



CHAPTER 1

Introduction, Objectives & Methodology

The Indian textile industry is one of the largest in the world with a massive raw material and textiles manufacturing base. Our economy is largely dependent on the textile manufacturing and trade in addition to other major industries. About 27% of the foreign exchange earnings are on account of export of textiles and clothing alone. The textiles and clothing sector contributes about 14% to the industrial production and 3% to the gross domestic product of the country. Around 8% of the total excise revenue collection is contributed by the textile industry. So much so, the textile industry accounts for as large as 21% of the total employment generated in the economy. Around 35 million people are directly employed in the textile manufacturing activities. Indirect employment including the manpower engaged in agricultural based raw-material production like cotton and related trade and handling could be stated to be around another 60 million.

This industry is poised to meet the increased global competition in the post 2005 trade regime under WTO. The consequent effects of unleashing a flood of imported textiles into India and also making the export markets far more competitive are being felt from now onwards. The textile industry in India has a strong multi-fibre raw material production base, vast pool of skilled personnel, entrepreneurial talent, good export potential and low import content. Production systems are flexible, dynamic and vibrant. However, the industry's above strengths get substantially diluted on account of production process disadvantages in certain areas in terms of technology and supply-chain management deficiencies. It is high time that adequate corrective measures were taken to prepare a technology savvy industry to meet the challenges ahead.

The ongoing globalisation process is replete with threats from our competitors, particularly the export-led economies like China to de-stabilise our export and local markets. At the same time, one should also realise that it offers unlimited opportunities. In order to withstand the competition both in international and domestic markets and accelerate our export growth, it is imperative to identify the strengths and weaknesses of

the textile industry hindering its growth. Considering the inherent strengths of this industry in terms of a strong raw material base, skilled manpower and low wage costs, this industry has immense potential in the globalised textile economy. However, given the nature and extent of the fragmentation and technology obsolescence in the decentralised sector, it calls for a focused action plan and programmes to accelerate and sustain the growth level of the different segments of the industry.

In the above background, the Government of India as well as the important state governments having a significant presence of the textile industry reviewed the whole spectrum of textile industry. Based on the above review and discussions, appropriate roadmaps have been drawn up for the development and promotion of all the sectors of the textile industry from cotton to finished products. The National Textile Policy 2000 has envisaged a foreign exchange earning to the tune of US \$ 50 billion by the year 2010. Besides, many important measures have been spelt out in the policy document. Before formulating the textile policy, the Government of India had set up a Committee under the chairmanship of Mr. Sathyam to examine and draw up action points on various sectors of the textile industry. Accordingly, the committee in its report had outlined critical issues for development and growth.

In the textile industry, the weaving sector has been identified as one of the poorest technological links in the value chain. What makes the problem more serious is that the decentralised sector, both the powerlooms and the handlooms, which are accounting for the production of 76% of our fabrics needs, is marked by an overabundance. The textile industry can be broadly classified into two categories, the organised mill sector and the unorganised decentralised sector. Being a controlled sector, the organised mill sector has a complete information base on the organisational set-up, machinery installation, production pattern, employment etc. However, information-base on the decentralised sector on the above parameters are inadequate and policy planning has so far been based on hearsay and rough indirect estimates.

The organised sector of the textile industry represents the mills. It could be a spinning mill or a composite mill. Composite mill is one where the spinning, weaving and processing facilities are carried out under one roof. On the other hand, the decentralised sector has been found to be engaged mainly in the weaving activity, which makes it

heavily dependent on the organised sector for their yarn requirements. This decentralised sector is comprised of the three major segments viz., powerloom, handloom and hosiery. In addition to the above, there are readymade garments, khadi as well as carpet manufacturing units in the decentralised sector. In a country like ours where labour is abundant and the unemployment poses a serious threat to the economic growth of the country, there is always a controversy about the production technology to be adopted. The mill sector's competitiveness is at stake given the mushrooming of a large powerloom sector who has production-function advantages. The textile production in case of the later entrants like powerlooms have therefore upset the entire production scenario. The powerlooms and mills are able to go for mass production with better quality products. Inspite of the fact that the industry could assimilate high technology levels for better quality production in the market, it has never adapted to the modern technology and, therefore, has remained obsolete. In the advent of globalisation, the Government of India, as part of its modernisation efforts, has decided to induct about 50,000 shuttleless looms and upgrade 2.5 lakh looms into automatic and semi automatic powerlooms and make it cost effective.

1.1 Tamilnadu powerloom industry

The global market has become an overwhelming incentive for new investments and there has then occurred a veritable explosion of capacity in cotton-based complexes, the most important being the Tamilnadu clusters. This has been a many sided revolution: (1) the 1990s have seen phenomenal growth of cotton spinning in Tamilnadu and, thereafter, the mushrooming of powerlooms manufacturing grey cloth. (2) Tamilnadu has been in the forefront in the Indian powerloom industry. The state ranks third only after Maharashtra and Gujarat as regards the number of textile manufacturing units in organised and decentralised sector of the textile industry.

The powerloom industry in Tamilnadu provides direct and indirect employment to over 7 lakh workers and is reputed for its powerloom weaving. The state produces large volumes of powerloom items that find a market in every nook and corner of the country and also caters to the fabric needs of the export RMG manufacturing units located in Delhi, Mumbai, Chennai, Bangalore and other centres. Further, the performance of the powerloom sector in Tamilnadu presents a better picture as there are concentration of

industrial enterprises specialising in various stages of textiles manufacture, right from ginning of cotton followed by spinning to the finishing/garmenting of the end product.

The structure of powerloom sector in Tamilnadu differs from that observed in other states like Maharashtra and Gujarat. It varies in respect of the production pattern, size of the units, concentration of powerloom centres etc. At present, it is estimated that there are 4,37,325 looms in this sector. The powerlooms in Tamilnadu are mainly concentrated in the three districts of Salem, Erode and Coimbatore accounting together for 83% of the looms.

Keeping the interest of the powerloom Industry as a whole, an effort has been made to briefly explain the strengths, weaknesses, opportunities and threats of the present powerloom industry in Tamilnadu.

1.2 SWOT analysis of the textile manufacturing in Tamilnadu

Strengths

- 1. There are a large number of spinning mills located in the state that manufacture cotton yarn to ease the supply position and generate demand for yarn and supply of fabrics.
- 2. There are a large number of powerloom owners and looms that are expanding in size over the recent period.
- 3. The state has a traditional handloom base which helps in consolidating the powerlooms and adoption of traditional varieties.
- 4. There exists relatively better infrastructure facilities for transport, electricity etc. that are most favorable for running the powerloom weaving factories.
- 5. There are supportive engineering industries located in Coimbatore and elsewhere.
- 6. There is a well-developed ginning industry and cotton cultivation is wide-spread in the state.
- 7. The state has the advantage of possessing adequate disciplined labour supply with low labour cost.
- 8. There are well-established production bases for made-ups export as well as for domestic market.

- 9. The sector enjoys the advantage of catering to short batches for provision of varied designs.
- 10. There are adequate processing facility for yarn dyeing and production of yarn dyed fabrics.

Weaknesses

- 1. The most serious problem of the industry is the lack of adequate processing facilities; there is over-dependence on hand processors and traditional items.
- 2. The majority of the SMEs are tiny and cottage type units without sufficient capital back-up.
- 3. Most of the looms in the state are plain looms with low technology level.
- 4. There is always water scarcity and there is an increasing trend in the paucity of water required for the textile processing industry.
- 5. There is also a disadvantage in the form of increased power tariff, fuel cost etc.
- 6. There is always a dichotomy in production pattern and a handful of master weavers control the entire production of the cluster.
- 7. The demand pattern in the state is observed to be mostly seasonal.
- 8. The product diversification in the sector is insignificant.
- 9. The quality of wider-width fabrics for meeting the export demand is lacking in many respects, which is acting as a disadvantage to the growth of the industry.
- 10. There is inadequate encouragement to manufacture technical textiles, which has greater potential for growth.

Opportunities

- 1. As per available information, the market for processed cotton fabric will increase in the European and other markets and, therefore, the powerloom industry may benefit and expand substantially. Further the growth in the export segment will be mainly from cotton made-ups and garments along with processed fabrics.
- 2. Grey fabric export is continuing to grow and will show increasing trends.
- 3. Value added products will have greater demand and, therefore, processing will play an important role.
- 4. India with traditional designs and craftsmanship can command a greater market share for niche products in made-ups and garments.

Threats

- 1. Abolition of quota system will lead to fluctuations in the export demand.
- 2. Marketing will be the most problematic area where improvements are called for. Continuous quality improvement will be the need of the hour for which urgent measures are called for from all stakeholders.
- 3. Increasing competition from other states/centres (like Surat) will be a major problem where the industries have come up afresh and are well developed and technologically more advanced.
- 4. Traditional items like terry towels are manufactured in EOUs all over the country with superior quality. This has been eroding the traditional markets for powerloom and handloom products forcing them to go for product diversification.

1.3 Need for the study

The Indian textile industry is structurally flawed and its efficiency and growth depends upon the corrective measures and their effectiveness. This process of improving the structural aspects of the industry was initiated in the 1985 Textile Policy, which for the first time took a sectoral view of the industry. The government is spelling out the need for an integrated approach whereby all sectors will be modernised synchronously. This integrated approach is felt to help the textile industry to achieve a reasonable level of upgraded production technology and make it strong enough to face the changed competitive global scenario from the year 2005.

In order to meet the changed competitive conditions due to globalisation and liberalisation of the economy, there is an urgent need for upgrading the technology levels currently prevailing in the weaving segment, particularly the powerloom sector. All these call for the preparation and implementation of proper action plan in which all the stakeholders i.e., the government, the weavers and the other interest groups get fully involved. In order to prepare an effective perspective plan spread over 3-5 years of modernisation for this important sector, this study on the status of the powerloom sector in Tamilnadu with focus on modernisation has been carried out during August- December 2002.

1.4 Scope of the study

The study has aimed at finding out the current status of the powerloom sector in Tamilnadu in relation to its production efficiency and capabilities with a view to speed up modernisation of the powerlooms. In order to get primary information on the raw material supply as to its quality and availability, technology level as evidenced from the age/type of powerlooms, their production capacity, technology category, adaptability to the changing market requirements, this study has covered full-fledged powerloom manufacturers as well as job work units. As the powerloom industry has got a wider dispersal in Tamilnadu, such primary data collection had representation from most of the cluster centres in the state. In addition to the data at the level of primary powerloom units, a representative sample of powerloom fabric manufacturers with operational powerloom units and also without looms located in major manufacturing centres like Coimbatore, Salem, Erode, Tirupur, Madurai and Chennai have been covered in order to get the required information on the industry's perspective and problems inhibiting modernisation. In addition to the above two segments, additional inputs have been gathered from local governmental and non-governmental institutions on the issues relating to the modernisation aspect.

1.5 Objectives of the study

This study has focussed on the issues of modernisation, quality improvement and market adaptability of the powerloom sector in Tamilnadu, which will be useful in preparation of the short term/long term perspective plan. The broader objectives of the study are :

- (I) Analysing the present status and functioning of the powerloom units and assessing their operational/business capabilities according to the household and industrial types.
- (II) Assessing the existing pre-weaving, level of technology in weaving and machinery set-up with a view to identify the area-wise upgradation needs.
- (III) Gathering relevant information on the quality and supply of grey and dyed yarns and assess the supply chain efficiency.
- (IV) Assessing the flexibility and adaptability regarding quick responses to market changes in products; and the ways and means of increasing such capability.

- (V) An appraisal of the existing man-power/skill-level resources and identification of training/HRD requirements.
- (VI) Suggestions for modernisation measures in relation to technology upgradation, quality improvement and competitive marketing.

1.6 Government initiatives

Ministry of Textiles, Government of India has been very proactive in supporting the industry to prepare it for meeting the global challenge. In one such step, Government of India, Ministry of textiles has come forward to assist the government of Tamilnadu in preparing the local textile industry to meet the market requirements especially in the post quota era. The Union Textile Secretary and a team of Senior Officers of Government of India had discussions with the Chief Secretary and a team of Senior Officers of government of Tamilnadu for assessing the status of powerloom industry of the state and outlining an action plan for development of this sector through appropriate technology upgradation.

1.7 Methodology and procedures adopted for conducting the study

This study is based on the analysis of the primary data collected from an adequate and representative sample of powerloom units and also from inputs obtained from the extensive discussions through meetings with leading powerloom manufacturers and their associations in six important powerloom cluster centres of Tamilnadu. Additionally, all available information /data with various state government organisations and industry associations have been used in this study. As indicated above, different levels of the powerloom industry respondents were contacted, i.e.

- (i) Powerloom units
 - a. Job Workers
 - b. Master Weavers
 - c. Owner enterprises

(ii) Units of backward & forward linkages

- a. Raw material suppliers
- b. Machinery suppliers
- c. Pre-weaving & post weaving processing units etc.

(iii) Support service institutions

- a. Powerloom service centres (PSCs), Powerloom Development Export
 Promotion Council (PDEXCIL), South India Textile Research Association
 (SITRA), Office of the Textile Commissioner
- b. State Government
- c. CAD centres
- d. Financial institutions

1.8 Sampling procedure

Though the powerloom units are widely dispersed, there is area-wise specialization in the products being manufactured be it for the domestic market or for exports. The products being manufactured in Karur and nearby areas are significantly different from the products produced in Salem and surrounding areas; and likewise at Coimbatore, Somanur and other clusters. In view of the above, the sampling of powerloom units has been made to represent the different major product groups in specified clusters. The following cluster areas were identified for the above coverage of powerloom units:

- 1. Coimbatore
- 2. Erode
- 3. Karur
- 4. Salem
- 5. Madurai
- 6. Chennai

The selection of sample was made to the proportion of the size of powerlooms available in the selected cluster. The total of 1200 sample units were selected from six major clusters and 22 sub clusters as follows:

Table No.: 1.1
Sample Powerloom Units Covered in Different Clusters

Sr. No	Major Cluster	Sub Cluster	Products being manufactured	No. of sample Powerloom units (Proposed)	Final Accepted Sample Units
1	Coimbatore	Somanur Avanashi Palladam	Grey fabrics	120	108
2	Erode	Komarapalayam Pallipalayam Chennimalai	Dyed-Lungi, Bedsheets, Towels and Grey Fabrics	300	277
3	Karur	Vellakovil/Kangeyam Mulanur/Muthur	Dyed-Bedsheets, Towels, Napkins	240	262
4	Salem	Tiruchengode Edapadi Jalakantapuram	Dyed-(Export) Shirting, Saree	360	337
5	Madurai	Sankarankoil, Rajapalayam Virudhunagar	Grey–Bandage, Surgical Cloth, Dyed –Lungi, Saree	120	116
6	Chennai	Prodatturpet Kancheepuram	Dyed- Lungi, Saree, Shirting	60	55
	Total	·		1200	1155

1.9 Sampling Plan

Judgement sampling plan was adopted for selecting the manufacturers, master-weavers and jobbers of different sizes (mainly three types – large, medium and small) within the cluster. Besides a few non-loom units were also selected in the sample to gain information on the kind of work relations and linkages that exist, between the non-loom jobber and the master weavers / manufacturers.

1.10 Development of questionnaire and pre-testing

1.10.1 Powerloom units

A structured questionnaire was developed to collect data from the powerloom manufacturing units. The most fundamental and important issue in any survey procedure is to test the questionnaire for the purpose. A pre-test of questionnaire in a very small sample segment helps effective modification, if any, to the questionnaire resulting in the data consistency for large scale processing. The questionnaire so developed was operated after having it pre-tested as per the statistical norms. Based on the questionnaire, data was

collected from the individual sample units by the investigators. In addition to the structured questionnaire, certain open-ended questions were included as attachment to the main questionnaire which related to local infrastructure needs, government policies and other bottle-necks for modernisation and growth. Intensive training was imparted to the investigators before undertaking the actual fieldwork.

1.10.2 Focus Group Discussions (FGD)

Ten FGDs have been organised in the above concentration centres with prominent manufacturers, associations, government agencies, support service organizations including financial institutions and other stake-holders. Further, a structured questionnaire (checklist) was developed to facilitate the FGDs. The Market Research Officer / Deputy Director (MR) alongwith the Officer in charge of the local regional office formed a team for FGDs and facilitated its conduction.

1.10.3 Secondary source data collection from institutions

The available information on handlooms/ powerlooms from Directorate of Handlooms and Textiles and other government departments, different federations and associations, research institutions etc. were collected and made use of for the analysis of the issues.

This report uses four types of data sources: (i) Quantitative data available from official sources including the state Directorate of Handlooms and Textiles, (ii) sample survey covering 1155 powerloom units with 12981 looms, (iii) FGDs in important clusters and (iv) discussion with SIMA, SITRA, PSC and powerloom associations. The information from these sources were cross-checked with each other.

1.11 Consistency and quality checks

The supervisory officials at the field level have checked the quality of the data collected. In order to ensure the quality of data, the team leader and/or supervisor further subjected the filled-in schedules to sample checks. Its aim was to revisit, recovery of data, to correct initial errors of the interviewer and compliance with prescribed methods and procedures. After data entry, a computerized consistency check has been carried out for generating highly consistent and reliable data sets.

1.12 Data processing and report preparation

On the basis of the objectives drawn up for the survey, output tables required for analysis have been developed. In order to process the field data, a computer-based software was developed so as to process the data entry as well as output generation. The issues have been analysed by using statistical and econometric tools.

The report containing the findings is presented in 10 chapters. It indicates the focus areas where urgent measures are called for.
