Contract 4212
Study Report
Vision 2020
For the Sustained Growth of
Textile Machinery Industry
for

Supported by
Development Council for Textile Machinery Industry
Department of Heavy Industry (DHI)
Ministry of Heavy Industries & Public Enterprises

May 2011
Prepared by
Vision 2020 Document for the sustained growth of the Textile Machinery Industry

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1. Context
2. Scope of Work
3. Global scenario
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The Indian Textile Machinery Industry seeks to create a Vision 2020 for the enhancement of competitiveness and sustainable growth of the sector

- This proposal is based on request from The Textile Machinery Manufacturers Association (TMMA) seeking a detailed study and report on the Indian Textile Engineering Industry (TEI) Vision and Perspective Plan 2010 – 2020 for the enhancement of the competitiveness of the sector.

- The Indian textile machinery demand is estimated at about Rs. 10,000 (2010-11) crores of which 55% is met by local production and the rest being imported. The industry exports about 10% of its output and mainly consists of SME’s.

- The textile machinery industry is strategic to the holistic development and competitiveness of the Indian textile sector.

- The reconstituted Development Council for Textile Industry under the chairmanship of the Secretary, Department of Heavy Industry (DHI) envisages enhancement of the competitiveness of the textile machinery industry through support measures. The overall context is provided by the scheme for enhancement of the competitiveness of the Capital Goods Sector envisaged by the DHI under 12th Five Year Plan.

- Gherzi has in-depth market knowhow, expertise and contacts in the global and Indian textile and textile machinery industry which is a prerequisite to creating a blue print to for a globally competitive textile machinery industry in India.
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The scope of work should help to evolve a policy implementation and monitoring and facilitation mechanism to achieve sustained growth of the sector for the next 10-15 years. Specifically, the study should cover the following areas:

- **Demand**
  - To make a projection of the market demand in India and export potentials of the sector
  - To assess the technology demands of the sector

- **Enabling environment**
  - Conduct a SWOT analysis of the sector to study the factors such as weak or inadequate R&D capabilities, infrastructure inadequacies such as CFC and cluster park, supply chain gaps, human resources and skill gaps
  - Examine issues related to import of used textile machinery
  - Examine factors that inhibit capital investment of substantial magnitude
The scope of work should help to evolve a policy implementation and monitoring and facilitation mechanism to achieve sustained growth of the sector for the next 10-15 years. Specifically, the study should cover the following areas:

- **Policy interventions**

  - To recommend fiscal and policy measures to boost internal consumption, market share and export of Indian textile machinery industry in the light of the sustained 9% growth of the GDP and annual growth of 12% of the manufacturing sector and perceived capacity constraints to meet domestic demand.
  
  - To recommend support measures/schemes by the Government for substantial capacity creation, quality improvement and improving the competitiveness of the sector for both domestic and international segments.
  
  - To recommend measures to develop R&D, new products/technology including process knowhow, materials, components, sub-systems, technology upgradation/transfer, accessories and fillip to generation of intellectual capital in the sector.
  
  - To suggest policy measures to attract investment and in particular, leverage FDI to modernize Indian textile machinery sector and create a strong technological base.
  
  - To draw judiciously from, and benchmark to, the policies and practices of other countries, especially for technology acquisition and comparative advantages of manufacturing textile machinery in India vis-à-vis countries like China, Germany, Switzerland and Italy.
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Worldwide, the demand for textile machinery is growing with current size estimated over USD 25 billion.

Estimated Worldwide demand of textile machinery (sales in mn US $)

Source: VDMA Statistics & Gherzi
In 2006, the Chinese textile machinery industry had a turnover of €5,0 bn and in addition, China imported textile machines for €3,0 bn (No. 1 in World)

Chinese textile machinery market in € billion [2006]

- Total Chinese textile machinery turn over €5,0 bn, of which ... €1 bn for export
- Total textile machinery imports: €3,0 bn (plus 19% to 2005), of which ... €1 bn from Germany

Source: Gherzi analysis
Cumulative textile machinery shipments show massive investments in new equipment in Asia in the last decade

Cumulated textile machinery shipments (2000-2009)

Source: ITMF
Asia has the largest ring spinning capacity as well as quite new equipment
Global scenario

Weaving machines – installed capacities

<table>
<thead>
<tr>
<th>Year</th>
<th>Installed Capacities</th>
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<td>North America</td>
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<td>51'770</td>
<td>132'952</td>
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<tr>
<td>South America</td>
<td>85'240</td>
<td>74'650</td>
<td>74'650</td>
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<tr>
<td>Asia &amp; Oceania</td>
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<td>Turkey</td>
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<td>51'770</td>
<td>14'916</td>
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Source: ITMF
Asia has the largest weaving capacity as well as quite new equipment.

Figures in 1'000 machines

Source: ITMF
Historical installed ring spinning capacities show that textile machinery industry follows textile manufacturing industry

No linkage with productivity / spindles

Source: Gherzi Analyse, ITMF, The International Federation of Cotton and allied Textile Industries
India has now the opportunity to increase its share in a worldwide market which has just recovered from a slump.


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* without Japanese Producers


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Source: Gherzi
Prevailing trends the global textile machinery industry:

- Recovery in textile investments since 2009-10
- Shift in the textile manufacturing and engineering industry to Asia
- Top Chinese machine manufacturers started to export to countries outside of Asia (e.g. Turkey, Egypt,...)
- Western textile machine manufacturers not having an Asian production base unlikely to be sustainable
- Narrowing of the technology gap in conventional textile machinery
- Increasing emphasis on price/value performance
- Dominance of powerloom sector in India
# Vision 2020 Document for the sustained growth of the Textile Machinery Industry

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Gherzi suggests the following methodology:

**Phase 1**

Current textile machinery industry situation (India & Worldwide)
- Importance and history of the textile machinery industry
- Today’s vision
- TMMA
- Textile machinery manufacturers
- Market size and segmentation
- Policy and incentives
- Sectoral constraints

**Phase 2**

Benchmarking

A. Benchmarking of selected associations
   - TMMA(IN)
   - CEMATEX (EU) - VDMA – ACIMIT- SWISMEM
   - CTMA (CN)

B. Benchmarking of selected Indian textile machinery producers vis-à-vis worldwide major competitors

C. Benchmark of policies and incentives
   - Export promotion
   - Local subsidies
   - Other support measures

**Phase 3**

Vision & Strategy for the textile machinery industry
- Future vision / perspective plan 2020
- Recommendations
- Policy interventions needed
Phase 1: Current textile machinery industry situation (India & Worldwide)

Collection of information and data

Questionnaire
- Preparation of a questionnaire to be filled up by TMMA (and its members) as well as textile and garment mills. The purpose of the questionnaire will be for Gherzi experts to familiarize themselves with the current situation of TMMA (and members) and the user-industry perspective. This questionnaire will tackle issues like:
  - Target segment
  - Actual production and capacity
  - Demand – volume, technology
  - R&D
  - Business environment issues: Sector policy, Fiscal issues, incentives, infrastructural constraints, 2nd hand machinery

Analysis
- Segmentation and description of the respective nine segments (high- medium- and low-end)
  1. Spinning & winding
  2. Weaving preparatory and weaving machinery
  3. Knitting
  4. Processing
  5. Testing equipment
  6. Garmenting
  7. Jute textile machinery
  8. Synthetic – Filament Yarn machinery (draw texturising / crimping / rewinding / twisting / sizing)
  9. Ginning
- Estimate the attractiveness of the respective segments (volumes & trends)
- Assessment of level of technology (low-medium-high)
- SWOT Analysis
Phase 2: a) Benchmarking - Selected associations

**Leading textile machinery associations in the EU and China will be analyzed and benchmarked vis-à-vis the TMMA**

**Leading textile machinery associations**
- VDMA (Germany)
- ACIMIT (Italy)
- SWISSMEM (Switzerland)
- CTMA (China)

**Analysis**
- Brief presentation of their activities and their role in each of their « sphere of influence »
- How do they communicate with
  - their members
  - the government
  - clients of their members
- Power of influence
  - Government (legislation)
  - Market
- SWOT Analysis
- Key Success Factors
Phase 2: b) Benchmarking: Indian textile machinery producers vis-à-vis worldwide major competitors

Indian manufacturers will be benchmarked vis-à-vis leading EU and Chinese OEM’s

Description of the actual situation

• Competitive positioning per segment
  • Number of Indian manufacturers
  • Product portfolio and target markets
  • Market share

• SWOT per segment

• Comparison with EU & Chinese OEM’s
  • Technology
  • Pricing
  • Research and development
  • Service offered
Phase 2: b) Benchmarking - Indian textile machinery producers vis-à-vis worldwide

The segment of yarn clearer (related to winders) is quite restricted to few players due to the speed of the yarn (compared to ring spinning).

OEM’s being major customers, price pressure has increased substantially during the past 2 years.

In China, we have observed a product segmentation mainly based on the out coming yarn quality which reflects thereafter on the UVR of the yarn.
Government policy and incentives related to textile machinery will be benchmarked against India

Export promotion
- How does the government support exports
- Existence of subsidies (export financing, subsidies on raw material, power or tax rebates, etc.)?

Import legislation
- Is the internal market protected by import taxes?
- Existence of red tape?

Other support measures and incentives
- Doing business
- Fiscal issues
- Infrastructure availability in the form of CFC and cluster development
- R&D
Phase 3: Vision & Strategy for Textile Machinery Industry

Creating a Vision 2020 and strategic recommendations for enhancement of the competitiveness of Indian Textile Machinery Industry

**Vision**
- Size of the industry with segment wise break up
- Growth of the Indian and global textile industry
- Growth projections for the industry

**Government intervention**
- Policies and incentives
- R&D
- Removal of constraints facing the sector
- FDI promotion
- Skill development
- Capacity building

**Role of TMMA and relevant institutions**
- Service delivery to members
- Marketing
- R&D
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Gherzi estimates a project duration of at least 3 months

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<td>• Benchmarking of Indian textile machinery producers vis-à-vis worldwide competitors</td>
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<tr>
<td>• Benchmarking of policies and incentives</td>
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<th>Month 3</th>
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<td>Interim report</td>
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<td>Interim report</td>
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<td>Final report &amp; presentation</td>
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</tbody>
</table>
Resources: Gherzi will deploy an international team of industry experts with back office support

- **India:**
  - N.S. Sodhi – MBA with 25 years of experience in the global textile industry and contacts with OEM’s and textile manufacturers
  - S.S. Joshi - B.Text with 15 years of industry and consulting experience and contacts with the textile manufacturers

- **Europe:**
  - U. Hartmann – Textile technologist with 40 years of industry and consulting experience with worldwide contacts
  - S. Hugentobler - Textile engineer with 15 years of industry and consulting experience

- **China:**
  - Mr. G. Cai – Textile engineer with 30 years of industry and consulting experience with contacts with the Chinese OEM’s
A joint TMMA/DHI – Gherzi project organisation shall be set up

**Steering Committee**

<table>
<thead>
<tr>
<th>Textile Machinery Industry</th>
<th>Gherzi</th>
</tr>
</thead>
<tbody>
<tr>
<td>• TMMA</td>
<td>• N. S. Sodhi</td>
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<tr>
<td>• DHI</td>
<td>• S.S. Joshi</td>
</tr>
</tbody>
</table>

**Gherzi expert team**

Experts will be mobilized mainly during step 2

**Core team**

• Simon Hugentobler
• SS Joshi
• Udo Hartmann
• G. Cai

**Gherzi network**

The core team will seek the help of local offices / associates to collect important data and organise interviews
Budget

The professional fees, inclusive of expenses on travelling and incidentals, for undertaking this project would be Swiss Francs (CHF) 74,000 (seventy four thousand only).

The following payment schedule shall apply:

• CHF 30'000.-- with the signature of the contract
• CHF 24'000.-- after 45 days
• CHF 20'000.-- handing over the final report

Our fees are strictly net and free of any local Indian taxes. If such local taxes are due, they would have to be borne by the client.

All amounts payable to our account number IBAN CH78 0483 5083 1347 8100 0 (SWIFT N° CRESCHZZ80A) with the Credit Suisse Zürich, Switzerland.
5.1 Standard of Work

The standard of our work is in conformity with the rules and regulations of the Swiss Association of Management Consultants (ASCO).

5.2 Confidential Handling of Information

All information, data and documents obtained from and prepared for the client shall be held confidential and shall not be communicated to any third party without permission of the client.

5.3 Contract Coming into Force

The Contract, based on this Proposal, shall come into force on the date of receiving the copy of this proposal duly countersigned by the client.

The start of work shall take place upon mutual agreement.

Secretary General

G. Gherzi

N.S. Sodhi

TMMA

Gherzi Textil Organisation
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Why Gherzi?

- Global presence (Asia & EU)
- Understanding of the Indian textile and textile machinery sector
- In depth understanding of the Worldwide textile engineering industry in terms of
  - Industry structure
  - Key success factors
  - Technology
  - Segmentation
- Carried out similar recent assignments for associations & OEM’s
  - Swissmem
  - VDMA
  - Rieter
  - Oerlikon
  - Picanol
  - Sultex / ITEMA
  - Groz Beckert
  - Karl Mayer
  - Benninger
  - Monforts
- Direct live contacts with leading OEM’s, associations and textile manufacturers in EU and Asia
Gherzi has carried out recent studies for reputed Western OEM’s
Gherzi has contacts with leading Chinese OEM and accessory suppliers

<table>
<thead>
<tr>
<th>Spinning</th>
<th>Weaving</th>
<th>Knitting</th>
<th>Finishing</th>
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Card Clothing

- Geron
- Wishark
- Wuxi Owl
**Gherzi**: Integrated consulting for the entire textile & garment value chain

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<th>Logistics</th>
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![BoSS](https://via.placeholder.com/150)
Gherzi: Worldwide Presence

- 950 fully employed professionals
- Partnership on a worldwide level
- 6 own HQ offices
- More than 6,000 completed projects
- Activities in more than 80 countries