it was originally a private sector lender to big industrial projects. Currently, ICICI has turned into a "universal bank" and has developed the bank's fee earning business, especially by becoming a syndicate of loans rather than just a lender.

The *Industrial Finance Corporation of India* (IFCI) is the first development finance institution in India; it was established in 1948 to help the development of Indian Industries by providing medium and long term loans. Since 1993 IFCI began operations as a public limited company, widening the range of services to project finance, merchant banking, promotion services (such as subsidies for consultancy, for marketing assistance to small entrepreneurs, subsidies for training).
IFCI provides medium and long term finance to industry through a variety of products under project finance and financial services such as equipment leasing, equipment procurement, buyer's and supplier's credit, finance to leasing and hire-purchase concerns; additionally, merchant banking services are also provided.
IFCI can provide direct help in project preparation and in presenting the projects to commercial banks for the working capital credits.

The *Export Import Bank of India* is the principal financial institution for financing and promoting India's foreign trade. Its operations include deferred payment credit for exports, production loans for export-oriented units, guarantees and financing of overseas joint ventures.

Historically, the financial institutions have depended largely on Government for support. Mobilisation of funds by these institutions was helped by as system of large statutory liquidity requirement for commercial banks. It forced the banks to invest to a high proportion of their deposits in government securities and other approved securities, the latter categories involving some allocation in favour of financial institutions. This access has been progressively reduced in recent years with the implementation of the financial reforms and the consequent steady reduction in the mandatory statutory liquidity requirement. Of late, the institutions have been encouraged to raise their own funds from the market. Borrowings at market rate of interest accounted for 54% of IDBI's total borrowings in the 92/93, compared with the 32% in 91/92 and an average of less than 15% in he 1980s.

Mutual Funds

Within a short period of seven years since the first public fund was set up in 1987, mutual funds have become a major force for channeling savings, particularly of small investors, into the capital market.

Twenty-five mutual funds have been registered till December 1995 (not including the *Unit Trust of India* (UTI), set up by the Government to encourage small investors to invest in the equity market, which is a mutual fund-cum-investment institution) of which seven are in the private sector.

They have mobilised more than Rs 100 billion for investment in the capital market. The UTI itself mobilised more than Rs 500 billion. In addition, offshore funds have already invested USD 550 million in the Indian capital market.

Several public banks have launched large domestic mutual funds.

H) Incentives for Export Processing Zones (EPZs) and 100% Export Oriented Units (EOUs)

It is worth mentioning something about the possibility, stated by the Government of India, to take benefit of the attitude to export of the industrial companies. Basically, if the industrial company is settled in a export zone or is aimed at -mainly - export, it can benefit from special incentives.

Export processing zones (EPZs) - also known as Free Trade Zones (FTZ) in some areas - are enclaves with established infrastructure intended to provide an internationally competitive duty-free environment for export production at low cost. Apart from concessional rates for land and standard design factories, special tariff and tax incentives are offered to units located in these zones as well as to other 100% Export Oriented Units (EOUs).

The Government of India, with resolution dated 31st December 1980 and later amendments, introduced the scheme to facilitate the setting up of 100% Export Oriented Units. It was decided to give such units certain concessions to enable them to meet the foreign market competitiveness terms of price, quality, and nay other. A 100% Export Oriented Unit is therefore defined as an industrial unit offering its entire production for export, only excluding the permitted levels of domestic Tariff Area (DTA) sales and rejects.

Some of the general conditions, incentives and facilities applicable to those Units are hereinafter mentioned.

- the units undertake to export their entire production of goods (except sales permitted in the DTA), usually for a 10-year period. Sale of production in value terms up to 25% is permitted.
- the entire production and operation of 100% EOUs has to be realised within a bonded factory. EOUs can be set up everywhere in the country.
- the unit must respect the minimum production of added value (MVA), as prescribed in specific documentation
- the unit must maintain an appropriate account for the imports, consumption and utilisation of imported materials, as well as for the exports made.
- import of all industrial input such as: capital goods, raw materials, office equipment, material handling equipment etc. are exempt from customs duty. This includes

domestic supply (from Domestic Tariff Area) free of excise duty. No Import License is required.

- for import of second hand capital goods, the importer must provide a certificate reporting about the residual life and aging of the equipment. The second hand capital goods must not be more than seven years old and must have a residual life of five years.
- in case of leasing, the leasing company is eligible to import the capital goods without payment of custom duty
- 100% EOU are permitted the sale of rejects up to 5% of production in the DTA, subject to applicable duties
- automatic approval for up to 100% foreign equity
- 100% EOU are exempted from payment of corporate income tax for a continuos block of 5 years at their option during the first 8 years of operations. Exemption on taxes on export earnings even after the period of tax holiday are possible.

To qualify to be given such treatment, the unit in EPZ or the EOU must in principle be selling to export markets only. However 25% value of production is permitted to be sold in India (Domestic Tariff Area, and hence exported to India from the EPZ) at concessional duty rates, conditional to the fulfillment of export obligations and value addition norms fixed for all projects in the EPZs.

III Market Analysis

A) The Products.

The product to be manufactured by the proposed Joint venture is **Jaquard furnishing fabric** of different blends/mixes:

A) polyester / cotton
B) polyester / viscose
C) viscose/cotton.

In the initial period the production will be mostly limited to polyester / cotton fabric.

The structure of fabric will be Gobelin and Damasc, mainly of two types:

- high quality: 28/34 weft by 68 threads per cm. (av. 30 weft at 20.000 warps)
- base quality: 18/20 weft by 68 threads per cm. (av. 20 weft at 20.000 warps).

Gobelin will have a composition of 58% cotton (weft) and 42 % polyester (warp).
Damasc will have a composition of 53% cotton (weft) and 47 % polyester (warp).

These types of fabric are already present in the product range of Molteni & C. as the Ballata, Aliseo, Navona lines of Gobelins and Susanne/C, Myrica, Naomi, Acero, Venezia lines of Damascs.

The production (12 looms) will be organized on:

- 4 looms for the high quality (25%)
- 8 looms for the base quality.

Sample - "swatches" - making loom capacity (one for Gobelins and one for Damascs) will be located in Italy, at the Molteni & C. factory, to provide quick answer time for samples production. This will require the availability of multi patterns warp beams, in stripes, installed or ready in stand by.

Product Utilization

The fabric manufactured will be mostly utilised for upholstery furnishing, although many other utilizations can be considered like for garment, curtains, cushions, bedding.

This end use - furnishing upholstery - allows a reasonable time to adjust manufacturing to market dynamics, overcoming difficulties due to the distance between the destination market and the manufacturing facility. For the other final uses, like garment manufacturing, although fashion imposes rather rapid modifications of colors, design

and materials, the impact of distance on the production process can be also limited due to the technical scheme arranged. As a matter of fact, several families of designs, each allowing a different number of patterns/colors, will be readily available through warp beams to be installed on looms. Changes in production will be carried out through electronic instructions to the Jaquard machines and this will be obtained by a simple insertion of data diskettes containing weaving commands in the form of data files. These electronic files can be shipped very easily by courier or exchanged instantaneously over large distances by electronic mail.

Product life

The product definition process starts from the collection line design (fabric structure, patterns, colors etc.), developing through the to warp beams preparation (windering with yarns in different colors distribution) and the weaving, operated through the Jaquard machinery. A limited number (5 -8) of differently assorted and wound warp beams ("chains") will allow production of almost all the different designs and fabrics considered for the new factory.

Fabric structure, design and colors are modified by textile elaboration by mean of reprogramming the Jaquard machines and then preparing the appropriate warp beams.

As far as the USA market is concerned, the product can be considered to remain stable for a period from three to five years. Some clients require that specific patterns/design be anyway kept ready for production, on request, for longer periods.

Dyed yarn of the needed color and quality can be procured locally with a delivery delay of up to two months on order.

The agreement of the Partners appoints the Italian side of the responsibility of the color/design decision, at least basically over the first 3 to 5 years. Such an agreement will provide to the J/V Managers a reasonable time to accumulate a rich experience in international market styles and fashion dynamic. Beyond that point in time, it will result effective equipping the Joint venture with technology and machinery for the electronic textile elaboration to prepare the controlling diskettes on local basis, starting from the drawings, to drive the weaving looms and the Jaquard machinery.

Sales support.

It will be necessary to produce a large quantity of samples ("swatches"). Approximately from 2 to 3 per thousand of all production of fabric will be dedicated to samples. The cost of running this production, due to the frequent changes required, is very high and can be estimated at over 100.000 USD per year.

The pilot production will be carried out in the Italian Molteni & C. factory, under a specific agreement, and the costs will be charged on a yearly basis to the Joint Venture.

Finishing Characteristics.

Special finishing are not commonly requested for the USA and Indian markets. Antistain (Teflon Scotchgard etc.) could be needed on some supplies. The investment (and operation) cost of a finishing plant would be very high at the new factory, and can be estimated at about USD 1 million for one rameuse and the chemical processing equipment needed. In case such treatments are required, it would be appropriate to subcontract this operation in India, in Europe or in other locations.

The Italian partner company, when needed, subcontracts in Italy this type of processing and the same procedure will be followed for fabric from the JV requiring the treatment and forwarded to USA/European or Middle East markets. The present cost in Italy, for contract processing of this type, approximately, is 340 Lit (USD 20 cents) per meter.

Fire fighting / retardant characteristics and treatments require a different raw material (Trevira) and will depend on target market:

- Europe (Italy, Germany France) has very strict requirements.
- UK has quite relaxed requirements
- The USA has limited requirements, sometimes for the Contract market.

B) The Market for the Joint Venture

B.1) Production Capacity and Markets

The Joint Venture will target mainly two markets: the USA for a basic, mass segment and India, Europe and other East Asia for a superior, high quality segment. The USA will receive most of the exported production and namely the basic, low cost type of products. The production of the JV - nearly 1,000,000 meters - will be exported from India at approximately 75%.

India itself, Europe and other Asian markets will possibly account for the high quality products. It has to be considered that a sizable market exists and is developing at a fast rate in India for high quality - high price products, while medium level products are easily displaced by the local cheap production. The two markets are very different in size, structure and general characteristics: accordingly the strategy of the JV is quite diversified.

In the USA, where the market is very structured and very large, the JV will target a limited number - 15/20 - of very large dealers, operating for them as a manufacturing unit. There will be a limited number of orders, of large size, allowing an easily scheduled production, focusing to very low price level.

In India, and related high level markets, the approach will be through a large number of dealers/retailers. Orders will be for limited amounts and sizes spread over a large number of variants.

B.2) Data and methods used for the Market Study

Data have been derived from two different main sources. Data on the USA market have been mainly provided through contacts of the Italian partner, who contributed its proven knowledge of that market and carried out several market researches and tests prior and during the preparation of the study. The Indian Partner made available information from an in depth market analysis carried out in the Country and a remarkable wealth of information on the products, channels, conditions and competitors.

The conclusion of the analysis have been thoroughly discussed and agreed upon during several joint meetings that took place in November 1996 in India between the Parties and with the assistance of the UNIDO experts.

The analysis carried out shows that the market that the Joint Venture is targeting for its products is concrete, has much larger dimensions than the JV presently envisages, shows a stable, constant growth, and can be accessed at the conditions proposed, in USA and India.

The following are the details of the process to finally get those conclusions.

B.3) Market approach.

The initial fabric production program includes Gobelins and Damascs. Possibly, in the future, also Lisere and other more sophisticated fabrics will be manufactured.

The production activity of the new factory will be as follows:

Fabric type	Market	Price.USD/l.m	Pct. of tot. prod
Gobelins basic	Mass production USA	3.2	90% Gobelin Basic
Damasc basic	Mass production USA	2.9	60% Damasc Basic
Gobelins high	Average segment India - Eu. - Asia	8	10% Gobelin
Damasc high	Average segment India - Eu. - Asia	7	40% Damasc
Lampass	High segment India - Eu. - Asia	8.6	100%
Matelassé	High segment India - Eu. - Asia	8	100%

The expected production volumes, in linear meters (mtl), width 140 cm, per year will be around **980,000 mtl,** divided between 771,000 basic and 209.000 quality.

All this production is expected to be sold by the concerted efforts of the two partners.

The USA market can be estimated to amount to 220 million meters, with a minimum estimated market share of 3 per thousand.
The Indian market is approximately 20 million meters and the Joint Venture production has approximately a 1.3 per cent share

Fabric	mtl/YEAR 1	mtl /YEAR 2	mtl /YEAR 3	mtl/YEAR 4 - 5
Gobelin basic	115000	369000	462000	462000
Gobelin high	12500	40000	50000	50000
Damasc basic	77250	247200	309000	309000
Damasc high	12500	40000	50000	50000
Lampass	14750	47200	59000	59000
Matelassé	12500	40000	50000	50000
Total	**244,500**	**783,400**	**980,000**	**980,000**

The expected product market destination is the following (thousand meters):

Fabric	USA	India	Europe	Totals
Gobelins basic	(90%) 416		(10%) 46	462
Gobelins high		(100%) 50		50
Damasc basic	(60%) 185		(40%) 124	309
Damasc high		(100%) 50		50
Lampass		(100%) 59		59
Matelassé		(100%) 50		50
Total	601	209	174	980

For the basic production, the USA market will absorb 90% of Gobelin and 60 % of Damasc. Europe will absorb 10% of Gobelin and 40% of Damasc.

B.4) Prices

Prices levels, per meter, have been surveyed on the different markets and the posted prices for the JV products will allow the new Company to implement its planned market strategies, namely cost effectiveness for the USA market and quality/image for India-Eu.- Asia. markets.

Damascs have approximately 10 -15% less weight in weft (cotton) and are so correspondingly approximately 10 -15% less costly than Gobelins while having the same level of weaving complexity.
Color/design *variants* can be considered at this level of analysis not to impact sensibly on prices.

In the *USA* the prices presently accepted by the main dealers for the products are the following:

Gobelin basic	5.5 USD/lm
Damasc Basic	4.9 USD/lm

These are landed prices for large orders (e.g. 20,000 lm/month) and the JV plans to enter this market at, respectively, at 4.65 USD and 4.28 USD. The assumed production price in India is about 3.2 USD and 2.9 USD. Further, a transport cost has to be added of 0.15 USD/lm, a custom duty of 7.5% and a margin for the selling organization of 30%.

	Gobelins basic USD/lm	Damasc basic USD/lm
India price	3.2	2.9
Transport: 0.15 USD/lm	0.15	0.15
Custom duty: 7,5%	0.25	0.23
Agent: 30%	1.05	0.98
USA price	4.65	4.28

In the *Indian market* the expected prices are as follows for the posted products.

	JV posted price USD/lm	JV posted price Rs/lm	Present retail price Rs/lm
Gobelin High	8	280	350
Damasc High	7	245	330
Lampass	8.6	301	400
Matelassé	8	280	380

C - The USA Market.

Based on previous surveys (references), information collected from market surveys carried out by trade associations, direct surveys by the investors themselves, the market upholstery furnishing fabric expected for the J/V can be considered as follows:

Base segment	Year 1	Year 2	Year 3	Year 4
Total Mkt (mtl)	220 Mill	240 Mill	260 Mill	280 Mill
Jaquard: 30%	66 Mill	72 Mill	78 Mill	84 Mill
Volume JV	149,850	480,420	601,200	601,200
Share JV (%)	0,0027	0,0066	0,0077	-

The share expected to be reached by the Joint Venture will be less than one per cent.

To identify and assess the market perspectives of the Joint Venture an analysis has been carried out of the main industrial sector that will be targeted: the USA Household Furniture Industry. Data available were considered to give a general dimension of the market and of main trends in fashion and colors. Market figures - as displayed below - for this segment show the following ratios:

(values in million USD)	1987 (actual)	1996 (estimated)
Total Furniture market	34,800	--
Upholstered furniture	5,260	--
Materials	2,560	--
Fabric	620	882

Data for year 1987 derive from official market surveys, while the data related to 1996 are estimations. Considering an average increase of 4% per year of the fabric market, the escalation increases the 620 millions (1987) to 882 millions in 1996. This amount, to obtain a rough estimate of the total USA market, has to be complemented by an increase of 40% representing all sales effected through the department stores and specialty stores (Designers' Centers, 12 G Street etc..), bringing the total amount to 1,235 million USD.

The quota of Jaquard fabric is 30% of total and can be estimated in 370 million USD.

This can be averaged - at 5,5 USD/ml - to 67 million meters per year

C.1) General characteristics of the USA market.

This is the largest world market for furnishing fabric. There is a marked segmentation for final destination: Interior decoration (draperies curtains - upholstery), bedroom, bags and luggage, garments.

For upholstery fabric, in large volumes, the price segment are the following:

- a very low level segment includes fabrics like canvas at 2 - 2,5 USD/m and dyed Damascs at 3 -3,5 USD/m.
- the next upper level is represented by Gobelins (Ballata type) from 4.5 to 5,5 USD/m. This segment includes Gobelins, with warps from 10,000 to 20,000 filaments, that make marked recourse to sophisticated technical weaving technologies.

C.2) Main actors in the USA market.

The Furnishing Fabric market in the USA is quite complex and there are many actors playing strictly correlated roles.

A draft visualization of this market structure is shown in the attached table ('The Distribution System of the Textile Industry for Furnishing Fabric in the USA), while a brief description of each party role follows.

Manufacturer
Performs all or part of the required production within their own plants, like cutting and sewing.

Agent
Has no authority, his only function is to accept purchase orders, on an extended contract basis.
A common form of agent in the US is the "manufacturer's representative", who would present the manufacturer's products to potential buyers using company information and product samples.

Manufacturers' Rep
A manufacturer's representative contracts with the foreign company to represent the foreign company on a commission basis for a definite period of time. The contract usually establishes the territory in which the manufacturer's representative has to work; the terms of sale; the compensation to be paid; and any special responsibilities. The contract can be on an exclusive or nonexclusive basis, but even nonexclusive contracts will prohibit the manufacturer's representative from representing competing products.

The key characteristic of an agent or a manufacturer's representative is that the representative does not purchase the products itself, or assume any risk or responsibility for the sale. Rather, the representative promotes the products using literature and samples and obtains sales orders which are place directly with the foreign company. The foreign company then delivers the products to the purchaser, either directly or through an American distribution system. The agent then receives a commission on the completed sales.

Representative
Works from a showroom, does not take possession of the products, does not import the goods. Has a wide array of complimentary products from different manufacturers on display in the showroom. Get a standard commission percentage, 10-15% on the item sold.

Importer
Takes actual possession of the products, is responsible for the actual importing of the products. Deals with US Customs.

Distributors
A distributor purchases merchandise from the foreign company, usually at a substantial discount, and resells it for a profit. A distributor differs from an agent in that the distributor actually takes title to the goods and resells them. An agent, by comparison, never takes title to the products being sold; the agent represents the company and takes orders for the good which are then sold directly by the company to the purchaser.

The relationship with a distributor is defined by a contract, which will specify terms and conditions for the sales of the product to the distributor, the price, delivery terms, and other obligations of the distributor, such as sales or service. The distributor may or may not be required to engage in promotional activities. The contract may be exclusive or non-exclusive, and the distributor normally carries non-competitive but complementary product lines.

Depending on the nature of the products, a distributor may provide after-sales service and support for the foreign company's products. The distributor may maintain an

inventory of products to eliminate potential shipping delays, as well as parts and staff for servicing operations.

Some exporters may have both an agent and a distributor in the US The agent promotes the products and takes orders, which are then placed with the distributor for delivery and after-sales service.

Wholesaler
Concerned with the activities of those persons or establishments which sell to retailers and the other merchants, and/or to industrial, institutional and commercial users, but who do not sell insignificant amounts to the ultimate consumers. There are 4 different types:

A. Full-function/service wholesalers
B. Limited-function wholesalers
    - desk jobber
    - cash-carry wholesaler
    - truck jobbing
    - rack jobbers
C. Converters
D. Franchisers

Broker
Agents who specialize in buying or selling goods for a principal. Usually they have neither the title to, nor the possession of, the merchandise.

Dealer
Exclusive agreement, manufacturer ensures that their products will be merchandised with maximum energy and enthusiasm.

Jobbers
Perform the entrepreneurial functions of a manufacturing company, such as buying raw materials, designing and preparing samples, arranging for the manufacture of the items, and selling of the finished products. The jobber finances the entire operation including the purchase of raw materials.

Contractors
Manufacture items from material owned/and provided by others. They own factories and work for jobbers or manufacturers by contracting out their labor, which is the only commodity they supply. Their main operations include sewing, cutting, embroidering, pleating etc. Most imported apparel are clothing made for manufacturers and jobbers by contractors.

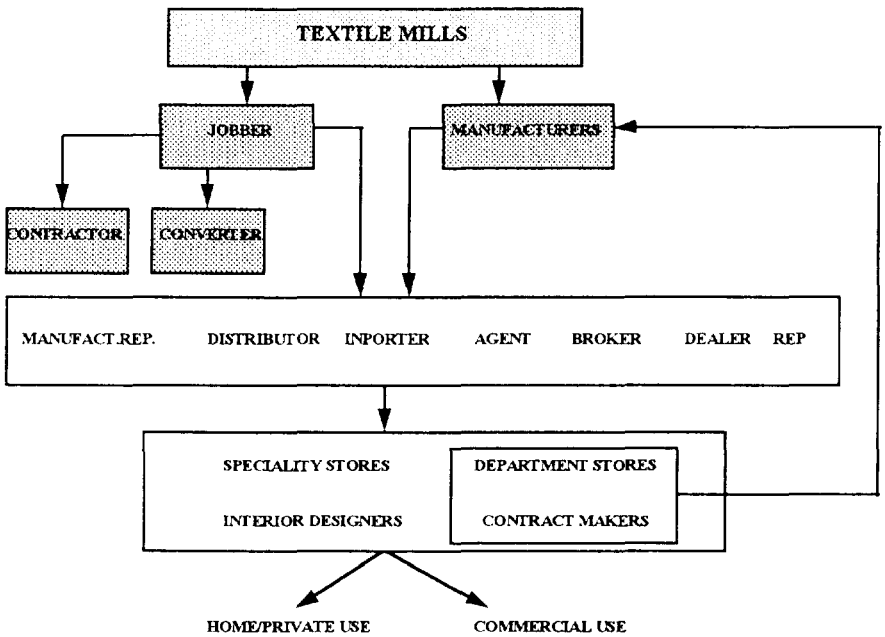
Converter
Adding value to the manufacturing process; he takes the textile and e.g. adds design to the material, adding trimming, adding buttons.

Showrooms
Display area, usually located in one of the specialized buildings, where the products represented are displayed for buyers to review. During market weeks, buyers will visit

these showrooms and place orders with the representative or agent who supervises the showroom.

Warehouse
Storage area where the actual products are placed. This can be an external source. Multiple goods produced by different manufacturers can be stored here.

In recent years, retailers started to import directly from manufacturers abroad, thus by passing the domestic industry totally.



The Distribution System of the Textile Industry for Furnishing fabric in USA

C.3) The USA Household furniture industry

This industry is the most important component of the final user target market for the J/V products.

Personal consumption expenditures for furniture and bedding totaled approximately USD 34.8 billion in 1989; increasing 3.8% over 1988, according to the US Dept. of Commerce, Bureau of Economic Analysis.

According to the American Furniture Manufacturers Association 1989, product shipments of furniture increased 1,4% over 1988, with bedroom furniture rising 8,0%, recliners up 7,2% and occasional furniture up 6,1%.

Since than the annual dynamic of the sector showed a single digit yearly growth to present days.

Upholstered Household Furniture

	1987	1986	1982	% Change 1987/82
N.° of companies	1.030	na	1.129	-8.8
N.° of establishments, tot.	1.150	na	1.227	-6.3
N.° with 20 or more employees	576	na	602	-4.3
Employees, total (thous.)	82.1	77.9	70.6	16.3
Production workers (thous.)	69.6	65.6	59.8	16.4
Payroll (mil. USD) (workers)	982.7	896.4	637.2	54.2
Value added (mil.USD)	2,661.2	2,489.2	1,745.3	52.5
Value of industry shipment	5,263	4,945.0	3.505.3	50.1
Capital exp.s, new (mil USD)	76.9	79.1	57.2	34.4

Location of the Industry: Leading Manufacturing States in the Furniture Industry
(Upholstered Household)

	No. of Establishments		Value Added by Manufacture
	Total	Employees	(Mil. USD)
Furniture			
USD total	1,150	576	2,661.2
North Carolina	264	168	882.0
California	194	91	317.9
Mississippi	94	63	469.8
Tennessee	66	44	225.2
Leading states, total	618	366	1,894.9
All other states	532	210	766.3

Material Consumed in Furniture/Bedding Manufacture

There was an increase in delivered costs of materials consumed in all of the specified furniture and bedding categories during the five year interval between the 1982 and the 1987 Census of Manufacturers, according to the Census Bureau.
The delivered cost of materials not only includes the price for the material, but also freight the charges and any other charges incurred by the establishment in acquiring these materials.

Delivered costs of materials, parts and supplies in the wood furniture category rose 59.7% in 1987 over 1982. While upholstered furniture rose 51.3%, metal household furniture increased 39.2%. Wood television and radio cabinets were up 21.8%; mattresses and bedsprings rose 34.6%; and household furniture, n.e.c. was up 1.6%.

Delivered Costs of Materials Consumed in the Productions of Household Furniture

	Delivered Cost (Mil. USD)	
	1987	**1982**
Upholstered household furniture:		
Material, parts, containers & supplies	2,561.3	1,692.9
Selected Materials:		
Furniture frames, wood	238.2	119.0
Woven upholstery fabrics, excl. ticking & muslin:	**105.4**	**90.5**
Cotton	**516.4**	**351.3**
Other (rayon, nylon,polyester, etc.)		
Paddings, battings & fillings, excl. rubber & plastics foam	79.2	61.8
Springs, innerspring units, & box spring constructions	68.7	36.1
Foam cores for matresses, include. latex, excl. topper pads	34.8	31.9
Formed & slab stock for pillows, cushions, seatings, etc. (urethane)	265.7	156.3

	Quantity (Thousands of Units)			Value (Millions of USD)		
	1987	**1982**	**% (87/82)**	**1987**	**1982**	**% (87/82)**
Upholstered household furniture (total)	na	na	--	4,911.8	3,319.8	+48.0
Sofa, davenports (excl. dual-purpose), settees & love seats, excl. chairs sold as part of suites & sectional sofa pieces	8,301.8	6,414.8	+29.4	1,987.6	1,397.7	+42.2
Swivel chairs with height adjustment and other chairs, except reclining	na	3,737.2	--	694.7	510.0	+36.2
Sectional sofa pieces, include. pieces seating one person	1,443.5	639.1	+125.9	341.3	132.9	+156.8
Rockers, include. swivel rockers	1,512.9	na	--	183.5	137.3	+33.6
Reclining chairs, all types	4,107.4	3,037.0	+35.2	837.2	524.7	+59.6
Other upholstered wood household furniture	na	na	--	95.6	111.1	-14.0
Upholstered household furniture, n.s.k.	na	na	--	772.0	506.1	+52.5

C.4) Upholstered Furniture: Fashion/Color issues

A market survey on this segment carried out by HFD in the early '90s provided the following data.

Response to questions pertaining to upholstery fabric suppliers and manufactures found country (casual) to be the preferred style of furniture for over one-third, (34.6%)

of respondents. Most were willing to pay between USD 500 to USD 699 for a living room sofa, with the median price at USD 729, and favored textures in mid-tone colors.

Style of Furniture Most Preferred

Country (casual)	34.6
Traditional	29.0
Eclectic	21.1
Modern (contemporary)	10.8
Early American	9.1
Formal English/French	4.7
Victorian	3.7
Oriental	3.2
French provincial	2.9
Southwest	2.0
Mediterranean	2.0
Italian provincial	1.5
Other	2.0

Type of Fabric Preferred by Upholstered Furniture

Texture	66.8
Prints	47.4
Velvets	18.2
Jacquards	12.8
Leather	7.4
Flocks	5.2

Note: Textures figure may be inflated due to consumer ignorance of the term jacquard

Color Preferred for Upholstered Furniture

Mid-tones (Wedgwood, mauve, rose)	61.9%
Earth tones (beige, brown)	46.9
Pastels (peach, seafoam, cream)	31.0
Jewel tones (ruby, teal, mahogany)	17.2
White-on-white	10.6
Black	1.7

It has to be taken into consideration that fashion factors will play a major role in opening the USA market to the J/V fabrics considering that it will profit from the Italian color and style of Molteni & C.

The past few months of 1996 have seen a worldwide evolution in home furnishing fashion which is evident in many countries including Europe, Australasia, South Africa and some Asian communities. This evolution has been gaining momentum for the past few years, reaching a threshold level where it is bursting onto the retail floor with full force.

The synergy is color-fresh, clean combinations with a heavy influence of primary hues, flowing into the mid price furniture range, and filtering into the volume market.

Over the past 4-5 years, the USA in general, has pursued a direction which has been dominated by a heavy influence of traditional patterns using muted colors, heading towards almost muddy tones, lacking clarity and contrast.

Those sourcing from the USA have been indicating for the past few years that they have been seeing less and less color and designs that cater to the evolving changes in consumer tastes for their markets.
This stagnation in fashion has resulted in buyers moving to Europe or attempting to convert their own product to cater to their needs for color and design.

These buyers are no longer expressing their concerns verbally but making a statement via their checkbooks. This evolution which was happening at a slow trot over the past couple of years has reverted to a full speed gallop in the past several months.

An influence, but not the sole contributing factor, leading to this divergence in home furnishing fashion can be found in a general tightening of the USA home furnishing market. This in turn, has brought a focus on domestic competition in the USA to the point where there is a vast similarity among many USA product lines.
This is a vicious circle where the determining factor on many domestic buyers moves away from color and design, to price. With the lack of individual identity, prices are cut further and further to the point where traditional margins become erroneous.

While the US has not been alone in a tightening of the home furnishing market, a distinct change has taken place in those markets outlined earlier where a metamorphoses is occurring in the form of color and design. The catalyst of which can be traced to suppliers from the UK, Italy and Spain with designer Tricia Guild, at the leading end of the home furnishing market in the UK, having a major influence.

Designers Guild has focused for several years on color to the "extreme", incorporating this into easy living designs with an influence of transitional and contemporary design layouts.
Other UK and European suppliers have grasped this trend, softening the acidity of what Designers Guild brought in colors, but maintaining the primary hues to become user friendly for the perceived middle market.

This in turn marries in with the colors and tones being used in the home accessory markets.
In contrast, some sectors of the USA home accessory market appear to be showing a distinct fashion influence, but the home furnishing market seems to be lagging behind.
The end result of this development has seen color and design burst on to the retail floors, receiving strong support at the customer level.

It is injecting some life back into the market, providing the consumer with distinct imagery with regards to a fashion change that is able to capture consumer attention and refocus on the home furnishing store.

As this has gained momentum, buyers have moved quickly to those suppliers who have been a catalyst of this change, such as the UK and sectors of other markets that have a natural tendency towards these type of colors and designs, for example, Italy and Spain.

Distribution channels, Curtain & Drapery Industry, Household Furniture Industry

The distribution of the major home textile products is dominated by Sears and J.C. Penney.
They account for 39% of the business, according to HFD. Mass merchandisers are next with 32%. Department stores have been losing share for some years. Some 100 retailers are estimated to account for 95% of total sales.

Over the past five years, most department stores have eliminated or sharply curtailed their curtain and drapery departments, citing the products' slow turn and the need for a high level of service to help consumers purchase window coverings.

Another channel of distribution also has developed to fill the void left by department stores: Specialty Stores. These retailers highlight service and selection in presenting a complete range of both ready-made and custom window coverings, and are considered by many manufacturers to be the wave of the future in selling upscale products. In 1989, specialty stores were responsible for 10% of over-the-counter curtain sales, and 13% of drapery sales, while in 1985, these retailers controlled 4% of the curtain business and 8% of the drapery category.

C.5) Market Structure.

Local and foreign Competition.

On this market there are 5 - 6 large manufacturers, each one in position to answer to orders of 40,000 m per month.
Fierce competition for quality/prices and service is to be expected.
American competitors are very strong in servicing large volume orders: they have no transport and no custom duties.

Good level Italian competitors are present (Pozzi, Prosetex,Rossini). Italian competitors have interesting price level, very good service, creativity and speed in developing new products. One Italian Company could provide 5/10,000 m/month. In ten working days they can deliver the first swatches, starting from sketch. Order delivery time is 4/5 weeks, maximum.

From Europe a good competition could be given by Chekoslovakia and Turkey. Belgians have a limited presence too.

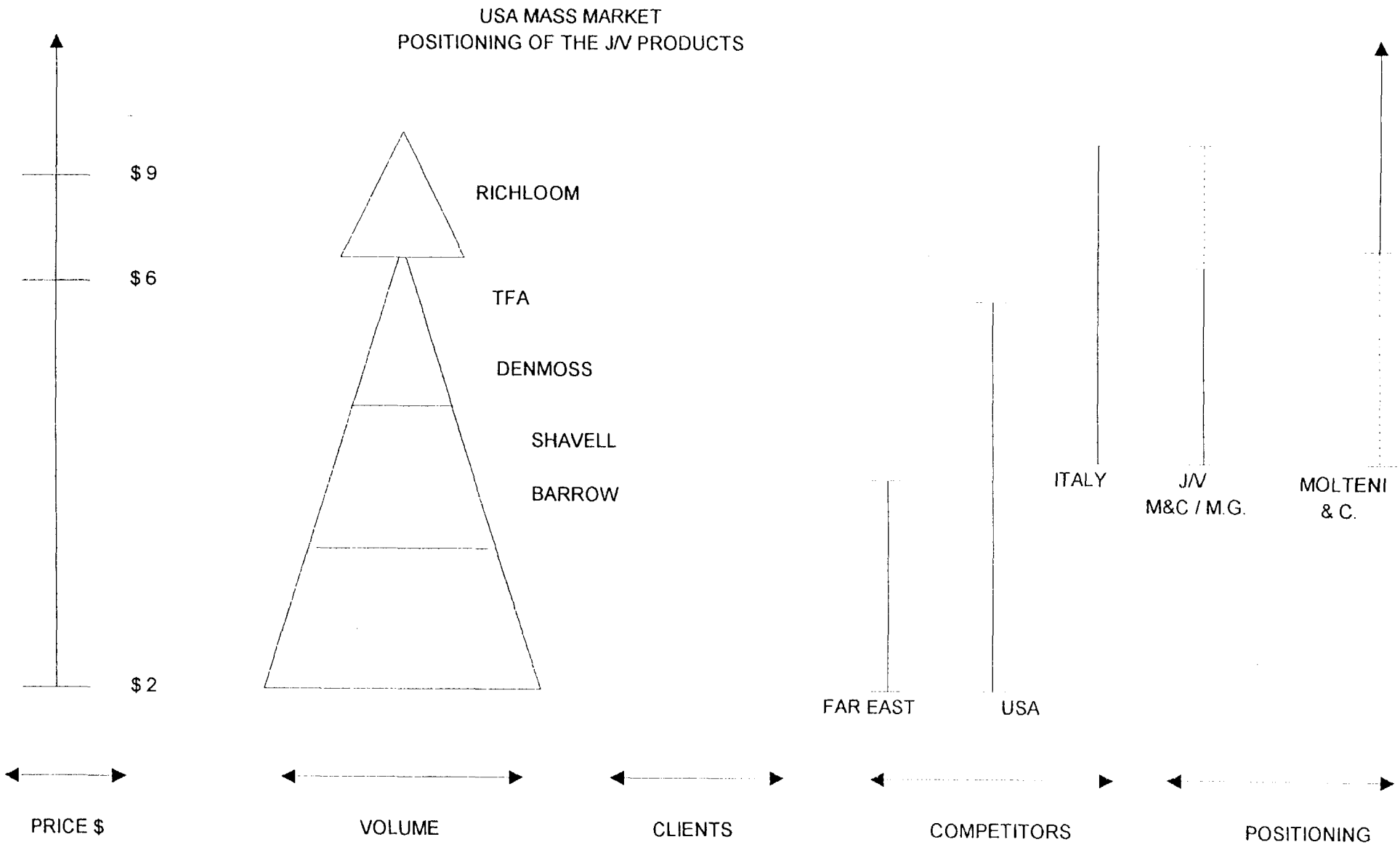
For Gobelin American manufacturers are offering a price of 4 USD/mtl while Italians and others are quoting 6 USD/mtl but with markedly superior quality.

Some Asian manufacturers from Korea and India are just beginning to import. South east Asia manufacturers are present with very low prices and correspondent quality.

Expected clients.

The Joint Venture will approach this market through wholesalers and converters. These in turn will supply the Industrial Furniture Manufacturers, at least for the first few years of operation of the Company.
The experience and presence of the Italian Partner on this market allowed them to detail their market expectations to the point of identifying some specific prospective clients.
These prospective clients have also been contacted during the course of the study and have confirmed their willingness to absorb a rather substantial part of the new production.

The volume to be sold in the USA Market is 600,000 meters.


USA MASS MARKET
POSITIONING OF THE J/V PRODUCTS
$ 9
$ 6
$ 2
RICHLOOM
TFA
DENMOSS
SHAVELL
BARROW
FAR EAST
USA
ITALY
J/V
M&C / M.G.
MOLTENI
& C.
PRICE $
VOLUME
CLIENTS
COMPETITORS
POSITIONING

The expected Client range can be divided in two groups according to common orders size:

a few (1 - 3) very large: 15 - 20.000 mtl /month orders

and a second group (4 -6) medium size: 3 - 7.000 mtl / month orders.

Smaller clients can provide slightly higher prices and margins but delivery conditions become extremely tough: one day delay can cause the cancellation of orders.
Shipping conditions become very critical for a foreign manufacturer located in India.

Market channels / terms and conditions of trade.

The Joint Venture will channel all its production directed to the USA market to a Company set up by the Italian Partner in the USA with this specific purpose.
This Company will distribute to all the American Clients acting as the company Agent /representative.

With the exception of one company, working in the garment sector only, all other clients identified by M. & C. are wholesalers and converters. Their quality requirements will be easily satisfied while service level, of great importance, will be a moor issue for the Joint Venture.

Example of requirements are:
Fast response on samples: 7 - 10 days
Design development: 2 -3 weeks for large orders
1 week for fashion line.

Service - measured on design development time and delivery time - will be critical. Styles requested now are flowery/classics and "novelties". "Modern" patterns are not very popular.

A new brand name will be created, for external as well as internal reasons.
Sales will be promoted by a fully dedicated area/account manager limited/directed to a number of clients. This scheme originates from the need of avoiding any interference with existing external network and relationships and to keep internal clear cut difference between different orders/production.

C.6) Market Strategy in the USA

The J/V will select a limited number of distribution channels and target a few large clients, mostly dealers.

Products will be mostly relatively simple type of products, Orissa and Ballata type. For others the focus will be on a reduced number of warp and weft.

A complete line will be manufactured with 3 chains for Gobelins and 6 - 8 chains for Damascs.

Classic and novelties patterns, in limited number will be offered.

Repeats will have to be 35 - 40 cm from small to medium, specially for garment and bags.

D - The Indian Market

Sources for the analysis of this market have been an in depth market research carried out by the Indian partner and several field surveys by the Italian partner and its consultants.

The analysis carried out had a broader scope than the distribution and marketing of the products themselves: also the structure and capacity of the local manufacturing companies was analyzed.

The scope has been to identify the products presently being distributed, the general conditions of trade, the volumes, price and trends, the distribution channels as well as the main actors in the market.

D.1) The main actors

There are three main actors moving this market that is going through a very dynamic, positive growth: *dealers, furniture shops and manufacturers.*

a) Dealers with retail shops and with wholesale activity. There is not yet a clear differentiation in these lines of activity and is very common for dealers to operate occasionally as wholesaler, particularly while importing products, creating informal purchase groups with stocks.
Retailers usually
A sample group of 85 dealers was interviewed in 7 cities: Bangalore, Bombay, Calcutta, Delhi, Jaipur, Kanpur, Madras

b) *Furniture shops* are still a very unorganized sector. A very large number is operating only with street level type of premises. The very large majority is made from small craftsman with very limited production showroom facilities. And most of them tend to use fabric that is supplied directly by their final clients.
The shops of acceptable size are few and in the major cities.
The sample group include 8 shops, four in Bombay and four in Delhi.

c) *Furnishing fabric manufacturers* are relatively few and can be roughly divided in two groups: organized industrial group and unorganized sector. These are mainly "converters" or jobbers commissioning the production of small lots of fabric to many small weaving outlets (from 1 to 10 powerlooms or handlooms). These converter provide design and enter into strict business relationship with their weavers although for the duration of the order, providing sometimes yarn, transport and some finance.

The organized groups are Reliance, Raymond, Eden, Golden Textile, Orkay, Shamkeen. Panipat is really an aggregation of manufacturers of the Panipat region near Delhi. No interviews were carried out with these competitors but many information have been collected.

D.2) The products

The textile products distributed in the upholstery/furnishing Indian domestic fabric market are the following: (silk excluded)

Cotton plain100%
Polyester printed
Velvet plain
Velvet Jaquard
Cotton/Polyester mix (Poly.100%) Jaquard

The fabric is sold (in rolls 50 meters) by linear meter with a width of 48- 58 inches on average.

The quality and variety of the fabric found in the retailers shop in Delhi and Bombay has been found to be rather low although some high level products are present, either imported or in silk and silk mixes.
The designs available are very poor and there is a very wide space for improvement. More important the retailers are very interested in modern, western designs that now can only be imported with a custom duty nearing 100%.

D.3) The volumes and prices

Monthly sales by each dealer, in meters and rolls, by fabric type is as follows:

Cotton 100%	1805	36
Cott. Poly. mix-Jaquard	*1261*	*26*
Polyester printed	992	19
Velvet Plain	746	16
Velvet Jaquard	797	17

Jaquard cotton/poly. mix fabric, that is the type of fabric that the JV is planning to produce, accounts for 23 % of sales in meters.

These products are experiencing a remarkable increase in sales over the previous year (1995) that has been shown to be as follows:

Cotton 100%	10 %
Cott. Poly.mix Jaquard	20 %
Polyester printed	7 %
Velvet Plain	0,5%
Velvet Jaquard	9 %

Again the fabric experiencing the highest increase is CPJ (Cotton/Polyester Jaquard)

The average prices, at retail/street level, for the products have been surveyed as follows:

Fabric	Rs/m. Min.	Rs./m. Max.
Cotton 100%	54	146
Cott. Poly.mix Jaquard	*104*	*259*
Polyester printed	100	204
Velvet Plain	137	247
Velvet Jaquard	273	422

Prices for CPJ were low in Calcutta and Bombay (due to a relevant presence of the production of the unorganized sector, cheap), average in Rajasthan (Jaipur, Kanpur) and Delhi and higher in the South (Bangalore, Madras).

The average price has been surveyed according to brand name for CPJ fabric:

Brand Name	Rs./m.	Rs./m.
Eden	204	338
Golden Textile	144	249
Inspiration	204	246
Liberty	148	264
Orkay	129	294
Panipat	48	101
Raymonds	*288*	*454*
Reliance	*278*	*383*
Shamkeen	*180*	*450*

Panipat is, more than a specific brand, the trade name of products coming from the unorganized sector of which Panipat is one of the most remarkable examples.
The market segment targeted by the JV is at present occupied by the last three brands - Raymonds, Reliance and Shamkeen - and accounts for approximately one third of the total Jaquard market.

The market shows a strong seasonal pattern with a high season extending from September to January and a dead season from June to August.

D.4) Market size.

The Joint Venture will start selling 209,000 meters per year, increasing to 383,000 if export to Europe (or other non US market) results less profitable.

General socioeconomic data to estimate the PCJ (Poly.Cott.Jaquard) market size were not available. General estimate have been obtained from industry experts, textile associations and the Indian partner himself, a most important actor in this market.
All figures converge toward a general consumption in India of approximately 20,000,000 meters of fabric for furnishing/upholstery fabric excluding draperies and bedspreads.
The total market for Jaquard can be conservatively estimated in 5,000,000 meters per year. The Joint Venture will therefore be targeting a market share from 4 to 7,5 %.

Market size estimates:

Three estimates have been obtained and they show a certain convergence.

1 - From the Indian Partner, Modern group, an estimate based on its knowledge of the distribution chain.
Based on market structure and retailers distribution.
Considering 22 cities(Geogr.), 15 dealers per city (Modern estimate), 1260 meters x month sold by each dealer (Market survey results for PCJ) x 12 = 4,986,600 meters.

2 - From Indian Textile Consultants (Protech) active in this trade as converters as well as engineering consultants.
Based on socioeconomic structure and purchasing power.
150,000,000 middle class individuals. Distributed in families of five: 30 millions.
Every five years (6 million) a family purchases ten meters equivalent to four seats. (60 million meters)

Organized sector supplies 50%: 30 million

PCJ fabric is 20%: 6 million meter per year

3 -A third estimate can be made on the Country installed industrial capacity. Figures are from official textile organizations.

Based on industrial capacity of Indian manufacturers.
There are three large manufacturers (Raymonds/Birla, Reliance/Ambani and Shamkeen) with approximately 1.5 million/year capacity: 4,5 millions.
There are five medium size manufacturers with a capacity of 300,000 meters (=1,500,000)
A large number of power looms and handlooms is dedicated to this production in the unorganized sector: approximately 1000 powerlooms and 5000 handlooms: 3 -6 million meters.
Total: 11,000,000 meters

Of the 11,000,000 meters 35% is estimated to be the Jaquard fabric.
The JV is therefore approaching a market of 3,850,000 meters/year, growing on the average 20 % per year.

When the company will start operating it will face a market - one and a half year from now - of 5 million meters and will target a share of 7,5%

D.5)The market channels

The market channel from Manufacturer to dealer/retailer is quite well defined and, considering the quality and price level of the products offered by the JV is the most likely to be used.
Most of the dealers that will be targeted by the JV are already buying their fabric directly from manufacturers or importing.

A mission by the Italian partner visited several retailers in Delhi and Bombay (most remarkable are Jagdish in Delhi and Pride in Bombay) where these findings have been verified.
Margins allowed to retailer are expected to be in the order of 50 to 100%., in general lower in Rajasthan and Delhi due to strong concentration of manufacturing capacity.
Lead time is on the average 15 days, changing from 22 in Bombay and the South to 10 in Rajasthan.
Purchases take place monthly on the average with a volume of 40 rolls per order.
The credit period is on the average 45 days (15 in Delhi and 60 in Bombay and the South).
Of the five most relevant competitor the most appreciated on the market is Reliance.
Dealers are on the average satisfied with design and range of products but are disappointed by delivery on time from manufacturers and margins offered.

The dealer/manufacturer relationship is characterized by the following main steps:
- the dealer gets to see the samples before placing orders;
- the booking agent goes to the shop to take orders;
- manufacturers company representatives visit the shop

The distribution channel through stockists/wholesalers is less known and organized and its dimension in volume are much smaller than that of dealers.
On the other side this channel is preferred by the furniture manufacturer segment.
Prices to the segment are almost the same than to final clients and manufacturers obtain a discount from 5 to 20%.

The Furniture shop/manufacturer/stockist relationship is characterized by the following main steps:
- the customer, or interior decorator, gives the design
- the furniture shop gets to see the samples before placing orders;
- the booking agent of fabric manufacturer goes to the shop to take orders;
- manufacturers company representatives visit the shop on a routine basis
- visits to the fabric manufacturer for business purposes

D.6) The conclusions of the Market Analysis

The market has a remarkable size (4 - 5 million meters/year)
The quality and prices to be offered by the JV will make the products extremely desirable by the local market assuring a smooth occupation of a 5 -10% market share.
The market trend and appreciation for western design is confirmed and the market will go toward a sure expansion while more international life style spreads, supported by media autonomous diffusion of western models.

The growth for PCJ fabric will continue to be around 20% per year for the next at least 5 years.

The recommended street price will be between RS. 200 and 450 and the factory price will be from 100 to 250.

Organized players that can offer quality, design and range of products consistent over time can reasonably gain a stable and profitable market share.
Perceived risks are illegal imports, entry into the market by giant companies from USA and Canada and the rising cost of raw materials.

D.7) The market strategy

The JV will offer PCJ on a very wide high level and quality range of products. Using design and experience from the Italian partner it will enter the market with a most remarkable product, extremely appealing to the upmarket segment.
The price level on the contrary will be on line with that of the local manufactured fabric, making use of the same raw materials and labor and adding the use of modern quality machinery.
The experience and reputation of the local partner should be a guarantee that this product is brought to market without any difficulty and very effectively.

IV Raw materials and supplies

The production of the new Company will make use of the following raw materials:

Yarns of:

- Polyester
- Viscose
- Cotton

Packaging materials.

A) Polyester continuous yarn

Polyester continuous yarn (PFY) is a rather commonly available type of commodity in India. It is produced in the Country in very large quantities and fully adequate quality.

Special attention, however, has to be paid to the price of this yarn to the Company.

First of all the project overall feasibility is quite sensitive to the cost of inputs.

The polyester yarn will be mostly employed for the fabric warp.

The specifications of the yarn required are: 150 D / 36 / 450. That is:

150 deniers
36 (to 72) filaments
Twisted 450 spins per meter
Texturized
Semi dull/dull

The polyester yarn will be dyed in many colors.

Price of polyester yarn

There are two prices to consider: for production to be exported and for production directed to the domestic market: in this case excise tax and local tax have to be included.

Including transport to the factory the expected price per kg is the following:

	Export USD/Kg	Domestic Rs.
Polyester yarn	3.75	177 (=USD 5.05)

The total quantity required by the factory during one year of operation will be approximately 202,000 kg. and the total cost to the company will be approximately (considering 75% of exports) 860,000 USD.

Terms of trade

Time of supply: for yarn whole quality test have been already carried out it can be up to 3 weeks.

Quantities will be from 10 to 30 tons per order. The yarn will be in cheese/cones (2-3 Kg) to be rewound at the factory before windering. Suppliers will usually accept to be paid 45 days after delivery.

The price of polyester yarn fluctuates according to the fluctuations of the world commodities that are used to manufacture it.

Polyester (PET) is a condensation polymer and is made by heating purified teraphtalic acid, or dimethyl teraphtalate, with excess of ethylene glycol in an atmosphere of nitrogen.

India, although disposing of large quantity of petrochemical derivatives from its own petrochemical industry, is not self-sufficient and has to import PET and sometimes PFY or PSF granules at world market prices.

To this first level of fluctuation of raw material have to be added the production cost components, anyway comparatively minor, of filament and yarn production.
Several large Indian companies are in effect integrating backward setting up very large PET, PFY, PSF production plants to control this part of the production process.

The Indian partner itself, the Modern Group, has just put on production its PFY plant with a large capacity and is embarking on a 1,660 Million US plant for the production of PX/PTA for its internal use and for other manufacturers.
The Modern Group is at present producing very large quantities of polyester yarn and will be in an optimal position to supply its local new Joint Venture Company.

B) Polyester market and synthetic textiles.

The polyester market is showing at present (third quarter of 1996) some signs of revival internationally, with prices reflecting a marginal improvement of five to ten per cent in the last few months.

While there has been an improvement in the realizations of exporting countries, rates quoted have been lower than their domestic Indian prices which hover around USD 1.20 -1.30 per kg.

Polyester prices had eroded during the last one year on weak demand and an over-supply situation.

If the reversal in the trend continues, it is expected to leave an impact on the domestic polyester industry. According to leading polyester manufacturers, the uptrend in international prices will lend stability to domestic prices of polyester fiber and yarn.

The Indian synthetic textiles industry has been buffeted by falling prices and emerging over capacity in its two main segments - polyester filament yarn (PFY) and polyester staple fiber (PSF).

Protected for long by the high tariff structure, the industry has been exposed to competition from outside only in the last few years. In line with the reform process in other sectors of the economy, the Indian Government has cut down the levels of import tariffs from around 150% in 1991 to current levels around 40% in a phased manner and is committed to reducing it further.

If it carries this process forward in 1997, the duties on PSF and PFY which are currently at round 45%, and duties on their raw materials such as purified terepthalic acid (PTA) and dimethyl terepthalate (DMT) which are at levels of 35% could also see some dip.
The India Government may also reduce import duties on PSF to 12% from 45%.

International prices of these commodities are at their rockbottom. The possibility of dumping is certainly there as PSF is be available for less than 1,000 USD per ton while PTA is available for around USD 500 per ton. Domestic prices of these commodities have usually tailed international trends and are priced at slightly above the landed cost.

Leading manufacturers of polyester filament yarn are Reliance Industries, DCL, Sanghi, Raymond Synthetics, and Indo Rama Synthetics.

Prices of polyester filament yarn have been decreasing till mid 1996 and are now mainly stable.
The size of the polyester filament yarn industry in the country is 40,000 tons per month.

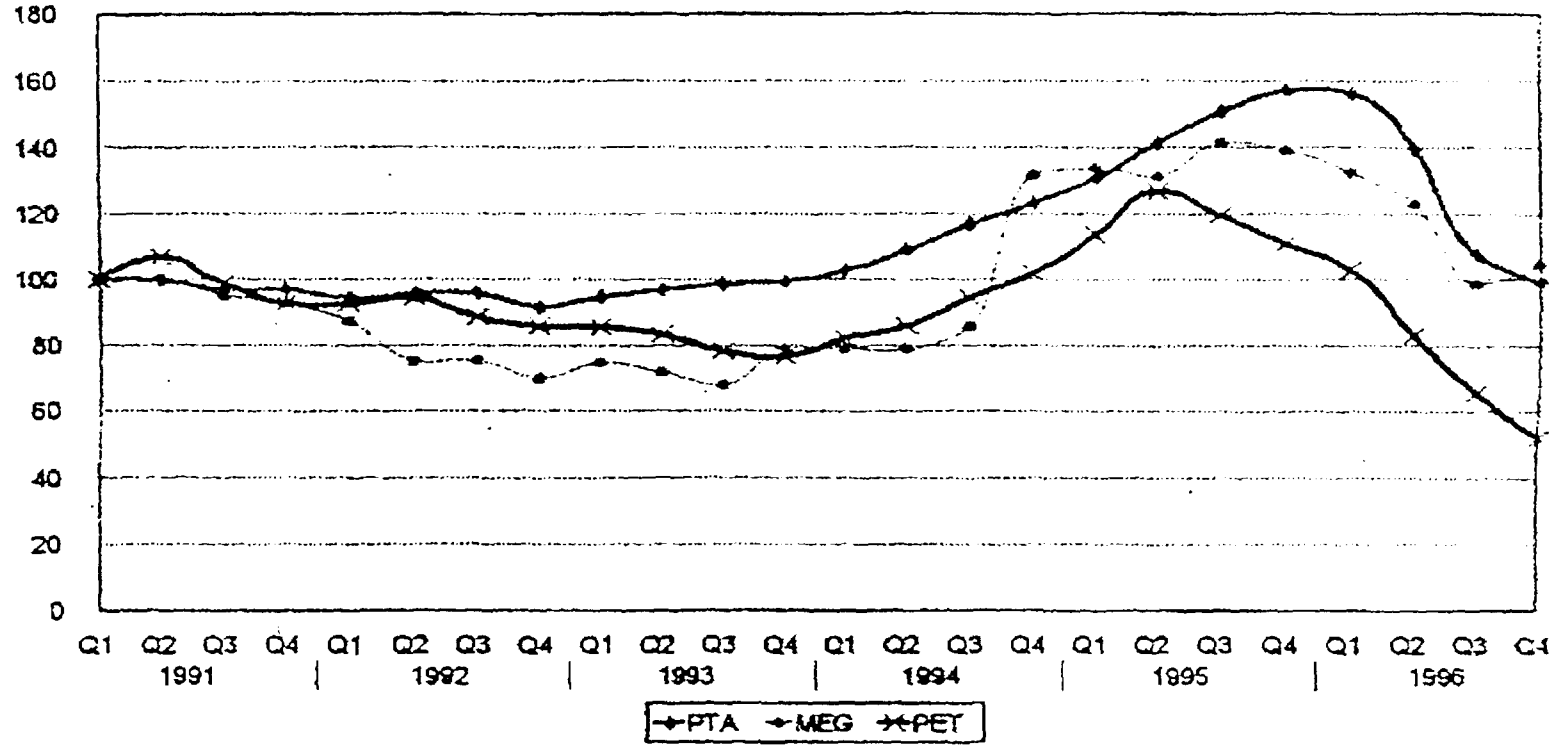
The industry is already witnessing a shake-out.
ICA (India) got out of the PSF business by putting off its unit into a separate company and selling it to Reliance Industries. Recently Orkay Industries sold its PFY unit to the JVG group. Some other companies have cut down production and are on the verge of being marginalised. Uneconomic capacity, low levels of technological modernization and being at the mercy of mercurial international commodity price trends are the features that have marked the performance of many of the players in the synthetic textile industry.

The industry is in a state of flux with many projects being shelved or postponed. Financial institutions are also having a second look at the industry and are reviewing their funding in many of these mega-projects.

Domestic manufacturers of polyester filament yarn have decided to slash production levels by as much as 30% to arrest the declining trend in prices, sparked off by low demand.

Companies engaged in texturising activities are finding it increasingly difficult to sustain huge inventories.
The situation has led to slashing of production levels.
The price of 155 denier texturised has dropped to Rs 106 per Kg, from Rs 165.

PET RESIN EUROPE
RAW MATERIAL AND PRICE MOVEMENTS



C) Viscose spun yarn

Viscose spun yarn will have the following specifications:

Ditex
12/2
24/2
30/2
40/2

Twists 14 - 16 per meter
Dyed many colors.

Viscose spun yarn, is a rather commonly available type of supply in India. It is produced in the Country in large quantities and fully adequate quality. Again it is also produced by the Modern Group itself through its controlled company Modern Threads.

Price of viscose yarn

Also for this yarn there are two prices to consider: for production to be exported and for production directed to the domestic market: in this second case excise tax and local tax have to be included.
Including transport to the factory the expected price per kg is the following:

	Export USD/Kg	Domestic Rs.
Viscose yarn	3.65-3.90	160-173 (=4.7 USD)

The total quantity required by the factory during one year of operation will be approximately 42,000kg. and the total cost to the company will be approximately (considering 75% of exports) 172,000 USD.

Terms of trade are essentially the same as for Polyester yarn.

D) Cotton yarn

Cotton yarn will be of the following type:

deniers
4/1
6/1
8/1
Open end.

The cotton will be dyed in many colors.

Price of cotton

There are again two prices to consider: for production to be exported and for production directed to the domestic market. Including transport to the factory the expected price per kg is the following:

	Export USD/Kg	Domestic Rs.
Cotton 4/1	2.9	93 (=USD 2.66)
Cotton 6/1	2.9	100 (=USD 2.86)
Cotton 8/1	2.9	100

The total quantity required by the factory during one year of operation will be approximately kg. 261,000 and the total cost to the company will be approximately (considering 75% of exports) 760,000 USD

Terms of trade are essentially the same as for Polyester yarn.

E) Packaging material.

Fabric will be distributed in rolls of approximately 50 m. length. Each roll is wound on a carton cylinder and wrapped in two layers of polyethylene foil. The total cost of this packaging is estimated to be 0.04 USD per m. Price information for raw materials have been secured from these sources, compared and weighted.

The Italian partner Molteni & C. provided direct prices knowledge and quotations from the international market. Moreover Molteni & C. is at present buying polyester and viscose yarn from INDIA: quality and market are well known to the Company.

The Indian partners provided its quotations and estimates from the different raw materials while a third, external local source-consultants and textiles associations have been used for further information.

The data obtain - all very similar- have been verified and the figure used for the study are those obtain through minor adjustment.

V Location, Site and Environment

The plant of the new Joint Venture will be located in Northern India, in an area that is already well served by infrastructure and where industrialization, particularly textile operations, is widespread.

A) Site

The two Parties have not yet taken a final decision on the precise site for the new Joint Venture factory.

However it has to be considered that most of the characteristics of the new plant and the general location have been analyzed in detail.

The facility in itself has very limited dimensions, is technically quite simple and its erection and completion falls into the responsibilities of the Indian partner who, carrying out with success yearly investment in industrial plants for over 50 million USD millions can reasonably provide a 4000 sqm plant estimated at 1 million USD.

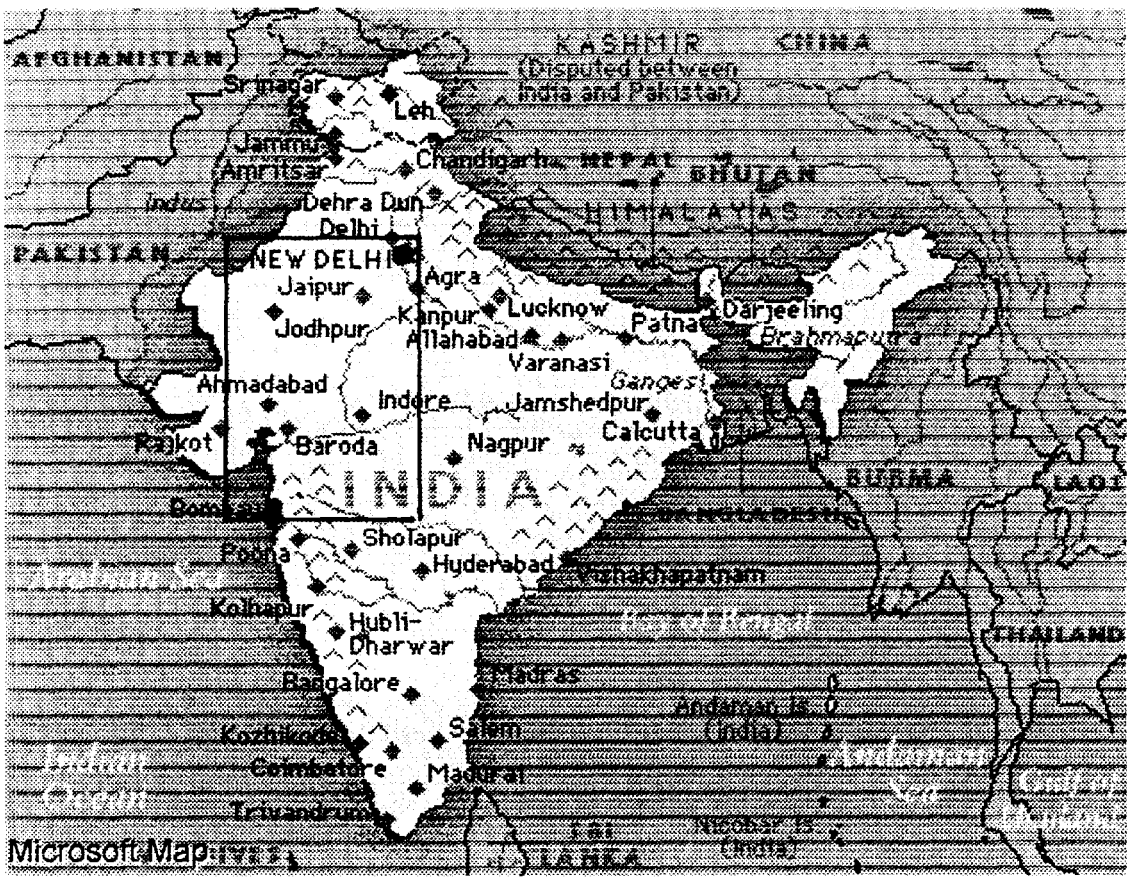
The Parties have in fact decided to locate the new plant, as an independent unit, in the proximity of one of the several that the Indian Partner runs already in the Country.

Two locations are being considered:

- near Alwar in Rajasthan, at approximately 150 Km from New Delhi, neighboring the factories of Modern Syntex and Modern Suitings the Yarn and fabric manufacturers of the Group;

- near Navsari, Surat, in the Ahmedabad district of Gujarat, not far from the POY factory of Modern Petrofils and at 250 Km from Bombay.

India


AFGHANISTAN
KASHMIR
(Disputed between India and Pakistan)
CHINA
Srinagar
Leh
Jammu
Amritsar
Chandigarh
NEPAL
BHUTAN
Indus
Dehra Dun
HIMALAYAS
Delhi
PAKISTAN
NEW DELHI
Agra
Jaipur
Kanpur
Lucknow
Darjeeling
Patna
Jodhpur
Allahabad
Brahmaputra
Varanasi
Ganges
Ahmadabad
Indore
Jamshedpur
Rajkot
Baroda
Nagpur
Calcutta
INDIA
BURMA
Bombay
Sholapur
Poona
Hyderabad
Vishakhapatnam
Kolhapur
Hubli
Dharwar
THAILAND
Bangalore
Madras
Andaman Is.
(India)
Salem
Kozhikode
Coimbatore
Madurai
Trivandrum
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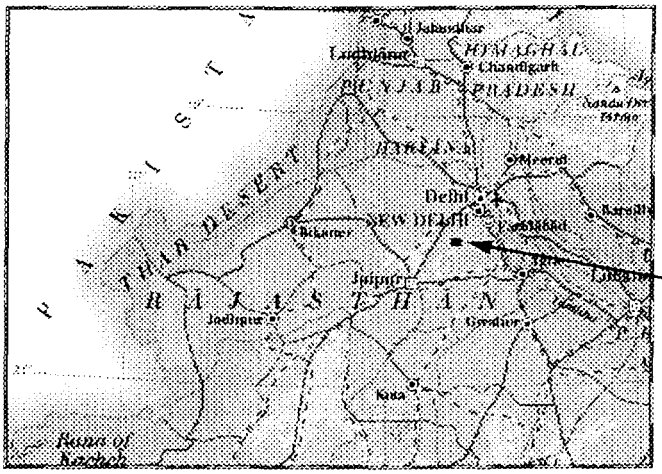
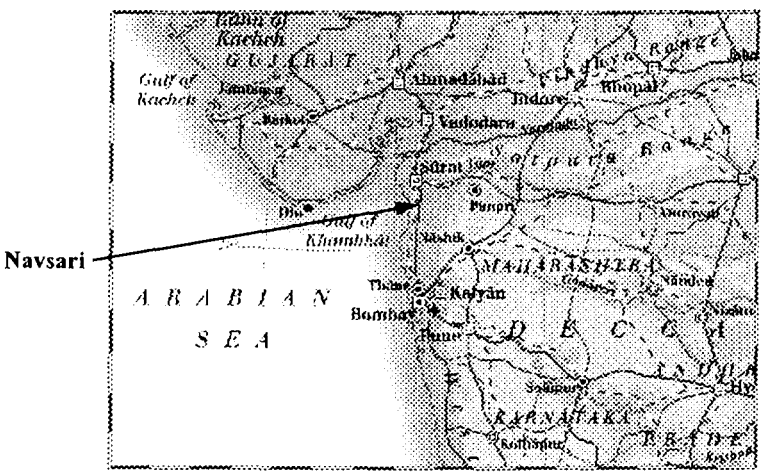


First Location: Alwar, Rajasthan



Second Location: Navsari, Gujarat

B) Logistics

Both locations proposed by the Indian Partner - Rajasthan and Gujarat - are already home to many similar textile factories, and are both reasonably served by communication means.

Both locations provide sites with good connection to power, telephone lines, water. Power supply, although showing a limited number of black-outs per week - cannot be relied at present anywhere in the Country and in the future the situation will likely

worsen due to large increases in consumption, outpacing the growth of generation facilities. So the plant will have to install its own UPS system.

Transport costs of raw material will be better in Rajasthan - due to the vicinity of the Modern yarn production - but this advantage over Navsari would be outset by the cost of transporting the final product for export to Bombay port by truck for shipping. This takes a two days journey by truck over the most important and congested Indian road system - the North/South road (otherwise considered normal by local standards).

A third alternative would have been to locate the plant in the Bombay area. This was not a welcome choice to either of the Parties because far from their existing industrial operations and for the sensibly more difficult, congested conditions of work.

Labor is available in both locations at conditions that are equivalent and the proximity with the Indian partner other plants makes it easy to proceed to staffing training and management.

The reasons for not having yet decided the final location are the followng:

- the land (16 -18,000 m^2) will be purchased and this will be done only after the Promoters are satisfied with the outcome of the feasibility analysis; several candidate lands have already been identified and their conditions for purchase are well known, similar and acceptable.

- the possibility of obtaining some specific area incentive will be considered by the Partners and this will have to be verified before making the final decision.

There are however enough data to estimate the cost of the plant and to evaluate its possible environmental and social impact.

The impact of the selected location on the economics of the project has been thoroughly analysed, resulting in a minor impact. As a matter of fact, land investment cost in the selected possible locations is conservatively estimated at 215,000 USD (land 200,000 USD plus site preparation 15,000 USD). An increase by 20% out of the amount would lead to a corresponding increase by less than 1% of the total estimated investment cost. Such an increase would definitely not affect the project profitability: as clarified in the Financial Analysis (see Chapter X), the project is not very sensitive to the investment cost modifications.

Transportation costs have a relevant importance for the selection of the suitable location. Cost of transportation of finished products have been assessed for the two locations as follows:

route	cost per mlt (cent of USD)
Alwar-Bombay	4
Navsari-Bombay	1.5

The difference on the total amount produced quantity (please refer to Chapter 4 raw Material and Chapter 6 Engineering) accounts for 25,000 USD per year (at full capacity), equivalent to less than 1% of the total estimated production cost.

As far as the financial analysis is concerned, the assumption of 4 cent/mlt has been taken, altough the actual transportation cost will result from the final location selection. In any case, the pessimistic approach of considering the worst case (4 cent/mlt) implies a possible improvement on the calculated profitability, which in turn is not very sensitive to connected decrease in production cost (please refer to Chapter X Financial Analysis).

The site will have the following characteristics:

- 1 Size 16,000 sqm. The building, in which the plant will be located, will have a surface of 4000 sqm. It will need an equal amount of land for yards and it will be appropriate to have the possibility of expanding this facility doubling its dimensions, always horizontally.
- The estimated cost of the land is 500 Rs./sqm, which is common for prime industrial land at the time of writing.

The area considered is conveniently located between New Delhi and Bombay, in an environment that already hosts many textile factories

C) The Project Area

The Project will be located in the adjoining states of Rajasthan or Gujarat as shown in the attached maps.

Rajasthan state, in northwestern India, is bordered on the north and northwest by Pakistan, on the northeast by Punjab State and Haryana State, on the east by Uttar Pradesh State, on the east and southeast by Madhya Pradesh State, and on the southwest by Gujarat State. It is mainly agricultural; millet, wheat, corn, and cotton are grown here.

Cotton mills and cement works are in the state, but handicrafts are the main industry. The capital of Rajasthan State is Jaipur.

Hindus make up about 75% of the population, which also includes minorities of Muslims, Jains, and tribespeople. Rajasthani and Hindi are the principal languages. Most of the state was formed between 1948 and 1950 from the former principalities of Rajputana. The state contains many interesting Buddhist, Jain, and Mughal ruins. Area, 342,239 sq km (132,138 sq mi); population (1991) 44,005,990.

Alwar city is in Rajasthan State, capital of Alwar District. Alwar, which is circled by a wall and moat, has several fine palaces and temples and a library containing rare Asian manuscripts. Before the partition of India in 1947, the city served as the capital of the princely state of Alwar.
Population (1991) 211,162.

Gujarat, state in Western India, is bordered on the northeast by Rajasthan State, on the east by Madhya Pradesh State, on the southeast by Maharashtra State, on the south and southwest by the Arabian Sea, and on the northwest by Pakistan. Characterized by a varied topography, Gujarat has a fertile plain in the south cut by several rivers, low hills in the west, and broad mud flats in the north that adjoin the Thar (Great Indian) Desert. The leading crops are rice, jowar, maize, peanuts, cotton, and tobacco. Among livestock raised are buffalo and other cattle, sheep, and goats.

Minerals produced include salt, manganese, limestone, and bauxite. Petroleum production began in 1960, and an oil refinery is at Baroda. One of India's most industrialized states, Gujarat has a variety of industries, the principal ones being general and electrical engineering and the manufacture of textiles, vegetable oils, chemicals, soda ash, and cement. New industries include fertilizers and petrochemicals.

The capital of Gujarat is Gandhinagar.
Gujarat State was formed on May 1, 1960, from the northern and western portions of Bombay State, a predominantly Gujarati-speaking area. The remainder of Bombay State became Maharashtra State.
Area, 196,024 sq km (75,685 sq mi); population (1991) 41,309,582.

VI Engineering and Technology

A) The Production Process

The production process is represented in the attached production flow-chart.

Starting from the Yarn Warehouse by Windering and Warping cones and warp beams are prepared.

Positioning of warp beams at looms is followed by a Knotting phase and then by Weaving.
After this, Quality control takes place before the Fabric Warehouse.

B) The Proposed Production Plant

A preliminary layout has been prepared and the following schedule indicates the surfaces allocated (including service, ancillary areas):

- Yarn Warehouse 630 sqm (16 x 39)
- Warping/Windering 600 sqm (25 x 249
- Weaving 630 sqm (19 x 33)
- Laboratory 80 sqm
- Workshop 100 sqm
- Fabric warehouse 960 sqm

This last area will accommodate up to one month stock.
With a height of at least 5 m. there will be three lines of fabric reels containers on three levels (3 lines x 63 containers x 12 - 16 reels).

This brings up to 3,000 sqm the surface strictly dedicated to production.

Air conditioning will be needed for Cotton and Viscose processing.
Humidification for dry periods (frequent in Rajhastan).

A more detailed description of the production facility with indication of the equipment considered and of the operation program follows herebelow.

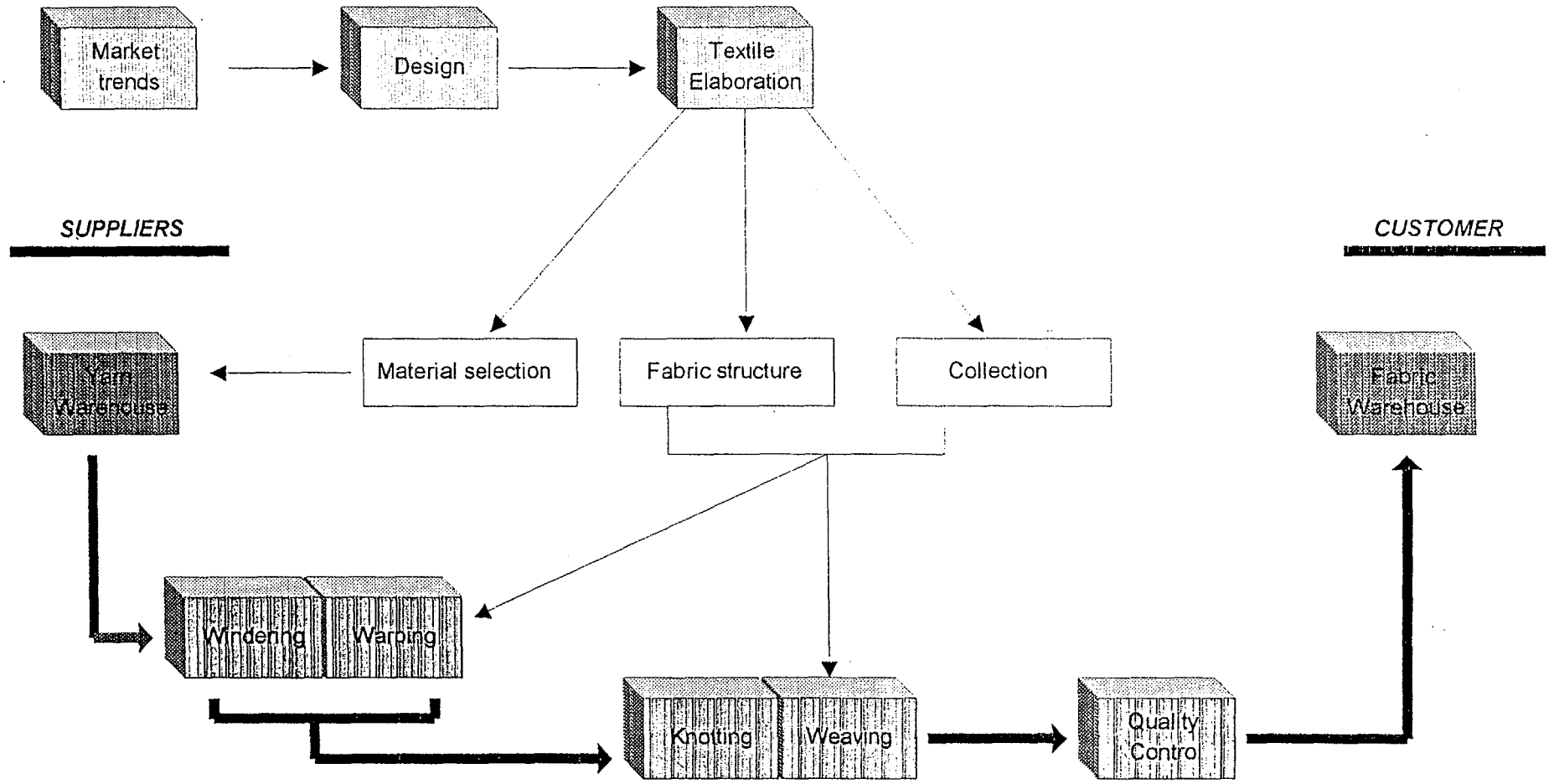
Yarn Warehouse

Operation: 2 months stock in different yarns and colors.

Total operating stock: kg. 66.000

Space: for operating stock about 500 sqm on two floor shelf equipment

MOLTENI & C. / MODERN GROUP J V
PRODUCTION FLOW



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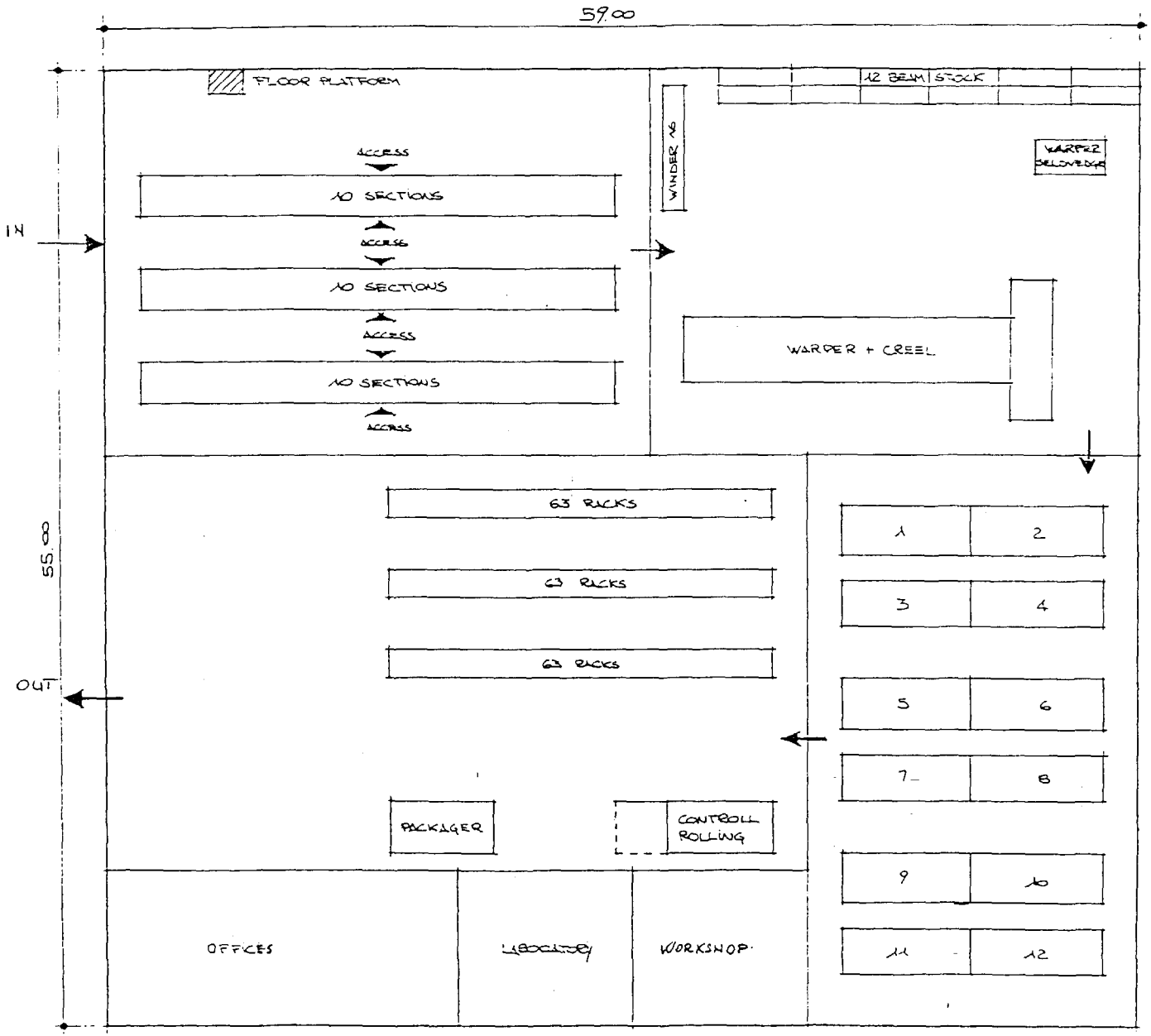

LEGENDA:

	YARN WAREHOUSE	M. 31.00 × 22.00. MQ. 6
	WARPING HOUSE	M. 28.00 × 22.00 . MQ. 6
	WEAVING SECTION N°	M. 19.00 × 33.00 . MQ. 6
	DELIVERY AREA FABRICS WAREHOUSE	M. 10.00 × 21.00 . MQ. 9
	WORKSHOP	M. 10.00 × 9.00 . MQ. 9
	LABORATORY	M. 10.00 × 9.00 . MQ. 9
	OFFICES	M. 30.00 × 9.00 . MQ. 18

TOTAL AREA MQ 3215

1.	Certified scale floor platform 150 x 200	USD	4.700
	With electronic system for printing date, code, minute, gross, net etc....	USD	7.700
1	Electric lifting truck	USD	13.500
4	Manual truck to bring 1/2 box of weft yarn from warehouse to the looms	USD	600
		USD	26.500

Personnel: (2 shift) = 1 man per shift Total= 2 men

Warping and Windering

Operation: 1 shift

Equipment:

1 Electronic Beninger sectional warper mm 3200	USD	260.000
1 Creel 640 positions (Benninger)	USD	135.000
1 Warper fro seldvedges with 10 position creel	USD	4.000
1 Manual truck for discharging beams	USD	8.000
1 Winder, come to come, 16 positions for preparation of weft	USD	99.000
	USD	506.000

Space:
500 sqm needed for machinery, plus 8 beam stock, plus yarn to be warped.

Personnel: 1 shift operation will be enough to feed 3 shift weaving

3 Warping men	1 for machinery	skilled
	1 for charging creel	skilled
	1 for seldvedges	skilled

1 Windering man

Weaving

Operation: on three shifts, 4 looms for each weaver

Hypothesis for Production:

N° of looms:	12 double (310 for height 280 cm)
Technical speed of the looms:	280 insertion per minute
Yearly working days:	300
Daily working hours:	24
Efficiency:	80%

Production:

Basic Quality

280(speed) x 60(minutes) x 24(hours) x 300(days) x 8(looms) x 2 x 80%(efficiency)

2000 (average insertion each meter)

= 773.000 mt Height 140 cm

High Quality

280(speed) x 60(minutes) x 24(hours) x 300(days) x 4(looms) x 2 x 65%(efficiency)

3000 (average insertion each meter)
= 209.000 mt Height 140 cm

Six looms will be equipped with quadruple Jaquard machines (5376 lifters) and 6 looms with double machines (2686 lifters).

LOOMS DISPOSITION

4 Jaq 1	4 Jaq 3	4 Jaq 5	4 Jaq 7	4 Jaq 9	4 Jaq 11
2 Jaq 2	2 Jaq 4	2 Jaq 6	2 Jaq 8	2 Jaq 10	2 Jaq 12

Equipment

12 Vamatex looms P 1001 ES	USD	730.000
6 Staubli Jacquard machine C 860 5376 (4) Lifters	USD	580.000
6 Staubli Jacquard machine C 860 2686 (2) Lifters	USD	290.000
1 Knotting machine Titan KM 2.000, with truck	USD	30.000
1 Manual truck for discharging fabric reels	USD	2.200
12 Harnesses	USD	160.000
12 Gantry	USD	54.000
" Lamelle"	USD	15.000

Space Requirements:

A net surface of 300 sqm is needed.

Personnel: 3 shift

6 weaver	2 each shift	skilled
3 knotting men	1 each shift	skilled
3 threading men	1 each shift	skilled
3 looms engineering	1 each shift	skilled
1 jolly	1 each shift	skilled

Final Quality Control - Finished Goods Warehouse

Operation:

1 month production will be stocked in the warehouse.

Space:

1.0000 sqm are needed.

Equipment

1 Double machine for fault control, for rolling and folding	USD	77.000
1 Semiautomatic packager	USD	28.000
1 Electric lifting truck	USD	13.500
2 Manual truck for rolls	USD	200
2 Warehouse truck for rolls (10)	USD	20.000
	USD	138.700

Personnel: 2 men for 1 shift at the rolling machine
1 man for 1 shift at packager
1 man for 1 shift for warehouse

Other Ancillary Facilities and Equipment

A) 1 Compressor 11 HP 1,5 cm	USD	8.500
1 Electric lifting truck	USD	34.000
	USD	42.500

B) A sampling office will be included.
2 persons will be enough with a simple cutting table and sewing machines USD 20.000

C) Laboratory USD 50.000

TOTAL EQUIPMENT COST IS ESTIMATED AT: USD 2.644.900

C) Equipment List and Budget

Yarn Warehouse

1.	Certified scale floor platform 150 x 200	USD	4.700
	With electronic system for printing date, code, minute, gross, net etc....	USD	7.700
1	Electric lifting truck	USD	13.500
4	Manual truck to bring 1/2 box of weft yarn from warehouse to the looms	USD	600

Warping & Windering

1 Electronic Beninger sectional warper mm 3200	USD	260.000
1 Creel 640 positions (Benninger)	USD	135.000
1 Warper fro seldvedges with 10 position creel	USD	4.000
1 Manual truck for discharging beams	USD	8.000
1 Winder, come to come, 16 positions for preparation of weft	USD	99.000

Weaving

12 Vamatex looms P 1001 ES	USD	730.000
Staubli Jacquard machine C 860 5376 lifter	USD	870.000
1 Knotting machine Titan KM 2.000, with truck	USD	30.000
1 Manual truck for discharging fabric reels	USD	2.200
12 Harnesses	USD	160.000
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2 Warehouse truck for rolls	USD	20.000

Other Ancillary Facilities & Equipment

A) 1 Compressor 11 HP 1,5 cm	USD	8.500
1 Electric lifting truck	USD	34.000
B) Sampling office to accommodate 2 persons with a simple cutting table and sewing machines	USD	20.000
C) Laboratory	USD	50.000
TOTAL EQUIPMENT COST IS ESTIMATED AT:	**USD**	**2.644.900**

D) Production Engineering Issues

Technical service for looms Sulzer Vs Vamatex.
Quotations are expected from both companies.
Delivery time for looms is 3 - 5 months on order.

Over 50 people will work in the factory
Weft needs windering (re-windering)
Warp is received already dyed from dyeing plant (of Modern group).
At present no finishing processes are forecasted for product directed to USA Market.

For the High level (India) segment a "finishing" process will have to be included to provide for softening, hand, thermofinishing, antistain, scotchgard, teflon, etc.
This will require other equipment: a Rameuse and an Oven with a possible additional investment of 500,000 US.
Start up: in six months 300,000 meters can be achieved.

E) Technological Choices

Several technological decisions have been taken during the project definition and formulation phase.

Technology and Know how involved in the project and its transfer.
1 - Textile elaboration. Technology to transform a fabric design and drawing into a textile production plan for the Jaquard looms.

This operation will continue to be performed at the M&C technology center and working instructions for the electronic Jaquard looms will be in magnetic/electronic form (diskettes).

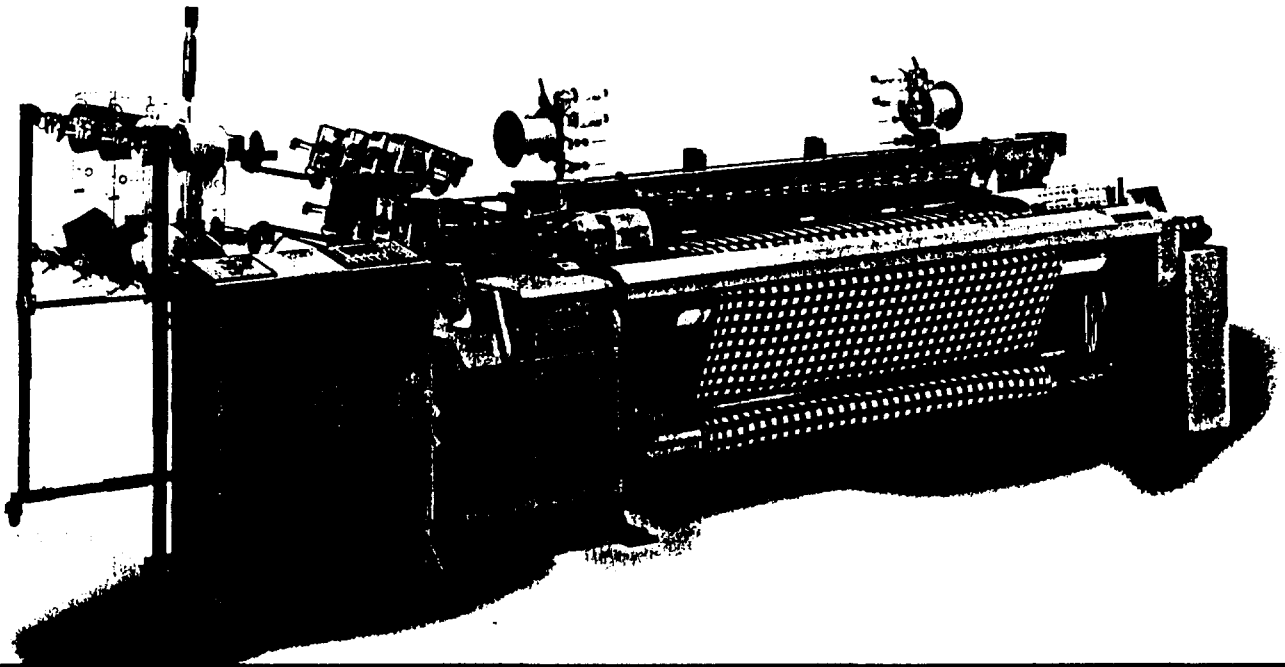
2 - Looms set up and tuning. This is done for each specific fabric design at the beginning of the weaving operation and this will be effected by technicians at the new factory that will receive specific training.

3 - Textile production for the drawings requested.
This provides for a selection of a limited number of warp beams/chains, possibly 4, specially for the product range to be covered.
It will allow a limited stock and fast and efficient weaving operation.

The same for the combination of Jaquard machines to be installed on each loom.
These units can be in sets of two or four, allowing smaller or larger patterns to be waved.
The decision is taken according to the market needs and is a balance between the cost of the Jaquard units (approx 580,000 USD each.) and the speed of weaving.
Because the same effect can, in a way, be obtained by increasing the number of weft while lowering the speed of production.

4 - Design and engineering of a textile factory

5 - Style/market know how.
Different drawings are appropriate for different markets. For example classic design is for UK, USA prefer fantasy, Germany likes modern, etc.



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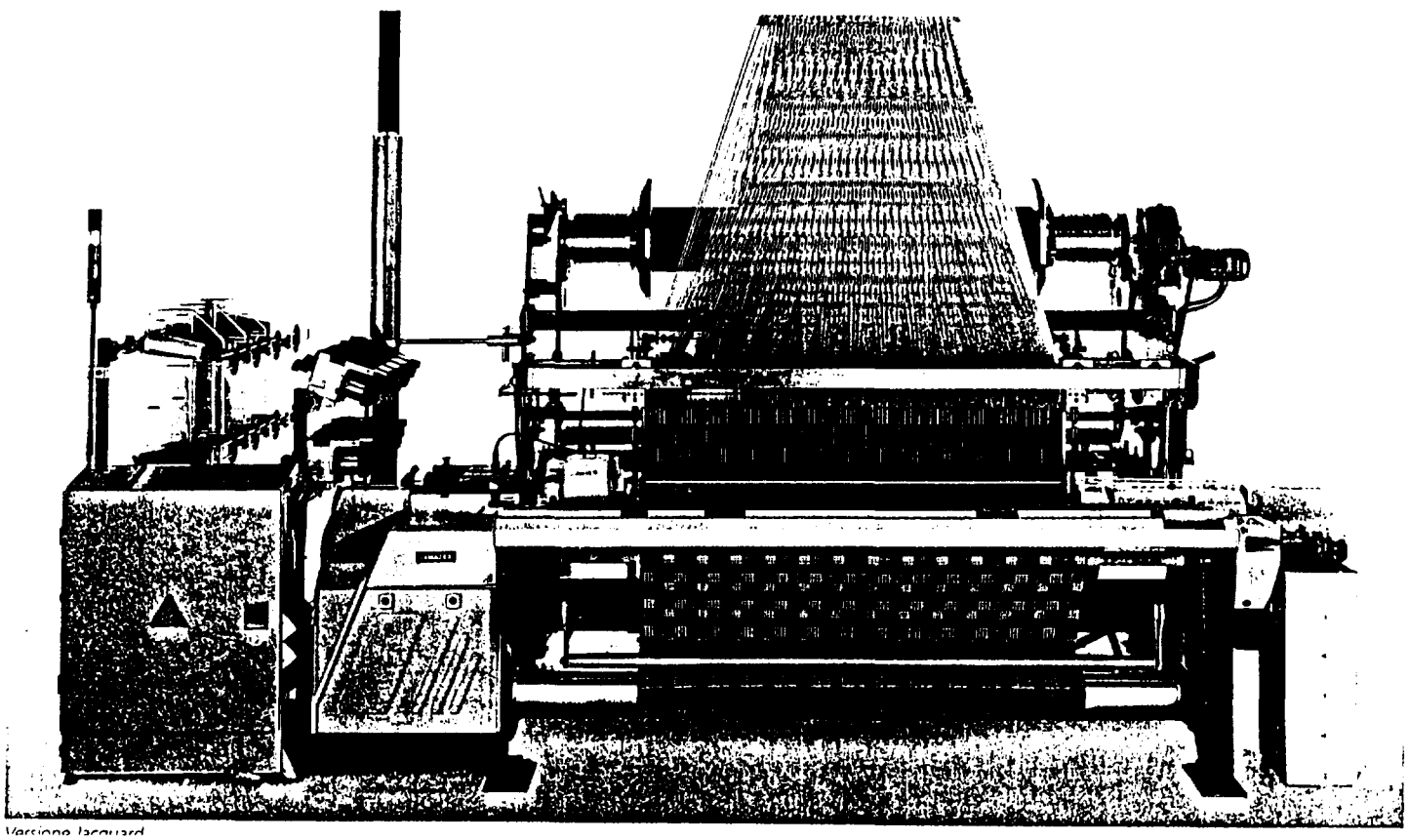

Versione Jacquard

VAMATEX

VAMATEX

Caratteristiche tecniche

Tipo di macchina:	Macchina per tessitura a pinze.
Altezze nominali:	1600 - 1900 - 2100 - 2300 - 2600 mm. 3000 - 3200 - 3400 - 3600 - 3800 mm.
Riduzione in altezza:	600 mm standard, 1000 mm a richiesta.
Prestazioni:	Fino a 600 inserzioni al minuto. Fino a 1400 metri al minuto di trama inserita.
Tessuti producibili:	Tessuti con filati naturali, sintetici artificiali e misti, con peso compreso fra 15 e 800 grammi/metro quadrato.
Filati lavorabili:	Filati discontinui da Nm 2 a Nm 200. Filati continui da dTex 1500 a dTex 10.
Geometria del passo:	Simmetrica di dimensioni ridotte.
Versioni macchina:	Per subbi semplici e per subbi gemellari con diametro fino a 1000 mm. A richiesta per subbi diametro 1250 mm. Per doppio o triplo subbio. A richiesta con subbio superiore.
Numero di colori:	4 - 8 - 12 colori con sequenza a piacere.
Alimentazione trama:	Con porgitrama elettronici a spire separate. (Alimentatore dei porgitrama integrato nel quadro elettrico della macchina).
Frenatura della trama:	Continua con freni meccanici sui porgitrama. A richiesta con freni elettronici programmabili per una frenatura discontinua solo nei punti di pinzatura.
Inserzione della trama:	Mediante una pinza portante la trama viene portata al centro della macchina dove una pinza traente la prende in consegna e la estrae dall'altro lato. Le pinze sono montate su nastri flessibili guidati bilateralmente da una pista discontinua monolaterale formata da elementi guida a gancini.
Battente:	Comandato da gruppi a camme coniugate positive in bagno d'olio.
Densità di trama:	Standard da 4 a 84 trame/cm. A richiesta da 1 a 150 trame/cm. Possibilità di ottenere diverse densità di trama programmate nel disegno.
Svolgitore d'ordito:	Svolgitore positivo motorizzato a controllo elettronico. A richiesta svolgitore meccanico. Tutti sincronizzati con il regolatore del tessuto.
Regolatore del tessuto:	Regolatore positivo motorizzato a controllo elettronico. A richiesta regolatore meccanico. Tutti sincronizzati con lo svolgitore d'ordito.
Formazione del passo:	Macchina ad eccentrici (massimo 12 quadri) con livellamento licci a richiesta. Ratiere elettroniche rotative (massimo 20 quadri). Jacquard meccaniche o elettroniche con comando a cardano.
Ricerca del passo:	Dispositivo motorizzato a controllo elettronico programmabile secondo le esigenze.
Cimosse:	Legatura a giro inglese con 2 o 4 fili. Termosaldate per filati sintetici. Con cimossatrici laterali ed intermedie. Comando delle false cimosse e dei fili di legatura mediante dispositivo indipendente.
Controllo trama:	Tastatore piezo-elettrico con funzioni di alta sensibilità e antidoppia.
Controllo ordito:	Guardiaorditi elettromeccanici motorizzati, elettrici od elettronici fino ad 8 ranghi, anche con dispositivi di identificazione rapida del filo rotto.
Avvolgimento tessuto:	Su subbiello a sgancio rapido fino a 500 mm di diametro. A richiesta predisposizione per avvolgimento esterno.
Lubrificazione:	Tutti i dispositivi in bagno d'olio.
Tiraggio scarti:	Tiro meccanico degli scarti di cimossa e dei fili in esubero e loro deposito in un capiente contenitore.
Comando principale:	Motore trifase da 6,5 Kw nominali. Gruppo freno frizione elettromagnetico.
Controllo macchina:	Mediante SIMOD il computer di bordo che comanda e controlla tutte le principali funzioni tessili e meccaniche. Inoltre permette la programmazione dei disegni, il loro immagazzinamento e la gestione di tutti i parametri e dati di funzionamento. Un'ampia programmazione è possibile per gestire i tempi di fermata ed i tipi di ricerca automatica del passo per meglio rispondere alle esigenze tessili. Il sistema è compatibile ed interfacciabile con i principali programmi utilizzati in tessitura (es. Pocket Stäubli).

VII Organization and Overhead costs

The organization of the new Company is examined here to verify the adherence of the proposed structure to the productive and operational activities that will take place.

Also it has to be verified that the operational definition of the new venture is in accordance with the corporate strategies and policies of the two constituting partners and that it is adequate for the activities planned.

An outline of the structure of cost centers is also given to allow an assessment of overhead costs.

A) Organizational Design.

The Company will be organized along a traditional pyramidal scheme - on two levels of top management and supervisors - which suits the management style of the two originating Companies and should allow the fast decision making and tight operating control needed during the start up phases.

The Board of Directors will express the President (the Indian Partner) and the Vice President (the Italian Partner).

To the Vice President will report the different unit managers:

- Marketing and Sales
- Production (Technical, Main Plant, Warehousing, Transports)
- Service plants, Maintenance, Quality, Purchasing)
- Administrative (Accounting, Finance, Personnel)

At this stage the organizational structure is investigated in regards to three peculiar aspects impacting on project feasibility and success:

- Relationship with the foreign partner
- Remoteness of production facility from design\export marketing functions
- Sales/Marketing structure.

A.1) Relationship with the Foreign Partner.

The Indian Partner - represented by the President - will control the overall activity of the Company, will take care to develop and maintain the relationship with the local Authorities, with the local industrial sector and the local market accesses, will provide assistance to guarantee an efficient operation of the premises and of the service utilities that have to serve the factory buildings. Also operational coordination with the Indian Modern Group textile activities will be a responsibility of the President.

The Foreign Partner - represented by the Vice President - will have functions and powers allowing him specific control of his direct contribution to the J/V: financial, technical and related to the export markets as well as to the trade mark issues. He will be together, with the Technical Manager, the main instrument to transfer market and product know how to the local operation.

He will be assisted, full time, by a Indian expert dealing mainly with all issues relating to the Indian market aspects.

The Technical and Production Manager, with responsibilities also for Procurement and Quality Management will be appointed by the Foreign partner but will need the approval of the Foreign partner.

A.2) Remoteness from design/marketing.

The Joint Venture itself and the production facility - in North West India - will be located in a relatively remote area - several thousands miles, and with 8 hours time zone difference - from Europe, where the design development and main marketing effort will be made and still farther from the USA that will be the main target market. This implies certain redundancies in control positions and a relevant communication cost in the whole system of which the J/V is part.

The Production Manager, physically located at the main Factory, will have to control purchasing - raw materials, consumables etc.- , logistics and local warehous-ing/service and transports and shipping. In India, the likely selected location will be somewhat far, for western standards, from the main hubs of communication and this will require particular attention to stocks, external maintenance support, spare parts of imported machinery, local transportation network. A long haul by truck is the most likely and reliable connection to Bombay (port and airport)for products to be exported.

The Technical Manager located at the Factory site, will have to organize a fairly equipped and well trained, autonomous service and maintenance unit to reduce to a minimum external interventions, from Europe and local.

Beside the initial, scheduled training activities involving all Indian personnel the process of continuous technology transfer will be coordinated by the Technical Manager.

The three expatriates - Production, Technical and Administrative Manager - will prepare and implement, with the assistance of the Indian Assistant Manager, the Organization Manual.

This will have to include:

- objectives and policies of the company
- description of functional units with task details
- job descriptions
- administrative procedures at all functions and levels.

Full implementation of these organizational and administrative procedures will allow in a few years a smooth passage from the present management structure to a reduced presence of expatriates with Indian managers taking over their functions.

A.3) Sales /Marketing.

The sales / marketing structure will be organized with a Sales/Marketing manager in Bombay assisted by Regional sales Manager to exploit and consolidate the provincial markets .

B) Overhead costs.

The J/V will have to set up an efficient Management Information System to monitor the fast pace of the company development and to guarantee the essential coordination between sales, production, purchasing and logistics.

The System will have to guarantee also real time coordination with the Italian Partner Company in Europe to organize and follow up with production and shipping.

The Table below summarizes the personnel - direct and indirect labor - that will be employed by the new Company.

A preliminary scheme of Cost Centers will be as follows:

B.1) Direct

General management
Sales
Production - Preparation/rewindering
Production - Weaving
Production - Purchasing/Warehousing/Transport
Production - Engineering services and Technical Assistance
Service Cost Centers
Administration and Finance cost centers (Incl. training)

B.2) Overhead, indirect

Maintenance
Transportation
Communications
Rents
Property taxes and recurring land charges

Of the overhead costs special attention has to be given to communications between the factory location and the Italian Partner and the USA. These are carried out by telephone - for voice and data -and , frequently, by courier for artworks and samples. Also transportation, beside than for some raw materials and finished products, will require cars, station wagon and minitruck with its dedicated pool of drivers.

The equipment are assessed in Chapter VI and the labor related is estimated at 8 persons.

B.3) Shared Resources

The Italian Partner Molteni &C. owns and operates its production and office complex - with attached a warehousing center with trucks, garages and parking areas - in Lambrugo (Como) Italy and it is to be expected that part of the operation activity of the J/V, at least in the beginning years, for the creative definition of products and for international marketing purpose, will make use of these facilities.

Another very important industrial operation for the J/V will also take place here: sample making (swatches). This activity will require to have one loom fully dedicated to this activity and this will be charged at cost to the JV as well as the cost of development of technical supports for the new designs. The creative content will be transferred free of charge to the JV but the textile electronic elaboration will have to be reimbursed

VIII Human Resources

A) *Entrepreneurial and Management requirements*

The two parties are rather different in terms of company structure and organisation. The Indian party is a large industrial Group (Modern Group) with a fully developed management and a corporate structure. The Italian counterpart is a medium typical size high technology/quality European Company - (Molteni &C.) with a small but effective independent management structure that still reflects the family ownership.

The aim and capability to enter into entrepreneurial enterprises, such as this one, is definitively assessed in both the organizations.

Cultural differences between the two organizations, and personal motivation of management, will anyway have to be accounted for

.

The Indian management structure is dealing with a project that can be considered as 'small', according to the general size of he Indian company and its projected developments.

If and when the project will fit into the Group Strategic selection grid, it will be pursued with capacity and with appropriate means.

The Italian management is much more self-committed and motivated and will go far ahead of its normal duties to push the project through.

When a conclusive agreement will be reach by the two companies, definitively the two parties will be in position to provide appropriate skilled management resources for the project implementation and operation.

B) *Personnel*

During the project setup and construction phase the operation will be managed by the Project Management Unit which will take care of providing the human resources needed to:

- Manage the project
- Provide the temporary resources needed only in this first phase
- Gradually staff the Company

The PMU will chart in detail the requirements of the H.R. function, set up the recruiting and personnel policies and organize and start the training activities.
These activities will take place during the first year of life of the Company: construction period and first production year.

At its steady state the new Company will employ direct personnel of almost 60 units in the factory. Additional people should be added to take into considerations the sales workforce in India and, possibly, in the USA.

The personnel will be distributed into different positions according to the following table:

	Initial Phase	Operating Regime
Management	3	3
Administration	2	7
Technical	3	2
Production	20	31
Clerical and Services	5	9
Factory Workshop	5	5
Total	33	57
Expatriate Tech. + Mgmt.	2+1	1

A special consideration has to be given to the sales and distribution office that will be taken over for the USA market, mostly by the Italian Partner. This market will require specially trained, senior personnel to follow a few and large clients in the Country.

A full sales department will be created at the J/V premises to take care of the domestic market, of sales & marketing coordination with the Italian Partner and to develop gradually an autonomous international sales capacity. This structure will take advantage, at the beginning of operations, from the support of the business units of the Modern Group.

From a purely economical point of view the cost of labor has a limited impact on production cost and limited fluctuations will not produce any dramatic disruption in the feasibility of the project (see Chapter X Financial Analysis).

The yearly cost of employees is estimated at about 1,700 USD per year (social costs included) for the workers, to 1,900 USD per for engineers and skilled technicians, and to 2,500 USD for the management.

Work calendar includes twelve months with 6 days week and 20 days holiday.

C) Categories and functions

The numbers, skills and experiences of workers and employees have been evaluated through the experience of the two partners, and taking into consideration the work organization of existing similar factories in Italy and the Indian industrial environment.

The following personnel is estimated at full capacity in the factory:

Yarn Warehouse	2
Warping/Windering	4
Knotting/Weaving	19
Quality Ctrl. and Fab. War.	6

A factory Workshop will employ at least 5 skilled workers

The estimate of the employed workers seems to be correct or slightly on pessimistic for the amount of production considered. It will be sensibly higher than the European standard for similar operations, while - on the opposite - for the Indian standard can be considered a challenging target of production per capita in the textile industry.

In favor of this estimate is the decision to use modern, automated and integrated efficient equipment that will be at a level not commonly available in India.

A training program will also be attended by the employees and workers, which will return in appropriate skilled personnel to run efficiently a the production system.

D) Availability and recruiting

The area where the factory will be located can source the skilled and unskilled labour and clerical personnel required to run the production complex. Recruitment will have anyway to be carried out with controlled procedures to select the most appropriate operators for the specific positions. The Indian Partner can immediately provide reasonably skilled workers only requiring consistent, rapid, training on the new processes to be faced.

E) Training

Training is organized at different levels.

As far as the production is concerned, four technicians will visit Italy for a three-month technical stage - formal training and on the job training - in similar factories and plants at the Italian partner factories.

All other workers will be trained for two months in India before enter on duty directly on the production lines for the next training-on-the-job phase. This training will be provided by technicians from Italy.

During the construction period a group of technicians and foremen of the new Company, accompanied by the technicians of the machinery suppliers, will follow the installation, testing and final commissioning of the production equipment. This will improve further their technical knowledge and experience.

As far as the design and access to the international market, specific training and information stages will be organised for two months - in India - before going into operation, while training on the job will be a permanent commitment of the Italian partner.

F) Foreign experts

Expatriates will participate in the construction and start up phases and will tutor the Indian technicians during the first few months of production.

Two expatriates (General Manager, and Technical Manager) will be located at the factory for the first few months with main responsibilities of management, contact with Italian Partner and technical and quality control.

IX Implementation planning and budgeting

A) Implementation Planning Issues

The Project has not started at the moment of writing. Although the positive results of the market surveys have been already considered by both parties the detailed financial analysis will be the key issue to decide for a go ahead.

The Indian attitude is towards a rather high profitability of the project projections, while the Italian partner priority is more in targeting to a market nice which is presently unable to tap because of internal industrial cost reasons.

Therefore, one of the main issues still open at the moment of the study will result in the negotiations that will take place between the two potential partners with respect to the intercompany prices. As a matter of fact, a high bulk price of the Joint Venture to the Italian partner would benefit the JV, while reducing - or deleting - the chances of the Italian partner to market - additionally to the JV, with some sort of geographical share of the addressable countries - directly the final products. On the other side, if the price would be too conservative, the Joint Venture projections could result so lowered to limit - or discourage at all - the interest of the Indian partner in taking part into the initiative.

The major concern about possible difficulties in the project implementation is the impact of delays that can affect seriously the market results. The Indian market for Jaquard fabric is developing very fast and at least two other similar operations - with the same productive size- have been recently announced on the press. Apparently, the overall market size cannot accommodate more than four or five players of that size.

The US market is probably under some control of the Italian partner - due its introduction and good reputation because of the higher level products - but a six to twelve months delay could imply losing the opportunity, that in turn can be get by other newcomers.

Worldwide a lot of investments are being planned to modernize existing plants and to increase production capacity of Jaquard fabric: a delay of several months could consistently affect the market opportunities presently opened to the new Venture.

There should be not any major cost increase effects due to a delay in implementation.

- The market of textile machinery is not experiencing turbulence and likely will not go through any remarkable uptrend in the next couple of years: the cost forecasts are quite stable.

- Fluctuations of local construction costs, even accounting for a limited percentage of the total investment cost, will provide some impact on the cost projections and the economic results. With respect to the investment cost sensitivity, please refer the Chapter X, Financial Analysis.

- Variation can be expected on the raw material cost side. However, the impact of the raw material cost escalation could be mitigated by the appropriate price variations a applied by the new company, which will basically work on commitment (firm orders in batch from final users) basis (See Chapter IV Raw Materials).

- The labor cost could not badly affect the project projections in the medium term, even in presence of major changes, because of the structure of the production costs (again see Chapter X Financial Analysis - Production Cost Schedule - Annex 1).

B) Project Implementation Team

At present the project is under direct control of the two Managing Directors of the partners. Delegation is given to members of their respective staffs for specific tasks. On project startup, a Project Management Unit - PMU - will have to be put in place. It will be managed by the Indian Partner Divisional Manager, assisted by a full time Project Manager. The Italian Managing Director will be appointed as Deputy Manager, assisted by a Technologist/Contract Manager and a Lawyer.

The responsibilities are split as follows.

- the Indian Partner will be in charge of all civil works, installations of machinery (with external assistance), coordination with local Authorities and companies, personnel selection, staffing and establishment of the Indian sales network.

- the Italian side will be responsible for design, selection, supply, installation, testing and start up of the machinery that the Joint Venture will buy in Europe and import to India.

Coordination will take place between the two Partners at the Assistants level.

The PMU will prepare a detailed project schedule and continuously monitor the project development to identify and react in the most appropriate way to possible changes in the expected outcomes.

C) Stages Of Project Implementation

The Project Implementation phase, from firm investment decision through construction - installation to start up of production (first step) is expected to last 12 months. It is expected that the project will start officially by June, 1997.

The Project implementation can be split up, for control purposes, into a series of connected activities. The following table shows the expected timetable for the project implementation.

	Month
• Joint Company formation: establishment and registration	1 - 1
• Financial planning and organization	1 - 2
• Design Engineering (Civil works / production equipment)	1 - 2
• Land, building	1 - 5
• Procurement of machinery	1 - 4
• Installation and start up	5 - 7
• Plant commissioning	6 - 7
• Organization buildup	3 - 6
• Recruiting	3 - 4
• Marketing/sales organization.	3 - 7

D) Budgeting

The total plant design, engineering and construction plus equipment costs have been estimated at around 5,455,000 USD, out of which the major portion is accounted by plant machinery & equipment estimated at 3,890,000 USD (part of which has to be imported) and 1,015,000 USD for land, civil works, structure & buildings.

The balance of 550,000 USD is allocated as pre-production expenditure.

All the assets allocated were considered as fixed investments.

As verified with from similar Italian and Indian manufacturers, the technical/industrial life of this kind of fixed assets is around 10 years; thus a depreciation rate of 10%/yr. (straight-line method) has been selected.

INVESTMENTS COSTS		**Invest. ('000 USD)**	**Depr. rate (%)**
Land, civil works, buildings		1,015,000	5%
Plant machinery & equipment			
- Italian/European origin	2,860,000		
- Technology	400,000		
- Indian machinery	630,000		
Total Equipment		3,890,000	10%
Pre-production expenditure		550,000	10%
TOTAL		**5,455,000**	

The investment outlay will be financed by equity capital (870,000 USD, that is 40% contributed by the Italian investors and 1,306,000 USD, that is 60%, contributed by the Indian Investor) and through two long term loans, locally drawn, one in foreign currency (Italian Lira) and one in Rupees. Equity will be contributed in cash.

SOURCES OF FINANCE	('000 USD)
Equity:	
Italian Partner	870,000
Indian Partner	1,306,000
TOTAL EQUITY CAPITAL	**2,176,000**
Loans:	
FX Loan	2,000,000
Rs Loan	1,279,000
TOTAL LOANS	**3,279,000**
TOTAL FINANCING	**5,455,000**

X Financial Appraisal and Investment Appraisal

A) General Aspects

The following financial analysis has been carried out using the methodology recommended in the UNIDO Manual for the Preparation of Industrial Feasibility Studies. In accordance with this methodology, UNIDO COMFAR III expert package has been used for the financial and economic calculations. The financial analysis has been carried out to evaluate the Indian Joint Venture, developed as described in the present feasibility study, for production of synthetic fabrics for furniture and its subsequent distribution in the foreign and local market for industrial use. By taking into consideration the required project input costs and output prices, risks and uncertainty this study is aimed at clarifying the main issues of the business plan, calculating:

1) the analysis of the cost estimates for the project, based on the information included in the previous chapters of the study

2) the financial analysis, including the flow of financial resources and the project financial net benefits

In the appendices, COMFAR III Expert printout are given. All financial calculations have been carried out using the international US Dollars (USD) currency, and the results have been reported using US dollars accordingly, for the reason that most of the sales (at least 75%) are generated into USD and for the sake of simplicity in understanding the figures.

Analysis Method

The financial and economic evaluation has been conducted using the methodology which UNIDO recommends as well as standard capital budgeting procedures. The future cash flows are forecasted, generated by the project over the estimated 12-year planning horizon, based on market trends, and the Italian partners' general experience.

In determining the rate of discount to be used, the appropriate cost of funding was considered, calculating the weighted average cost of capital (WACC). This reflects both the risk involved in Indian investment and the capital structure[1].

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[1] The **discount rate** used for NPV calculation is the **WACC**, where the weights are based on the proportion of the firm's capital structure accounted for by each source of capital. This discount rate takes in account the time value of money, as well as the riskiness of the JV's cash flows.

$$\mathbf{WACC} = \%D * Rd * (1-t) + \%E * Re$$

where Rd is the cost of debt and Re is the expected rate of return on each partners equities

$$\mathbf{Re} = Rf + Rm$$

where Rf is the risk free level and Rm is the risk premium over the capital market.
In this case the Re for the Indian partner was estimated at about 16-17%, corresponding to the level of a local long term interest, while the Rf for the Italian partner was considered about 12% plus an Rm of approx. 8% (for eight-year investment, inclusive of the profit level in alternative investments and the risk related to the proposed activity in India); thus the Italian Re was assumed about 20%. The total Re on equity is averaged at about 18.2%. Therefore, weighting the different rates and different invested capitals at the beginning of the activity, the composed **WACC is about to 15%**.

Finally the COMFAR III Expert Software has been used to evaluate the present value of the JV's future cash flow discounted at the cost of capital.

The following assumptions have been made:

i) It has been assumed all the synthetic fabric production will be bought according to the Export Oriented Unit scheme, i.e. at least 75% outside the country (namely on the American market) and 25% in the domestic market (unit-wise). Therefore, the majority of the sales will be generated into USD. Under this assumptions the synthetic fabric produced by the joint venture is assumed sold totally sold. The assumption of 100% volume produced and sold is applied to the whole project life.

ii) As a consequence of the EOU assumption, a tax holiday of 5 continuos years is admitted, out of the first 8 of operations. In a conservative assumption, the tax holiday has been considered in the first five years of production(i.e. tax holiday starting from the second of activity, first of operations).

iii) The base model is assumed without inflation to examine the profitability of the industrial initiative as independent from the general economic context. The calculations have been carried out using dollar cash flows for product sales and for all payments which will take place in USD, and finally discounting all nominal cash flows at the nominal dollar rate of return. A relatively low political risk (expropriation, exchange control, repatriation) was taken into consideration.

iv) In the calculation of incremental cash flows, it was assumed that the effect of "own market erosion" was supposed negligible (the JV products do not take sales away from the Italian partner products, targeting different section of the synthetic fabric market - the latter being addressed to extremely stylish/sophisticated customers) and additional sales or other advantages for existing Italian products were also considered insignificant

v) Sensitivity analysis was performed on this base case. Since a critical assumption is that the JV's sales would be considered as market prices (rather than as transfer prices to the Italian company or to any affiliate to the Italian company acting as commercial units - therefore no buy-back arrangement was supposed to sustain the sales price of the JV), various scenarios were enacted to account for possible unpredictability in market prices. Prices were forecast to be 3%, 5%, and 10% percent less than the base case prices. Production costs were forecasted to be 3%, 5% and 10% more than the base case. Investment costs were forecasted to be 3%, 5% and 10% more than the base case ones. The resulting net present values and internal rate of returns serve to illuminate further the JV's value and risks.

B) Input Data

The following sections highlight the input data utilised for the COMFAR III Expert calculations, as derived from the previous chapter of the present feasibility study (Chapt.2 - Chapt.9).

B.1) Fixed Investment Costs

Initial investment costs are defined as the sum of fixed assets (fixed investment costs plus pre-production expenditures) and current assets (net working capital). These costs are estimated for the construction phase foreseen for the second 6 months of 1997 (July to December 1997). The production phases is envisaged from January 1998, lasting for 12 years (till December 2009). The reference year for the COMFAR calculations is selected on year 2000.

The overall fixed investment cost is estimated as 5,055,0000 USD for fixed investment assets, out of which the main part is accounted for "plant machinery & equipment" valued at 3,890,000 USD (3,260,000 coming from abroad India, the remaining 630,000 locally sourced), 1,015,000 USD for civil works, structure, buildings, services and others. As far as the intangible assets are concerned, about 400,000 USD have been estimated for the Know How transfer (benefiting the Italian partner) and 150,000 USD for pre-production expenditures (less than 3% of contingencies) in the construction phase. The total foreign expenditures sum up to about 3,515,000 USD.

The technical life of these kind of fixed assets is around 10 years; thus a depreciation rate of no lower than 10%/yr. (straight-line method) has been selected. The present model includes a depreciation rate linear to zero.

FIXED INVESTMENTS COSTS	Invest. outlay	Depreciation rate (%)
Land	200,000	-
Site preparation and building	725,000	5%
Contingencies	150,000	10%
Plant machinery & equipment	3,980,000	10%
Pre-production expenditure	400,000	10%
TOTAL INITIAL INVESTMENT (without working capital)	5,455,000	

B.2) Working Capital

Net Working Capital requirements have been calculated according to the expected minimum days of coverage (MDC) determined for the JV. The raw material supplies have been considered generating the need for a local stock up to 20 days.

Similarly, as far as the accounts payable are concerned, in the present estimation a conservative figure of 30 days was considered as the maximum delay in payment allowed to the JV.

A relatively conservative figure for the cash-in-hand part of the working capital was considered, equivalent to 5 days, to give the JV company the possibility to fulfill very short term requirements in case no delay would be accepted.

The following table summarises the main input for working capital coverage (MDC, Minimum Days of Coverage):

Item	MDC
Raw Material	20
Work in Progress	10
Finished Products	15
Accounts Receivable	40
Cash in Hand	5
Accounts Payable (factory supplies, utilities, repair, overheads)	30
Account Payable (spare parts paid)	60
Account Payable (raw material)	40

The yearly average capital trapped in the company can subsequently be calculated.

The first year of production (second half of 1997, 6 months at reduced capacity) requires an additional increase of investment due to the working capital over the first of production, estimated up to about 183,360 USD, to be increased to 272,393 USD over the second year of production, and reaching an steady average level of about 333.218 USD (from the third year onwards).

Working Capital (USD)	year 1	year 2	year 3	year 4
Current Assets	0	307,057	458,620	565,486
Account Payable	0	123,697	186,226	232,267
Net Working Capital	0	183,360	272,393	333,218

As it will result, the net investment in WIC results in about 8.5% of the sales level.

B.3) Total Investment

It is assumed that the entire initial investment is composed by the capital expenditures (5,055,000 USD), the pre-production expenditures (400,000 USD) and the required initial net working capital(183,360 USD on year 1998).

Therefore, the time schedule of the capital investment formation is as follows:

Cumulated Investment (USD)	year 1	year 2	year 3	year 4
Fixed Investment	5,055,000	0	0	0
Pre-production expenditures	400,000	0	0	0
Total Net Working Capital	0	183,360	272,393	336,884
TOTAL INVESTMENT	5,455,000	5,638,360	5,727,393	5,741,884

B.4) Sources of Finance

It is assumed that the entire investment of 5,455,000 USD is covered by the following share of capital sources:

- 60% commercial loans, equal to 3,279,000 USD
- 40% equity capital, equal to 2,176,000 USD

On turn, the equity capital is split between the local Indian partner (60%) and the foreign Italian one (40%), resulting in the following:

- 60% Indian partner, equal to 1,306,000 USD
- 40% Italian partner, equal to 870,000 USD

The total loans are further split in between the total amount covered by hard currency credit line and the term loans provided by local financial institutions into local currency (Indian Rupees). As a typical assumption, specially applied to the Indo-Italian relationship, the total amount of loans has been split as follows:

- a term loan from the credit line provided by EXIM Bank of India and Mediocredito Centrale, disbursed into Italian Lire, 7 years repayment period, 18 months grace period, interest rate at LIBOR +2% (presently 9%, with forecasts of next decrease by end '97), max credit amount of 2,000,000 USD
- a term loan from a financial institution (for example IDBI, Industrial Development Bank of India or equivalent), covering the remaining 1,279,000 USD, drawn into Indian Rupees, over a 5-year period, 18 months of grace period, interest rate at about 19%

The total amount of capital infusion is therefore split as in the following table:

Source	Capital Contribution (USD)	Share %
Modern Group	1,306,000	equity 60%
Molteni & C. Spa	870,000	equity 40%
TOTAL EQUITY	**2,176,000**	total equity 40% of total capital
credit line	2,000,000	loans
term loan	1,279,000	loans
TOTAL LOANS	**3,279,000**	total loans 60% of total capital

Of course, the financial requirements for a sustainable growth are covered through the self-financing capabilities, obtained by short term loans covering the increase of working capital (at the beginning) and further from the net profit coming from the sales. As later discussed, the cash flow for financial planning states that the growth is effectively supported by an appropriate inflow of finance. The discussion is described in chapter 10.4.1.

For the sake of a very prudent modeling of the business plan, the interest rate assumed (19%) for the debt service from the lending Institution - like the mentioned IDBI - was assumed higher than the present market indication (presently about 15%-16%). Furthermore, it should be pinpointed that the usual Indian lending structure includes inflation expectation, expressing all the debt interest rate in term of fixed loans. On the opposite, the present model does not include any inflation expectation, assuming real term calculation. Floating loans are not usual in India, and are still presently linked (implicitly linked) to foreign currency loans only (like the applied EXIM Bank credit line). Considering a floating Indian Rupees loan would lower the interest rate nominal expectations (and therefore the debt service), thus improving the financial results of the projections. However, due to the infrequent utilisation of floating interest rate in India, in the present calculation a fixed rate (i.e. higher rate) term loan was assumed, resulting in a pessimistic approach.

B.5) Production Phase

The Indian synthetic fabric manufacturing plant can produce up to 1.000.000 meters (m) of fabrics of several different types. The production phase will start on 1.1.1998, after 6 months of construction, and will last for 12 years. It has been assumed that the increase of production capacity will follow the listed schedule:

Year	capacity
1998	50%
1999	80%
2000-2009	100%

Therefore, the year 2000 was selected as reference year. In the present model, all the production is considered to be sold on yearly basis.

Six different types of product were considered for the JV production; three of them will be sold in international markets, therefore in the prices are incorporated all the excise duty related to, so that the company income is considered as net. Accordingly, all the raw materials are inclusive of any customs duty due to import without final product export.

Product	Yearly 100% Capacity (m)	Unit Price (USD/m)
Gobelin Basic	462,000	3,2
Gobelin High	50,000	8,0
Damasc Basic	309,000	2,9
Damasc High	50,000	7,0
Lampass	59,000	8,6
Matelassé	50,000	8,0
TOTAL	980,000	--

It should be underlined that the Gobelin Basic and the Damasc Basic are produced for the export market, thus achieving the minimum export target to cope with the Export Oriented Unit requirements (and related tax exemption scheme), resulting in some 78% of production sold abroad (minimum 75%).

Production costs are calculated taking into account that the raw material is locally sourced for some of the basic materials, such as the cotton yarn (in different types: cotton 4/1, cotton 6/1, cotton 8/1) and viscose yarn (in the types viscose 24/2 and 30/2), while the polyester yarn is imported. Therefore, according to the final market destination of the finished products, the raw material cost is charged by import duties (polyester imported, fabrics sold on local market), or is not (polyester imported but fabrics sold on international market).

The following table shows the different costs considered in the analysis:

Raw Material Item (yarn)	Source	Cost (USD/Kg)
Cotton 4/1	Domestic	2.90
Cotton 6/1	Domestic	2.90
Cotton 8/1	Domestic	2.90
Viscose 24/2	Domestic	3.75
Viscose 30/2	Domestic	3.90
Polyester (for export)	Foreign	3.75
Polyester (for domestic)	Foreign	5.05

The cross reference table between products and raw material consumption (per unit) is hereinafter shown (all raw materials considered into Kg of yarn per meter of final fabric production - 1.4 m wide):

Product	Cotton 4/1 (Kg/m)	Cotton 6/1 (Kg/m)	Cotton 8/1 (Kg/m)	Visc.se 24/2 (Kg/m)	Visc.se 30/2 (Kg/m)	Poly.r (export) (Kg/m)	Poly.r (local) (Kg/m)
Gobelin Basic	0.340	-	-	-	0.005	0.226	-
Gobelin High	-	-	0.270	-	0.005	-	0.240
Damasc Basic	-	0.270	-	-	0.005	0.205	-
Damasc High	-	-	-	-	0.205	-	0.205
Lampass	-	-	-	0.270	0.005	-	0.205
Matelassé	0.140	-	-	0.240	0.005	-	0.205

As far as the indirect costs are concerned, energy and factory supplies are taken into account separately.

Additional general expenditures related to the company's activity are taken into account under the indirect costs overheads.

The related costs are locally paid, with the exception of spare parts which are imported, according to the following table:

Item	Cost at 100% capacity (USD)
Utilities	213,840
Factory Supplies	38,800
Spare Parts	15,000
Maintenance	15,000
Factory Overh.ds	60,000
Admin Overh.ds	12,000

Personnel costs are divided by categories, and has been considered as indirect fixed costs.

JV Personnel	year cost (USD)	1997	1998	1999
Expatriates	1,370	2	1	1
Managers	2,743	8	12	12
Staff	2,743	7	18	18
Skilled workers	2,743	30	45	45

B.6) Income Taxes

According to local law in India, and according to the local definition of Export Oriented Unit, an income tax holiday of five years is granted to the project. After that, a full tax rate of 40% is supposed to apply to the Joint Venture.

C) ANALYSIS OF RESULTS

C.1 Cashflow for financial planning and profit distribution

The cashflow has been evaluated on yearly basis. The first year of cash balance shows the net difference of zero USD, being (theoretically) all the fixed investment balanced by the funds (equity 2,176,000 and term loans 3,279,000 USD).

The company starts producing at the rate of about 50% of the capacity at the beginning of the second year of operations (1998). Therefore, the total net working capital needs rise to the level of 183,000 USD. Assuming the pessimistic condition that the whole current assets should be anticipated, the total increase of investment, covered by short term finance (one year term, at 22% interest rate), rises to about 310,000 USD at the beginning of year 1999. However, the operations of the year lead to a total net surplus (end of 1998) equal to 130,000 USD: therefore, the short term net unbalance is about 250,000 USD (made up by 310,000 USD capital installment plus 68,200 interests less 130,000 USD surplus). However, it should be underlined that the short term debt is drawn on January 1st, and repaid (capital and interest) on January first as well. As a consequence, the cash surplus at the end of the year does not include the debt service, located - one day later - on the next year cash report.

However, as a matter of fact, the cash surplus is apparently positive (130,000 USD) but is really liable of 250,000 USD to match with the next year (1999) operations. Furthermore, the operation plan envisages a further increase of production (up to 80% of the total capacity) on the third year (1999). As a consequence, the working capital increase (net) is as high as 89,000 USD, the total net working capital being about 272,000 USD. Again, assuming that the whole current assets increase should be anticipated at the beginning of the year, an amount of about 150,000 should be anticipated, together with the previous 250,000 USD. Therefore, a second short term batch of about 400,000 USD has to be drawn (1-year duration at 22%).

At the end of the year, the cumulated cash surplus of about 337,000 USD materialises. However, as in before, the immediate next day (i.e. January 1st, 2000), the cumulated cash is supposed to decrease dramatically due to the debt service (400,000 capital installment and 88,000 interest) and the further increase of working capital. Still, the pessimistic assumption of full increase of the current assets at the very beginning of the year leads to an estimation of 106,000 USD increase.

The total cash balance at the beginning of the year 2000 is therefore requiring a short term infusion of 260,000 USD (488,000 USD debt service, 106,000 USD increase of current assets less 337,000 cumulated cash).

The operations of the year 2000 provide a final cash surplus of 421,742 USD, with a cumulated of about 758,000 USD. Therefore, the short term liquidity is definitively covered by the available cumulated cash. No need on short term basis is thereafter strictly required, apart from any company's finance policy that could involve the short finance utilisation.

The total short term table is thereafter shown:

Date of Disbursement	Short Term Finance (USD)
1/1/1998	+310,000
1/1/1999	-310,000
1/1/1999	+400,000
1/1/2000	-400,000
1/1/2000	+260,000
1/1/2001	-260,000

As the dividend distribution is a corporate finance policy matter, in the present analysis - as previously stated - no dividend paid is taken into consideration. Therefore, all the surplus is cumulated over the years of the investment planning horizon. The total cumulated cash increases from the 130,757 USD of the year 1998 to the final 7,803,819 USD at year 2009. However, it should be noticed that the final accumulated depreciation accounts for 4,971,000. It means that even if theoretically the cumulated cash can be converted in paid out dividends, the greatest part of the amount should be retained to cover the need of reinvesting in fixed assets at the end of the production period. Of course, a firm operating in a real context would utilise loans and credit lines to finance the extension of the investments, introducing appropriate level of liabilities in the balance sheet. It should be clearly understood that a real dividend policy can only be designed by the shareholders during the implementation phases and according the industrial policy of the company.

C.2 Net Income Statement

The Net Income Statement schedule shows an increasing trend of sales from 2,015,950 USD of the first production year (1998) to 4,031,900 USD of 2000. Later on, the assumed stability (analysis in real term) of price leaves the total sales unchanged at the steady state. As far as the gross profit from operations is concerned, it increases from 5.4% of the revenues to the about 25% of the late years (2006-2007), pushed up by the reduction of the debt service paid back to the lenders.

The Net Profit is negative on the first year (-351,000 USD) even though the depreciation (498,000 USD) and the recourse to short term bank credit permit to retain a positive level of the cash, as introduced in the previous section. Since the second year the Net Profit turns to positive, even starting from a limited amount of 174,977 USD (1999). The Net Profit increases quickly to 592,245 USD (third year, 2000), then to 709,875 USD (2001), and still increasing up to 611,000 USD in the late years of the project (2006-2007).

It is worth noticing that the interests payments present two major steps down in year 2001 (fourth of production, from 400,000 to 282,000 USD) and in 2003 (sixth of production, from 222,000 to 162,000 USD), then reducing gradually to 41,000 USD in the 2005 year and disappearing later on.

The Net Profit to Equity ratio (ROE) again shows a first negative value (corresponding to the first year negative net profit), then turns to a positive - but very limited - value of 8% (rather below the minimum expectations of the shareholders. Eventually, the ROE values start going fairly positive, ranging from 27% to 35% in the third to sixth year of production, decreasing to 22% on the first year of taxation (2003), then increasing again up to 28% (2006-2007) and finally boosting over 39% in the last two years. The trend can be easily understood from the Net Profit to Total Sales diagram (see Annex 1) due to increasing of the production level (approaching the capacity), the decreasing influence of the debt service and the taxation period starting. As ROE should be compared with the equity return expectation of the partners, it be underlined that the both the partner's expectations are largely exceeded at any single stage of the company business plan after the first two years. A separate comment is due to the exceptional high rate of the last two years, resulting basically from the conclusion of the depreciation period, and therefore from the reduced depreciation amount accounted in the last two years.

As far as the Return On Investment is concerned, the COMFAR III printouts show that the ROI level is to some extent following the same pattern of the ROE. As a matter of fact the ROI level can be defined as insufficient on the first year (1998), at the 2.4%. Further, the level of ROI increases over 11% on 1999 and then stabilise at 17% from the third year (2000) onwards, then stepping down to 11% on 2003 (due to tax) and gradually recovering to 15% on the last two years. In the case of ROI it is clear that the reduced capacity of the first (but even of the second year as well) does not permit an acceptable gross margin. The company should therefore force the industrial plan to reach the steady level full capacity as soon as possible, to shorten the period of low-income.

C.3 Discounted cashflows

The financial evaluation has been carried out assuming a basic reference configuration for the investment project, defined by the cost estimation summarised in the previous paragraphs. This basic version does not include any inflation rate. The related printouts are enclosed in the Annex 1 to the present study.

C.3.1 Discounted Cashflow over total investment

Given the general assumptions of the project, the Net Present Value (NPV) over the project, calculated at 15% of discount rate, is positive (636,413 USD), with a NPV ratio of 0.11 (total discounted value higher than initial of 11%). The evaluation shows a positive result, with some margin on the threshold of decision (0 level).

The internal rate of return over total investment IRR looks slightly good (17.48%), which represents a limited 2.5% spread over the required discount rate. The amount is not very high, but should take into consideration that a the assumption on prices and debt interest rates have been assumed rather pessimistic (price very low, interest rate inclusive of inflation expectation, while the calculation model is considered free of inflation and devaluation of the Indian Rupee).

As the result of the present analysis, a payback period of 6 years is calculated. The payback periods increases to 11 years when calculated in discounted terms. It means that the last year net cash flow is the real key factor to get a positive NPV. In turn it demonstrates that the project suffers a certain degree of risk, as the whole calculated profitability 'de facto' lays in the very last year of the planning horizon. Therefore, the companies should carry out the entire life span of the project before getting the recovery point of the investment.

C.3.2 Discounted Cashflow over total equity invested

The NPV calculated over the equity invested shows a result, coming to a 284,433 USD at 18.2%. It should be underlined that the present evaluation takes into consideration the composition of the initial finance, therefore calculating the discount factor on the equity as the weighted expectation of the two partners (see footnote on paragraph X.a. The associated internal rate of return (over total equity) is calculated equal to 20.4%. Again, a limited margin of 2% is evaluated over the cut-off rate.

C.4 Break-even Analysis

A break-even analysis was performed on this base case. First, costs were allocated according to their variable and direct cost contribution. All raw material, factory supplies, and other costs were considered as variable. All the other costs, including all personnel costs, were considered fixed. The JV operation was determined to break-even when it reached 56% of its operating capacity. Again, in the early period of the JV (years 1998-1999) the break-even margin is higher (because of the reduced capacity resulting in reduces income at a stable fixed costs level), resulting in about 87.6% on the first year and 63% on the second respectively.

C.5 Sensitivity Analysis

Sensitivity analysis was performed on different parameters:

- time planning
- market prices of the product
- the production costs
- the investment costs.

C.5.1 Planning Horizon Sensitivity

When the planning horizon is varied, different values of the basic parameters (NPV, IRR...) are obtained. As a matter of fact, the longer the planning horizon, the higher the Net Present value results. The sensitivity investigation is aimed at investigating the attitude of the project to recover quickly the investment exposed, and therefore at evaluating the effective risk borne by the promoters.

In the following table tha main results are of the investigation are listed (the base case is associated to a duration of 12 years, and it is shown in bold on the table):

Planning Horizon (years)	NPV at 15% (USD)	IRR (%)
8	85,842	15.39
10	331,792	16.41
12	**636,413**	**17.48**
15	964,735	18.42

As a matter of fact, a time period less than 11 years does not permit the full recovery of the investment, as already known from the discounted cash flow analysis. It is worth noticing, however, that the overall trend of the relationship of duration to IRR (or NPV) is quite light, showing a slight increase of 3% while doubling (8 to 15) the time plan.

C.5.2 Price Sensitivity

With the reduction of output prices by 3%, 5% and 10% (and total sales at full capacity decreasing to 3,910,000 USD, 3,830,000 and 3,628,000 respectively), the net present value continues decreasing, assuming a value lower than zero since the 5% price decrease.

Price reduction	Sales revenues (full production) USD	NPV at 15% (USD)	IRR (%)
base case (12 years)	**4,031,900**	**636,413**	**18.42**
- 3 %	3,910,943	151,712	15.60
- 5 %	3,830,305	-171.422	14.32

The result of the analysis shows agreement with the outcome of the Net Income Statement. As a matter of fact, the forecasted price level is not very profitable to the Joint Venture. The sales level exclusively permits the cope with the expectation of economic return of the project, but without providing additional flexibility. If a permanent decrease (higher than 3%) of the market value should materialise, the project turns into negative return. However, it should be underlined that the price level identified in the study is rather conservative, and that the price reduction should be as long as the project life to affect the NPV projection.

C.5.3 Production Cost Sensitivity

Production Cost Increase	NPV at 15% (USD)	IRR(%)
base case (12 years)	**636,413**	**18.42**
+ 3 %	320,788	16.26
+ 5 %	110,370	15.43

As stated before, the tight price level affects the overall evaluation of the flexibility of the project towards permanent fluctuations. In the case of production cost increase, the limited margin of price to cost results in negative results of the project (i.e. NPV negative) since more than +5% production costs. Again, to affect the NPV the decrease should be permanent and no feed-back should be possible to compensate the increase of costs by increase of price. As a conclusion, the conditions for the failure of the project are rather stringent, but it is worth underlying that the margin price-to-cost is actually limited.

C.5.4 Investment Cost Sensitivity

Investment Cost Increase	NPV at 15% (USD)	IRR(%)
base case (12 years)	**636,413**	**18.42**
+ 3 %	484,970	16.85
+ 5 %	384,007	16.44
+ 10 %	131,702	15.47

As shown in the above table, even a limited increase of the total investment cost can affect the overall rate of return. As a matter of fact, more than a 10% increase of the investment cost can result in a negative NPV calculation. The reason for the sensitivity of the project to the investment costs is linked to the limited project profitability (only 2% margin to the cut off rate), which provides very few flexibility towards fluctuations in the implementation phase.

C.5.5 Further Planning Horizon Sensitivity

A summary table reporting about the effects of the variations of the main parameters is thereafter shown. As previously understood, the time duration plays a crucial role on the estimated profitability of the venture. A time duration lower than 12 years may

result in a highly sensitive project, while extending the time plan up to 15 years can contribute to create a more stable project performance.

Planning Horizon (years)	Parameter Variation	NPV at 5% (USD)	IRR (%)
8	production cost +3%	-54,460	14.74
8	investment cost +3%	-185,707	14.15
8	price level -3%	-609,104	12.18
12	**production cost 5%**	**110,370**	**15.43**
12	**investment cost +5%**	**384,007**	**16.44**
12	**price level -5%**	**-171,422**	**14.32**
15	production cost +5%	405,103	16.45
15	investment cost +5%	710,716	17.42
15	price level -5%	105,281	15.38

C.6 Conclusions on the financial results

The financial evaluation has been carried out assuming a basic reference configuration for the investment project, defined by the cost estimation summarised in the previous paragraphs. This basic version does not include any inflation rate. The related printout are enclosed in the Annex 1 to the Chapter X. The main consideration that can be pinpointed are the following:

i) Given the general assumptions of the project, the Net Present Value (NPV), calculated at 15% of discount rate over a 12 years planning horizon, is positive (636,413 USD), thus confirming to the investors that the industrial project can provide a remuneration higher than required. However, the turning point of the NPV cumulating occurs at the very last year of the project, being the discounted payback period evaluated as 11 years long.

ii) The internal rate of return IRR looks positive (17.48%), which represents a calculated 2.5% spread over the required discount rate.

iii) The Net Income Statement starts to show positive net profit from the second year, while the balance of the Cumulative Cash Flow requires the additional inflow of a certain level of overdraft in the first three years. The net profit results in acceptable level of ROE since the third year.

iv) The operational margin is positive from the first year, and reaches about 24.5% of sales at the full capacity reference year.

v) A break-even analysis was performed on this base case. First, costs were allocated according to their variable and direct cost contribution. The JV operation was determined to break-even when it reached 56.2% of its operating capacity.

vi) The sensitivity analysis shows that only very few permanent variations (less than 5%) of the main parameters (sales price, production costs, investment costs) can be suffered without affecting the positive results of the NPV - IRR criteria. However, it should be underlined that both the interest rate structure and the sale price projections have been selected with quite pessimistic assumptions, therefore granting additional margin of profitability to the project.

XI Legal Framework of the Project

The legal and corporate framework for the project was also explored, to a certain extent, to provide the Investor with an extended understanding that would further reduce the risk of failure in this international Joint Venture.

The following issues have been investigated.

A) The legal framework:

Investment codes: advantages, their granting, constraints, priorities
Guarantees from expropriation /nationalization, protection of intellectual property, international arbitration, advantages of partnership.

B) Company law

Types of incorporation, formalities for incorporation, cost, registering foreign participated companies, employment of expatriate personnel
Subscription of capital, directors etc.

C) Formalities

Incorporating a Company: authorization time, cost, solicitors, lawyers, fees, control of the company (articles of association)
Nationality of managers. Personnel representation on the board.

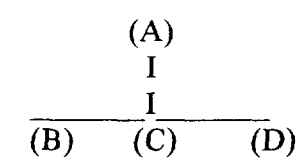
These issues have been identified by the Italian partner and discussed with the Indian partner during several meetings. Clarification were provided by the Indian Partner and by its lawyers; several joint decision were taken and the resulting cooperation scheme was then drafted in the form of a group of agreements.

A) The Agreements

The master agreement is the **Joint Venture agreement** (A).

This is accompanied by a

- Technology transfer Agreement (B), a
- Licence and Trademark Agreement (C) and a
- Marketing and distributorship Agreement (D)



These agreements have been drafted by the Parties in turn (A and B by the Indian Party and C and D by the Italian Party), revised by the Parties Lawyers and agreed in principle by both Investors.

Specific issues, peculiar for the project, have been:

Control of the company and safeguards for the minority partner
Distributorship by the Italian Party in the USA and Europe
Trademark in India for the Joint Venture: it was decided to register it as well as to register Molteni as a trademark in India.
Regarding the commercial structure the general agreement reached is that all sales to USA and Europe will be dealt with by an international company - possibly in Hong Kong - controlled by Molteni, that will operate as exclusive agent for both regions.

B) The Joint Venture Agreement

The following is the text of the Draft JV Agreement reached by the two partners at the date of preparing the report.

DRAFT OF JOINT VENTURE AGREEMENT

THIS AGREEMENT, made and entered into this, _____day of _____, by and between _____ (hereinafter referred to as PARTY OF THE FIRST PART), a corporation organised and existing under the Companies Act 1956 having its registered office at _____ and _____ (hereinafter referred to as PARTY OF THE SECOND PART a corporation organised and existing under the Italian Law, having its registered office in Italy.

WHEREAS, the PARTY OF THE FIRST PART and the PARTY OF THE SECOND PART are desirous to set up a project to manufacture FURNISHING FABRICS in India.

AND WHEREAS, each party understand that the creation under the laws of India of a limited liability company jointly owned by the parties or their approved associated or nominees and with the public participation will be instrumental to the accomplishment of the objective.

AND WHEREAS, the parties have mutually agreed to incorporate a new joint stock company with limited liability under which the project to manufacture Furnishing Fabrics in the joint stock company so incorporated.

AND WHEREAS, each party upon agreed ratios, terms and conditions in this

AGREEMENT and in its Schedules, is willing to provide the required capital, technology, equipment and services for the manufacture of Furnishing Fabrics in the joint stock company so incorporated.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, the PARTY OF THE FIRST PART and the PARTY OF THE SECOND PART agree as follows.

1. Premises and Schedules

Premises and schedules form an integral and substantial part of this Agreement.

2. Definitions

As used in this Agreement, the following terms shall have the following meanings, such meanings to be equally applicable to both the singular and plural forms of the terms defined:

2.1 Joint Company shall mean the Joint Stock Company to be incorporated in India with limited liability by the parties for the manufacture of Furnishing Fabrics in accordance with provision of article 2 of this Agreement.

2.2 Associated Company shall mean any company, or enterprise owned or controlled by a party through direct or indirect ownership of at least _____. of the stock normally entitled to vote.

2.3 Party shall mean either PARTY OF THE FIRST PART, or the PARTY OF THE SECOND PART.

2.4 Parties shall mean PARTY OF THE FIRST PART or PARTY OF THE SECOND PART.

2.5 Board shall mean the Board of Directors of the Joint Company.

2.6 Products shall mean Furnishing Fabrics.

3. Formation of the Joint Stock Company:

3.1 The parties (or the PARTY OF THE FIRST PART) shall cause the Joint Company to be incorporated under the provisions of the Companies Act 1956, in accordance with the terms of this Agreement under the name and style of ____. or such other name as may be mutually agreed by both the parties, with Memorandum and Articles of Association, which shall be as Schedule "A" attached.

3.2 If any of the provisions contained in the Memorandum and Article of Association as given in the schedule "A" is not approved by the Registrar of Companies, suitable and desires amendments shall be made therein with mutual consent of both the parties.

3.3 The costs of incorporation of the Joint Company shall be borne by the PARTY OF THE FIRST PART.

3.4 The registered office of the Joint Company shall be situated at _____.

4. Object of the Joint Company

4.1 The activities of the Joint Company shall be the manufacture and sale of Furnishing Fabrics. The Joint Company shall take up any other object as specified in the object clause of its Memorandum and Articles, subject to applicable laws, only after having the consent of both the parties in writing.

5. Cost of the Project and means of Financing

5.1 The details of the cost of the project to be set up by the Joint Company and its means of financing are given at Schedule "B" attached. The pattern of financing for any cost overrun shall be decided by the parties with mutual consent.

6. Capital Investment:

6.1 Capital investment by the parties in the Joint Company and all obligations pursuant to this Agreement are conditional upon fulfillment of the following conditions on or before _____ or such other date as may be agreed to mutually by the parties.

(a) The requisite approvals from the Government of India for setting up of the project for the manufacture of Furnishing Fabrics by the Joint Company are received.

(b) The approval of the Government of India of the Application for Foreign Collaboration is received.

(c) The approval of Government of India of the Application for Capital Goods Clearance for the importation of equipment required is obtained.

(d) The following further approval from Indian and Italian Authorities are obtained.

(e) All the aforesaid approval must be in a form and content acceptable by both the Parties.

6.2 Immediately after all conditions precedent as set out in Article 6.1 are fulfilled, the parties shall provide capital, in cash, as per the agreed time schedule given in Schedule «C». The Time Schedule «C» may be modified or revised from time to time by the parties with mutual consent in writing.

6.3 The authorised share capital of the Joint Company shall be Rs _____ (Rupees _____), which shall be divided, into _____ equity shares of Rs._____ each.

6.4 The parties and their respective associate companies shall respectively subscribe to the issued equity capital of the Joint Company in the following proportions:

- PARTY OF THE FIRST PART and its associate companies _____
- PARTY OF THE SECOND PART and its associate companies _____
- Public holdings _____

It is further agreed that nominee of each party participating in any issuance of equity share shall, before acquiring such share of the Joint Company, agree in writing to be bound by the terms of this _____ Agreement.

Subject to the terms hereof, the parties agree to maintain the aforesaid proportions at all times unless otherwise expressly agreed in writing.

7. Purpose of the Joint Company

7.1 Purpose of the Joint Company shall be to purchase such goods and enter into such contracts that shall be needed and desirable to produce, market, distribute and sell the Products in the Indian Territory and abroad.

7.2 For the realization of the purpose, the Joint Company shall use exclusively the technical know-how of the PARTY OF THE SECOND PART on the basis of the agreement, whose draft is attached as Schedule «D» to this Agreement.

7.3 The Joint Company will preferably sell the Products abroad and the PARTY OF THE SECOND PART, or a company appointed by this latter, shall have the priority for the purchase of the products of the Joint Company destined to the

following markets: USA and EUROPE, and the right of first refusal to exploit those markets.

Should the PARTY OF THE SECOND PART exercise that right of refusal, the Joint Company shall be free to sell in those markets either directly, or indirectly.

7.4 The PARTY OF THE SECOND PART, or a company appointed by this latter, to the extent that shall be reasonably possible without prejudice for its right to realize profits, even small, shall do its best endeavours to buy and resell into the markets as set out in paragraph 7.3, a maximum of the 70% (seventy percent) of the production of the Joint Company.

8. Directors

8.1 The number of directors of the Joint Company shall neither be less than _____ nor more than _____ excluding alternate directors. Initially the Board of Directors («Board») shall consist of _____ directors, subject to a possible increase in the number of such initial directors to accommodate the nominee directors of the financial institution or bank, as mutually agreed by the parties.

The initial and successive Boards shall be comprised of _____ directors nominated by the PARTY OF THE FIRST PART, ____ directors nominated by the PARTY OF THE SECOND PART and independent directors elected to the position from a list of candidates mutually acceptable to each party as well as such other directors that may by appointed under rights granted by Joint Company with the mutual Agreement of the parties to financial institutions or bank. Each party shall have the right to appoint as alternate directors for each of the directors nominated by such party. The parties hereby negotiate and agree to cause the vote related to their shares in the Joint Company, to elect the directors nominated according to what precedes.

8.2 The Chairman of the Board shall be appointed by the PARTY OF THE FIRST PART, and his term shall not be liable to retirement by rotation.

8.3 The Managing Director shall be appointed by the PARTY OF THE FIRST PART and his term shall not be liable to retirement by rotation.

8.4 The parties shall jointly nominate for election and appointment ___ directors, whose office shall be liable to retirement by rotation. Any vacancy cause by such directors being unable or ceasing to hold the office for any reason whatsoever shall be filled by the parties jointly nominating another person for election and

appointment to such office.

8.5 Subject to the maximum number provided in Article 8.1 above, any additional director or directors may be nominated and appointed by the «Board» only with the mutual agreement of the parties.

8.6 Unless both the parties agree in writing to a shortest notice, _____ clear days notice of every meeting of the Board of Directors or a committee thereof shall be given in writing to every director (including an alternate director) or member of a committee at his usual address, whether in India or abroad. A director abroad shall furnish to the Joint Company a telex or facsimile number at which such notice may be given and communication of notice by the Joint Company at such numbers shall be deemed service thereof on such director. Where notice of a meeting is required to be given to a director abroad, the notice shall be given simultaneously by registered Air Mail letter or by facsimile transmission or telex at the facsimile telephone number or telex number provided by such directors.

8.7 Every notice convening a meeting of the Board or a committee thereof shall set out the agenda of the business to be transacted at such meeting in full details. Unless otherwise agreed to by the chairman, no item of business shall be transacted at such meeting which has not been stated in full detail in the notice convening the meeting provided that with the prior written consent of the parties, any item of business not included in the agenda may be transacted at that meeting.

8.8 The quorum for the meeting of the Board shall be the absolute majority of the elected directors including the number of directors, if any, whose place may be vacant at the time Provided however, that if a meeting cannot be held due to the absence of the quorum, then, upon notice being provided to each director, such meeting shall stand postponed to the same day after _____ weeks at the same time and place, or, if that day is a public holiday, at the same time and place.

8.9 Each member of the Board may be removed in any moment only upon request of the party that appointed such member.

8.10 In case of a vacancy caused by death, dismissal or removal of any member, the party who appointed this member shall appoint another member.

8.11 Each party agrees to vote affirmatively for appointments and removals requested and nominated by the other party, according to what provided for in this paragraph and in paragraphs 8.9 and 8.10.

8.12 Subject to the approval of the Reserve Bank of India, the Joint Company shall bear all the expenses of each visit of all the Directors living abroad to attend the Board Meeting.

8.13 Except in those cases where a resolution is required by law to be passed at a meeting of the Board, a resolution shall be taken as duly passed at a meeting of the Board or Committees of the Board, as the case may be duly called and constituted in accordance with the provisions of the Companies Act 1956, and the Article of Association of the Joint Company, if a draft thereof is circulated, together with the relevant papers, if any, to all the directors or to all members of the committee of the Board, as the case may be, and such resolution has been approved by a majority of the directors entitled to vote thereon, including in such majority, at least _____ each of the directors nominated by either party, pursuant to section 8.1 above.

8.14 Matters requiring the consent of the Shareholders

The Joint Company and the parties shall exercise any and all rights to vote and other powers of control at their disposal in relation to the Joint Company, provided that the following matters, request the consent of all the Shareholders and, for the matter requiring the competence of the Board, of the Directors nominated by PARTY OF THE SECOND PART:

8.14.1 Changes in the capital structure of the Joint Company, including issue of shares, reduction of capital, etc.

8.14.2 Winding-up, sale or amalgamation of the Joint Company.

8.14.3 Change of the Joint Company's registered office.

8.14.4 Alteration in the Joint Company's object clause, as set forth in its Memorandum of Association.

8.14.5 Change in the name of the Joint Company.

8.14.6 Alteration of the Article of Association of the Joint Company.

8.14.7 Approval of the annul business plan [budget], including, to exemplify, sales' price policy and credit insurance.

8.14.8 Appointment or removal of auditor of the Joint Company.

8.14.9 Creation of any and all fix or floating charges, mortgages, pledges [except pledges consequent to a law operation] or other encumbrances on the whole or a substantial part of the concern, property or other assets of the Joint Company.

8.14.10 Borrowing of sums exceeding the credit lines granted by the

banks of the Joint Company and its associated companies. Such lines cannot be opened without the consent of the PARTY OF THE SECOND PART, if the total amount exceeds _____ Rs (_____rupees).

8.14.11 Supply of any warranty or insurance to assure liabilities or insurance of each person [other than the Joint Company o a wholly owned associated company].

8.14.12 Sale, transfer, lease, assignment or disposal in any other way of a substantial part of the concern, property or other assets of the Joint Company [or any interest in it] or the contractual engagement to do so in a different way from the ordinary and correct course of the object of the Joint Company.

8.14.13 Stipulation of any contract, agreement or engagement involving expenses or realization from fixed assets by the Joint Company exceeding _____ Rs [_____Rupees] in each single year or related to any project, and for the scope of this paragraph, the total amount payable according to any freight, installment buying, buying on credit sales or condition sales agreements shall be deemed a capital expenditure having taken place in the year in which the contract was drawn up.

8.14.14 Hiring of any new employees with a consideration, direct or indirect, that may exceed a rate of _____. Rs [_____. Rupees].

8.14.15 Assumption or engagement to assume any and all lease interests or concessions over any land.

8.14.16 Issuing of any non-issued share or creation of each new share.

8.14.17 Funding, division or conversion of any share capital.

8.14.18 Issuing of any debenture or other convertible security o any share security or other options concerning share of the Joint Company.

8.14.19 Creation or acquisition of any associated or disposition of any share in any associated.

8.14.20 Enter into a partnership, a joint venture or a sharing profits Agreement with any person.

8.14.21 Each act of winding-up [both voluntary and compulsory] of the Joint Company.

8.14.22 Stipulation of any contract or transaction, except in the ordinary and correct course of the object with equal trade conditions.

8.14.23 Appointment or firing of each managing director.

8.14.24 Assumption of any decision to open or close any branch or associated of the Joint Company, outside the Indian Territory.

8.14.25 Significant alteration of the managing structure of the Joint Company.

8.14.26 Stipulation of any liability with reference to payment to retirement schemes on a non contributive basis, in favour of managers or any employee of the Joint Company.

8.15 The business and operations of the Joint Company shall be conducted in accordance with an annual business plan approved by the Parties.

8.16 The Joint Company shall submit to each party monthly financial report in a form mutually agreed upon between the parties and such other statement and report containing financial, production or other business information as may from time to time reasonably be requested by either party.

8.17 The Joint Company shall at all times be operated as an independent enterprise for the profit of all its shareholders and all dealings or transactions with, or on behalf of any shareholders of the Joint Company, shall be on such term no more favourable than would be accorded to any person in the ordinary course of business, taking into consideration bulk sales, offers and contracts.

9. Dividend policy

9.1 Subject to the approval of the Board, a minimum of ____% of the surplus available for distribution of dividend shall be distributed by the Joint Company each year as dividend.

10. Records

10.1 The Joint Company shall keep true and accurate accounting record of all operations and such records shall be open for inspection to the parties or to their duly authorised representative at all reasonable times.

10.2 The auditor of Joint Company shall furnish copies of its final reports to the Parties within ____ days after the end of the financial year of the Joint Company.

10.3 Unless otherwise agreed to by the parties in writing, the financial year of the Joint Company shall be ending on 31st March every year.

11. Effective Date:

11.1 As soon as this Agreement is signed, each of the parties shall be obliged to take every reasonable step to cooperate in obtaining the necessary Governmental approval licences provided for in this Agreement and to take other steps reasonably necessary to further the objects of this Agreement. The parties shall not be obligated, however, to proceed with any other action required by this Agreement, unless otherwise contemplated herein, until the «Effective Date». The «Effective Date» of this Agreement shall be the date mutually determined by the parties in writing after all the conditions set forth in Articles 6.1 of this agreement have been fulfilled or waived by the Parties.

12. Application for Approvals

12.1 PARTY OF THE FIRST PART shall file all necessary applications for licences and approvals required from the Government of India for the setting up of the project.

12.2 PARTY OF THE SECOND PART shall file all necessary applications for any licence or approval eventually required under the law of Italy.

12.3 Each party shall take all reasonable steps to ensure that the requisite approvals are obtained from their respective Government speedily.

12.4 Each party shall cooperate and assist the other party in their efforts of obtaining the requisite approvals. The various information required by the governments for the approvals shall be provided by the party concerned speedily and within reasonable time.

13. Transfer of Shares:

13.1 It is agreed that neither party shall sell, transfer, assign, mortgage, pledge or otherwise encumber or deal with any or all shares of the Joint Company without consent of the other party, except as is hereinafter provided:

(a) Transfer of the shares by the party to its associate companies or the sale of shares held by the associate company to their concerned party.

(b) Transfer of director's qualification share so long as the beneficial ownership of such share is retained by the respective party.

13.2 (a) Subject to article 13.1 above, should a party or its associate

company desire to sell any of the shares held by in the Joint Company, such party shall first offer or have offered said shares to the other party by notice of the same.

(b) Such offer shall contain the price at which the shares for sale are offered by the party or its associate company. The offeree shall accept the offer within _____ days from the receipt of the notice of offer and pay the price [subject to the provisions of sub section (d) below] of the said shares within ____ days of acceptance. In case the offeree desires to accept the offer, without accepting the price contained in the offer, offeree shall, within the said period of _____ days, be entitled to exercise its options to purchase the shares subject to the condition that the price of the shares shall be as valued by the auditors of the Joint Company whose valuation shall be final. However, the Party or its associates company making the offer, shall have the right to withdraw the offer in case the price asked by them is not accepted. The price for the shares shall [subject to the provisions of sub article (d) below] be paid immediately after _____ days of such valuation, unless the party or its associate company elects to withdraw its offer within the said ____ days of such valuation.

(c) It is expressly agreed that the offeree may nominate any other person to purchase the shares offered to it or any part thereof.

(d) In case any approval of an authority in India is required for such sale of shares, the offeree shall make an application for the same within ____ days after acceptance or the valuation contemplated in sub section (b) above, as the case may be. The price for the shares shall then be paid within _____ days after receipt by the offeree of the necessary approval[s]. If, for any reason whatsoever, the said approval[s] is not received within ____ days from the making of the application [or such further period as agreed to by and between the parties] the offeror shall be at liberty to withdraw the offer.

(e) In the event that the offeree fails for any reason whatsoever to observe any of the time limit set forth here above, the offer shall lapse and the offeror shall be at liberty, for a period of _____ days from the lapse of the offer, to transfer the offered shares to a third party or parties at a price not lower than and/or on conditions not more favourable than those offered in the offer.

14. Competition with the Joint Company:

14.1 The PARTY OF THE FIRST PART or its Associate Companies will not set up any project to manufacture such products as are being or will be produced by the Joint Company in India and abroad, except with the written permission of the PARTY OF THE SECOND PART.

14.2 The PARTY OF THE SECOND PART or its Associate companies shall not export to India products equal or similar to those manufactured by the Joint Company, without the prior written consent of the Joint Company.

14.3 The PARTY OF THE SECOND PART or its associated companies will not set up any other manufacturing facilities in India either by themselves or with any other person whether resident of India or not for the manufacture of the products being manufactured or to be manufactured by the Joint Company.

14.4 The PARTY OF THE SECOND PART shall not provide any technical know-how, equipment or any other services for the purposes of the setting up of the projects in India for manufacture of products being manufactured by or to be manufactured by the Joint Company.

14.5 All business confidential or proprietary information received by either party or their Associate Companies as a result of this Agreement or discussions preceding such Agreement, whether direct or indirect, shall be treated by the recipient as confidential and shall not be disclosed in any manner nor used for any purpose except as herein contemplated.

15. Provision of Technical know-how and other services:

15.1 It is agreed that the PARTY OF THE SECOND PART shall provide technical know-how and other services to the Joint Company as per the agreed terms and conditions.

15.2 The PARTY OF THE SECOND PART shall execute the Agreement of provision of technical know-how and other services within 30 days from the incorporation of the Joint Company as per the draft Agreement annexed as Schedule «D» of this Agreement.

16. Termination of the Agreement

This Agreement may be terminated as follows:

(i) the PARTY OF THE FIRST PART may terminate this Agreement by giving the Notice of Termination in writing to the other party if

(a) The Technical know-how and other services Agreement which is contemplate by the parties to be executed and performed between the Joint Company and the PARTY OF THE SECOND PART terminated due to a serious default of the PARTY OF THE SECOND PART under such Agreement, and fails to correct such default to the reasonable satisfaction of the PARTY OF THE FIRST PART within 60 days after written notice of such default is provided to the PARTY OF THE SECOND PART.

(b) if the PARTY OF THE SECOND PART defaults in the performance of any material undertaking under this Agreement and fails to correct such default to the reasonable satisfaction of the PARTY OF THE FIRST PART within _____ days after written notice of such default, is provided to the PARTY OF THE SECOND PART.

(ii) The PARTY OF THE SECOND PART may terminate this Agreement by giving the Notice of Termination in writing to the other party if:

(a) the Technical know-how and other services Agreement which is contemplated by the parties to be executed and performed between the Joint Company and PARTY OF THE SECOND PART is terminated due to the default of the Joint Company under such Agreement.

(b) if the PARTY OF THE FIRST PART defaults in the performance of any material undertaking under this Agreement and fails to correct such default to the reasonable satisfaction of the PARTY OF THE SECOND PART within ____ days after written notice to the other party, if any basic premise or term of this Agreement is breached by the other party, or such other party shall have failed to remedy such breach within _____ days from the written notice having been serviced on the party in breach, by the party so wishing to terminate the Agreement.

Notwithstanding the foregoing, in any such event, the parties shall endeavour to resolve the differences caused by such breach/defaults and shall negotiate in good faith to determine if there is a method to resolve such difference and correct any breach/defaults so that this Agreement might continue without termination.

16.2 This Agreement may be terminated by either party in the event, due to strike, riot, earthquake, storm, fire, explosion, act of God, war, acts of the Government of India or Government of the _____ or any other cause similar thereto, because of

which the continued operation of this Agreement or business activities of the Joint Company are interrupted, prevented or delayed for a period of exceeding 6 (six) months.

16.3 This Agreement may be terminated by either party in the event that the other party becomes insolvent or has a receiver appointed over it assets or is ordered to be wound up [except that where any such event is only for the purpose of amalgamation with another or reconstruction and the resultant company is acceptable to the party desiring termination as a shareholder of Joint Company which acceptance will not be unreasonably withheld].

16.4 This Agreement may be terminated by either party in the event that there is a deadlock between the parties with respect to the management or operations of the Joint Company which deadlock remains unresolved for a period of ____ months following written notice thereof from one party to the other. In such case this Agreement will automatically terminate at the end of such period.

16.5 This Agreement may be terminated by either party in the event that Joint Company becomes insolvent or goes into liquidation or is ordered to be wound up or has a receiver appointed over its assets or execution or distress is levied upon all or substantially all of its assets.

17. Effects of Termination:

17.1 In this Agreement is terminated pursuant to article 16.1, then unless otherwise agreed, the party terminating this Agreement shall be entitled to require the party in breach to sell its own and its associate shareholding companies in the Joint Company to the public at large by a public office thereof.

17.2 If this Agreement is terminated pursuant to articles 16.2 or 16.4, then unless otherwise agreed, the party terminating this Agreement shall be entitled to require the party in default to sell its own and its associate companies shareholding in the Joint Company at the option of the terminating party.

(a) to the terminating party or its associate companies on the terms and conditions ad set forth in article 13 hereof; or

(b) to the public at large by a public offer.

17.4 In case of termination of this Agreement for any reason whatsoever, the terminating party shall not be entitled to a compensation, in addition to what provided

for in this article 17.

17.5 In case of termination of this Agreement, the PARTY OF THE FIRST PART shall not be entitled to use know-how and technologies received by the PARTY OF THE FIRST PART, neither its name or trade marks.

18. Arbitration and Applicable Law:

18.1 This Agreement shall be governed by and construed in accordance with the laws of United Kingdom.

18.2 Any dispute arising out, or in connection with this Agreement, including any question regarding its existence, shall be referred to and finally resolved by arbitration under that Rules of the London Court of International Arbitration, which Rules are deemed to be incorporated by reference into this clause. The tribunal shall consist of three arbitrators, one of whom shall be nominated by each party and the third to be appointed by the London Court of International Arbitration.

The Arbitration. The arbitration shall take place at London and the language of the arbitration shall be English. The parties shall abide by and perform any award rendered by the arbitrators and a judgment may be entered upon the award in any court having jurisdiction.

19. Force Majeure:

19.1 If the performance of this Agreement or of any obligation of either party is prevented, restricted or interfered with by reasons of: fire, explosion, strike, casualty or accident, epidemic, cyclone, earthquake, flood, or war, revolution, or requirement of any government or any subdivision, authority or representative of any such government; or any other act whatsoever, whether similar or dissimilar to those enumerated, beyond the reasonable control of the parties hereto; shall be excused from such performance to the extent of such prevention, restriction or interference for the period is persists, provided that the party so affected shall use its best efforts to avoid or remove such causes of non-performance hereunder with the utmost dispatch whenever such causes are removed.

19.2 If the force majeure persists for a continuous period of 2 (two) months or more, the parties shall meet and decide about the future course of action.

20. Communications and notices

20.1 Unless another form of notice is specified for a specific purpose under this Agreement, notices required or permitted by this Agreement shall be sufficiently given if mailed by registered or certified air mail, postage prepaid or if sent, by cable, either of which air mail or cable communication shall be confirmed by a concurrent telex or telecopy transmission, which in the case of PARTY OF THE FIRST PART shall be addressed to

Attn: Managing Director

_____

[INDIA]

and in case of PARTY OF THE SECOND PART, notices shall be addressed to:

_____

Either part may change the address at which notice is to be received by duly notifying the other party.

21. Miscellaneous matter:

[Non agency]

21.1 Nothing in this Agreement shall be construed to constitute the Joint Company as an agent of any party for any purpose.

Entire Agreement:

21.2 This Agreement and its Schedules constitute the entire Agreement between the parties and supersedes any and all prior Agreements and understandings, whether written or oral, between the parties with respect to the subject matter hereof and no Agreement or understanding varying or extending this Agreement shall be binding on any party, unless made in writing and signed by a duly authorised officer or representative of each party, which writing must contain an express reference to this Agreement.

Assignment:

21.3 This Agreement and the obligations expressed herein shall not be assigned by either party except with the prior written consent of the other party. Notwithstanding the foregoing, any successor in interest to either party, shall be bound by the terms of this Agreement and shall be liable to the other party for the full and proper performance of this Agreement. In the event of any permitted assignment shall continue to be bound jointly and severally with the assignee for the proper performance

of the obligation of this Agreement.

English Language:

21.4 All correspondence and technical documentation between the parties shall be in English Language.

Continuation of performance:

21.5 The parties shall continue the performance of their respective obligations herein contained, notwithstanding any arbitration proceeding unless such obligations itself is the subject matter of such arbitration.

No Waiver:

21.6 Failure of either party hereto to exercise any right hereunder or to claim for fulfillment of any term hereof will not relieve, exempt of effect in any manner, the rights of the other party including the right to demand at any time strict and complete fulfillment of any or all provisions of this agreement.

Headings:

21.7 All Headings used herein are for the sake of convenience only and shall not affect or to be construed or interpreted as restricting or affecting in any manner the meaning, interpretation or scope of the article.

22. List of Schedules:

22.1 The following schedules to the agreement form an integral part of the agreement:

Schedule «A» - Draft Memorandum and Articles of Association

Schedule «B» - Cost of Project and Means of financing

Schedule «C» - Time Schedule for payment of capital

Schedule «D» - Draft Agreement for provision of technical know-how and other services

Schedule «E» - Draft of a Distribution Agreement

IN WITNESS WHEREOF, THE PARTIES have cause this agreement to be executed by their duly authorised representatives in the presence of:

PARTY OF THE FIRST PART	PARTY OF THE SECOND PART
In the presence	In the presence
1.	1.
2.	2.

ANNEX 1

COMFAR PRINTOUT

Basic Version

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning horizon 12 years
Date and time:	revised april 1997
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2009
Length:	12 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,455,000.00	336,884.86	5,791,884.86

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,658,192.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2009
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00
Administrative overhead costs	12,000.00	12,000.00	12,000.00

SUMMARY SHEET

OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00
Depreciation	498,750.00	498,750.00	35,500.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,367,725.00	3,439,654.29	2,585,910.00
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,367,725.00	3,439,654.29	2,585,910.00
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-351,775.00	592,245.71	1,445,990.00
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-351,775.00	592,245.71	1,445,990.00
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	592,245.71	1,445,990.00
Income (corporate) tax	0.00	0.00	578,396.00
NET PROFIT	-351,775.00	592,245.71	867,594.00

RATIOS

Net present value	at 15.00 %	636,413.74
Internal rate of return on investment (IRR)	17.48 %	
Modified IRR on investment	17.48 %	
Internal rate of return on equity (IRRE)	20.46 %	
Modified IRRE on equity	20.46 %	

FIXED INVESTMENT COSTS - TOTAL
US Dollars

	Total construction	Total production	Construction 7/1997-12/1997	Production 1998
Land purchase	200,000.00	0.00	200,000.00	0.00
Site preparation and development	75,000.00	0.00	75,000.00	0.00
Site preparation and development	15,000.00	0.00	15,000.00	0.00
Design & Eng. Local	30,000.00	0.00	30,000.00	0.00
Design & Eng.Foreign	30,000.00	0.00	30,000.00	0.00
Civil works, structures and buildings	710,000.00	0.00	710,000.00	0.00
Plant machinery and equipment	3,900,000.00	0.00	3,900,000.00	0.00
Transport Equipment	10,000.00	0.00	10,000.00	0.00
Industrial Local Eqp	630,000.00	0.00	630,000.00	0.00
Industrial Foreign Eqp	3,260,000.00	0.00	3,260,000.00	0.00
Auxiliary and service plant equipment	20,000.00	0.00	20,000.00	0.00
Environmental protection	0.00	0.00	0.00	0.00
Incorporated fixed assets (project overheads)	0.00	0.00	0.00	0.00
Contingencies	150,000.00	0.00	150,000.00	0.00
Contingencies Local	75,000.00	0.00	75,000.00	0.00
Contingencies Foreign	75,000.00	0.00	75,000.00	0.00
TOTAL FIXED INVESTMENT COSTS	5,055,000.00	0.00	5,055,000.00	0.00
Foreign share (%)	66.17	0.00	66.17	0.00

FIXED INVESTMENT COSTS - TOTAL
US Dollars

	Production 1999	Production 2000	Production 2001	Production 2002
Land purchase	0.00	0.00	0.00	0.00
Site preparation and development	0.00	0.00	0.00	0.00
Site preparation and development	0.00	0.00	0.00	0.00
Design & Eng. Local	0.00	0.00	0.00	0.00
Design & Eng.Foreign	0.00	0.00	0.00	0.00
Civil works, structures and buildings	0.00	0.00	0.00	0.00
Plant machinery and equipment	0.00	0.00	0.00	0.00
Transport Equipment	0.00	0.00	0.00	0.00
Industrial Local Eqp	0.00	0.00	0.00	0.00
Industrial Foreign Eqp	0.00	0.00	0.00	0.00
Auxiliary and service plant equipment	0.00	0.00	0.00	0.00
Environmental protection	0.00	0.00	0.00	0.00
Incorporated fixed assets (project overheads)	0.00	0.00	0.00	0.00
Contingencies	0.00	0.00	0.00	0.00
Contingencies Local	0.00	0.00	0.00	0.00
Contingencies Foreign	0.00	0.00	0.00	0.00
TOTAL FIXED INVESTMENT COSTS	0.00	0.00	0.00	0.00
Foreign share (%)	0.00	0.00	0.00	0.00

FIXED INVESTMENT COSTS - TOTAL
US Dollars

	Production 2003	Production 2004	Production 2005	Production 2006
Land purchase	0.00	0.00	0.00	0.00
Site preparation and development	0.00	0.00	0.00	0.00
Site preparation and development	0.00	0.00	0.00	0.00
Design & Eng. Local	0.00	0.00	0.00	0.00
Design & Eng.Foreign	0.00	0.00	0.00	0.00
Civil works, structures and buildings	0.00	0.00	0.00	0.00
Plant machinery and equipment	0.00	0.00	0.00	0.00
Transport Equipment	0.00	0.00	0.00	0.00
Industrial Local Eqp	0.00	0.00	0.00	0.00
Industrial Foreign Eqp	0.00	0.00	0.00	0.00
Auxiliary and service plant equipment	0.00	0.00	0.00	0.00
Environmental protection	0.00	0.00	0.00	0.00
Incorporated fixed assets (project overheads)	0.00	0.00	0.00	0.00
Contingencies	0.00	0.00	0.00	0.00
Contingencies Local	0.00	0.00	0.00	0.00
Contingencies Foreign	0.00	0.00	0.00	0.00
TOTAL FIXED INVESTMENT COSTS	0.00	0.00	0.00	0.00
Foreign share (%)	0.00	0.00	0.00	0.00

FIXED INVESTMENT COSTS - TOTAL
US Dollars

	Production 2007	Production 2008	Production 2009
Land purchase	0.00	0.00	0.00
Site preparation and development	0.00	0.00	0.00
Site preparation and development	0.00	0.00	0.00
Design & Eng. Local	0.00	0.00	0.00
Design & Eng.Foreign	0.00	0.00	0.00
Civil works, structures and buildings	0.00	0.00	0.00
Plant machinery and equipment	0.00	0.00	0.00
Transport Equipment	0.00	0.00	0.00
Industrial Local Eqp	0.00	0.00	0.00
Industrial Foreign Eqp	0.00	0.00	0.00
Auxiliary and service plant equipment	0.00	0.00	0.00
Environmental protection	0.00	0.00	0.00
Incorporated fixed assets (project overheads)	0.00	0.00	0.00
Contingencies	0.00	0.00	0.00
Contingencies Local	0.00	0.00	0.00
Contingencies Foreign	0.00	0.00	0.00
TOTAL FIXED INVESTMENT COSTS	0.00	0.00	0.00
Foreign share (%)	0.00	0.00	0.00

PRE-PRODUCTION EXPENDITURES - TOTAL
US Dollars

	Total construction	Total production	Construction 7/1997-12/1997	Production 1998
Pre-production Local	250,000.00	0.00	250,000.00	0.00
Pre-production Foreign	150,000.00	0.00	150,000.00	0.00
Pre-production expenditures (net of interest)	400,000.00	0.00	400,000.00	0.00
Interest	0.00	0.00	0.00	0.00
TOTAL PRE-PRODUCTION EXPENDITURES	400,000.00	0.00	400,000.00	0.00
Foreign share (%)	37.50	0.00	37.50	0.00

PRE-PRODUCTION EXPENDITURES - TOTAL
US Dollars

	Production 1999	Production 2000	Production 2001	Production 2002
Pre-production Local	0.00	0.00	0.00	0.00
Pre-production Foreign	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00	0.00
Interest	0.00	0.00	0.00	0.00
TOTAL PRE-PRODUCTION EXPENDITURES	0.00	0.00	0.00	0.00
Foreign share (%)	0.00	0.00	0.00	0.00

PRE-PRODUCTION EXPENDITURES - TOTAL
US Dollars

	Production 2003	Production 2004	Production 2005	Production 2006
Pre-production Local	0.00	0.00	0.00	0.00
Pre-production Foreign	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00	0.00
Interest	0.00	0.00	0.00	0.00
TOTAL PRE-PRODUCTION EXPENDITURES	0.00	0.00	0.00	0.00
Foreign share (%)	0.00	0.00	0.00	0.00

PRE-PRODUCTION EXPENDITURES - TOTAL
US Dollars

	Production 2007	Production 2008	Production 2009
Pre-production Local	0.00	0.00	0.00
Pre-production Foreign	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00
Interest	0.00	0.00	0.00
TOTAL PRE-PRODUCTION EXPENDITURES	0.00	0.00	0.00
Foreign share (%)	0.00	0.00	0.00

NET WORKING CAPITAL REQUIREMENTS - TOTAL
US Dollars

	Coefficient of turnover	Construction 7/1997-12/1997	Production 1998
Total inventory	0.00	0.00	148,121.16
Raw materials	0.00	0.00	51,333.04
Factory supplies	0.00	0.00	0.00
Utilities	0.00	0.00	0.00
Energy	0.00	0.00	0.00
Spare parts consumed	0.00	0.00	416.67
Work in progress	0.00	0.00	38,964.58
Finished product	0.00	0.00	57,406.88
Accounts receivable	0.00	0.00	153,085.00
Cash-in-hand	72.00	0.00	5,851.39
CURRENT ASSETS	0.00	0.00	307,057.55
Current liabilities			
Accounts payable	0.00	0.00	123,697.26
TOTAL NET WORKING CAPITAL REQUIREMENTS	0.00	0.00	183,360.29
INCREASE IN NET WORKING CAPITAL	0.00	0.00	183,360.29
Foreign share (%)	0.00	0.00	38.19

NET WORKING CAPITAL REQUIREMENTS - TOTAL
US Dollars

	Production 1999	Production 2000	Production 2001
Total inventory	223,839.15	276,292.13	275,060.14
Raw materials	80,079.55	99,380.77	98,559.44
Factory supplies	0.00	0.00	0.00
Utilities	0.00	0.00	0.00
Energy	0.00	0.00	0.00
Spare parts consumed	416.67	416.67	416.67
Work in progress	57,506.77	70,644.28	70,233.61
Finished product	85,836.17	105,850.42	105,850.42
Accounts receivable	228,896.44	282,267.78	282,267.78
Cash-in-hand	5,884.72	6,926.39	6,926.39
CURRENT ASSETS	458,620.32	565,486.30	564,254.30
Current liabilities			
Accounts payable	186,226.37	232,267.79	228,389.29
TOTAL NET WORKING CAPITAL REQUIREMENTS	272,393.95	333,218.51	335,865.01
INCREASE IN NET WORKING CAPITAL	89,033.66	60,824.56	2,646.50
Foreign share (%)	26.91	25.09	24.90

NET WORKING CAPITAL REQUIREMENTS - TOTAL
US Dollars

	Production 2002	Production 2003	Production 2004
Total inventory	275,060.14	275,754.58	275,754.58
Raw materials	98,559.44	98,559.44	98,559.44
Factory supplies	0.00	0.00	0.00
Utilities	0.00	0.00	0.00
Energy	0.00	0.00	0.00
Spare parts consumed	416.67	416.67	416.67
Work in progress	70,233.61	70,511.39	70,511.39
Finished product	105,850.42	106,267.08	106,267.08
Accounts receivable	282,267.78	283,378.89	283,378.89
Cash-in-hand	6,926.39	7,065.28	7,065.28
CURRENT ASSETS	564,254.30	566,198.75	566,198.75
Current liabilities			
Accounts payable	228,480.55	229,313.88	229,313.88
TOTAL NET WORKING CAPITAL REQUIREMENTS	335,773.75	336,884.86	336,884.86
INCREASE IN NET WORKING CAPITAL	-91.26	1,111.11	0.00
Foreign share (%)	24.90	25.15	25.15

NET WORKING CAPITAL REQUIREMENTS - TOTAL
US Dollars

	Production 2005	Production 2006	Production 2007
Total inventory	275,754.58	275,754.58	275,754.58
Raw materials	98,559.44	98,559.44	98,559.44
Factory supplies	0.00	0.00	0.00
Utilities	0.00	0.00	0.00
Energy	0.00	0.00	0.00
Spare parts consumed	416.67	416.67	416.67
Work in progress	70,511.39	70,511.39	70,511.39
Finished product	106,267.08	106,267.08	106,267.08
Accounts receivable	283,378.89	283,378.89	283,378.89
Cash-in-hand	7,065.28	7,065.28	7,065.28
CURRENT ASSETS	566,198.75	566,198.75	566,198.75
Current liabilities			
Accounts payable	229,313.88	229,313.88	229,313.88
TOTAL NET WORKING CAPITAL REQUIREMENTS	336,884.86	336,884.86	336,884.86
INCREASE IN NET WORKING CAPITAL	0.00	0.00	0.00
Foreign share (%)	25.15	25.15	25.15

NET WORKING CAPITAL REQUIREMENTS - TOTAL
US Dollars

	Production 2008	Production 2009
Total inventory	275,754.58	275,754.58
Raw materials	98,559.44	98,559.44
Factory supplies	0.00	0.00
Utilities	0.00	0.00
Energy	0.00	0.00
Spare parts consumed	416.67	416.67
Work in progress	70,511.39	70,511.39
Finished product	106,267.08	106,267.08
Accounts receivable	283,378.89	283,378.89
Cash-in-hand	7,065.28	7,065.28
CURRENT ASSETS	566,198.75	566,198.75
Current liabilities		
Accounts payable	229,313.88	229,313.88
TOTAL NET WORKING CAPITAL REQUIREMENTS	336,884.86	336,884.86
INCREASE IN NET WORKING CAPITAL	0.00	0.00
Foreign share (%)	25.15	25.15

INVESTMENT COSTS - TOTAL
US Dollars

	Total construction	Total production	Construction 7/1997-12/1997	Production 1998
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00	0.00
Total pre-production expenditures	400,000.00	0.00	400,000.00	0.00
Pre-production expenditures (net of interest)	400,000.00	0.00	400,000.00	0.00
Interest	*0.00*	*0.00*	*0.00*	*0.00*
Increase in net working capital	0.00	336,884.86	0.00	183,360.29
TOTAL INVESTMENT COSTS	5,455,000.00	336,884.86	5,455,000.00	183,360.29
Foreign share (%)	64.07	25.15	64.07	38.19

INVESTMENT COSTS - TOTAL
US Dollars

	Production 1999	Production 2000	Production 2001	Production 2002
Total fixed investment costs	0.00	0.00	0.00	0.00
Total pre-production expenditures	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00	0.00
Interest	0.00	0.00	0.00	0.00
Increase in net working capital	89,033.66	60,824.56	2,646.50	-91.26
TOTAL INVESTMENT COSTS	89,033.66	60,824.56	2,646.50	-91.26
Foreign share (%)	3.69	16.94	0.00	0.00

INVESTMENT COSTS - TOTAL
US Dollars

	Production 2003	Production 2004	Production 2005	Production 2006
Total fixed investment costs	0.00	0.00	0.00	0.00
Total pre-production expenditures	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00	0.00
Interest	0.00	0.00	0.00	0.00
Increase in net working capital	1,111.11	0.00	0.00	0.00
TOTAL INVESTMENT COSTS	1,111.11	0.00	0.00	0.00
Foreign share (%)	100.00	0.00	0.00	0.00

INVESTMENT COSTS - TOTAL
US Dollars

	Production 2007	Production 2008	Production 2009
Total fixed investment costs	0.00	0.00	0.00
Total pre-production expenditures	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00
Interest	0.00	0.00	0.00
Increase in net working capital	0.00	0.00	0.00
TOTAL INVESTMENT COSTS	0.00	0.00	0.00
Foreign share (%)	0.00	0.00	0.00

ANNUAL COSTS OF PRODUCTS - TOTAL
US Dollars

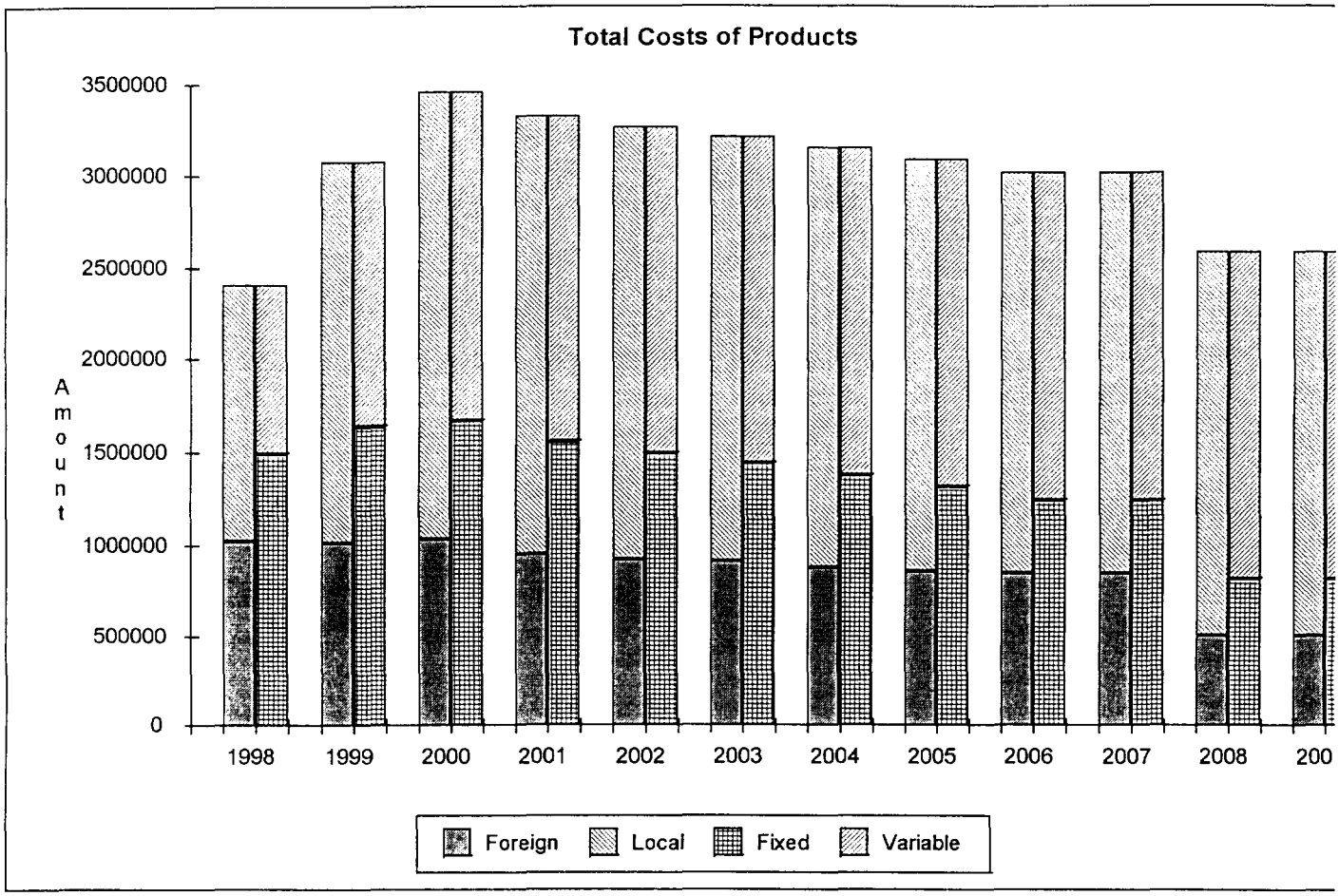
	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002
Raw materials	923,994.79	1,441,431.88	1,788,853.92	1,774,070.00	1,774,070.00
Factory supplies	970.00	31,040.00	38,800.00	38,800.00	38,800.00
Utilities	53,460.00	171,072.00	213,840.00	213,840.00	213,840.00
Energy	0.00	0.00	0.00	0.00	0.00
Spare parts consumed	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00
Repair, maintenance, material	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00
Royalties	50,000.00	161,000.00	201,000.00	201,000.00	201,000.00
Labour	224,300.00	210,700.00	210,700.00	210,700.00	210,700.00
Labour overhead costs (taxes etc.)	50,000.00	15,000.00	0.00	0.00	0.00
Factory overhead costs	70,000.00	10,000.00	60,000.00	60,000.00	60,000.00
FACTORY COSTS	1,402,724.79	2,070,243.88	2,543,193.92	2,528,410.00	2,528,410.00
Administrative overhead costs	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00
OPERATING COSTS	1,414,724.79	2,082,243.88	2,555,193.92	2,540,410.00	2,540,410.00
Depreciation	498,750.00	498,750.00	498,750.00	498,750.00	498,750.00
Financial costs	491,210.00	491,724.29	400,494.29	282,864.29	222,434.29
TOTAL PRODUCTION COSTS	2,404,684.79	3,072,718.16	3,454,438.20	3,322,024.29	3,261,594.29
Direct marketing costs	0.00	0.00	0.00	0.00	0.00
Marketing overhead costs	0.00	0.00	0.00	0.00	0.00
COSTS OF PRODUCTS	2,404,684.79	3,072,718.16	3,454,438.20	3,322,024.29	3,261,594.29
Foreign share (%)	42.21	32.80	29.71	28.40	28.14
Variable share (%)	38.42	46.91	51.78	53.40	54.39

ANNUAL COSTS OF PRODUCTS - TOTAL
US Dollars

	Production 2003	Production 2004	Production 2005	Production 2006	Production 2007
Raw materials	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00
Factory supplies	38,800.00	38,800.00	38,800.00	38,800.00	38,800.00
Utilities	213,840.00	213,840.00	213,840.00	213,840.00	213,840.00
Energy	0.00	0.00	0.00	0.00	0.00
Spare parts consumed	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00
Repair, maintenance, material	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00
Royalties	201,000.00	201,000.00	201,000.00	201,000.00	201,000.00
Labour	210,700.00	210,700.00	210,700.00	210,700.00	210,700.00
Labour overhead costs (taxes etc.)	0.00	0.00	0.00	0.00	0.00
Factory overhead costs	70,000.00	70,000.00	70,000.00	70,000.00	70,000.00
FACTORY COSTS	2,538,410.00	2,538,410.00	2,538,410.00	2,538,410.00	2,538,410.00
Administrative overhead costs	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00
OPERATING COSTS	2,550,410.00	2,550,410.00	2,550,410.00	2,550,410.00	2,550,410.00
Depreciation	493,750.00	493,750.00	493,750.00	462,500.00	462,500.00
Financial costs	162,004.29	101,574.29	41,144.29	0.00	0.00
TOTAL PRODUCTION COSTS	3,206,164.29	3,145,734.29	3,085,304.29	3,012,910.00	3,012,910.00
Direct marketing costs	0.00	0.00	0.00	0.00	0.00
Marketing overhead costs	0.00	0.00	0.00	0.00	0.00
COSTS OF PRODUCTS	3,206,164.29	3,145,734.29	3,085,304.29	3,012,910.00	3,012,910.00
Foreign share (%)	28.07	27.79	27.51	27.95	27.95
Variable share (%)	55.33	56.40	57.50	58.88	58.88

ANNUAL COSTS OF PRODUCTS - TOTAL
US Dollars

	Production 2008	Production 2009
Raw materials	1,774,070.00	1,774,070.00
Factory supplies	38,800.00	38,800.00
Utilities	213,840.00	213,840.00
Energy	0.00	0.00
Spare parts consumed	15,000.00	15,000.00
Repair, maintenance, material	15,000.00	15,000.00
Royalties	201,000.00	201,000.00
Labour	210,700.00	210,700.00
Labour overhead costs (taxes etc.)	0.00	0.00
Factory overhead costs	70,000.00	70,000.00
FACTORY COSTS	2,538,410.00	2,538,410.00
Administrative overhead costs	12,000.00	12,000.00
OPERATING COSTS	2,550,410.00	2,550,410.00
Depreciation	35,500.00	35,500.00
Financial costs	0.00	0.00
TOTAL PRODUCTION COSTS	2,585,910.00	2,585,910.00
Direct marketing costs	0.00	0.00
Marketing overhead costs	0.00	0.00
COSTS OF PRODUCTS	2,585,910.00	2,585,910.00
Foreign share (%)	19.09	19.09
Variable share (%)	68.61	68.61

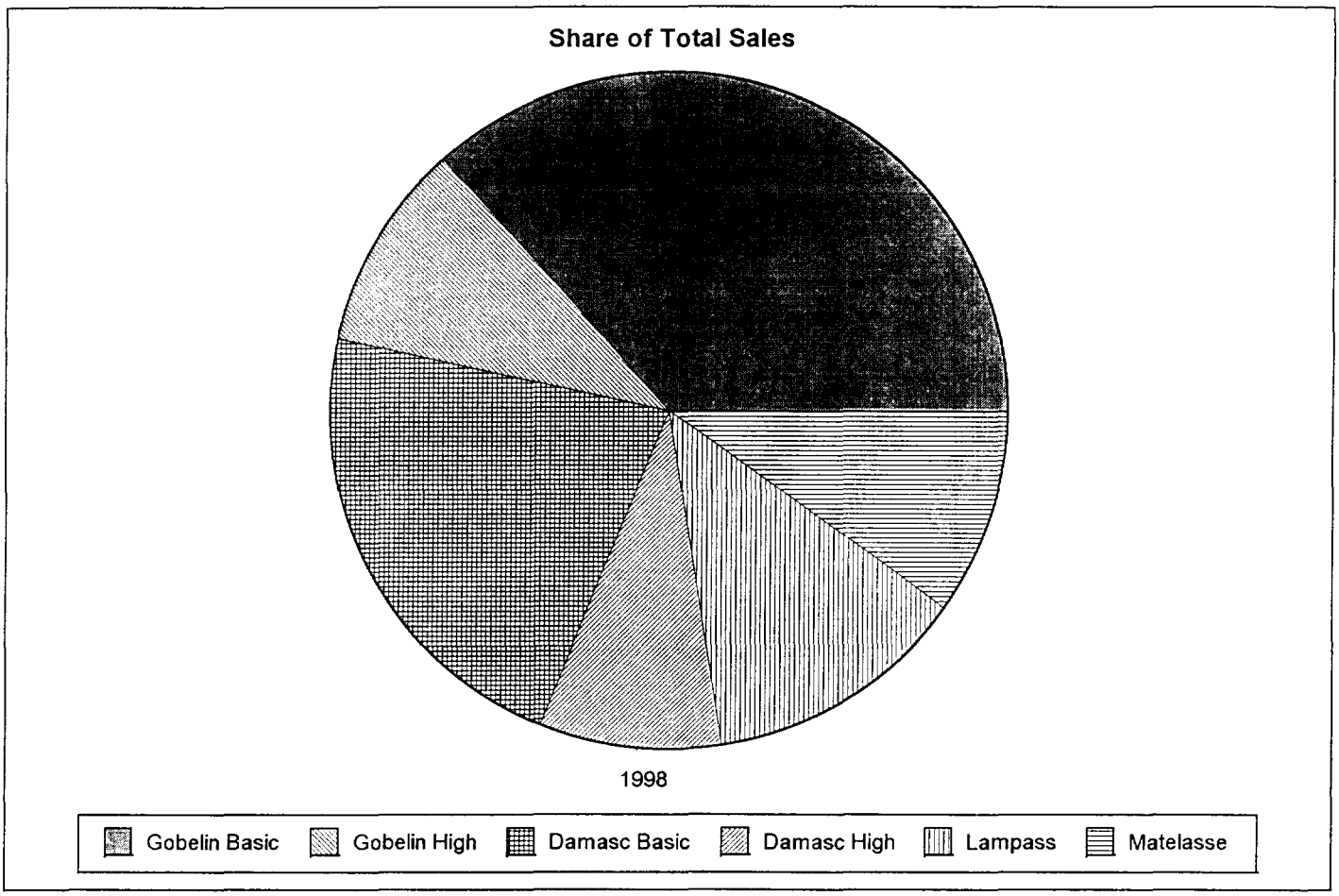

Total Costs of Products
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
Amount
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
200
Foreign
Local
Fixed
Variable

PRODUCTION AND SALES PROGRAMME - TOTAL
US Dollars

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003
Gross sales revenue	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Less sales tax	0.00	0.00	0.00	0.00	0.00	0.00
Net sales revenue	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Subsidy	0.00	0.00	0.00	0.00	0.00	0.00
SALES REVENUE	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Foreign share (%)	58.89	58.89	58.89	58.89	58.89	58.89

PRODUCTION AND SALES PROGRAMME - TOTAL
US Dollars

	Production 2004	Production 2005	Production 2006	Production 2007	Production 2008	Production 2009
Gross sales revenue	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Less sales tax	0.00	0.00	0.00	0.00	0.00	0.00
Net sales revenue	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Subsidy	0.00	0.00	0.00	0.00	0.00	0.00
SALES REVENUE	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Foreign share (%)	58.89	58.89	58.89	58.89	58.89	58.89


Share of Total Sales
1998
Gobelin Basic
Gobelin High
Damasc Basic
Damasc High
Lampass
Matelasse

FINANCIAL FLOW - TOTAL
US Dollars

	Total inflow	Construction 7/1997-12/1997	Production 1998	Production 1999
Equity capital	2,176,000.00	2,176,000.00	0.00	0.00
Ordinary capital	2,176,000.00	2,176,000.00	0.00	0.00
Preference capital	0.00	0.00	0.00	0.00
Subsidies, grants	0.00	0.00	0.00	0.00
Long-term loans	3,279,000.00	3,279,000.00	-142,857.14	-468,428.57
Long-term loans-1	1,279,000.00	1,279,000.00	0.00	-182,714.29
Long-term EXIM	2,000,000.00	2,000,000.00	-142,857.14	-285,714.29
TOTAL LONG-TERM FINANCE	5,455,000.00	5,455,000.00	-142,857.14	-468,428.57
Total short-term loans	1,203,192.38	0.00	433,697.26	152,529.11
Short-term loans	970,000.00	0.00	310,000.00	90,000.00
Accounts payable	233,192.38	0.00	123,697.26	62,529.11
TOTAL FINANCIAL FLOW	6,658,192.38	5,455,000.00	290,840.11	-315,899.46
Foreign share (%)	57.91	52.61	61.18	63.46

FINANCIAL FLOW - TOTAL
US Dollars

	Production 2000	Production 2001	Production 2002	Production 2003
Equity capital	0.00	0.00	0.00	0.00
Ordinary capital	0.00	0.00	0.00	0.00
Preference capital	0.00	0.00	0.00	0.00
Subsidies, grants	0.00	0.00	0.00	0.00
Long-term loans	-468,428.57	-468,428.57	-468,428.57	-468,428.57
Long-term loans-1	-182,714.29	-182,714.29	-182,714.29	-182,714.29
Long-term EXIM	-285,714.29	-285,714.29	-285,714.29	-285,714.29
TOTAL LONG-TERM FINANCE	-468,428.57	-468,428.57	-468,428.57	-468,428.57
Total short-term loans	-93,958.58	-263,878.50	91.26	833.33
Short-term loans	-140,000.00	-260,000.00	0.00	0.00
Accounts payable	46,041.42	-3,878.50	91.26	833.33
TOTAL FINANCIAL FLOW	-562,387.15	-732,307.07	-468,337.31	-467,595.24
Foreign share (%)	74.94	74.52	61.01	60.92

FINANCIAL FLOW - TOTAL
US Dollars

	Production 2004	Production 2005	Production 2006	Production 2007
Equity capital	0.00	0.00	0.00	0.00
Ordinary capital	0.00	0.00	0.00	0.00
Preference capital	0.00	0.00	0.00	0.00
Subsidies, grants	0.00	0.00	0.00	0.00
Long-term loans	-468,428.57	-325,571.43	0.00	0.00
Long-term loans-1	-182,714.29	-182,714.29	0.00	0.00
Long-term EXIM	-285,714.29	-142,857.14	0.00	0.00
TOTAL LONG-TERM FINANCE	-468,428.57	-325,571.43	0.00	0.00
Total short-term loans	0.00	0.00	0.00	0.00
Short-term loans	0.00	0.00	0.00	0.00
Accounts payable	0.00	0.00	0.00	0.00
TOTAL FINANCIAL FLOW	-468,428.57	-325,571.43	0.00	0.00
Foreign share (%)	60.99	43.88	0.00	0.00

FINANCIAL FLOW - TOTAL
US Dollars

	Production 2008	Production 2009	Scrap 2010
Equity capital	0.00	0.00	0.00
Ordinary capital	0.00	0.00	0.00
Preference capital	0.00	0.00	0.00
Subsidies, grants	0.00	0.00	0.00
Long-term loans	0.00	0.00	0.00
Long-term loans-1	0.00	0.00	0.00
Long-term EXIM	0.00	0.00	0.00
TOTAL LONG-TERM FINANCE	0.00	0.00	0.00
Total short-term loans	0.00	0.00	-229,313.88
Short-term loans	0.00	0.00	0.00
Accounts payable	0.00	0.00	-229,313.88
TOTAL FINANCIAL FLOW	0.00	0.00	-229,313.88
Foreign share (%)	0.00	0.00	4.86

DEBT SERVICE - TOTAL
US Dollars

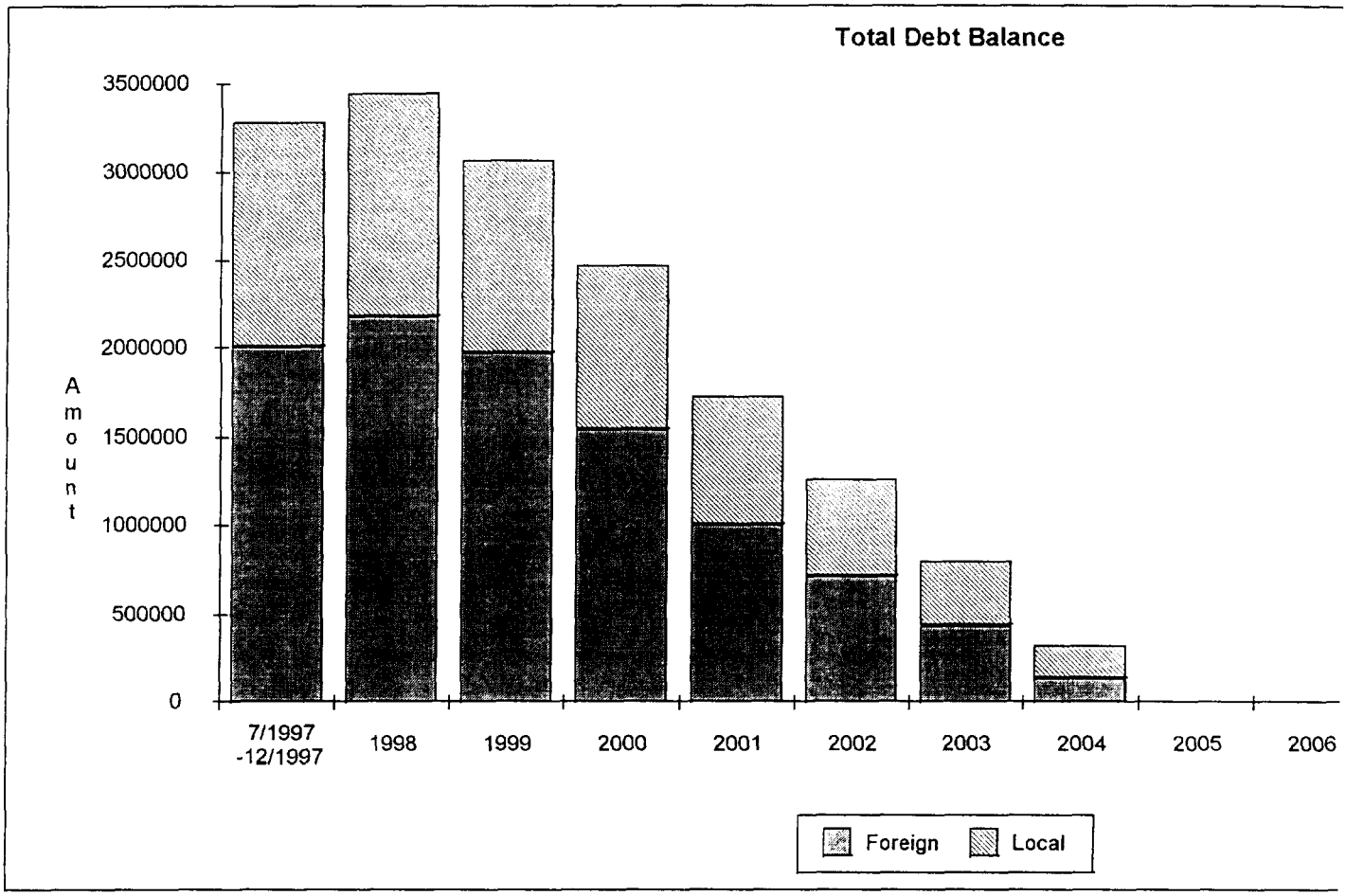
	Total inflow	Construction 7/1997-12/1997	Production 1998	Production 1999	Production 2000
Total long-term loans					
Disbursement	3,279,000.00	3,279,000.00	0.00	0.00	0.00
Repayment	3,279,000.00	0.00	142,857.14	468,428.57	468,428.57
Debt balance	0.00	3,279,000.00	3,136,142.86	2,667,714.29	2,199,285.71
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00
Interest payable	1,980,050.00	0.00	423,010.00	403,724.29	343,294.29
Other financial costs	0.00	0.00	0.00	0.00	0.00
Total short-term loans					
Disbursement	970,000.00	0.00	310,000.00	400,000.00	260,000.00
Repayment	970,000.00	0.00	0.00	310,000.00	400,000.00
Debt balance	0.00	0.00	310,000.00	400,000.00	260,000.00
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00
Interest payable	213,400.00	0.00	68,200.00	88,000.00	57,200.00
Other financial costs	0.00	0.00	0.00	0.00	0.00
TOTAL DEBT SERVICE					
Disbursement	4,249,000.00	3,279,000.00	310,000.00	400,000.00	260,000.00
Repayment	4,249,000.00	0.00	142,857.14	778,428.57	868,428.57
Debt balance	0.00	3,279,000.00	3,446,142.86	3,067,714.29	2,459,285.71
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00
Interest payable	2,193,450.00	0.00	491,210.00	491,724.29	400,494.29
Other financial costs	0.00	0.00	0.00	0.00	0.00

DEBT SERVICE - TOTAL
US Dollars

	Production 2001	Production 2002	Production 2003	Production 2004	Production 2005
Total long-term loans					
Disbursement	0.00	0.00	0.00	0.00	0.00
Repayment	468,428.57	468,428.57	468,428.57	468,428.57	325,571.43
Debt balance	1,730,857.14	1,262,428.57	794,000.00	325,571.43	0.00
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00
Interest payable	282,864.29	222,434.29	162,004.29	101,574.29	41,144.29
Other financial costs	0.00	0.00	0.00	0.00	0.00
Total short-term loans					
Disbursement	0.00	0.00	0.00	0.00	0.00
Repayment	260,000.00	0.00	0.00	0.00	0.00
Debt balance	0.00	0.00	0.00	0.00	0.00
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00
Interest payable	0.00	0.00	0.00	0.00	0.00
Other financial costs	0.00	0.00	0.00	0.00	0.00
TOTAL DEBT SERVICE					
Disbursement	0.00	0.00	0.00	0.00	0.00
Repayment	728,428.57	468,428.57	468,428.57	468,428.57	325,571.43
Debt balance	1,730,857.14	1,262,428.57	794,000.00	325,571.43	0.00
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00
Interest payable	282,864.29	222,434.29	162,004.29	101,574.29	41,144.29
Other financial costs	0.00	0.00	0.00	0.00	0.00

DEBT SERVICE - TOTAL
US Dollars

	Production 2006	Production 2007	Production 2008	Production 2009	Scrap 2010
Total long-term loans					
Disbursement	0.00	0.00	0.00	0.00	0.00
Repayment	0.00	0.00	0.00	0.00	0.00
Debt balance	0.00	0.00	0.00	0.00	0.00
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00
Interest payable	0.00	0.00	0.00	0.00	0.00
Other financial costs	0.00	0.00	0.00	0.00	0.00
Total short-term loans					
Disbursement	0.00	0.00	0.00	0.00	0.00
Repayment	0.00	0.00	0.00	0.00	0.00
Debt balance	0.00	0.00	0.00	0.00	0.00
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00
Interest payable	0.00	0.00	0.00	0.00	0.00
Other financial costs	0.00	0.00	0.00	0.00	0.00
TOTAL DEBT SERVICE					
Disbursement	0.00	0.00	0.00	0.00	0.00
Repayment	0.00	0.00	0.00	0.00	0.00
Debt balance	0.00	0.00	0.00	0.00	0.00
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00
Interest payable	0.00	0.00	0.00	0.00	0.00
Other financial costs	0.00	0.00	0.00	0.00	0.00


Total Debt Balance
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
Amount
7/1997 -12/1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Foreign
Local

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US Dollars

	Construction 7/1997-12/1997	Production 1998	Production 1999	Production 2000
TOTAL CASH INFLOW	5,455,000.00	2,449,647.26	3,688,049.11	4,337,941.42
Inflow funds	5,455,000.00	433,697.26	462,529.11	306,041.42
Total equity	2,176,000.00	0.00	0.00	0.00
Total long-term loans	3,279,000.00	0.00	0.00	0.00
Total short-term loans	0.00	433,697.26	462,529.11	306,041.42
Inflow operation	0.00	2,015,950.00	3,225,520.00	4,031,900.00
Sales revenue	0.00	2,015,950.00	3,225,520.00	4,031,900.00
Interest on short-term deposits	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	5,455,000.00	2,318,889.69	3,481,783.63	3,916,198.83
Increase in fixed assets	5,455,000.00	0.00	0.00	0.00
Fixed investments	5,055,000.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	400,000.00	0.00	0.00	0.00
Increase in current assets	0.00	307,057.55	151,562.77	106,865.98
Operating costs	0.00	1,377,765.00	2,060,068.00	2,540,410.00
Marketing costs	0.00	0.00	0.00	0.00
Income (corporate) tax	0.00	0.00	0.00	0.00
Financial costs	0.00	491,210.00	491,724.29	400,494.29
Loan repayment	0.00	142,857.14	778,428.57	868,428.57
Dividends	0.00	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00	0.00
SURPLUS (DEFICIT)	0.00	130,757.56	206,265.49	421,742.58
CUMULATIVE CASH BALANCE	0.00	130,757.56	337,023.05	758,765.64
Foreign surplus (deficit)	-625,000.00	619,862.30	1,043,188.10	1,262,580.16
Local surplus (deficit)	625,000.00	-489,104.74	-836,922.61	-840,837.57
Foreign cumulative cash balance	-625,000.00	-5,137.70	1,038,050.40	2,300,630.56
Local cumulative cash balance	625,000.00	135,895.26	-701,027.35	-1,541,864.92
Net flow of funds	5,455,000.00	-200,369.89	-807,623.74	-962,881.44

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US Dollars

	Production 2001	Production 2002	Production 2003	Production 2004
TOTAL CASH INFLOW	4,031,900.00	4,031,991.26	4,032,733.33	4,031,900.00
Inflow funds	0.00	91.26	833.33	0.00
Total equity	0.00	0.00	0.00	0.00
Total long-term loans	0.00	0.00	0.00	0.00
Total short-term loans	0.00	91.26	833.33	0.00
Inflow operation	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Sales revenue	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Interest on short-term deposits	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	3,554,349.36	3,231,272.86	3,513,081.59	3,474,879.14
Increase in fixed assets	0.00	0.00	0.00	0.00
Fixed investments	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00	0.00
Increase in current assets	-1,231.99	0.00	1,944.44	0.00
Operating costs	2,540,410.00	2,540,410.00	2,550,410.00	2,550,410.00
Marketing costs	0.00	0.00	0.00	0.00
Income (corporate) tax	0.00	0.00	330,294.29	354,466.29
Financial costs	282,864.29	222,434.29	162,004.29	101,574.29
Loan repayment	732,307.07	468,428.57	468,428.57	468,428.57
Dividends	0.00	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00	0.00
SURPLUS (DEFICIT)	477,550.64	800,718.40	519,651.75	557,020.86
CUMULATIVE CASH BALANCE	1,236,316.27	2,037,034.68	2,556,686.42	3,113,707.28
Foreign surplus (deficit)	1,235,800.00	1,521,514.29	1,536,117.46	1,562,942.86
Local surplus (deficit)	-758,249.36	-720,795.88	-1,016,465.71	-1,005,922.00
Foreign cumulative cash balance	3,536,430.56	5,057,944.84	6,594,062.30	8,157,005.16
Local cumulative cash balance	-2,300,114.28	-3,020,910.17	-4,037,375.88	-5,043,297.88
Net flow of funds	-1,015,171.35	-690,771.60	-629,599.52	-570,002.86

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US Dollars

	Production 2005	Production 2006	Production 2007	Production 2008
TOTAL CASH INFLOW	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Inflow funds	0.00	0.00	0.00	0.00
Total equity	0.00	0.00	0.00	0.00
Total long-term loans	0.00	0.00	0.00	0.00
Total short-term loans	0.00	0.00	0.00	0.00
Inflow operation	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Sales revenue	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Interest on short-term deposits	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	3,295,764.00	2,958,006.00	2,958,006.00	3,128,806.00
Increase in fixed assets	0.00	0.00	0.00	0.00
Fixed investments	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00	0.00
Increase in current assets	0.00	0.00	0.00	0.00
Operating costs	2,550,410.00	2,550,410.00	2,550,410.00	2,550,410.00
Marketing costs	0.00	0.00	0.00	0.00
Income (corporate) tax	378,638.29	407,596.00	407,596.00	578,396.00
Financial costs	41,144.29	0.00	0.00	0.00
Loan repayment	325,571.43	0.00	0.00	0.00
Dividends	0.00	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00	0.00
SURPLUS (DEFICIT)	736,136.00	1,073,894.00	1,073,894.00	903,094.00
CUMULATIVE CASH BALANCE	3,849,843.28	4,923,737.28	5,997,631.28	6,900,725.28
Foreign surplus (deficit)	1,731,514.29	1,880,800.00	1,880,800.00	1,880,800.00
Local surplus (deficit)	-995,378.29	-806,906.00	-806,906.00	-977,706.00
Foreign cumulative cash balance	9,888,519.44	11,769,319.44	13,650,119.44	15,530,919.44
Local cumulative cash balance	-6,038,676.17	-6,845,582.17	-7,652,488.17	-8,630,194.17
Net flow of funds	-366,715.71	0.00	0.00	0.00

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US Dollars

	Production 2009	Scrap 2010
TOTAL CASH INFLOW	4,031,900.00	1,050,198.75
Inflow funds	0.00	0.00
Total equity	0.00	0.00
Total long-term loans	0.00	0.00
Total short-term loans	0.00	0.00
Inflow operation	4,031,900.00	0.00
Sales revenue	4,031,900.00	0.00
Interest on short-term deposits	0.00	0.00
Other income	0.00	1,050,198.75
TOTAL CASH OUTFLOW	3,128,806.00	229,313.88
Increase in fixed assets	0.00	0.00
Fixed investments	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00
Increase in current assets	0.00	0.00
Operating costs	2,550,410.00	0.00
Marketing costs	0.00	0.00
Income (corporate) tax	578,396.00	0.00
Financial costs	0.00	0.00
Loan repayment	0.00	229,313.88
Dividends	0.00	0.00
Equity capital refund	0.00	0.00
SURPLUS (DEFICIT)	903,094.00	820,884.86
CUMULATIVE CASH BALANCE	7,803,819.28	8,624,704.14
Foreign surplus (deficit)	1,880,800.00	84,730.56
Local surplus (deficit)	-977,706.00	736,154.31
Foreign cumulative cash balance	17,411,719.44	17,496,450.00
Local cumulative cash balance	-9,607,900.17	-8,871,745.86
Net flow of funds	0.00	-229,313.88

DISCOUNTED CASH FLOW - TOTAL CAPITAL INVESTED
US Dollars

	Construction 7/1997-12/1997	Production 1998	Production 1999	Production 2000
TOTAL CASH INFLOW	0.00	2,015,950.00	3,225,520.00	4,031,900.00
Inflow operation	0.00	2,015,950.00	3,225,520.00	4,031,900.00
Sales revenue	0.00	2,015,950.00	3,225,520.00	4,031,900.00
Interest on short-term deposits	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	5,455,000.00	1,561,125.29	2,149,101.66	2,601,234.56
Increase in fixed assets	5,455,000.00	0.00	0.00	0.00
Fixed investments	5,055,000.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	400,000.00	0.00	0.00	0.00
Increase in net working capital	0.00	183,360.29	89,033.66	60,824.56
Operating costs	0.00	1,377,765.00	2,060,068.00	2,540,410.00
Marketing costs	0.00	0.00	0.00	0.00
Income (corporate) tax	0.00	0.00	0.00	0.00
NET CASH FLOW	-5,455,000.00	454,824.71	1,076,418.34	1,430,665.44
CUMULATIVE NET CASH FLOW	-5,455,000.00	-5,000,175.29	-3,923,756.95	-2,493,091.51
Net present value	-5,455,000.00	395,499.74	813,926.91	940,685.75
Cumulative net present value	-5,455,000.00	-5,059,500.26	-4,245,573.34	-3,304,887.59
NET PRESENT VALUE	at 15.00 %	636,413.74		
INTERNAL RATE OF RETURN	17.48 %			
MODIFIED INTERNAL RATE OF RETURN	17.48 %			
NORMAL PAYBACK	at 0.00 %	6 years		
DYNAMIC PAYBACK	at 15.00 %	11 years		
NPV RATIO	0.11			

DISCOUNTED CASH FLOW - TOTAL CAPITAL INVESTED
US Dollars

	Production 2001	Production 2002	Production 2003	Production 2004
TOTAL CASH INFLOW	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Inflow operation	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Sales revenue	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Interest on short-term deposits	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	2,543,056.50	2,540,318.74	2,881,815.40	2,904,876.29
Increase in fixed assets	0.00	0.00	0.00	0.00
Fixed investments	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00	0.00
Increase in net working capital	2,646.50	-91.26	1,111.11	0.00
Operating costs	2,540,410.00	2,540,410.00	2,550,410.00	2,550,410.00
Marketing costs	0.00	0.00	0.00	0.00
Income (corporate) tax	0.00	0.00	330,294.29	354,466.29
NET CASH FLOW	1,488,843.50	1,491,581.26	1,150,084.60	1,127,023.71
CUMULATIVE NET CASH FLOW	-1,004,248.01	487,333.25	1,637,417.85	2,764,441.57
Net present value	851,251.10	741,579.50	497,213.31	423,689.96
Cumulative net present value	-2,453,636.49	-1,712,056.99	-1,214,843.68	-791,153.72
NET PRESENT VALUE				
INTERNAL RATE OF RETURN				
MODIFIED INTERNAL RATE OF RETURN				
NORMAL PAYBACK				
DYNAMIC PAYBACK				
NPV RATIO				

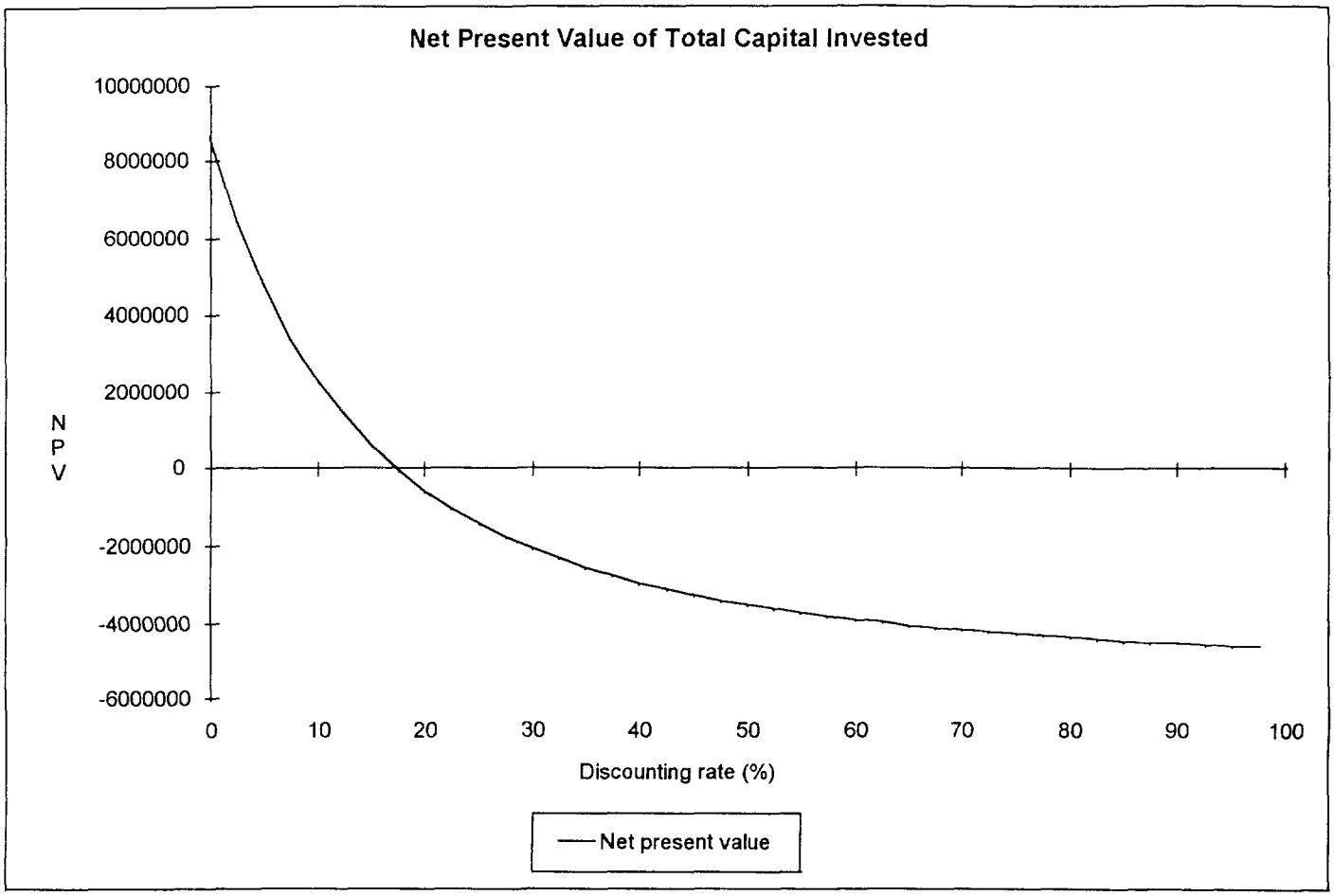
DISCOUNTED CASH FLOW - TOTAL CAPITAL INVESTED
US Dollars

	Production 2005	Production 2006	Production 2007	Production 2008
TOTAL CASH INFLOW	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Inflow operation	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Sales revenue	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Interest on short-term deposits	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	2,929,048.29	2,958,006.00	2,958,006.00	3,128,806.00
Increase in fixed assets	0.00	0.00	0.00	0.00
Fixed investments	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00	0.00
Increase in net working capital	0.00	0.00	0.00	0.00
Operating costs	2,550,410.00	2,550,410.00	2,550,410.00	2,550,410.00
Marketing costs	0.00	0.00	0.00	0.00
Income (corporate) tax	378,638.29	407,596.00	407,596.00	578,396.00
NET CASH FLOW	1,102,851.71	1,073,894.00	1,073,894.00	903,094.00
CUMULATIVE NET CASH FLOW	3,867,293.28	4,941,187.28	6,015,081.28	6,918,175.28
Net present value	360,524.18	305,267.70	265,450.17	194,113.93
Cumulative net present value	-430,629.54	-125,361.84	140,088.34	334,202.27

NET PRESENT VALUE	
INTERNAL RATE OF RETURN	
MODIFIED INTERNAL RATE OF RETURN	
NORMAL PAYBACK	
DYNAMIC PAYBACK	
NPV RATIO	

DISCOUNTED CASH FLOW - TOTAL CAPITAL INVESTED
US Dollars

	Production 2009	Scrap 2010
TOTAL CASH INFLOW	4,031,900.00	820,884.86
Inflow operation	4,031,900.00	0.00
Sales revenue	4,031,900.00	0.00
Interest on short-term deposits	0.00	0.00
Other income	0.00	820,884.86
TOTAL CASH OUTFLOW	3,128,806.00	0.00
Increase in fixed assets	0.00	0.00
Fixed investments	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00
Increase in net working capital	0.00	0.00
Operating costs	2,550,410.00	0.00
Marketing costs	0.00	0.00
Income (corporate) tax	578,396.00	0.00
NET CASH FLOW	903,094.00	820,884.86
CUMULATIVE NET CASH FLOW	7,821,269.28	8,642,154.14
Net present value	168,794.73	133,416.74
Cumulative net present value	502,997.00	636,413.74
NET PRESENT VALUE		
INTERNAL RATE OF RETURN		
MODIFIED INTERNAL RATE OF RETURN		
NORMAL PAYBACK		
DYNAMIC PAYBACK		
NPV RATIO		


Net Present Value of Total Capital Invested
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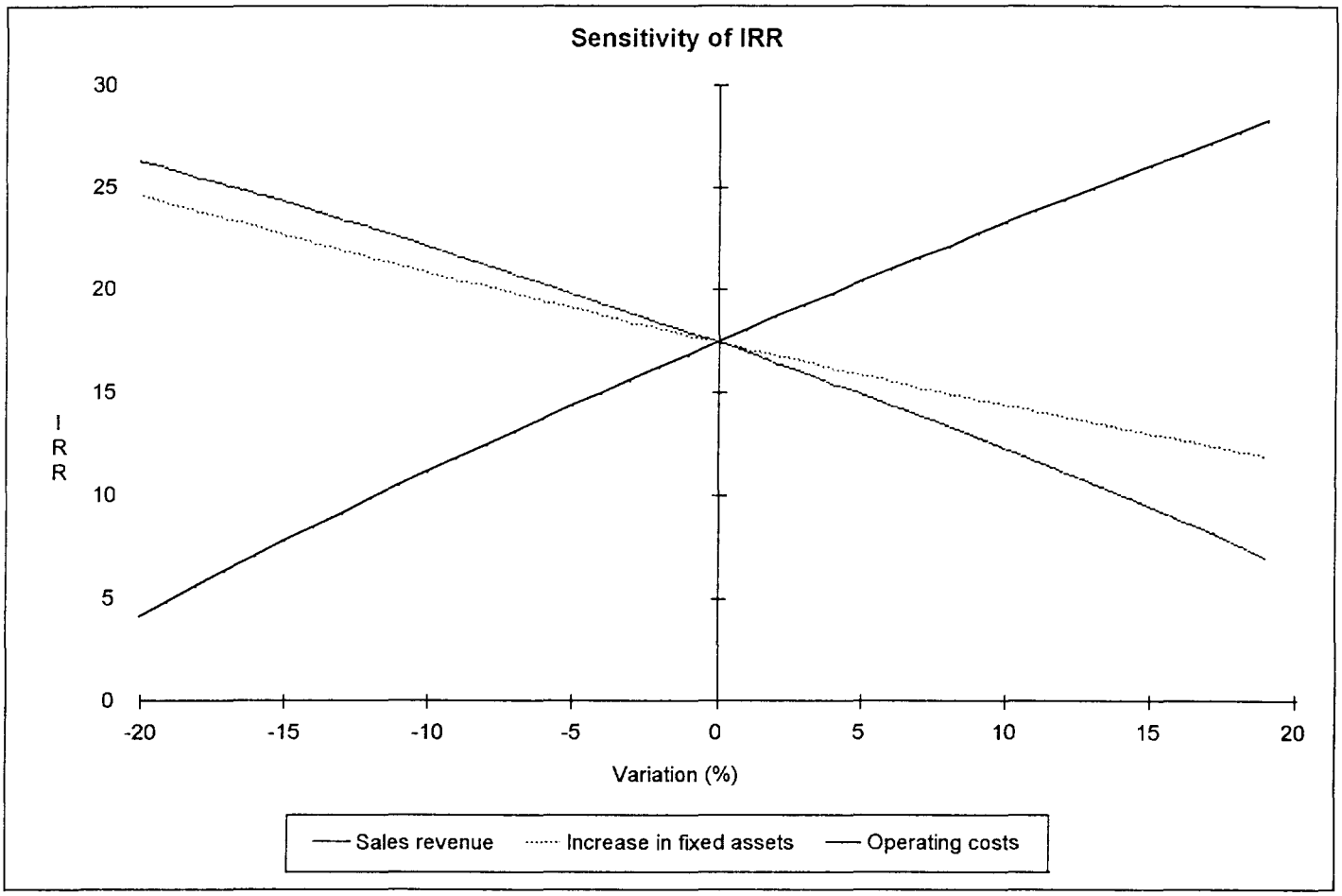
8000000
6000000
4000000
2000000
N
P
V
0
-2000000
-4000000
-6000000
0
10
20
30
40
50
60
70
80
90
100
Discounting rate (%)
Net present value


Sensitivity of IRR
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25
20
15
10
5
0
IRR
-20
-15
-10
-5
0
5
10
15
20
Variation (%)
Sales revenue
Increase in fixed assets
Operating costs

DISCOUNTED CASH FLOW - EQUITY CAPITAL INVESTED
US Dollars

	Construction 7/1997-12/1997	Production 1998	Production 1999	Production 2000
TOTAL CASH INFLOW	0.00	130,757.56	206,265.49	421,742.58
Surplus (deficit)	0.00	130,757.56	206,265.49	421,742.58
Dividends	0.00	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	2,176,000.00	0.00	0.00	0.00
Equity capital paid	2,176,000.00	0.00	0.00	0.00
NET CASH RETURN	-2,176,000.00	130,757.56	206,265.49	421,742.58
CUMULATIVE NET CASH RETURN	-2,176,000.00	-2,045,242.44	-1,838,976.95	-1,417,234.36
Net present value	-2,176,000.00	113,702.23	155,966.34	277,302.60
Cumulative net present value	-2,176,000.00	-2,062,297.77	-1,906,331.43	-1,629,028.83
NET PRESENT VALUE	at 15.00 %	783,862.85		
INTERNAL RATE OF RETURN	20.46 %			
MODIFIED INTERNAL RATE OF RETURN	20.46 %			
SHORT NET PRESENT VALUE	at 15.00 %	650,446.11	for 13 years	
NORMAL PAYBACK	at 0.00 %	7 years		
DYNAMIC PAYBACK	at 15.00 %	10 years		

DISCOUNTED CASH FLOW - EQUITY CAPITAL INVESTED
US Dollars

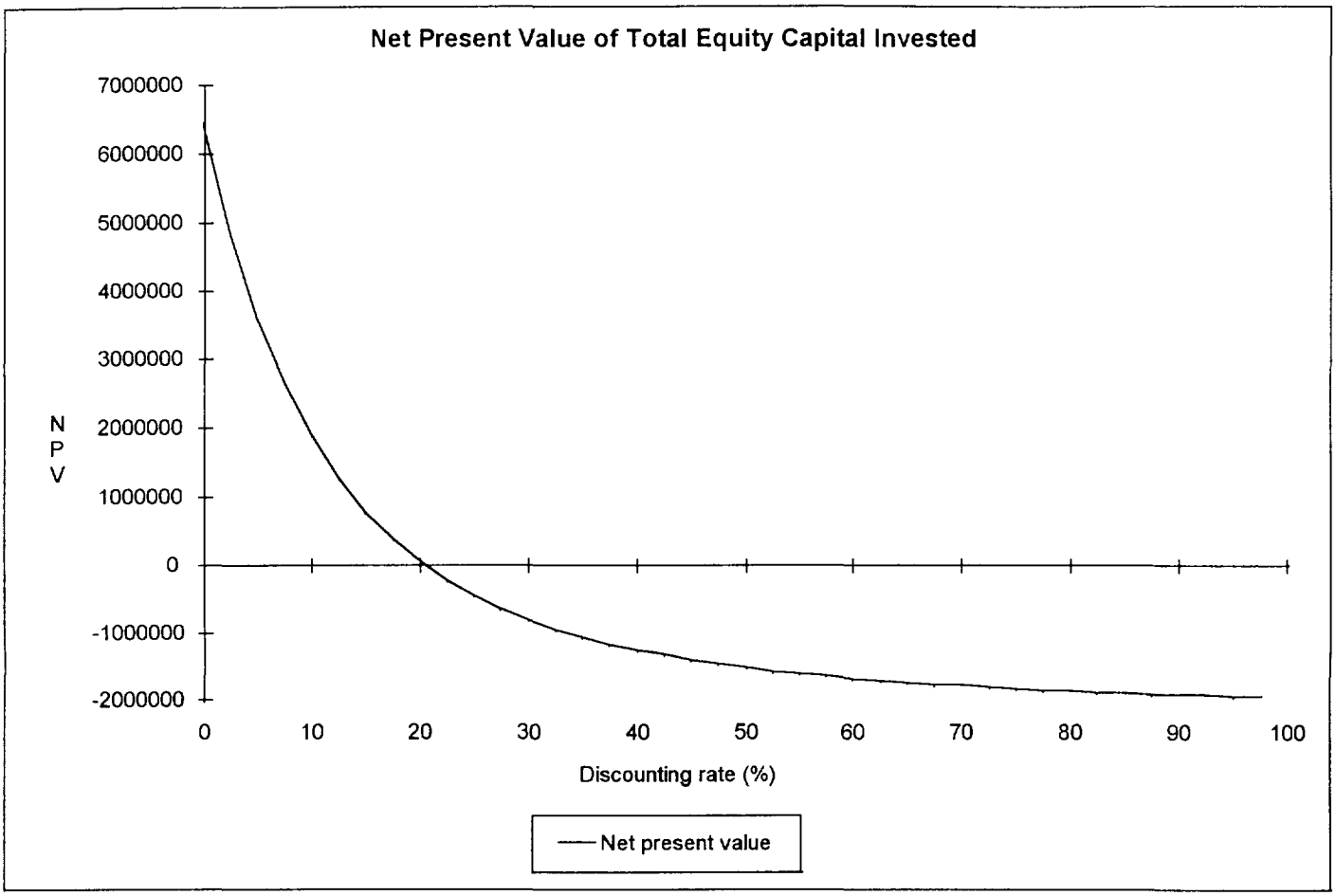
	Production 2001	Production 2002	Production 2003	Production 2004
TOTAL CASH INFLOW	477,550.64	800,718.40	519,651.75	557,020.86
Surplus (deficit)	477,550.64	800,718.40	519,651.75	557,020.86
Dividends	0.00	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	0.00	0.00	0.00	0.00
Equity capital paid	0.00	0.00	0.00	0.00
NET CASH RETURN	477,550.64	800,718.40	519,651.75	557,020.86
CUMULATIVE NET CASH RETURN	-939,683.73	-138,965.32	380,686.42	937,707.28
Net present value	273,041.13	398,098.56	224,659.79	209,404.77
Cumulative net present value	-1,355,987.71	-957,889.14	-733,229.35	-523,824.58
NET PRESENT VALUE				
INTERNAL RATE OF RETURN				
MODIFIED INTERNAL RATE OF RETURN				
SHORT NET PRESENT VALUE				
NORMAL PAYBACK				
DYNAMIC PAYBACK				

DISCOUNTED CASH FLOW - EQUITY CAPITAL INVESTED
US Dollars

	Production 2005	Production 2006	Production 2007	Production 2008
TOTAL CASH INFLOW	736,136.00	1,073,894.00	1,073,894.00	903,094.00
Surplus (deficit)	736,136.00	1,073,894.00	1,073,894.00	903,094.00
Dividends	0.00	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	0.00	0.00	0.00	0.00
Equity capital paid	0.00	0.00	0.00	0.00
NET CASH RETURN	736,136.00	1,073,894.00	1,073,894.00	903,094.00
CUMULATIVE NET CASH RETURN	1,673,843.28	2,747,737.28	3,821,631.28	4,724,725.28
Net present value	240,644.16	305,267.70	265,450.17	194,113.93
Cumulative net present value	-283,180.42	22,087.28	287,537.45	481,651.39
NET PRESENT VALUE				
INTERNAL RATE OF RETURN				
MODIFIED INTERNAL RATE OF RETURN				
SHORT NET PRESENT VALUE				
NORMAL PAYBACK				
DYNAMIC PAYBACK				

DISCOUNTED CASH FLOW - EQUITY CAPITAL INVESTED
US Dollars

	Production 2009	Scrap 2010
TOTAL CASH INFLOW	903,094.00	820,884.86
Surplus (deficit)	903,094.00	820,884.86
Dividends	0.00	0.00
Equity capital refund	0.00	0.00
TOTAL CASH OUTFLOW	0.00	0.00
Equity capital paid	0.00	0.00
NET CASH RETURN	903,094.00	820,884.86
CUMULATIVE NET CASH RETURN	5,627,819.28	6,448,704.14
Net present value	168,794.73	133,416.74
Cumulative net present value	650,446.11	783,862.85
NET PRESENT VALUE		
INTERNAL RATE OF RETURN		
MODIFIED INTERNAL RATE OF RETURN		
SHORT NET PRESENT VALUE		
NORMAL PAYBACK		
DYNAMIC PAYBACK		


Net Present Value of Total Equity Capital Invested
7000000
6000000
5000000
4000000
3000000
2000000
1000000
0
-1000000
-2000000
N
P
V
0
10
20
30
40
50
60
70
80
90
100
Discounting rate (%)
Net present value

NET INCOME STATEMENT
US Dollars

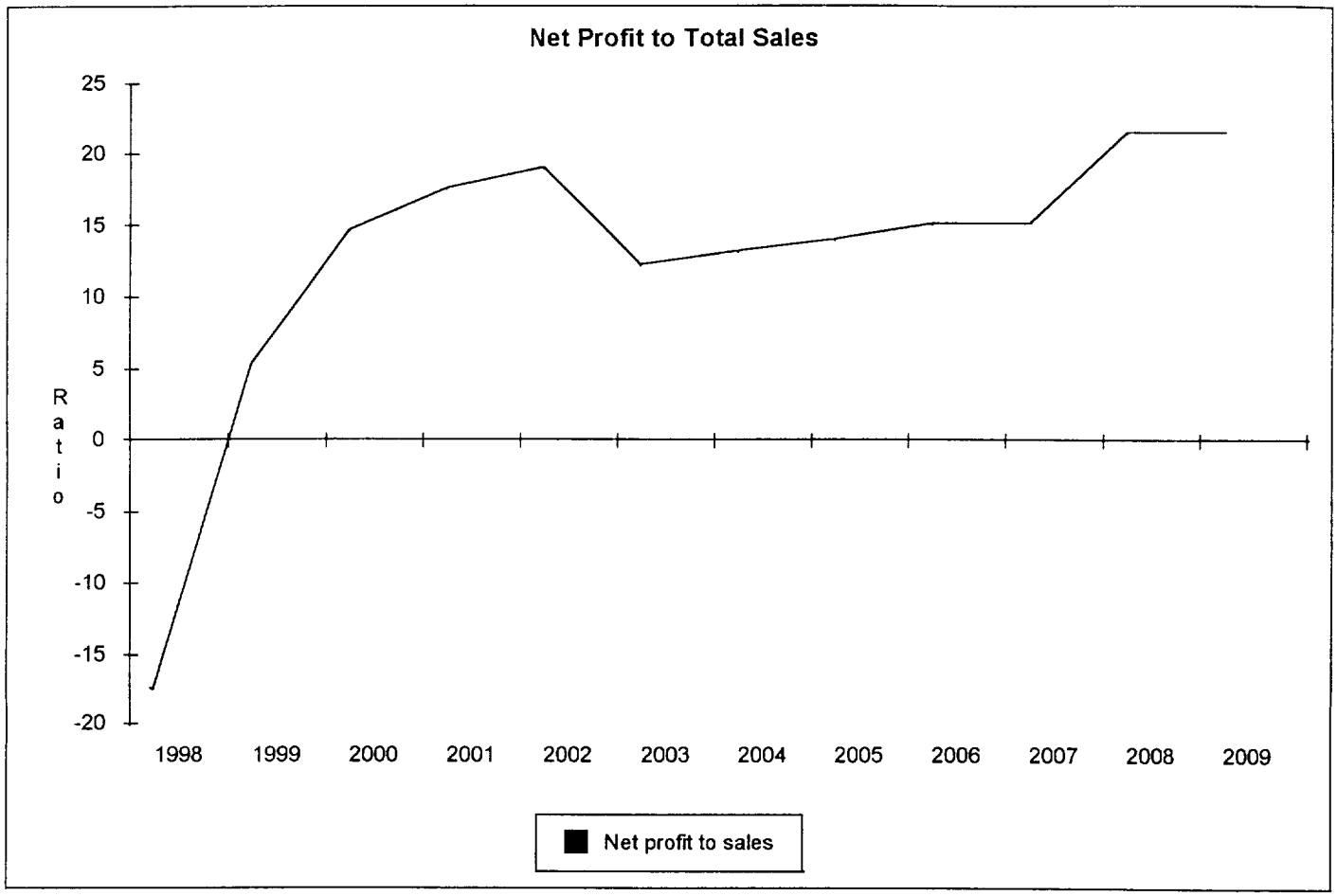
	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002
Sales revenue	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00
Less variable costs	887,035.00	1,419,256.00	1,774,070.00	1,774,070.00	1,774,070.00
Material	887,035.00	1,419,256.00	1,774,070.00	1,774,070.00	1,774,070.00
Personnel	0.00	0.00	0.00	0.00	0.00
Marketing (except personnel)	0.00	0.00	0.00	0.00	0.00
Other variable costs	0.00	0.00	0.00	0.00	0.00
VARIABLE MARGIN	1,128,915.00	1,806,264.00	2,257,830.00	2,257,830.00	2,257,830.00
in % of sales revenue	56.00	56.00	56.00	56.00	56.00
Less fixed costs	989,480.00	1,139,562.00	1,265,090.00	1,265,090.00	1,265,090.00
Material	69,430.00	217,112.00	267,640.00	267,640.00	267,640.00
Personnel	274,300.00	225,700.00	210,700.00	210,700.00	210,700.00
Marketing (except personnel)	0.00	0.00	0.00	0.00	0.00
Depreciation	498,750.00	498,750.00	498,750.00	498,750.00	498,750.00
Other fixed costs	147,000.00	198,000.00	288,000.00	288,000.00	288,000.00
OPERATIONAL MARGIN	139,435.00	666,702.00	992,740.00	992,740.00	992,740.00
in % of sales revenue	6.92	20.67	24.62	24.62	24.62
Interest on short-term deposits	0.00	0.00	0.00	0.00	0.00
Financial costs	491,210.00	491,724.29	400,494.29	282,864.29	222,434.29
GROSS PROFIT FROM OPERATIONS	-351,775.00	174,977.71	592,245.71	709,875.71	770,305.71
in % of sales revenue	-17.45	5.42	14.69	17.61	19.11
Extraordinary income	0.00	0.00	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00	0.00	0.00
GROSS PROFIT	-351,775.00	174,977.71	592,245.71	709,875.71	770,305.71
Investment allowances	0.00	0.00	0.00	0.00	0.00
TAXABLE PROFIT	0.00	174,977.71	592,245.71	709,875.71	770,305.71
Income (corporate) tax	0.00	0.00	0.00	0.00	0.00
NET PROFIT	-351,775.00	174,977.71	592,245.71	709,875.71	770,305.71
in % of sales revenue	-17.45	5.42	14.69	17.61	19.11
Dividends	0.00	0.00	0.00	0.00	0.00
RETAINED PROFIT	-351,775.00	174,977.71	592,245.71	709,875.71	770,305.71
Ratios (%)					
Net profit to equity	-16.17	8.04	27.22	32.62	35.40
Net profit to net worth	-19.28	8.75	22.85	21.50	18.92
Net profit+interest to investment	2.47	11.64	17.15	17.14	17.14

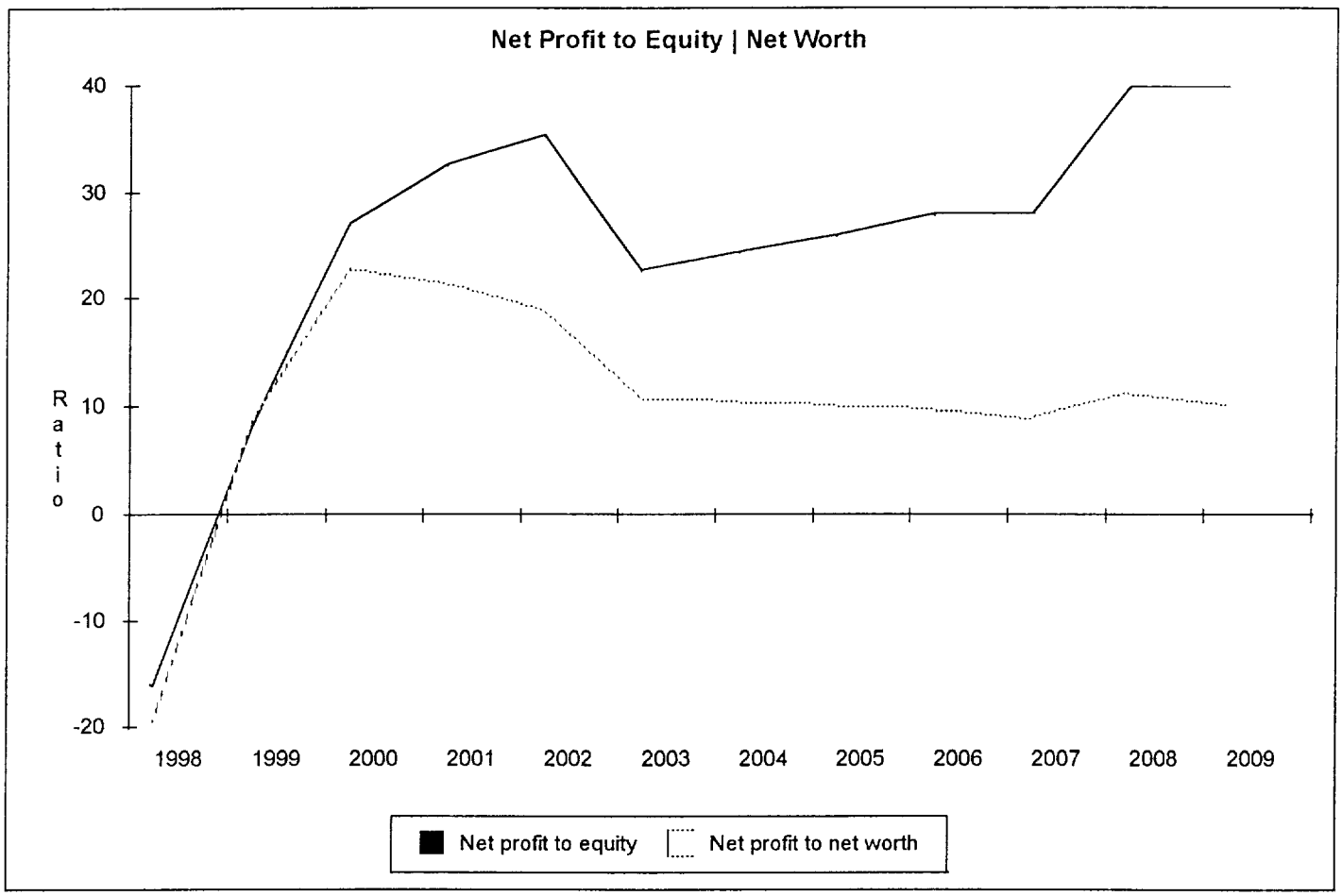
NET INCOME STATEMENT
US Dollars

	Production 2003	Production 2004	Production 2005	Production 2006	Production 2007
Sales revenue	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Less variable costs	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00
Material	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00
Personnel	0.00	0.00	0.00	0.00	0.00
Marketing (except personnel)	0.00	0.00	0.00	0.00	0.00
Other variable costs	0.00	0.00	0.00	0.00	0.00
VARIABLE MARGIN	2,257,830.00	2,257,830.00	2,257,830.00	2,257,830.00	2,257,830.00
in % of sales revenue	56.00	56.00	56.00	56.00	56.00
Less fixed costs	1,270,090.00	1,270,090.00	1,270,090.00	1,238,840.00	1,238,840.00
Material	267,640.00	267,640.00	267,640.00	267,640.00	267,640.00
Personnel	210,700.00	210,700.00	210,700.00	210,700.00	210,700.00
Marketing (except personnel)	0.00	0.00	0.00	0.00	0.00
Depreciation	493,750.00	493,750.00	493,750.00	462,500.00	462,500.00
Other fixed costs	298,000.00	298,000.00	298,000.00	298,000.00	298,000.00
OPERATIONAL MARGIN	987,740.00	987,740.00	987,740.00	1,018,990.00	1,018,990.00
in % of sales revenue	24.50	24.50	24.50	25.27	25.27
Interest on short-term deposits	0.00	0.00	0.00	0.00	0.00
Financial costs	162,004.29	101,574.29	41,144.29	0.00	0.00
GROSS PROFIT FROM OPERATIONS	825,735.71	886,165.71	946,595.71	1,018,990.00	1,018,990.00
in % of sales revenue	20.48	21.98	23.48	25.27	25.27
Extraordinary income	0.00	0.00	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00	0.00	0.00
GROSS PROFIT	825,735.71	886,165.71	946,595.71	1,018,990.00	1,018,990.00
Investment allowances	0.00	0.00	0.00	0.00	0.00
TAXABLE PROFIT	825,735.71	886,165.71	946,595.71	1,018,990.00	1,018,990.00
Income (corporate) tax	330,294.29	354,466.29	378,638.29	407,596.00	407,596.00
NET PROFIT	495,441.43	531,699.43	567,957.43	611,394.00	611,394.00
in % of sales revenue	12.29	13.19	14.09	15.16	15.16
Dividends	0.00	0.00	0.00	0.00	0.00
RETAINED PROFIT	495,441.43	531,699.43	567,957.43	611,394.00	611,394.00
Ratios (%)					
Net profit to equity	22.77	24.43	26.10	28.10	28.10
Net profit to net worth	10.85	10.43	10.02	9.74	8.87
Net profit+interest to investment	11.35	10.93	10.52	10.56	10.56

NET INCOME STATEMENT
US Dollars

	Production 2008	Production 2009
Sales revenue	4,031,900.00	4,031,900.00
Less variable costs	1,774,070.00	1,774,070.00
Material	1,774,070.00	1,774,070.00
Personnel	0.00	0.00
Marketing (except personnel)	0.00	0.00
Other variable costs	0.00	0.00
VARIABLE MARGIN	2,257,830.00	2,257,830.00
in % of sales revenue	56.00	56.00
Less fixed costs	811,840.00	811,840.00
Material	267,640.00	267,640.00
Personnel	210,700.00	210,700.00
Marketing (except personnel)	0.00	0.00
Depreciation	35,500.00	35,500.00
Other fixed costs	298,000.00	298,000.00
OPERATIONAL MARGIN	1,445,990.00	1,445,990.00
in % of sales revenue	35.86	35.86
Interest on short-term deposits	0.00	0.00
Financial costs	0.00	0.00
GROSS PROFIT FROM OPERATIONS	1,445,990.00	1,445,990.00
in % of sales revenue	35.86	35.86
Extraordinary income	0.00	0.00
Extraordinary loss	0.00	0.00
Depreciation allowances	0.00	0.00
GROSS PROFIT	1,445,990.00	1,445,990.00
Investment allowances	0.00	0.00
TAXABLE PROFIT	1,445,990.00	1,445,990.00
Income (corporate) tax	578,396.00	578,396.00
NET PROFIT	867,594.00	867,594.00
in % of sales revenue	21.52	21.52
Dividends	0.00	0.00
RETAINED PROFIT	867,594.00	867,594.00
Ratios (%)		
Net profit to equity	39.87	39.87
Net profit to net worth	11.18	10.06
Net profit+interest to investment	14.98	14.98


Net Profit to Total Sales
25
20
15
10
5
0
-5
-10
-15
-20
Ratio
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Net profit to sales

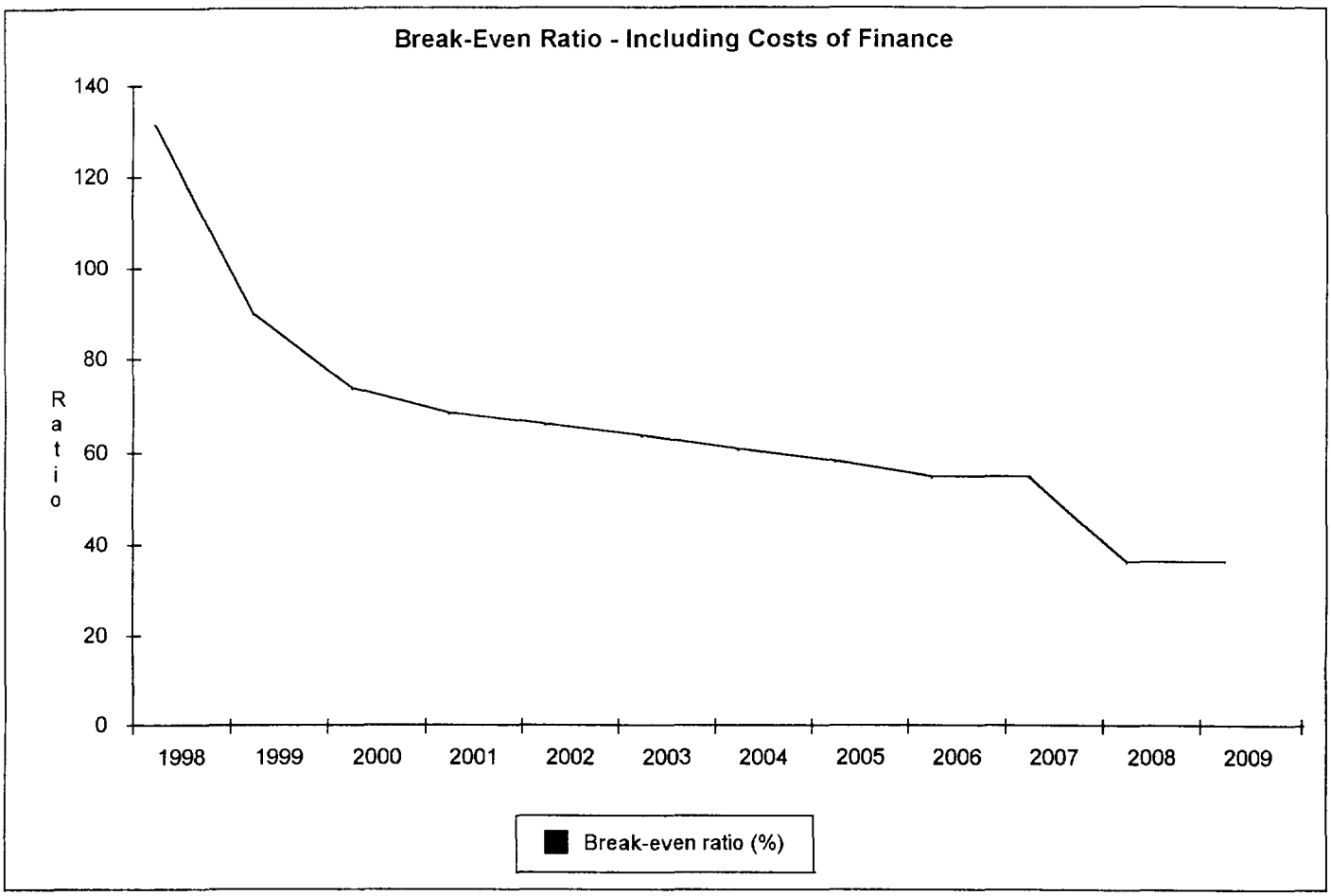

Net Profit to Equity | Net Worth
40
30
20
10
0
-10
-20
Ratio
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Net profit to equity
Net profit to net worth

BREAK-EVEN ANALYSIS - TOTAL
US Dollars

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003
Sales revenue	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Variable costs	887,035.00	1,419,256.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00
Variable margin	1,128,915.00	1,806,264.00	2,257,830.00	2,257,830.00	2,257,830.00	2,257,830.00
Variable margin ratio (%)	56.00	56.00	56.00	56.00	56.00	56.00
Including cost of finance						
Fixed costs	989,480.00	1,139,562.00	1,265,090.00	1,265,090.00	1,265,090.00	1,270,090.00
Financial costs	491,210.00	491,724.29	400,494.29	282,864.29	222,434.29	162,004.29
Break-even sales value	2,644,129.10	2,913,055.09	2,974,302.44	2,764,245.71	2,656,333.37	2,557,349.73
Break-even ratio (%)	131.16	90.31	73.77	68.56	65.88	63.43
Fixed costs coverage ratio	0.76	1.11	1.36	1.46	1.52	1.58
Excluding cost of finance						
Fixed costs	989,480.00	1,139,562.00	1,265,090.00	1,265,090.00	1,265,090.00	1,270,090.00
Break-even sales value	1,766,955.18	2,034,962.79	2,259,123.30	2,259,123.30	2,259,123.30	2,268,052.01
Break-even ratio (%)	87.65	63.09	56.03	56.03	56.03	56.25
Fixed costs coverage ratio	1.14	1.59	1.78	1.78	1.78	1.78

BREAK-EVEN ANALYSIS - TOTAL
US Dollars

	Production 2004	Production 2005	Production 2006	Production 2007	Production 2008	Production 2009
Sales revenue	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Variable costs	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00
Variable margin	2,257,830.00	2,257,830.00	2,257,830.00	2,257,830.00	2,257,830.00	2,257,830.00
Variable margin ratio (%)	56.00	56.00	56.00	56.00	56.00	56.00
Including cost of finance						
Fixed costs	1,270,090.00	1,270,090.00	1,238,840.00	1,238,840.00	811,840.00	811,840.00
Financial costs	101,574.29	41,144.29	0.00	0.00	0.00	0.00
Break-even sales value	2,449,437.40	2,341,525.06	2,212,247.60	2,212,247.60	1,449,736.12	1,449,736.12
Break-even ratio (%)	60.75	58.07	54.87	54.87	35.96	35.96
Fixed costs coverage ratio	1.65	1.72	1.82	1.82	2.78	2.78
Excluding cost of finance						
Fixed costs	1,270,090.00	1,270,090.00	1,238,840.00	1,238,840.00	811,840.00	811,840.00
Break-even sales value	2,268,052.01	2,268,052.01	2,212,247.60	2,212,247.60	1,449,736.12	1,449,736.12
Break-even ratio (%)	56.25	56.25	54.87	54.87	35.96	35.96
Fixed costs coverage ratio	1.78	1.78	1.82	1.82	2.78	2.78


Break-Even Ratio - Including Costs of Finance
140
120
100
80
60
40
20
0
Ratio
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Break-even ratio (%)

PROJECTED BALANCE SHEET
US Dollars

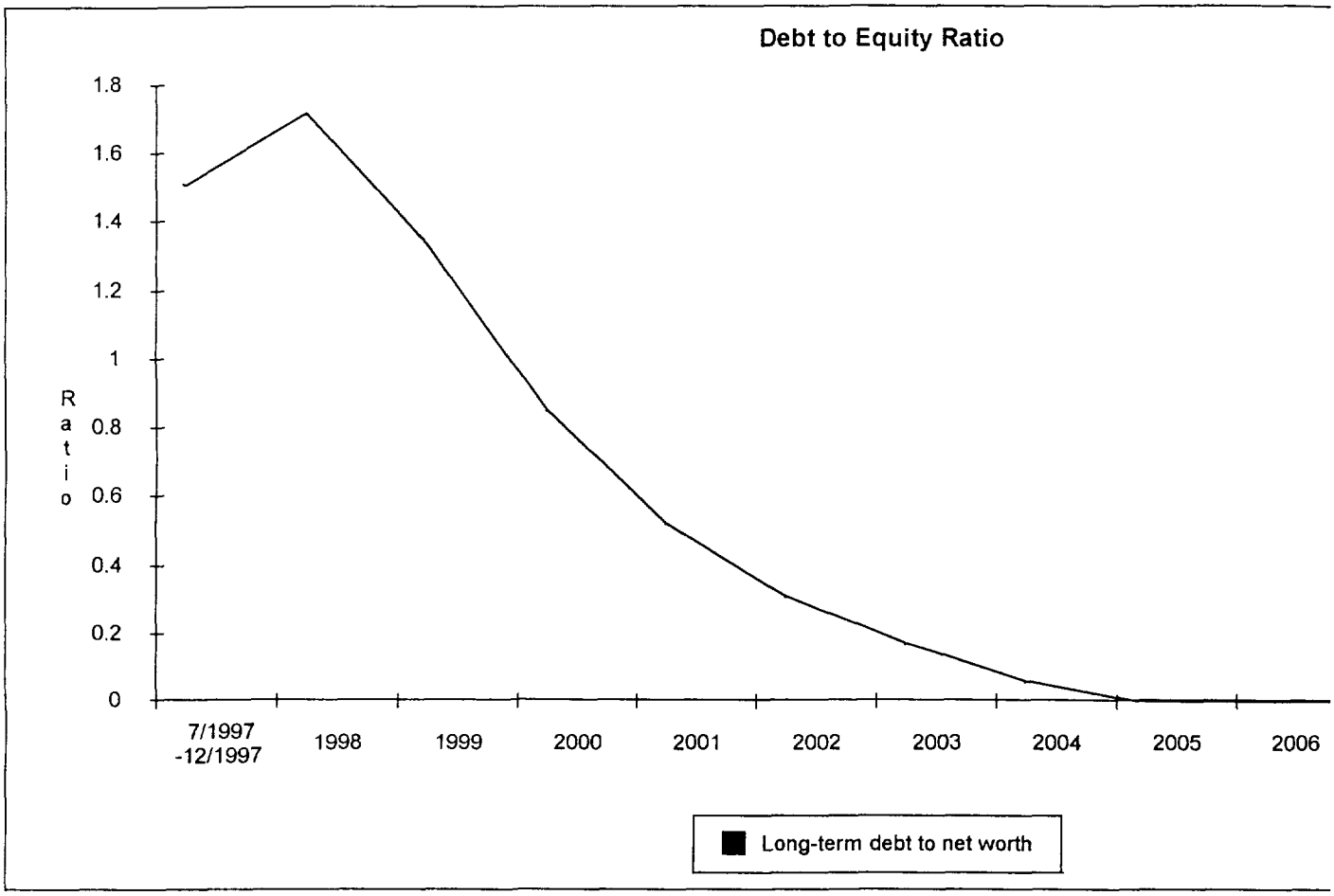
	7/1997 -12/1997	1998	1999	2000	2001
TOTAL ASSETS	5,455,000.00	5,745,840.11	5,604,918.37	5,459,799.22	5,260,570.58
Total current assets	0.00	437,815.11	795,643.37	1,324,251.93	1,800,570.58
Inventory on materials & supplies	0.00	51,749.71	80,496.21	99,797.44	98,976.11
Work in progress	0.00	38,964.58	57,506.77	70,644.28	70,233.61
Finished product	0.00	57,406.88	85,836.17	105,850.42	105,850.42
Accounts receivable	0.00	153,085.00	228,896.44	282,267.78	282,267.78
Cash-in-hand	0.00	5,851.39	5,884.72	6,926.39	6,926.39
Short-term deposits	0.00	0.00	0.00	0.00	0.00
Cash surplus, finance available	0.00	130,757.56	337,023.05	758,765.64	1,236,316.27
Total fixed assets, net of depreciation	5,455,000.00	4,956,250.00	4,457,500.00	3,958,750.00	3,460,000.00
Fixed investments	0.00	5,055,000.00	5,055,000.00	5,055,000.00	5,055,000.00
Construction in progress	5,055,000.00	0.00	0.00	0.00	0.00
Total pre-production expenditures	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00
Less accumulated depreciation	0.00	498,750.00	997,500.00	1,496,250.00	1,995,000.00
Less depreciation allowance	0.00	0.00	0.00	0.00	0.00
Accumulated losses brought forward	0.00	0.00	351,775.00	176,797.29	0.00
Loss in current year	0.00	351,775.00	0.00	0.00	0.00
TOTAL LIABILITIES	5,455,000.00	5,745,840.11	5,604,918.37	5,459,799.22	5,260,570.58
Total current liabilities	0.00	433,697.26	586,226.37	492,267.79	228,389.29
Accounts payable	0.00	123,697.26	186,226.37	232,267.79	228,389.29
Bank overdraft	0.00	310,000.00	400,000.00	260,000.00	0.00
Total long-term loans	3,279,000.00	3,136,142.86	2,667,714.29	2,199,285.71	1,730,857.14
Total equity	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00
Reserves, retained profit brought forward	0.00	0.00	0.00	0.00	415,448.43
Net profit after tax	0.00	0.00	174,977.71	592,245.71	709,875.71
Net worth	2,176,000.00	1,824,225.00	1,999,202.71	2,591,448.43	3,301,324.14
Ratios (%)					
Equity to total liabilities	39.89	37.87	38.82	39.85	41.36
Net worth to total liabilities	39.89	31.75	35.67	47.46	62.76
Long-term debt to net worth	1.51	1.72	1.33	0.85	0.52
Current assets to current liabilities	0.00	1.01	1.36	2.69	7.88

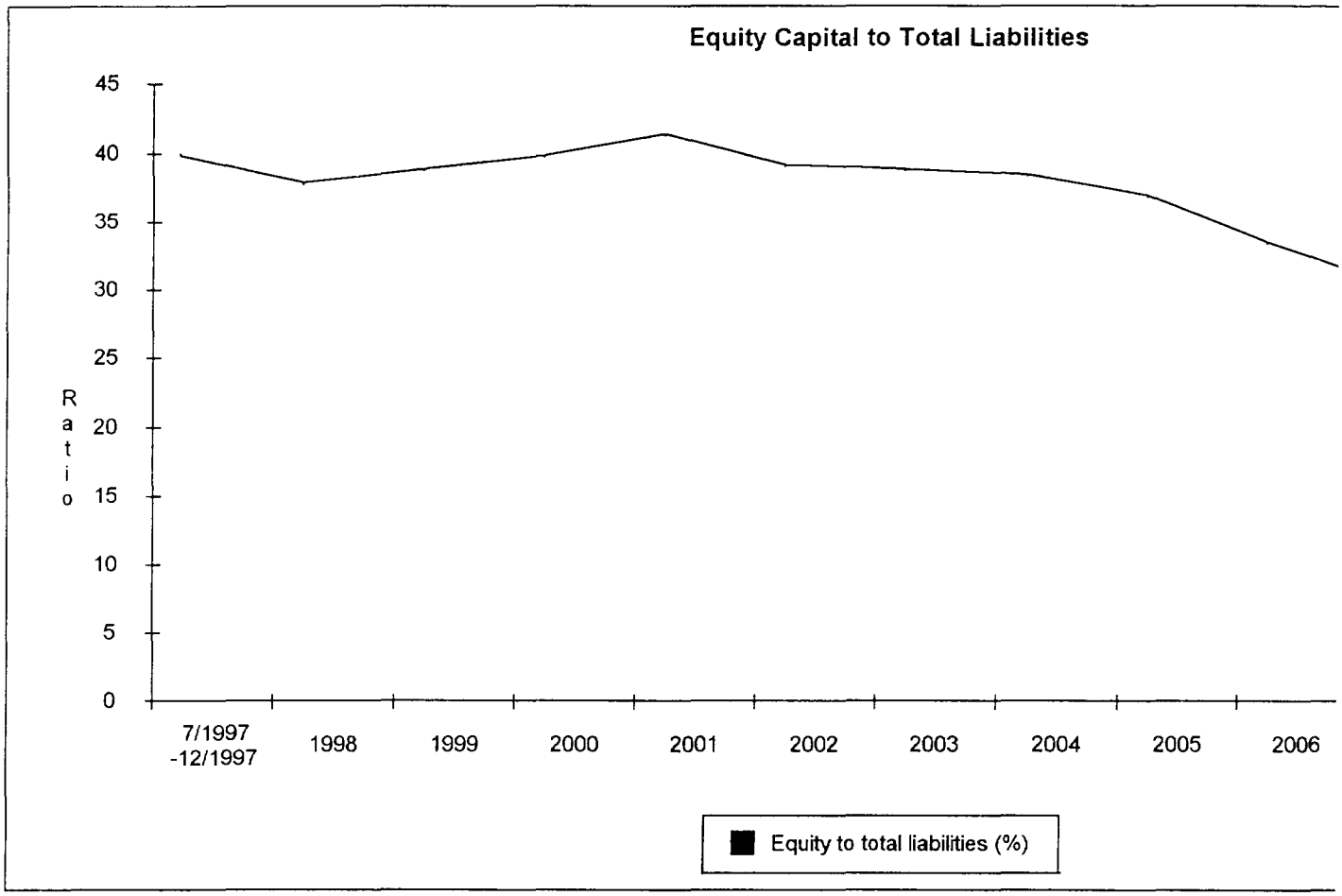
PROJECTED BALANCE SHEET
US Dollars

	2002	2003	2004	2005	2006
TOTAL ASSETS	5,562,538.98	5,590,385.17	5,653,656.03	5,896,042.03	6,507,436.03
Total current assets	2,601,288.98	3,122,885.17	3,679,906.03	4,416,042.03	5,489,936.03
Inventory on materials & supplies	98,976.11	98,976.11	98,976.11	98,976.11	98,976.11
Work in progress	70,233.61	70,511.39	70,511.39	70,511.39	70,511.39
Finished product	105,850.42	106,267.08	106,267.08	106,267.08	106,267.08
Accounts receivable	282,267.78	283,378.89	283,378.89	283,378.89	283,378.89
Cash-in-hand	6,926.39	7,065.28	7,065.28	7,065.28	7,065.28
Short-term deposits	0.00	0.00	0.00	0.00	0.00
Cash surplus, finance available	2,037,034.68	2,556,686.42	3,113,707.28	3,849,843.28	4,923,737.28
Total fixed assets, net of depreciation	2,961,250.00	2,467,500.00	1,973,750.00	1,480,000.00	1,017,500.00
Fixed investments	5,055,000.00	5,055,000.00	5,055,000.00	5,055,000.00	5,055,000.00
Construction in progress	0.00	0.00	0.00	0.00	0.00
Total pre-production expenditures	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00
Less accumulated depreciation	2,493,750.00	2,987,500.00	3,481,250.00	3,975,000.00	4,437,500.00
Less depreciation allowance	0.00	0.00	0.00	0.00	0.00
Accumulated losses brought forward	0.00	0.00	0.00	0.00	0.00
Loss in current year	0.00	0.00	0.00	0.00	0.00
TOTAL LIABILITIES	5,562,538.98	5,590,385.17	5,653,656.03	5,896,042.03	6,507,436.03
Total current liabilities	228,480.55	229,313.88	229,313.88	229,313.88	229,313.88
Accounts payable	228,480.55	229,313.88	229,313.88	229,313.88	229,313.88
Bank overdraft	0.00	0.00	0.00	0.00	0.00
Total long-term loans	1,262,428.57	794,000.00	325,571.43	0.00	0.00
Total equity	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00
Reserves, retained profit brought forward	1,125,324.14	1,895,629.86	2,391,071.29	2,922,770.71	3,490,728.14
Net profit after tax	770,305.71	495,441.43	531,699.43	567,957.43	611,394.00
Net worth	4,071,629.86	4,567,071.29	5,098,770.71	5,666,728.14	6,278,122.14
Ratios (%)					
Equity to total liabilities	39.12	38.92	38.49	36.91	33.44
Net worth to total liabilities	73.20	81.70	90.19	96.11	96.48
Long-term debt to net worth	0.31	0.17	0.06	0.00	0.00
Current assets to current liabilities	11.39	13.62	16.05	19.26	23.94

PROJECTED BALANCE SHEET
US Dollars

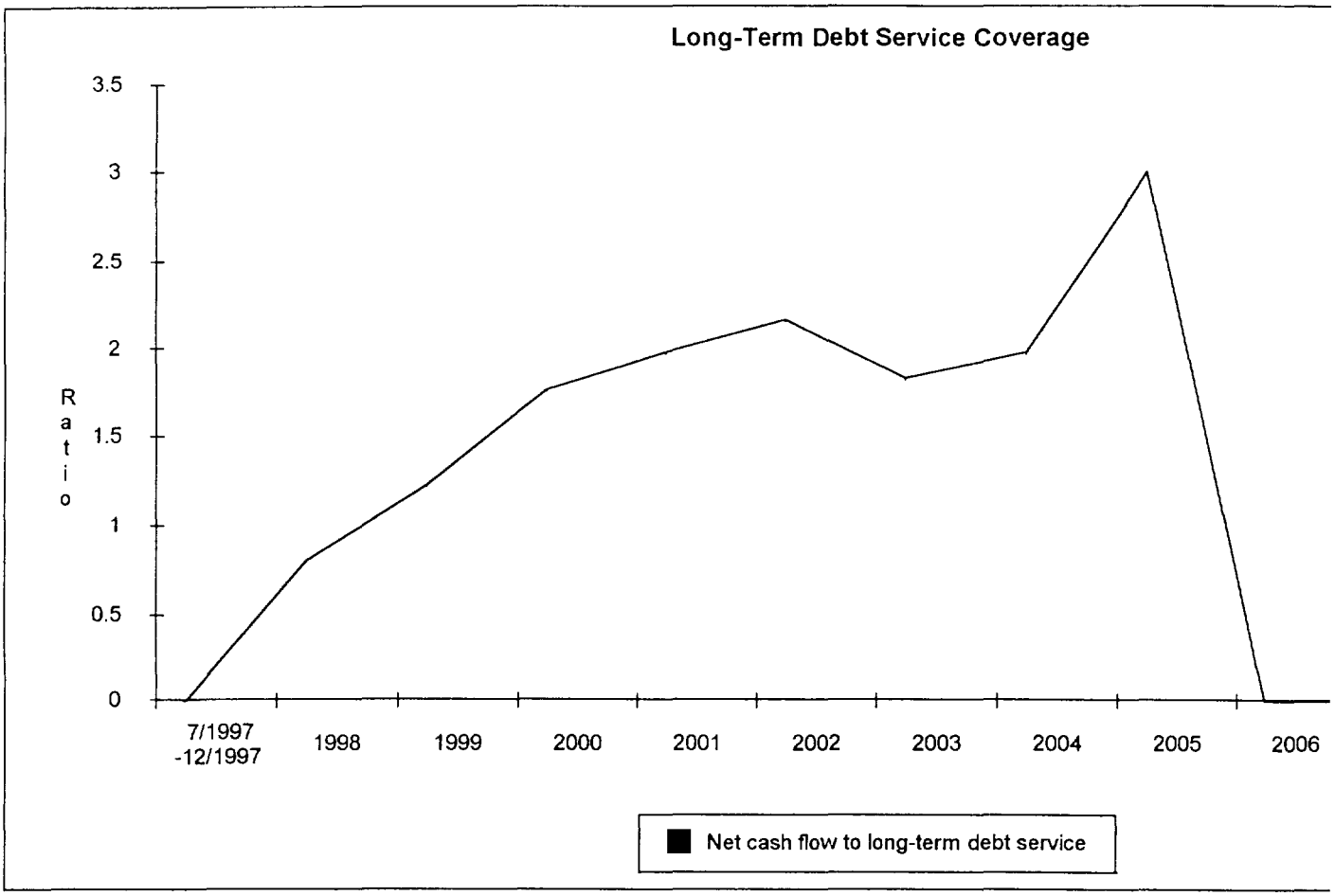
	2007	2008	2009
TOTAL ASSETS	7,118,830.03	7,986,424.03	8,854,018.03
Total current assets	6,563,830.03	7,466,924.03	8,370,018.03
Inventory on materials & supplies	98,976.11	98,976.11	98,976.11
Work in progress	70,511.39	70,511.39	70,511.39
Finished product	106,267.08	106,267.08	106,267.08
Accounts receivable	283,378.89	283,378.89	283,378.89
Cash-in-hand	7,065.28	7,065.28	7,065.28
Short-term deposits	0.00	0.00	0.00
Cash surplus, finance available	5,997,631.28	6,900,725.28	7,803,819.28
Total fixed assets, net of depreciation	555,000.00	519,500.00	484,000.00
Fixed investments	5,055,000.00	5,055,000.00	5,055,000.00
Construction in progress	0.00	0.00	0.00
Total pre-production expenditures	400,000.00	400,000.00	400,000.00
Less accumulated depreciation	4,900,000.00	4,935,500.00	4,971,000.00
Less depreciation allowance	0.00	0.00	0.00
Accumulated losses brought forward	0.00	0.00	0.00
Loss in current year	0.00	0.00	0.00
TOTAL LIABILITIES	7,118,830.03	7,986,424.03	8,854,018.03
Total current liabilities	229,313.88	229,313.88	229,313.88
Accounts payable	229,313.88	229,313.88	229,313.88
Bank overdraft	0.00	0.00	0.00
Total long-term loans	0.00	0.00	0.00
Total equity	2,176,000.00	2,176,000.00	2,176,000.00
Reserves, retained profit brought forward	4,102,122.14	4,713,516.14	5,581,110.14
Net profit after tax	611,394.00	867,594.00	867,594.00
Net worth	6,889,516.14	7,757,110.14	8,624,704.14
Ratios (%)			
Equity to total liabilities	30.57	27.25	24.58
Net worth to total liabilities	96.78	97.13	97.41
Long-term debt to net worth	0.00	0.00	0.00
Current assets to current liabilities	28.62	32.56	36.50


Debt to Equity Ratio
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Ratio
7/1997 -12/1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Long-term debt to net worth


Equity Capital to Total Liabilities
45
40
35
30
25
20
15
10
5
0
Ratio
7/1997
-12/1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Equity to total liabilities (%)

FINANCIAL RATIOS							
	7/1997 -12/1997	1998	1999	2000	2001	2002	2003
Long-term debt to net worth	1.51	1.72	1.33	0.85	0.52	0.31	0.17
Current assets to current liabilities	0.00	1.01	1.36	2.69	7.88	11.39	13.62
Net cash flow to long-term debt	-1.66	0.15	0.40	0.65	0.86	1.18	1.45
Accounts receivable to accounts payable	0.00	1.24	1.23	1.22	1.24	1.24	1.24
Net cash flow to long-term debt service	0.00	0.80	1.23	1.76	1.98	2.16	1.82

FINANCIAL RATIOS						
	2004	2005	2006	2007	2008	2009
Long-term debt to net worth	0.06	0.00	0.00	0.00	0.00	0.00
Current assets to current liabilities	16.05	19.26	23.94	28.62	32.56	36.50
Net cash flow to long-term debt	3.46	0.00	0.00	0.00	0.00	0.00
Accounts receivable to accounts payable	1.24	1.24	1.24	1.24	1.24	1.24
Net cash flow to long-term debt service	1.98	3.01	0.00	0.00	0.00	0.00

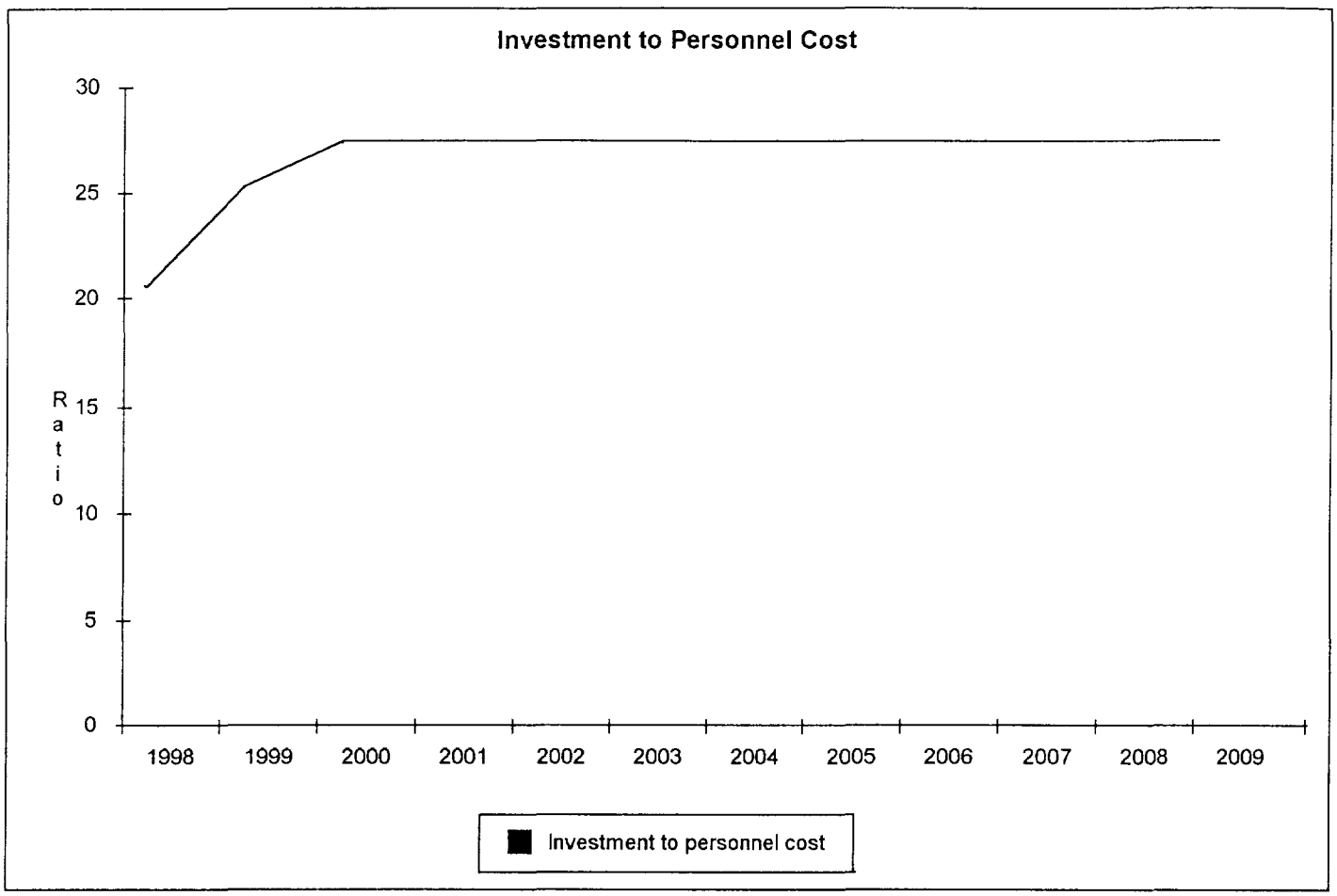

Long-Term Debt Service Coverage
3.5
3
2.5
2
1.5
1
0.5
0
Ratio
7/1997 -12/1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Net cash flow to long-term debt service

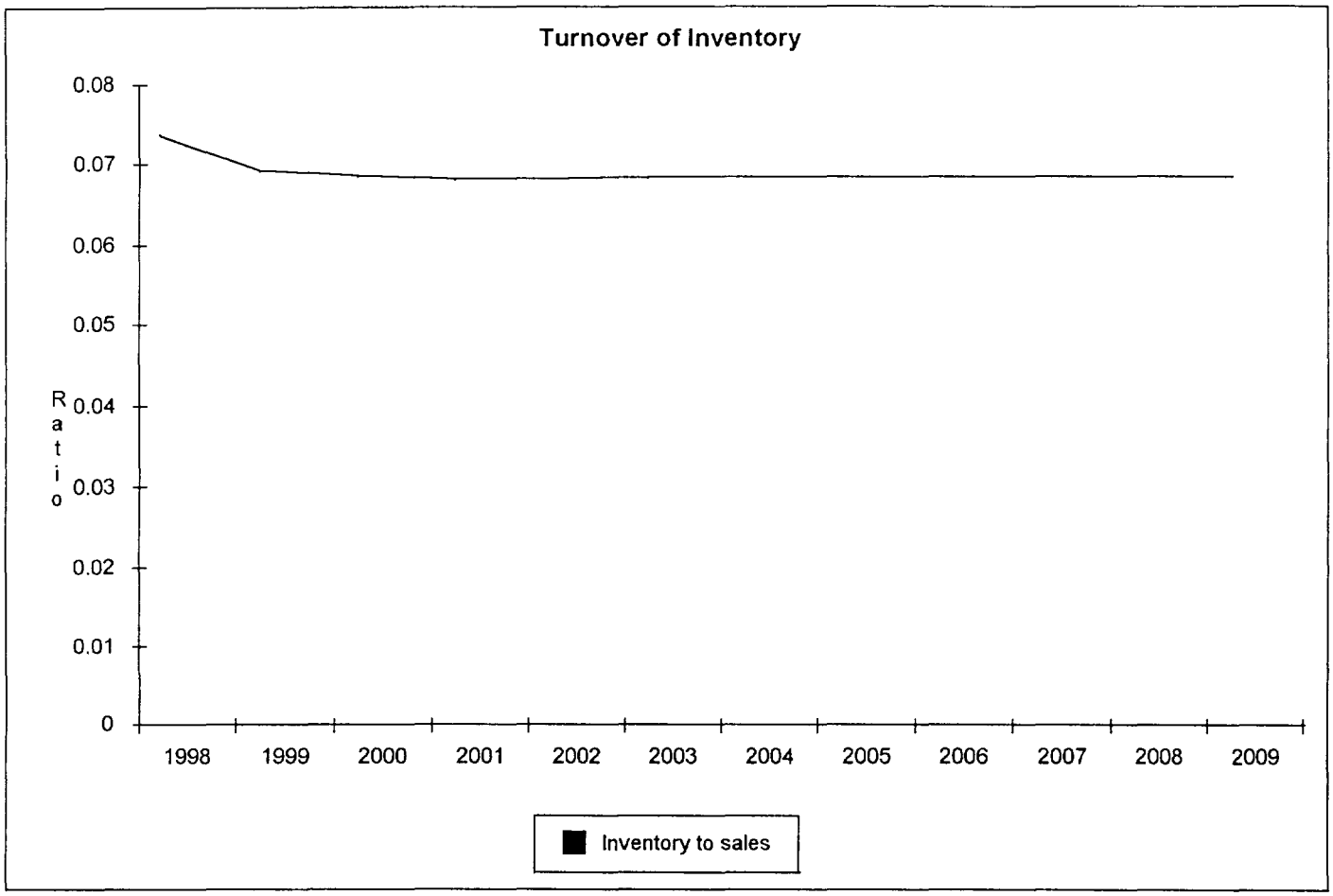
EFFICIENCY RATIOS

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003
Sales to total capital investment	0.36	0.56	0.70	0.70	0.70	0.70
Investment to personnel cost	20.56	25.38	27.47	27.48	27.48	27.49
Inventory to sales	0.07	0.07	0.07	0.07	0.07	0.07
Net cash flow to total sales	0.23	0.33	0.35	0.37	0.37	0.29

EFFICIENCY RATIOS

	Production 2004	Production 2005	Production 2006	Production 2007	Production 2008	Production 2009
Sales to total capital investment	0.70	0.70	0.70	0.70	0.70	0.70
Investment to personnel cost	27.49	27.49	27.49	27.49	27.49	27.49
Inventory to sales	0.07	0.07	0.07	0.07	0.07	0.07
Net cash flow to total sales	0.28	0.27	0.27	0.27	0.22	0.22


Investment to Personnel Cost
30
25
20
15
10
5
0
Ratio
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Investment to personnel cost


Turnover of Inventory
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
Ratio
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Inventory to sales

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture
Date and time:	capacity 50/80/100 short term compensated
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2005
Length:	8 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,455,000.00	336,884.86	5,791,884.86

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,658,192.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2005
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00
Administrative overhead costs	12,000.00	12,000.00	12,000.00
OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00

SUMMARY SHEET

Depreciation	498,750.00	498,750.00	493,750.00
Financial costs	491,210.00	400,494.29	41,144.29
TOTAL PRODUCTION COSTS	2,367,725.00	3,439,654.29	3,085,304.29
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,367,725.00	3,439,654.29	3,085,304.29
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-351,775.00	592,245.71	946,595.71
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-351,775.00	592,245.71	946,595.71
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	592,245.71	946,595.71
Income (corporate) tax	0.00	0.00	378,638.29
NET PROFIT	-351,775.00	592,245.71	567,957.43

RATIOS

Net present value	at 15.00 %	85,842.54
Internal rate of return on investment (IRR)	15.39 %	
Modified IRR on investment	15.39 %	
Internal rate of return on equity (IRRE)	17.10 %	
Modified IRRE on equity	17.09 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture
Date and time:	capacity 50/80/100 short term compensated
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2007
Length:	10 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,455,000.00	336,884.86	5,791,884.86

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,658,192.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2007
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00
Administrative overhead costs	12,000.00	12,000.00	12,000.00
OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00

SUMMARY SHEET

Depreciation	498,750.00	498,750.00	462,500.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,367,725.00	3,439,654.29	3,012,910.00
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,367,725.00	3,439,654.29	3,012,910.00
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-351,775.00	592,245.71	1,018,990.00
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-351,775.00	592,245.71	1,018,990.00
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	592,245.71	1,018,990.00
Income (corporate) tax	0.00	0.00	407,596.00
NET PROFIT	-351,775.00	592,245.71	611,394.00

RATIOS

Net present value	at 15.00 %	331,792.94
Internal rate of return on investment (IRR)	16.41 %	
Modified IRR on investment	16.41 %	
Internal rate of return on equity (IRRE)	18.81 %	
Modified IRRE on equity	18.81 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning horizon increased to 15 years
Date and time:	capacity 50/80/100 short term compensated
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2012
Length:	15 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,455,000.00	336,884.86	5,791,884.86

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,658,192.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2012
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00
Administrative overhead costs	12,000.00	12,000.00	12,000.00

SUMMARY SHEET

OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00
Depreciation	498,750.00	498,750.00	35,500.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,367,725.00	3,439,654.29	2,585,910.00
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,367,725.00	3,439,654.29	2,585,910.00
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-351,775.00	592,245.71	1,445,990.00
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-351,775.00	592,245.71	1,445,990.00
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	592,245.71	1,445,990.00
Income (corporate) tax	0.00	0.00	578,396.00
NET PROFIT	-351,775.00	592,245.71	867,594.00

RATIOS

Net present value	at 15.00 %	964,735.93
Internal rate of return on investment (IRR)	18.42 %	
Modified IRR on investment	18.42 %	
Internal rate of return on equity (IRRE)	21.75 %	
Modified IRRE on equity	21.75 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning horizon 12 years price reduction 3%
Date and time:	capacity 50/80/100 short term compensated
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2009
Length:	12 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,455,000.00	336,884.86	5,791,884.86

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,658,192.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2009
SALES REVENUE	1,955,471.50	3,910,943.00	3,910,943.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00

SUMMARY SHEET

Administrative overhead costs	12,000.00	12,000.00	12,000.00
OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00
Depreciation	498,750.00	498,750.00	35,500.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,367,725.00	3,439,654.29	2,585,910.00
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,367,725.00	3,439,654.29	2,585,910.00
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-412,253.50	471,288.71	1,325,033.00
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-412,253.50	471,288.71	1,325,033.00
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	471,288.71	1,325,033.00
Income (corporate) tax	0.00	0.00	530,013.20
NET PROFIT	-412,253.50	471,288.71	795,019.80

RATIOS

Net present value	at 15.00 %	151,712.17
Internal rate of return on investment (IRR)	15.60 %	
Modified IRR on investment	15.60 %	
Internal rate of return on equity (IRRE)	17.07 %	
Modified IRRE on equity	17.07 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning horizon 12 years price decrease 5%
Date and time:	revised april 1997
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2009
Length:	12 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,455,000.00	336,884.86	5,791,884.86

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,658,192.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2009
SALES REVENUE	1,915,152.50	3,830,305.00	3,830,305.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00

SUMMARY SHEET

Administrative overhead costs	12,000.00	12,000.00	12,000.00
OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00
Depreciation	498,750.00	498,750.00	35,500.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,367,725.00	3,439,654.29	2,585,910.00
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,367,725.00	3,439,654.29	2,585,910.00
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-452,572.50	390,650.71	1,244,395.00
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-452,572.50	390,650.71	1,244,395.00
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	390,650.71	1,244,395.00
Income (corporate) tax	0.00	0.00	497,758.00
NET PROFIT	-452,572.50	390,650.71	746,637.00

RATIOS

Net present value	at 15.00 %	-171,422.20
Internal rate of return on investment (IRR)	14.32 %	
Modified IRR on investment	14.32 %	
Internal rate of return on equity (IRRE)	14.83 %	
Modified IRRE on equity	14.83 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning horizon 12 years production cost increase 3%
Date and time:	capacity 50/80/100 short term compensated
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2009
Length:	12 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	346,991.41	346,991.41
TOTAL INVESTMENT COSTS	5,455,000.00	346,991.41	5,801,991.41

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,210,188.15
TOTAL SOURCES OF FINANCE	6,665,188.15

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2009
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,406,737.95	2,604,262.30	2,614,562.30

SUMMARY SHEET

Administrative overhead costs	12,360.00	12,360.00	12,360.00
OPERATING COSTS	1,419,097.95	2,616,622.30	2,626,922.30
Depreciation	498,750.00	498,750.00	35,500.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,409,057.95	3,515,866.59	2,662,422.30
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,409,057.95	3,515,866.59	2,662,422.30
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-393,107.95	516,033.41	1,369,477.70
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-393,107.95	516,033.41	1,369,477.70
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	516,033.41	1,369,477.70
Income (corporate) tax	0.00	0.00	547,791.08
NET PROFIT	-393,107.95	516,033.41	821,686.62

RATIOS

Net present value	at 15.00 %	320,788.00
Internal rate of return on investment (IRR)	16.26 %	
Modified IRR on investment	16.26 %	
Internal rate of return on equity (IRRE)	18.24 %	
Modified IRRE on equity	18.24 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning horizon 12 years production cost increase 5%
Date and time:	revised april 1997
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2009
Length:	12 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	353,729.11	353,729.11
TOTAL INVESTMENT COSTS	5,455,000.00	353,729.11	5,808,729.11

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,214,852.00
TOTAL SOURCES OF FINANCE	6,669,852.00

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2009
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,434,053.25	2,654,830.50	2,665,330.50

SUMMARY SHEET

Administrative overhead costs	12,600.00	12,600.00	12,600.00
OPERATING COSTS	1,446,653.25	2,667,430.50	2,677,930.50
Depreciation	498,750.00	498,750.00	35,500.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,436,613.25	3,566,674.79	2,713,430.50
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,436,613.25	3,566,674.79	2,713,430.50
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-420,663.25	465,225.21	1,318,469.50
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-420,663.25	465,225.21	1,318,469.50
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	465,225.21	1,318,469.50
Income (corporate) tax	0.00	0.00	527,387.80
NET PROFIT	-420,663.25	465,225.21	791,081.70

RATIOS

Net present value	at 15.00 %	110,370.85
Internal rate of return on investment (IRR)	15.43 %	
Modified IRR on investment	15.43 %	
Internal rate of return on equity (IRRE)	16.78 %	
Modified IRRE on equity	16.78 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning production 12 years
Date and time:	capacity 50/80/100 short term compensated investment cost increase -3%
Project classification:	New project *Joint-venture project*
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2009
Length:	12 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,206,650.00	0.00	5,206,650.00
Total pre-production expenditures	412,000.00	0.00	412,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,618,650.00	336,884.86	5,955,534.86

SOURCES OF FINANCE

	Total inflow
Equity capital	2,339,650.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,821,842.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2009
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00
Administrative overhead costs	12,000.00	12,000.00	12,000.00

SUMMARY SHEET

OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00
Depreciation	513,712.50	513,712.50	36,565.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,382,687.50	3,454,616.79	2,586,975.00
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,382,687.50	3,454,616.79	2,586,975.00
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-366,737.50	577,283.21	1,444,925.00
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-366,737.50	577,283.21	1,444,925.00
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	577,283.21	1,444,925.00
Income (corporate) tax	0.00	0.00	577,970.00
NET PROFIT	-366,737.50	577,283.21	866,955.00

RATIOS

Net present value	at 15.00 %	484,970.22
Internal rate of return on investment (IRR)	16.85 %	
Modified IRR on investment	16.85 %	
Internal rate of return on equity (IRRE)	19.18 %	
Modified IRRE on equity	19.18 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning horizon 12 years investment cost increase 5%
Date and time:	revised april 1997
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2009
Length:	12 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,307,750.00	0.00	5,307,750.00
Total pre-production expenditures	420,000.00	0.00	420,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,727,750.00	336,884.86	6,064,634.86

SOURCES OF FINANCE

	Total inflow
Equity capital	2,448,750.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,930,942.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2009
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00

SUMMARY SHEET

Administrative overhead costs	12,000.00	12,000.00	12,000.00
OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00
Depreciation	523,687.50	523,687.50	37,275.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,392,662.50	3,464,591.79	2,587,685.00
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,392,662.50	3,464,591.79	2,587,685.00
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-376,712.50	567,308.21	1,444,215.00
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-376,712.50	567,308.21	1,444,215.00
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	567,308.21	1,444,215.00
Income (corporate) tax	0.00	0.00	577,686.00
NET PROFIT	-376,712.50	567,308.21	866,529.00

RATIOS

Net present value	at 15.00 %	384,007.88
Internal rate of return on investment (IRR)	16.44 %	
Modified IRR on investment	16.44 %	
Internal rate of return on equity (IRRE)	18.40 %	
Modified IRRE on equity	18.40 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning horizon 12 years investment cost increase 10%
Date and time:	revised april 1997
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2009
Length:	12 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,560,398.91	0.00	5,560,398.91
Total pre-production expenditures	439,992.00	0.00	439,992.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	6,000,390.91	336,884.86	6,337,275.78

SOURCES OF FINANCE

	Total inflow
Equity capital	2,721,390.91
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	7,203,583.29

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2009
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00

SUMMARY SHEET

Administrative overhead costs	12,000.00	12,000.00	12,000.00
OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00
Depreciation	548,615.03	548,615.03	39,049.29
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,417,590.03	3,489,519.31	2,589,459.29
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,417,590.03	3,489,519.31	2,589,459.29
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-401,640.03	542,380.69	1,442,440.71
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-401,640.03	542,380.69	1,442,440.71
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	542,380.69	1,442,440.71
Income (corporate) tax	0.00	0.00	576,976.28
NET PROFIT	-401,640.03	542,380.69	865,464.43

RATIOS

Net present value	at 15.00 %	131,702.98
Internal rate of return on investment (IRR)	15.47 %	
Modified IRR on investment	15.47 %	
Internal rate of return on equity (IRRE)	16.66 %	
Modified IRRE on equity	16.66 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning horizon increased to 15 years production cost increased 5%
Date and time:	capacity 50/80/100 short term compensated
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2012
Length:	15 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	353,729.11	353,729.11
TOTAL INVESTMENT COSTS	5,455,000.00	353,729.11	5,808,729.11

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,214,852.00
TOTAL SOURCES OF FINANCE	6,669,852.00

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2012
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,434,053.25	2,654,830.50	2,665,330.50

SUMMARY SHEET

Administrative overhead costs	12,600.00	12,600.00	12,600.00
OPERATING COSTS	1,446,653.25	2,667,430.50	2,677,930.50
Depreciation	498,750.00	498,750.00	35,500.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,436,613.25	3,566,674.79	2,713,430.50
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,436,613.25	3,566,674.79	2,713,430.50
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-420,663.25	465,225.21	1,318,469.50
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-420,663.25	465,225.21	1,318,469.50
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	465,225.21	1,318,469.50
Income (corporate) tax	0.00	0.00	527,387.80
NET PROFIT	-420,663.25	465,225.21	791,081.70

RATIOS

Net present value	at 15.00 %	405,103.73
Internal rate of return on investment (IRR)	16.45 %	
Modified IRR on investment	16.45 %	
Internal rate of return on equity (IRRE)	18.30 %	
Modified IRRE on equity	18.30 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture planning horizon extended to 15 years investment cost increase 5%
Date and time:	capacity 50/80/100 short term compensated
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2012
Length:	15 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,307,750.00	0.00	5,307,750.00
Total pre-production expenditures	420,000.00	0.00	420,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,727,750.00	336,884.86	6,064,634.86

SOURCES OF FINANCE

	Total inflow
Equity capital	2,448,750.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,930,942.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2012
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00

SUMMARY SHEET

Administrative overhead costs	12,000.00	12,000.00	12,000.00
OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00
Depreciation	523,687.50	523,687.50	37,275.00
Financial costs	491,210.00	400,494.29	0.00
TOTAL PRODUCTION COSTS	2,392,662.50	3,464,591.79	2,587,685.00
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,392,662.50	3,464,591.79	2,587,685.00
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-376,712.50	567,308.21	1,444,215.00
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-376,712.50	567,308.21	1,444,215.00
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	567,308.21	1,444,215.00
Income (corporate) tax	0.00	0.00	577,686.00
NET PROFIT	-376,712.50	567,308.21	866,529.00

RATIOS

Net present value	at 15.00 %	710,716.96
Internal rate of return on investment (IRR)	17.42 %	
Modified IRR on investment	17.42 %	
Internal rate of return on equity (IRRE)	19.79 %	
Modified IRRE on equity	19.79 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture sensitivity: price reduction 5%
Date and time:	capacity 50/80/100 short term compensated
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2005
Length:	8 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,455,000.00	336,884.86	5,791,884.86

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,658,192.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2005
SALES REVENUE	1,915,152.50	3,830,305.00	3,830,305.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00
Administrative overhead costs	12,000.00	12,000.00	12,000.00

SUMMARY SHEET

OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00
Depreciation	498,750.00	498,750.00	493,750.00
Financial costs	491,210.00	400,494.29	41,144.29
TOTAL PRODUCTION COSTS	2,367,725.00	3,439,654.29	3,085,304.29
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,367,725.00	3,439,654.29	3,085,304.29
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-452,572.50	390,650.71	745,000.71
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	-452,572.50	390,650.71	745,000.71
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	390,650.71	745,000.71
Income (corporate) tax	0.00	0.00	298,000.29
NET PROFIT	-452,572.50	390,650.71	447,000.43

RATIOS

Net present value	at 15.00 %	-609,104.54
Internal rate of return on investment (IRR)	12.18 %	
Modified IRR on investment	12.18 %	
Internal rate of return on equity (IRRE)	10.89 %	
Modified IRRE on equity	10.89 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture sensitivity: production cost increase 3%
Date and time:	capacity 50/80/100 short term compensated
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2005
Length:	8 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,055,000.00	0.00	5,055,000.00
Total pre-production expenditures	400,000.00	0.00	400,000.00
Increase in net working capital	0.00	346,991.41	346,991.41
TOTAL INVESTMENT COSTS	5,455,000.00	346,991.41	5,801,991.41

SUMMARY SHEET

SOURCES OF FINANCE

	Total inflow
Equity capital	2,176,000.00
Long-term loans	3,279,000.00
Total short-term loans	1,210,188.15
TOTAL SOURCES OF FINANCE	6,665,188.15

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2005
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,406,737.95	2,604,262.30	2,614,562.30
Administrative overhead costs	12,360.00	12,360.00	12,360.00
OPERATING COSTS	1,419,097.95	2,616,622.30	2,626,922.30
Depreciation	498,750.00	498,750.00	493,750.00
Financial costs	491,210.00	400,494.29	41,144.29
TOTAL PRODUCTION COSTS	2,409,057.95	3,515,866.59	3,161,816.59
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,409,057.95	3,515,866.59	3,161,816.59
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-393,107.95	516,033.41	870,083.41
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00

SUMMARY SHEET

GROSS PROFIT	-393,107.95	516,033.41	870,083.41
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	516,033.41	870,083.41
Income (corporate) tax	0.00	0.00	348,033.37
NET PROFIT	-393,107.95	516,033.41	522,050.05

RATIOS

Net present value	at 15.00 %	-185,707.64
Internal rate of return on investment (IRR)	14.15 %	
Modified IRR on investment	14.15 %	
Internal rate of return on equity (IRRE)	14.66 %	
Modified IRRE on equity	14.66 %	

SUMMARY SHEET

Project title:	Synthetic Fabric Production
Project description:	Production of Synthetic Fabric for Furniture sensitivity: investment cost increase 3%
Date and time:	capacity 50/80/100 short term compensated
Project classification:	New project Joint-venture project
Construction phase:	7/1997 - 12/1997
Length:	6 months
Production phase:	1/1998 - 12/2005
Length:	8 periods
Accounting currency:	US Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	5,206,650.00	0.00	5,206,650.00
Total pre-production expenditures	412,000.00	0.00	412,000.00
Increase in net working capital	0.00	336,884.86	336,884.86
TOTAL INVESTMENT COSTS	5,618,650.00	336,884.86	5,955,534.86

SUMMARY SHEET

SOURCES OF FINANCE

	Total inflow
Equity capital	2,339,650.00
Long-term loans	3,279,000.00
Total short-term loans	1,203,192.38
TOTAL SOURCES OF FINANCE	6,821,842.38

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2000	Last year 2005
SALES REVENUE	2,015,950.00	4,031,900.00	4,031,900.00
Factory costs	1,365,765.00	2,528,410.00	2,538,410.00
Administrative overhead costs	12,000.00	12,000.00	12,000.00
OPERATING COSTS	1,377,765.00	2,540,410.00	2,550,410.00
Depreciation	513,712.50	513,712.50	508,562.50
Financial costs	491,210.00	400,494.29	41,144.29
TOTAL PRODUCTION COSTS	2,382,687.50	3,454,616.79	3,100,116.79
Marketing costs	0.00	0.00	0.00
COSTS OF PRODUCTS	2,382,687.50	3,454,616.79	3,100,116.79
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	-366,737.50	577,283.21	931,783.21
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00

SUMMARY SHEET

GROSS PROFIT	-366,737.50	577,283.21	931,783.21
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	0.00	577,283.21	931,783.21
Income (corporate) tax	0.00	0.00	372,713.29
NET PROFIT	-366,737.50	577,283.21	559,069.93

RATIOS

Net present value	at 15.00 %	-58,460.35
Internal rate of return on investment (IRR)	14.74 %	
Modified IRR on investment	14.74 %	
Internal rate of return on equity (IRRE)	15.76 %	
Modified IRRE on equity	15.76 %	

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US Dollars

	Construction 7/1997-12/1997	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003
TOTAL CASH INFLOW	5,455,000.00	2,449,647.26	3,688,049.11	4,337,941.42	4,031,900.00	4,031,991.26	4,032,733.33
Inflow funds	5,455,000.00	433,697.26	462,529.11	306,041.42	0.00	91.26	833.33
Total equity	2,176,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Total long-term loans	3,279,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Total short-term loans	0.00	433,697.26	462,529.11	306,041.42	0.00	91.26	833.33
Inflow operation	0.00	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Sales revenue	0.00	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Interest on short-term deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	5,455,000.00	2,318,889.69	3,481,783.63	3,916,198.83	3,554,349.36	3,231,272.86	3,513,081.59
Increase in fixed assets	5,455,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Fixed investments	5,055,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	400,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in current assets	0.00	307,057.55	151,562.77	106,865.98	-1,231.99	0.00	1,944.44
Operating costs	0.00	1,377,765.00	2,060,068.00	2,540,410.00	2,540,410.00	2,540,410.00	2,550,410.00
Marketing costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Income (corporate) tax	0.00	0.00	0.00	0.00	0.00	0.00	330,294.29
Financial costs	0.00	491,210.00	491,724.29	400,494.29	282,864.29	222,434.29	162,004.29
Loan repayment	0.00	142,857.14	778,428.57	868,428.57	732,307.07	468,428.57	468,428.57
Dividends	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SURPLUS (DEFICIT)	0.00	130,757.56	206,265.49	421,742.58	477,550.64	800,718.40	519,651.75
CUMULATIVE CASH BALANCE	0.00	130,757.56	337,023.05	758,765.64	1,236,316.27	2,037,034.68	2,556,686.42
Foreign surplus (deficit)	-625,000.00	619,862.30	1,043,188.10	1,262,580.16	1,235,800.00	1,521,514.29	1,536,117.46

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US Dollars

	Production 2004	Production 2005	Scrap 2006
TOTAL CASH INFLOW	4,031,900.00	4,031,900.00	2,046,198.75
Inflow funds	0.00	0.00	0.00
Total equity	0.00	0.00	0.00
Total long-term loans	0.00	0.00	0.00
Total short-term loans	0.00	0.00	0.00
Inflow operation	4,031,900.00	4,031,900.00	0.00
Sales revenue	4,031,900.00	4,031,900.00	0.00
Interest on short-term deposits	0.00	0.00	0.00
Other income	0.00	0.00	2,046,198.75
TOTAL CASH OUTFLOW	3,474,879.14	3,295,764.00	229,313.88
Increase in fixed assets	0.00	0.00	0.00
Fixed investments	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00
Increase in current assets	0.00	0.00	0.00
Operating costs	2,550,410.00	2,550,410.00	0.00
Marketing costs	0.00	0.00	0.00
Income (corporate) tax	354,466.29	378,638.29	0.00
Financial costs	101,574.29	41,144.29	0.00
Loan repayment	468,428.57	325,571.43	229,313.88
Dividends	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00
SURPLUS (DEFICIT)	557,020.86	736,136.00	1,816,884.86
CUMULATIVE CASH BALANCE	3,113,707.28	3,849,843.28	5,666,728.14
Foreign surplus (deficit)	1,562,942.86	1,731,514.29	84,730.56

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US Dollars

	Construction 7/1997-12/1997	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003
Local surplus (deficit)	625,000.00	-489,104.74	-836,922.61	-840,837.57	-758,249.36	-720,795.88	-1,016,465.71
Foreign cumulative cash balance	-625,000.00	-5,137.70	1,038,050.40	2,300,630.56	3,536,430.56	5,057,944.84	6,594,062.30
Local cumulative cash balance	625,000.00	135,895.26	-701,027.35	-1,541,864.92	-2,300,114.28	-3,020,910.17	-4,037,375.88
Net flow of funds	5,455,000.00	-200,369.89	-807,623.74	-962,881.44	-1,015,171.35	-690,771.60	-629,599.52

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US Dollars

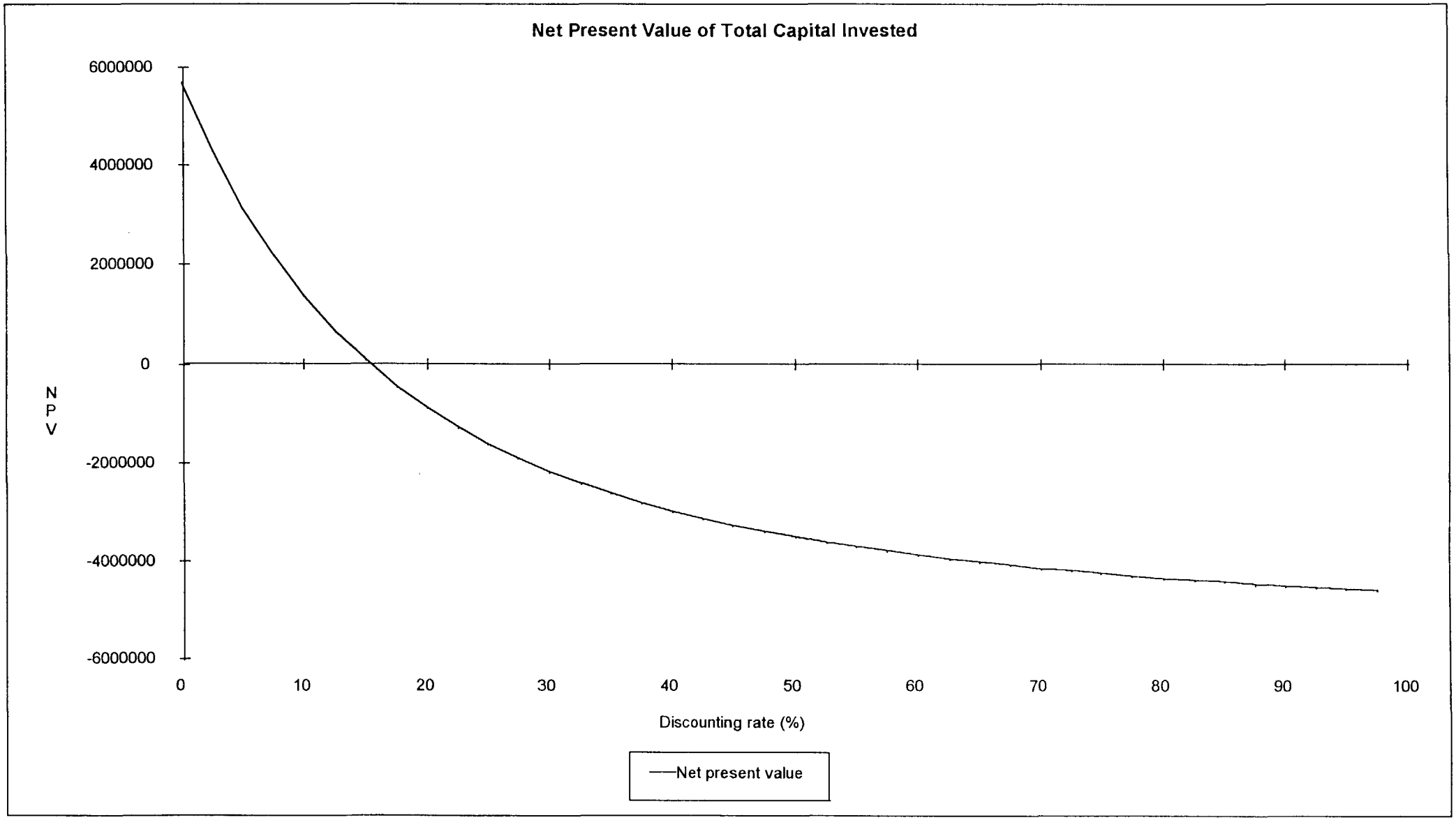
	Production 2004	Production 2005	Scrap 2006
Local surplus (deficit)	-1,005,922.00	-995,378.29	1,732,154.31
Foreign cumulative cash balance	8,157,005.16	9,888,519.44	9,973,250.00
Local cumulative cash balance	-5,043,297.88	-6,038,676.17	-4,306,521.86
Net flow of funds	-570,002.86	-366,715.71	-229,313.88

DISCOUNTED CASH FLOW - TOTAL CAPITAL INVESTED
US Dollars

	Construction 7/1997-12/1997	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003
TOTAL CASH INFLOW	0.00	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Inflow operation	0.00	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Sales revenue	0.00	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Interest on short-term deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	5,455,000.00	1,561,125.29	2,149,101.66	2,601,234.56	2,543,056.50	2,540,318.74	2,881,815.40
Increase in fixed assets	5,455,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Fixed investments	5,055,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	400,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in net working capital	0.00	183,360.29	89,033.66	60,824.56	2,646.50	-91.26	1,111.11
Operating costs	0.00	1,377,765.00	2,060,068.00	2,540,410.00	2,540,410.00	2,540,410.00	2,550,410.00
Marketing costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Income (corporate) tax	0.00	0.00	0.00	0.00	0.00	0.00	330,294.29
NET CASH FLOW	-5,455,000.00	454,824.71	1,076,418.34	1,430,665.44	1,488,843.50	1,491,581.26	1,150,084.60
CUMULATIVE NET CASH FLOW	-5,455,000.00	-5,000,175.29	-3,923,756.95	-2,493,091.51	-1,004,248.01	487,333.25	1,637,417.85
Net present value	-5,455,000.00	395,499.74	813,926.91	940,685.75	851,251.10	741,579.50	497,213.31
Cumulative net present value	-5,455,000.00	-5,059,500.26	-4,245,573.34	-3,304,887.59	-2,453,636.49	-1,712,056.99	-1,214,843.68
NET PRESENT VALUE	at 15.00 %	85,842.54					
INTERNAL RATE OF RETURN	15.39 %						
MODIFIED INTERNAL RATE OF RETURN	15.39 %						
NORMAL PAYBACK	at 0.00 %	6 years					
DYNAMIC PAYBACK	at 15.00 %	10 years					
NPV RATIO	0.01						

DISCOUNTED CASH FLOW - TOTAL CAPITAL INVESTED
US Dollars

	Production 2004	Production 2005	Scrap 2006
TOTAL CASH INFLOW	4,031,900.00	4,031,900.00	1,816,884.86
Inflow operation	4,031,900.00	4,031,900.00	0.00
Sales revenue	4,031,900.00	4,031,900.00	0.00
Interest on short-term deposits	0.00	0.00	0.00
Other income	0.00	0.00	1,816,884.86
TOTAL CASH OUTFLOW	2,904,876.29	2,929,048.29	0.00
Increase in fixed assets	0.00	0.00	0.00
Fixed investments	0.00	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00	0.00
Increase in net working capital	0.00	0.00	0.00
Operating costs	2,550,410.00	2,550,410.00	0.00
Marketing costs	0.00	0.00	0.00
Income (corporate) tax	354,466.29	378,638.29	0.00
NET CASH FLOW	1,127,023.71	1,102,851.71	1,816,884.86
CUMULATIVE NET CASH FLOW	2,764,441.57	3,867,293.28	5,684,178.14
Net present value	423,689.96	360,524.18	516,472.07
Cumulative net present value	-791,153.72	-430,629.54	85,842.54
NET PRESENT VALUE			
INTERNAL RATE OF RETURN			
MODIFIED INTERNAL RATE OF RETURN			
NORMAL PAYBACK			
DYNAMIC PAYBACK			
NPV RATIO			


Net Present Value of Total Capital Invested
6000000
4000000
2000000
0
-2000000
-4000000
-6000000
N
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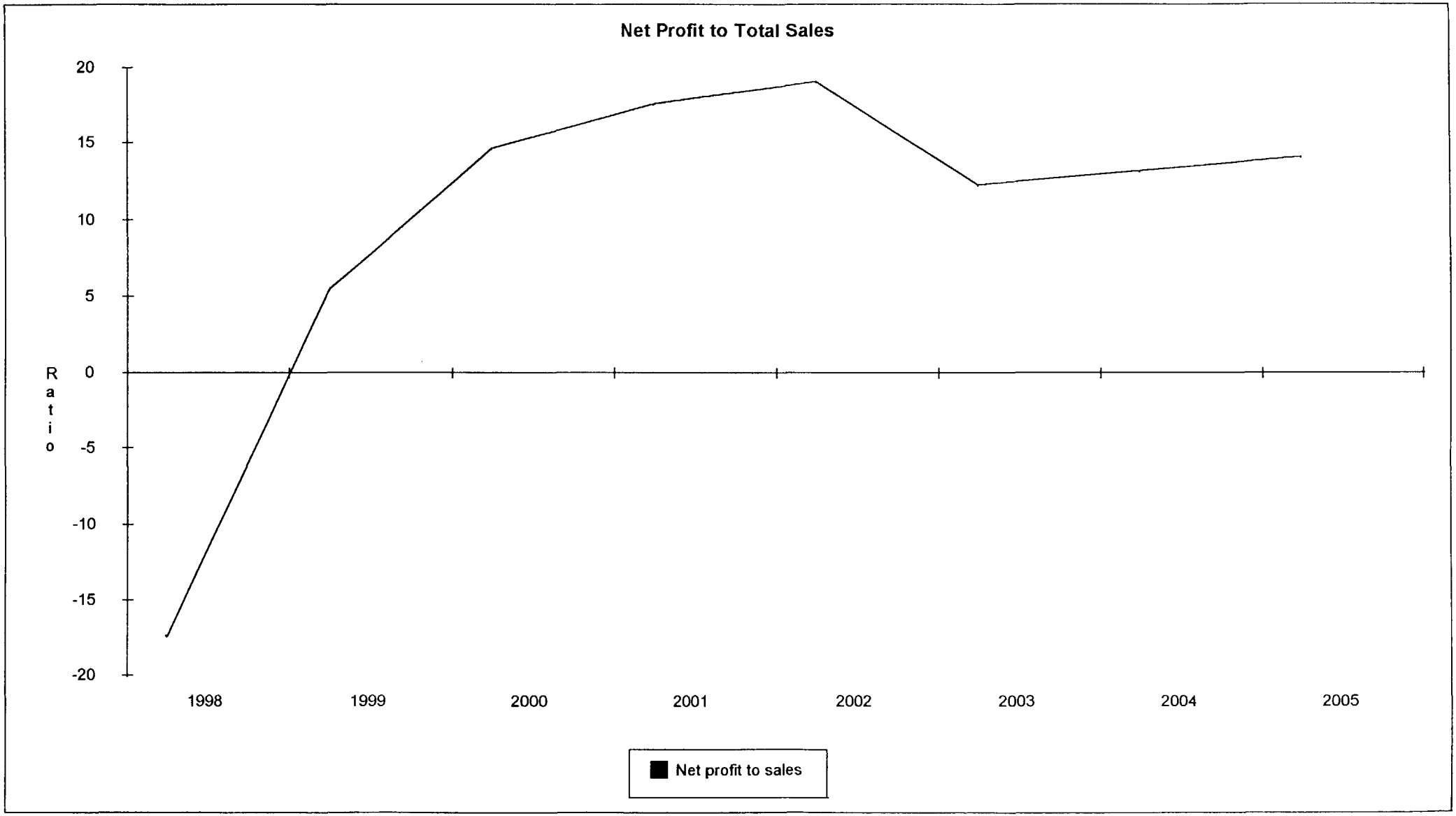
0
10
20
30
40
50
60
70
80
90
100
Discounting rate (%)
Net present value

NET INCOME STATEMENT
US Dollars

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003	Production 2004	Production 2005
Sales revenue	2,015,950.00	3,225,520.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00	4,031,900.00
Less variable costs	887,035.00	1,419,256.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00
Material	887,035.00	1,419,256.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00	1,774,070.00
Personnel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marketing (except personnel)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other variable costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE MARGIN	1,128,915.00	1,806,264.00	2,257,830.00	2,257,830.00	2,257,830.00	2,257,830.00	2,257,830.00	2,257,830.00
in % of sales revenue	56.00	56.00	56.00	56.00	56.00	56.00	56.00	56.00
Less fixed costs	989,480.00	1,139,562.00	1,265,090.00	1,265,090.00	1,265,090.00	1,270,090.00	1,270,090.00	1,270,090.00
Material	69,430.00	217,112.00	267,640.00	267,640.00	267,640.00	267,640.00	267,640.00	267,640.00
Personnel	274,300.00	225,700.00	210,700.00	210,700.00	210,700.00	210,700.00	210,700.00	210,700.00
Marketing (except personnel)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	498,750.00	498,750.00	498,750.00	498,750.00	498,750.00	493,750.00	493,750.00	493,750.00
Other fixed costs	147,000.00	198,000.00	288,000.00	288,000.00	288,000.00	298,000.00	298,000.00	298,000.00
OPERATIONAL MARGIN	139,435.00	666,702.00	992,740.00	992,740.00	992,740.00	987,740.00	987,740.00	987,740.00
in % of sales revenue	6.92	20.67	24.62	24.62	24.62	24.50	24.50	24.50
Interest on short-term deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financial costs	491,210.00	491,724.29	400,494.29	282,864.29	222,434.29	162,004.29	101,574.29	41,144.29
GROSS PROFIT FROM OPERATIONS	-351,775.00	174,977.71	592,245.71	709,875.71	770,305.71	825,735.71	886,165.71	946,595.71
in % of sales revenue	-17.45	5.42	14.69	17.61	19.11	20.48	21.98	23.48
Extraordinary income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GROSS PROFIT	-351,775.00	174,977.71	592,245.71	709,875.71	770,305.71	825,735.71	886,165.71	946,595.71

NET INCOME STATEMENT
US Dollars

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003	Production 2004	Production 2005
Investment allowances	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TAXABLE PROFIT	0.00	174,977.71	592,245.71	709,875.71	770,305.71	825,735.71	886,165.71	946,595.71
Income (corporate) tax	0.00	0.00	0.00	0.00	0.00	330,294.29	354,466.29	378,638.29
NET PROFIT	-351,775.00	174,977.71	592,245.71	709,875.71	770,305.71	495,441.43	531,699.43	567,957.43
in % of sales revenue	-17.45	5.42	14.69	17.61	19.11	12.29	13.19	14.09
Dividends	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RETAINED PROFIT	-351,775.00	174,977.71	592,245.71	709,875.71	770,305.71	495,441.43	531,699.43	567,957.43
Ratios (%)								
Net profit to equity	-16.17	8.04	27.22	32.62	35.40	22.77	24.43	26.10
Net profit to net worth	-19.28	8.75	22.85	21.50	18.92	10.85	10.43	10.02
Net profit+interest to investment	2.47	11.64	17.15	17.14	17.14	11.35	10.93	10.52


Net Profit to Total Sales
Ratio
20
15
10
5
0
-5
-10
-15
-20
1998
1999
2000
2001
2002
2003
2004
2005
Net profit to sales

PROJECTED BALANCE SHEET
US Dollars

	7/1997 -12/1997	1998	1999	2000	2001	2002	2003	2004
TOTAL ASSETS	5,455,000.00	5,745,840.11	5,604,918.37	5,459,799.22	5,260,570.58	5,562,538.98	5,590,385.17	5,653,656.03
Total current assets	0.00	437,815.11	795,643.37	1,324,251.93	1,800,570.58	2,601,288.98	3,122,885.17	3,679,906.03
Inventory on materials & supplies	0.00	51,749.71	80,496.21	99,797.44	98,976.11	98,976.11	98,976.11	98,976.11
Work in progress	0.00	38,964.58	57,506.77	70,644.28	70,233.61	70,233.61	70,511.39	70,511.39
Finished product	0.00	57,406.88	85,836.17	105,850.42	105,850.42	105,850.42	106,267.08	106,267.08
Accounts receivable	0.00	153,085.00	228,896.44	282,267.78	282,267.78	282,267.78	283,378.89	283,378.89
Cash-in-hand	0.00	5,851.39	5,884.72	6,926.39	6,926.39	6,926.39	7,065.28	7,065.28
Short-term deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash surplus, finance available	0.00	130,757.56	337,023.05	758,765.64	1,236,316.27	2,037,034.68	2,556,686.42	3,113,707.28
Total fixed assets, net of depreciation	5,455,000.00	4,956,250.00	4,457,500.00	3,958,750.00	3,460,000.00	2,961,250.00	2,467,500.00	1,973,750.00
Fixed investments	0.00	5,055,000.00	5,055,000.00	5,055,000.00	5,055,000.00	5,055,000.00	5,055,000.00	5,055,000.00
Construction in progress	5,055,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total pre-production expenditures	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00
Less accumulated depreciation	0.00	498,750.00	997,500.00	1,496,250.00	1,995,000.00	2,493,750.00	2,987,500.00	3,481,250.00
Less depreciation allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accumulated losses brought forward	0.00	0.00	351,775.00	176,797.29	0.00	0.00	0.00	0.00
Loss in current year	0.00	351,775.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL LIABILITIES	5,455,000.00	5,745,840.11	5,604,918.37	5,459,799.22	5,260,570.58	5,562,538.98	5,590,385.17	5,653,656.03
Total current liabilities	0.00	433,697.26	586,226.37	492,267.79	228,389.29	228,480.55	229,313.88	229,313.88
Accounts payable	0.00	123,697.26	186,226.37	232,267.79	228,389.29	228,480.55	229,313.88	229,313.88
Bank overdraft	0.00	310,000.00	400,000.00	260,000.00	0.00	0.00	0.00	0.00
Total long-term loans	3,279,000.00	3,136,142.86	2,667,714.29	2,199,285.71	1,730,857.14	1,262,428.57	794,000.00	325,571.43
Total equity	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00
Ordinary capital	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00	2,176,000.00

PROJECTED BALANCE SHEET
US Dollars

	2005
TOTAL ASSETS	5,896,042.03
Total current assets	4,416,042.03
Inventory on materials & supplies	98,976.11
Work in progress	70,511.39
Finished product	106,267.08
Accounts receivable	283,378.89
Cash-in-hand	7,065.28
Short-term deposits	0.00
Cash surplus, finance available	3,849,843.28
Total fixed assets, net of depreciation	1,480,000.00
Fixed investments	5,055,000.00
Construction in progress	0.00
Total pre-production expenditures	400,000.00
Less accumulated depreciation	3,975,000.00
Less depreciation allowance	0.00
Accumulated losses brought forward	0.00
Loss in current year	0.00
TOTAL LIABILITIES	5,896,042.03
Total current liabilities	229,313.88
Accounts payable	229,313.88
Bank overdraft	0.00
Total long-term loans	0.00
Total equity	2,176,000.00
Ordinary capital	2,176,000.00

PROJECTED BALANCE SHEET
US Dollars

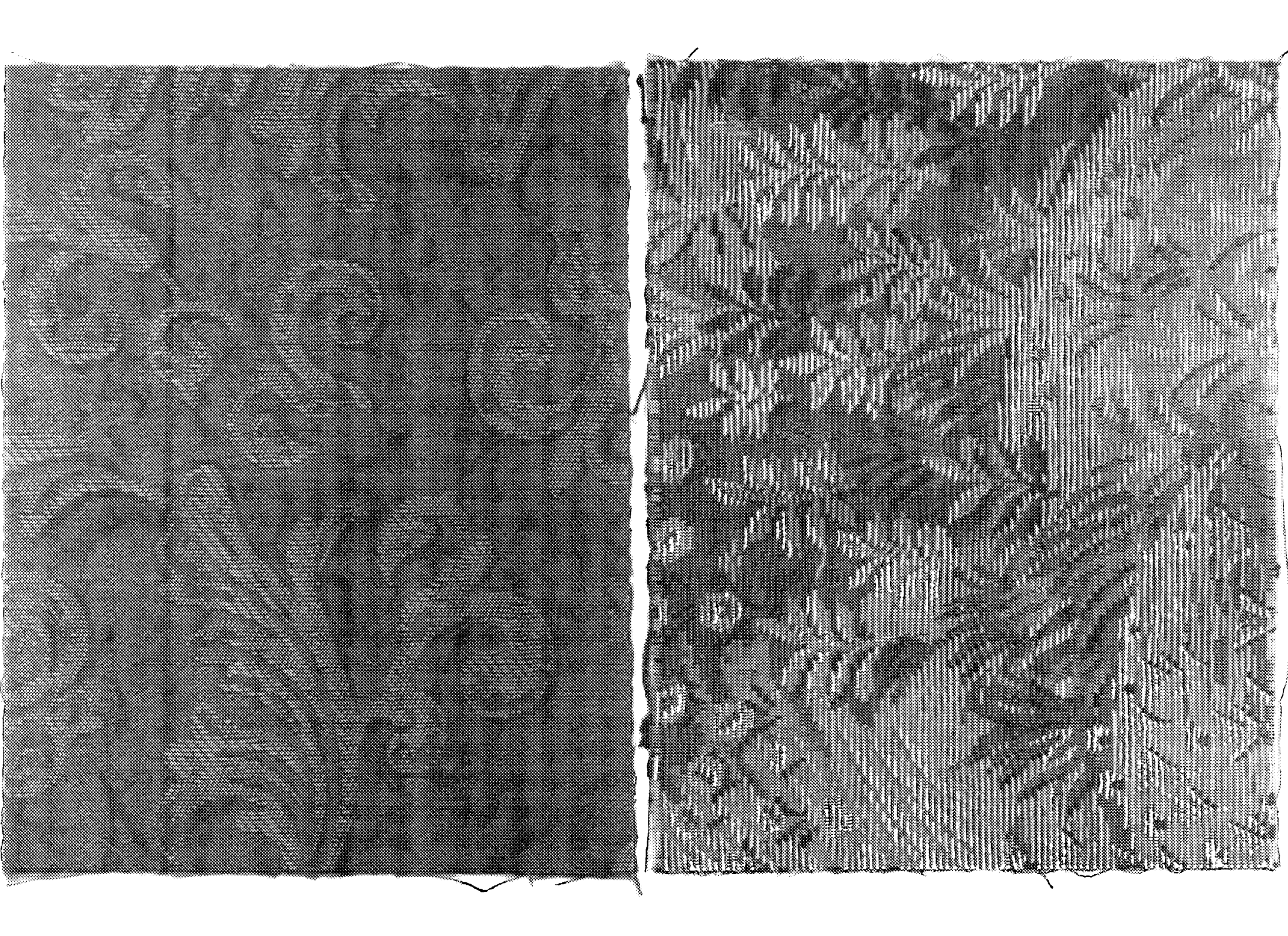
	7/1997 -12/1997	1998	1999	2000	2001	2002	2003	2004
Preference capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subsidies, grants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reserves, retained profit brought forward	0.00	0.00	0.00	0.00	415,448.43	1,125,324.14	1,895,629.86	2,391,071.29
Net profit after tax	0.00	0.00	174,977.71	592,245.71	709,875.71	770,305.71	495,441.43	531,699.43
Dividends	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retained profit	0.00	0.00	174,977.71	592,245.71	709,875.71	770,305.71	495,441.43	531,699.43
Net worth	2,176,000.00	1,824,225.00	1,999,202.71	2,591,448.43	3,301,324.14	4,071,629.86	4,567,071.29	5,098,770.71
Ratios (%)								
Equity to total liabilities	39.89	37.87	38.82	39.85	41.36	39.12	38.92	38.49
Net worth to total liabilities	39.89	31.75	35.67	47.46	62.76	73.20	81.70	90.19
Long-term debt to net worth	1.51	1.72	1.33	0.85	0.52	0.31	0.17	0.06
Current assets to current liabilities	0.00	1.01	1.36	2.69	7.88	11.39	13.62	16.05

PROJECTED BALANCE SHEET
US Dollars

	2005
Preference capital	0.00
Subsidies, grants	0.00
Reserves, retained profit brought forward	2,922,770.71
Net profit after tax	567,957.43
Dividends	0.00
Retained profit	567,957.43
Net worth	5,666,728.14
Ratios (%)	
Equity to total liabilities	36.91
Net worth to total liabilities	96.11
Long-term debt to net worth	0.00
Current assets to current liabilities	19.26

GOBELIN

DAMASCO



MATELASSÉ

LAMPASSO