Occasional Paper - 22

Growth and Prospects of Handloom Sector in India

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National Bank for Agriculture and Rural Development
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The Indian Textile Industry contributes about a fifth of our rural industrial production, nearly one-third of total exports and provides employment to millions of people. In the post-liberalisation era, the textile industry has undergone several changes, mainly on account of technology dvelopments and trends in fashion. Handloom sector contributes nearly 22 percent of the total cloth production in the country. It also contributes substantially to the export income of the country. The present occasional paper attempts to analyse the growth and prospects of handloom sector in India.

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M. SOUNDARAPANDIAN

Author

Dr. M. Soundarapandian
Reader
Department of Rural Industries and Management
Gandhigram Rural Institute
Deemed University
Gandhigram - 624 302.
Tamil Nadu, India.

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EXECUTIVE SUMMARY

(i) With almost one fourth of the total textile production and contributing substantially to the export earnings, the handloom remains dominant industrial segment in the country. However, it continues to be a traditional and hereditary occupation, using traditional methods of production and designs due to lack of exposure, awareness and knowledge on changing technologies, methods and the requirements.

(ii) The protectionist policies of the Government over the years like subsides, rebates and other schemes have led the weavers to become dependent entrepreneurs.

(iii) The evolution of master weavers and the other middlemen has created a wide gulf between the weaver and the consumer, thereby creating conditions of exploitation for both of them.

(iv) Co-operation, though considered as the best form of organization for a decentralized industry like handloom, has not been successful in the weaving industry. Inspite of continuous efforts over the last four decades, the weavers co-operatives could attract only 30 percent of the total weavers in the country.

(v) Inadequate or improper financial support to these co-operatives is considered as the main reason for their failure. Supply of raw material is the other major problem.

(vi) Although there is a stipulation of producing 50 percent hank yarn for the handloom industry by the composite mills, they are not adhering to such a stipulation.

(vii) Competition over the years has increased in the textile sector, particularly after the introduction of powerlooms. The powerloom sector enjoyed several advantages in the name of handloom industry in relation to consumption of yarn, production of reserved items to handlooms, etc. But these severely affected the handloom industry in particular.

(viii) The Janata Cloth Scheme and other controlled cloth schemes, introduced by the Government with the intention of achieving twin objectives of providing continuous employment to the weavers and supply of subsidized cloth to the poor, have also adversely affected the industry.

(ix) Marketing is the crux of the problem. The industry has been pursuing the sale oriented philosophy. The efforts are directed to augment the sale volume by one means or the other with emphasis mainly on promoting sale of handloom cloth to the Government departments, army personnel, local bodies, etc.

(x) Potentials of the export market of the handloom sector have not been exploited fully. The rate of success is not appreciable, except some bouts in the recent years.

Remedial Measures

A proper policy frame-work with a commitment towards implementation will certainly ensure a bright future to the industry. Some of the remedial measures could broadly be suggested as under :

(i) A change has to be brought about in the weaver's outlook. They must be oriented through some grass root level extension/exposure programme towards betterment of their skills, knowledge and technology in order to ensure quality of product, improved efficiencies and enhanced productivity levels.

(ii) The co-operative societies should be developed as nerve centers of the handloom industry. Each society should be provided with adequate working capital to run their activity on sound lines. The financial assistance to the handloom industry is being provided at present through NABARD, State Co-operative Banks, District Central Co-operative Banks, etc. Delayering of intermediations is thus warrated to avoid wide interest spreads, and high interest burden on the ultimate borrowers.

(iii) The weaving industry must develop collective market orientation. It should respond to the changing requirements of the market and provide required linkage support to the individual weavers societies, as it is not possible for the ordinary weaver to study the market trend and adopt it in his production unit.

(iv) The industry depends mostly upon the traditional buyers belonging to lower income groups for the purpose of marketing. The market outlet needs to be extended to cover the consumers belonging to upper income strata. This may entail product innovations to suit the preferences of upper income strata.

(v) Introduction of branding of the handloom product is another important measure that would increase the marketability of their products.

(vi) A handloom research centre should be set up at the national level to undertake research on demand patterns, designs, weaving technology, raw materials, etc.

The above measures, if implemented properly, will certainly benefit the industry. The Indian handloom industry will have a great future if it gets better organised and adapts to changes.

HIGHLIGHTS OF THE STUDY

The handloom sector plays a very important role in the country's economy. The importance of handloom sector in the national economy cannot be overemphasised on account of having the advantage of flexibility of small production run, uniqueness, innovation and adaptability to the exports requirement. This sector can contribute towards export earnings. Export of handloom has been, therefore, identified as "Thrust Area" for the overall development of the sector. The Government is exploring the possibility of making optimal use of the resource.

2. The handloom sector is the largest economic activity after agriculture providing direct and indirect employment to more than 30 lakh weavers. This sector contributes nearly 22 percent of the total cloth produced in the country and also contributes substantially to the export income of the country. Due to effective Government intervention through financial assistance and implementation of various developmental and welfare schemes, this sector has been able to withstand the competition from the powerloom and mill sectors. As a result of these measures, the production of handloom fabrics registered more than a ten fold increase from a level of 500 million sq. metres in the early fifties to 7862 million sq. metres in 1997-98.

3. The present study attempts to analyse the growth and prospects of handloom sector in India. The specific objectives of the study are:

   i) To review the origin and growth of handloom industry in India since pre-independence period;

   ii) To study the growth of handloom sector during the post independence period;

   iii) To analyze the performance of the handloom sector after implementation of New Economic Policy in India;

   iv) To study the impact of Multi Fibre Agreement on Indian textile sector;

   v) To review the problems and hindrances of the development of handloom sector in India; and

   vi) To suggest concrete measures for the growth of handloom sector in India.

4. Secondary data are used for analysis in the present study. The data were collected from the reports and records of the Office of Textile

Commissioner, Mumbai; Indian Cotton Mill's Federation, New Delhi; Office of the Development Commissioner for Handlooms, New Delhi; Tamil Nadu Handloom Industry and Trade Association, Chennai; Handloom Export Promotion Council, Chennai; 'Madurai Textile Exports Association, Madurai; Bombay Textile Research Association, Mumbai; Ministry of Textiles, New Delhi; Ministry of Industry and Commerce, New Delhi; Indian Institute of Handloom Technology, Varanasi and Salem; Textile Committee Library, Mumbai; Central Silk Board, Kancheepuram; National Handloom Development Corporation, Lucknow; and South India Textile Research Association, Coimbatore.

5. Various books and journals are also referred for the study. Many earlier studies have been referred for the purpose of understanding and analysing the growth trend of handloom sector in India. The collected data are analysed with the help of suitable statistical techniques like percentage analysis, ranking analysis, charts, etc.

6. The analysis and result discussions are given in six chapters. The first chapter reviews the origin and growth of handloom sector during the pre-independence period and post-independence period upto the launching of Economic Reforms. The technology growth of the handloom sector is analysed in the second chapter. The third chapter gives a clear picture about the growth and prospects of handloom sector before and after implementation of New Economic Policy in India. The role of World Trade Organization, General Agreement on Tariffs and Trade (GATT) and Multi-Fibre Agreement (MFA) in the development of textile sector in India has been discussed in the fourth chapter. The export performance of handloom sector is analysed in the fifth chapter. The sixth chapter deals with the institutional support for the growth of handloom sector.

7. The major findings of the study are summarised below:

   i) It is evident that the Indian cotton textile industry is as old as the vedic age. Cotton clothes were largely exported to other countries. The yarn was hand spun and the cloth hand woven and this super skill of weavers has been handed over from generation to generation.

   ii) With the introduction of the spinning Jenny in England, hand spinning, which provided occupation to a large number of people was completely replaced by the increased use of mill yarn.

   iii) With the introduction of powerlooms, the cost of production reduced considerably and the impact was so far reaching that not only did the exports of cotton textiles from India increased

during the middle of the 19th century but also the importance of cotton fabrics in India gained momentum.

iv) With the establishment of the first textile mill in Bombay in 1851, the handloom industry started facing competition from indigenous textile mills too.

v) In 1948, the Government of India set up a Handloom Standing Committee and a Handloom Development Fund of Rs. 10 lakh was placed at the disposal of the committee. As a result of all this, the industry started functioning fairly satisfactorily. An All India Handloom Board was set up in 1952.

vi) Based on the recommendation of the High Power Study Team (Sivaram Committee, 1974), the schemes, namely Intensive Development of Handlooms and Export oriented projects were launched by the Government in 1976. The Textile Policy (1981) stressed that special efforts would be made to ensure availability of adequate yarn so that the handloom sector will be able to achieve the production target allotted to it.

vii) The overriding objective of New Textile Policy, 1985 was the protection of consumer interests in providing cheap cloth. Regarding the composition of textile output, when the total cotton cloth output increased by 113.5 percent during the period from 1951-52 to 1985-86, the output declined by 9.95 percent in the mill sector and handloom output increased by 82.71 percent. At the same time, the powerloom sector recorded a growth of 18.95 percent.

viii) The share of the powerloom sector which was a meagre 5 per cent in 1951 rose to as high as 46.62 percent by 1986. The share of the other sectors declined perceptibly. Thus the powerlooms have overtaken the handloom in the race.

ix) The types of handlooms used in India include primitive looms like the loin looms, vertical looms such as drugget and carpet looms. These looms are capable of producing a wide range of varieties and designs, difficult to replicate even on the most modern looms.

x) Many handloom centres still use the traditional method of "street working" and " brush sizing". Rice starch, coconut or groundnut oil and rice gruel form the important ingredients for sizing in most handloom centres. In some centres, ragi or tamarind kernel powder is also used as starch.

xi) The preliminary production processes, including weaving of handloom cloth are almost similar in various sectors with wide

variations in the shares of factors of production, viz., capital, fixed and variable costs, as also wage structure, types of employment, quality and quantity of goods associated with the production of cloth in this small industry.

xii) Though India has the largest cotton acreage in the world (about a million hectares constituting about 25 percent), due to low yield per hectare (about 320 kg), India ranks third in the world in terms of cotton production, accounting for about 5 percent of the world production. The production of cotton rose significantly from about 78 lakh bales in 1980-81 to 136 lakh bales in 1989-90.

xiii) During the ten years period from 1980-81 to 1989-90, there was nearly two-fold increase in the production of raw silk, mainly used in the handloom sector. The increase in production of Tassar, Eri and Muga silks has also been quite significant during this period. The production of spun silk yarn and Noil yarn also witnessed a sharp increase during the same period.

xiv) The cloth production by handloom sector increased from 3109 million sq. metre in 1980-81 to 3924 million sq. metre in 1989-90. The share of handloom sector in cloth production was 24.98 percent in 1980-81 which declined to 19.05 percent in 1989-90. The handloom sector was highly dependent upon the organised mill sector for procurement of yarn.

xv) The per capita availability of cotton cloth grew from 12.84 sq. metre in 1980-81 to 14.63 sq metre in 1989-90. But the per capita consumption of cotton cloth had decreased from 10.56 sq. metre in 1980 to 7.44 sq. metre in 1990. The per capita consumption of non-cotton and Blended/mixed cloth had increased proportionately during the same period.

xvi) Promotion of the handloom sector has been a central theme of the Textile policy, 1985. Handloom (Reservation of Articles for production) Act,1985, reserving 22 varieties of articles for exclusive production in the handloom sector was a major initiative in the direction of protecting handlooms from the powerloom and mill sector.

xvii) During the post-liberalisation period, the area under cotton cultivation increased from 73.95 lakh hectares in 1990-91 to 86.46 lakh hectares in 1999-2000. Similarly, the production of cotton also increased from 117.0 lakh bales to 156.0 lakh bales during the same period.

xviii) The consumption of cotton yarn by handloom sector was 24.48 percent of the total consumption in 1990-91 and it rose to 30.76 percent in 1999-2000. After liberalisation, the consumption of cotton yarn by mill sector has declined from 21.62 percent in 1990-91 to 13.70 percent in 1999-2000.

xix) Of the total cloth production, only 18 percent of the fabrics/ cloth was produced in handloom sector in 1990-91 and the share of the handloom production remained negligible (18.75 percent) even in 1999-2000. After liberalisation, the share of 100 percent non-cotton fabrics increased from 1.59 percent in 1990-91 to 13.42 percent in 1999-2000, whereas the share of cotton cloth production declined from 71.80 percent to 64.47 percent during the same period.

xx) After implementation of New Economic policy, the production of 100% non-cotton fabrics by handloom sector increased from 47 million sq. metre (1.09 percent) in 1990-91 to 857 million sq metre (11.66 percent) in 1999-2000. But the cotton cloth production by handloom sector declined from 98.65 percent (4237 million sq. metre) to 86.72 percent (6376 million sq. metre) during the same period.

xxi) The wholesale price index of cotton handloom cloth increased from 200.6 in 1991 to 448.2 in 2000. During the last five year period, i.e., March 1995 to March 2000, the index numbers of whole sale prices in respect of raw cotton and cotton yarn declined by 26.6 percent and 5.7 percent, while the index of cotton handloom cloths increased by 75.6 percent during the same period.

xxii) The Census of Handlooms (1987-88) revealed that the productivity per loom per day was 5.12 metre in India. Of the total number of handlooms, 83.81 percent were functioning in the rural areas and the remaining 16.19 percent were functioning in the urban centres. Handloom is, thus, a rural based industry.

xxiii) Further, 67 percent of workers are engaged in weaving and remaining 33 percent of workers are engaged in preparatory work in handloom sector in India. Nearly 49 percent of the workers are engaged as a part time worker in the handloom industry. Besides, a sizeable chunk of workers (nearly 3.25 lakh) are employed in the handloom -carpet industry in India.

xxiv) The US rules of 1996 do not recognise processing of yarn and fabrics such as bleaching, dyeing, printing as substantial. They also do not recognise conversion of fabrics to made up articles

such as bed linen, kitchen and table linen, curtains and draperies, cushion covers, etc. The rules of origin proposed by US under the Harmonised work programme are not very different in their effect from their 1996 rules.

xxv) The Multi Fibre Agreement (MFA) framework provides for imposition of import quotas by developed countries on the exports of these products from developing countries. The possibility of India, the highly restricted, but dynamic textile exporter, having suffered substantial costs from the imposition of quotas cannot be undermined. The higher the rents, the greater is likely to be the overall welfare loss for India, since it would imply restricted markets and hence higher efficiency losses and greater diversion of world trade from efficient to inefficient producers.

xxvi) Implication of Agreement on Textiles and Clothing (ATC) of WTO and India is low labour cost. It is important to realise that low labour costs do not necessarily lead to price competitiveness. Labour cost is only one component of total input costs. Higher capital and energy costs can very easily nullify the advantage of low wages. In addition, if raw materials are not available at international prices, a labour advantage does not transparent tax structure, manifested through increased duties and sales tax.

xxvii) During the liberalisation era, the world's total exports increased from 226.59 billion in 1991 to 313.54 billion US dollars in 1996. Similarly, India's total exports also increased from 5.06 billion to 9.70 billion US dollars during the same period. The share of India's total export had risen from 2.23 percent in 1991 to 3.09 percent in 1996. The value of exports increased from Rs. 2978 million in 1992-93 to Rs. 71067 million in 1999-2000. The export of cotton fabrics dominated in all the years after liberalistion. The share of exports of handloom sectors, however, declined from 7.2 percent in 1985-86 to 1.3 percent in 1995-96.

8. The study has identified some of the problems confronting the handloom sector and made policy suggestions as mentioned below:

a) Weaving continues to be a traditional and hereditary based occupation. The weavers are following traditional methods of production and designs due to lack of exposure, awareness and knowledge over changing technologies, methods and the requirements. The protectionist policies of the government over the years like subsidies, rebates and other schemes led the weavers to become dependents rather than to be independent entrepreneurs. A change has to be brought about in the weaver's

outlook. They must be oriented towards the betterment of their skills, knowledge and technology in order to ensure quality.

b) Co-operation, though considered as the best form of organisation for a decentralised industry like handloom, was not successful. Inspite of the continuous efforts over the last four decades the co-operatives could attract only 30 percent of the total weavers of the country. Inadequate or improper financial support to the co-operatives is considered one of the main reasons for their failure. The co-operative societies should be developed as nerve centres of the handloom industry. Each society should be provided with adequate working capital to run the activity on sound lines. The financial assistance to the handloom industry is being provided at present through NABARD, District Co-operative Banks, State Co-operative Banks, Central Co-operative Banks, etc.

c) Supply of raw materials is the other major problem. The yarn is produced in composite mills and spinning mills. Though there is a stipulation of producing 50 percent hank yarn for the handloom industry by the composite mills, the mills have hardly adhered to such a stipulation. Competition over the years had increased in the textile sector, particularly after the introduction of powerlooms. The powerloom sector, enjoys several advantages in the name of handloom industry in relation to consumption of yarn, production of the reserved items of handlooms, etc. which adversely affect the handloom industry.

d) The evolution of master weavers and the other middlemen created a gulf between the weaver and the consumer, thereby both of them were exploited. The industry mostly depends upon the traditional buyers belonging to lower income groups for the purpose of marketing.

e) The Janata cloth scheme and other controlled cloth schemes introduced by the government with the intention of achieving the twin objectives of providing continuous employment to the weavers and supply of subsidised cloth to the poor have also affected the handloom industry. Introduction of branding to the handloom product is another important measure that increases the marketability of the products.

f) Marketing is the crux of the problem. The industry has been pursuing the sales oriented philosophy. The efforts are directed to sell the quantity that is being produced by one means or the other, purchase of handloom cloth by the government departments, army personnel, local bodies, etc. Export market potential has

not been exploited fully. The rate of success is not appreciable excepting in the recent years. The industry must develop market orientation. It should respond to the changing requirements of the market. It is not possible for the ordinary weaver to study the market trend and adopt it in his production unit. A handloom research centre should be set up at the national level to undertake research on demand patterns, designs, weaving technology, raw materials and so on.

9. The above measures, if implemented properly, will certainly benefit the industry. The Indian handloom industry will have a great future if it gets well organised and is adaptable to change.

CONTENTS

CHAPTER - I
INTRODUCTION

The handloom sector plays a very important role in the country's economy. The importance of handloom sector in the national economy cannot be overemphasised on account of having the advantage of flexibility of small production run, uniqueness, innovation and adaptability to the exports requirement. This sector can concentrate towards export earnings. Export of handloom has been therefore identified as "Thrust area" for the overall development of the sector. The Goverment is exploring the possibility of making optimal use of the resource.

2. The handloom sector is the largest economic activity after agriculture, providing direct and indirect employment to more than 30 lakh weavers. This sector contributes nearly 22 percent of the total cloth produced in the country and also contributed substantially to the export income of the country.

3. Due to effective Government intervention through financial assistance and implementation of various developmental and welfare schemes, this sector has been able to withstand the competition from the powerloom and mill sectors. As a result of these measures, the prodution of handloom fabrics registered more than ten fold increase from a level of 500 million sq. metres in the early fifties to 7862 sq. metres in 1997-98. The anticipated production for 1998-99 is 7170 million square metres.

4. The present study attempts to analyse the growth and prospects of handloom sector in India. The specific objectives of the study are :

   i) To review the origin and growth of handloom industry in India since pre-independence period;

   ii) To study the growth of handloom sector during the post independence period;

   iii) To analyse the perfomance of the handloom sector after implementation of New Economic Policy in India;

   iv) To study the impact of Multi Fiber Agreement on Indian textile sector;

   v) To review the problems and hindrance of the development of handloom sector in India; and

vi) To suggest concrete measures for the growth of handloom sector in India.

5. Secondary data are used for analysing the present study. The data were collected from the reports and records of the Office of Textile Commissioner, Mumbai; Indian Cotton Mill's Federation, New Delhi; Office of the Development Commissioner for Handlooms, New Delhi; The Tamil Nadu Handloom Industry and Trade Association, Chennai; The Handloom Export Promotion Council, Chennai; Madurai Textile Exporte Association, Madurai; The Bombay Textile Research Association, Mumbai; Ministry of Textiles, New Delhi; Ministry of Industry and Commerce, New Delhi; Indian Institute of Handloom Technology, Varanasi and Salem, Textile Committee Library, Mumbai; Central Silk Board, Kancheepuram; National Handloom Development Corporation, Lucknow; the South India Textile Research Association, Coimbatore.

6. Various books and journals are also referred for the study. Many earlier studies have been conducted for the purpose of understanding and analysing the growth trend of handloom sector in India. The collected data are analysed with the help of suitable statistical techniques like percentage analysis, ranking analysis, charts etc.

7. The analysis and result discussion are given in nine sections. Following the present first introductory chapter, the second chapter reviews the origin and growth of handloom sector during the pre-independence period and post independence period (Before Economic Reforms). The technological growth of the handloom sector are analysed in the third chapter. The fourth chapter gives a clear picture about the growth and prospects of handloom sector before and after implementation of New Economic Policy in India. The role of World Trade Organisation, General Agreement on Tariffs and Trade (GATT), Multi Fibre Agreement (MFA) in the development of textile sector in India has been discussed in the fifth chapter. The export performance of handloom sector is analysed in the sixth chapter. The seventh chapter deals with the institutional support for the growth of handloom sector. Few major problems are mentioned in the eighth section. The last chapter suggests some measures for the growth of handloom sector.

CHAPTER - II

HISTORICAL GROWTH OF HANDLOOM INDUSTRY IN INDIA

The present chapter has been divided into three sections namely Handloom Industry during pre independence, Handloom Industry during post-independence, and Government measures during post-independence in India.

Handloom Industry During Pre-Independence Period :

2. The origin and growth of Indian handloom textiles are discussed under the following headings:

   a) Indus Valley Civilization,
   b) Vedic period,
   c) Mauryan period
   d) Greek influence
   e) Indian brocades
   f) Shawls of India
   g) Indian embroidery
   h) Indian Dyed and Printed Fabrics
   i) Eighteenth Century
   j) Ninteenth Century

Indus Valley Civilization :

3. Late in 1921, a systematic excavation work was undertaken at Harappa and more and more important discoveries were made 400 miles south of the Indus. This place is known as Mohenjo- Daro. It was soon realized that an Urban Civilization, known as Indus Valley Civilization, was in existance in this area within the Indus river basin around 3000 B.C.

4. In the absence of any specimen of the dresses, it is not possible to get the exact knowledge of the clothing of the Indus people of the past. However, Spindles and Spindle whorls found during the excavations indicate that spinning of cotton and wool was very common in those

days. There is evidence to believe that the Indus people were practising the art of spinning of cotton and wool and also of dyeing of cloth. Some dyeing vessels have been found in the ruins of these cities.

Vedic Period :

5. The classical Indian Civilization developed from the earlier Vedic Civilization which was created by the Aryans, an invading people, who first came to India around 1500 B.C. Aryans used iron weapons and helmets and coat-of -mail. These fierce warriors armed with iron weapons and armour, riding horse - driven chariots had defeated the physically weak Dravidians and the aborigines who had less powerful weapons. The Aryans settled in North India and slow amalgamation of vedic culture with that of the Dravidians began. Finally the Dravidians settled down, turned to cultivation and began to inter - marry with the native Indians. The Aryans had spread south east from the Indus valley, reached the plains adjacent to the Ganga and the Jamuna rivers and made them their chief areas of development.

6. Spinning and weaving were highly advanced occupations in rigvedic society. Their weavers were busy weaving cotton and woollen fabrics and there were others who did the work of dyeing and embroidering. There were female weavers called "Vayitris" and "Siris". The terms "Vasas", "Vasana" and "vastra" refer to Gangetic cotton manufacturers. A woollen thread called "Varna Sutra" is mentioned in the later Samhitas and the Brahmanas. There are reference used by men and women, to sandals made of boar-skin, cotton, woollen, and silk clothes, dyed and embroidered clothes.

Mauryan Period :

7. Alexander, the Great, who conquered the Mediterranean world and the Persian Empire of Darius III, crossed the Indus river and moved on to the Indian Plains in 326 B.C. When Alexander died in 323 B.C. in Babylon, as the first emperor of India, Chandragupta Maurya reigned from his capital at Pataliputra for 24 years (322 -298 B.C) over an empire which covered all of North India from Ganges to the Indus and into the mountains of the Hindukush.

8. Even before the christian era, the fame of the Indian Printed Cotton fabrics had spread abroad. Herodotus, the Greek historian wrote about India in 445 B.C. "They process a kind of wild plant, which instead of fruit produces a wool of a finer, better quality than that of sheep, and

of this the Indians made clothes". He was obviously referring to cotton. Another Greek writer of the same century mentioned the bright colours of these printed fabrics, and their popularity with the women of the eastern Mediterranean. It is believed that this period marks the stabilization of costume design in India. During this period, costumes became regional or zonal in character. Royalty, soldiers, priests and other Professions were given distinctive costumes.

Greek Influence :

9. Bacterian Greeks, Parthians, Kushans and Shakas influenced the Indian dress, as depicted on their coins. One of their goddesses is shown wearing a close-fitting long sleeved bodice or tunic for the upper part of the body and trousers. A typical sari arrangement is found in the images of Greco - Buddhistic Hariti both from the north - west and from Mathura. When Alexander invaded India in 327 B.C. he was impressed by our advancement. He took back with him some of our printed cottons, as well as many of our finely woven silks, comparable to those of the master weavers of China, though the manner of decoration was similar to that of Persia.

10. When the Mohammedans invaded India in 711 A.D. they were intrigued by the Indian painted and printed cotton fabrics. The famous ancient Indian fabrics include Mulmul khas (king's muslin), jamdani (figured muslin), Banarasi brocade, Chand-tara, Dhupchhaon, Mapchar, Morgala, Bulbul chasm, Doshala, Kasaba or chaddar - Rumal Kashmir shawl, Kanikar, Jamaiwar, Amilkar (all shawls), Kashida, Phulkar, Bagh, Makmal, and other fabrics.

Indian brocades :

11. Brocade is a king of weave and is also called embroidery made on a loom. The background may be taffeta, twill, satin or damask, usually of one colour or with a warp stripe to contrast with the multi - coloured floral pattern. Banarasi brocade, the "fabric of dreams" is known as kinknab. These silk fabrics have coloured silk or gold threads interwoven to form the most attractive floral designs. The Indian brocades were made with gold and silver thread interwoven with silk threads or cotton/ silk blended yarns though they were earlier made entirely from fine gold or silver threads. Himrus are brocaded silks with cotton or wool blended with silk.

12. Shikarghar is the finest and most popular motif of Indian kinknab. In these fabrics, a masterly colour scheme is employed. In Baluchar Buttidar or Murshidabad, flower or spring designs are woven with a silk weft in gold, white, red, cream, orange or yellow colour with red, deep purple or blue ground.

Shawls of India :

13. The woollen textiles, superb woollen shawls, pre-moghul in origin and design, are made in Kashmir, Amritsar and Ludhiana. Kashmir shawls have become world - famous. The common colours used in the shawls are yellow, white, black, crimson, blue, green, purple and scarlet. Formalized imitations of nature such as leaves of chenar tree, apple blossoms, almond, tulip, birds etc, are used as the mofits.

    Kashimir shawls of the finest quality are made of pashm or pashmina, the wool of the Asian mountain goat. The wool from the underbelly, which is shed at the beginning of the summer, is the best fibre.

14. Doshala (twin shawl) and Chaddar - rumal or kasaba are the two types of kashmiri shawls. The kasaba shawls are square in shape and are so woven and embroidered that the design shows on both the surfaces when folded in half across the middle.

    The designs on Kashmir shawls are produced in a peculiar way. The patterns, mainly based on floral mofits, are treated with flat tones and no shades and tights are used. The colour schemes employed are subdued and produce a cool and pleasing effect.

Indian Embroidery :

15. Embroidery was practiced in ancient India during the Indus valley civilization (3rd millennium B.C). Ajanta cave wall paintings also show embroidered garments. The Indian craftsman excels in hand embroidery on cotton, silk, wool and velvet such as the kashmir kashida embroidery, the punjab phulkari, the patna kantha, the Hyderabad silks worked in gold and silver threads, the lucknow Mukhmals (velvets) with gold embroidery. The famous embroidery of Paithan is in gold and silver thread, the designs being taken from old Moghul miniatures and the frescoes of the Ajanta caves.

16. Chikan of lucknow is an elegant style of embroidery. Though done in white on cotton, linen or silk, it has elegant simplicity and purity. The Phulkari (flower - craft) and the Bagh (garden) are the most precious

needle work, the dream of the rural folk of Punjab. Chamba Rumals of Punjab are very picturesque and are small head shawls. Kastiti is a type of embroidery of India and belongs to the Karnataka State. The embroideries are very neat and pleasing and hence people like to wear them. The embroidery is so fine and delicate in its appearance, that it is often mistaken to be woven.

Indian dyed and Printed Fabrics:

17. In former times cottons were printed in India with landscapes and animal figures. The central portion of the cloth usually had a floral design and the edges were decorated with a repeat pattern made up of patterns such as horsemen, girls and flowers. The tree of life motif shows the richest development on printed cotton fabrics.

18. The prints were made by the resist style. They were made according to the traditional Indian technique, which has been practiced from the earliest times. The design is first transferred to a wooden block and a layer of molten wax or starch paste is printed on the fabric surface using the block. Only Indian dyers were able to produce really brilliant and fast colours. Saris and other cloths having figural patterns with reserved dots are made in Rajasthan and Gujarat. The centre of the fabric is occupied by close patterns of leaves and garlands, rows of the elephants , wariors and horses, girls standing beside a sacred tree etc.

19. The saris of central and western India may be in cotton, silk, mercerized cotton or man made fibre. The fabrics are of best quality in pastel or brilliant hues, tints and shades. South Indian Sarees are in silk and in soft cotton and generally are in dark shades. The best saris come from Arni, Ambur, Dharmavaaram, Kanchipuram, Kellegal, Molla, Karmura and Trivandrum. Silk sarees of Bengal and Madhya Pradesh are decorated with leaf and flower mofits regularly distributed over the surface of the fabric.

Eighteenth Century:

20. Handloom industry which is the oldest industry in the country has a glorious past. In the long history of its development, the industry has withstood several adversities. This is the fate of the industry even today. Historians consider India as the birth place of cotton manufacture which is recorded to have originated during the Vedic period as everything is traceable to Vedas in India.

21. The importance of the industry and its exquisiteness has been widely acclaimed by ancient writers - Chaolu Kua, Marco Polo, Renaudot etc. Renaudot states that in Calicut (Calicut and Cannanore previously belonged to the Malabar region) garments are made in an extraordinary manner that no where else are the like to be seen. They are for the most part Mound woven with degrees of fineness that it may be drawn through the ring of a middling size (see Gandhi 1973, P.572). Herodotus writing in about 450 BC stated that cotton was the customary wear of the Indians.

22. The superior quality Muslins generally called by the Greeks as 'Gangitiki' were also exported during the period Pliny's 'Natural History' written in 73 AD says that there was no year in which India did not drain the Roman Empire of a hundred million sesterces which is equivalent to Rs.15 million. A later description of the industry was contained in the writings of the Chinese traveller of the 13th century and of Marco Polo who travelled extensively through Asia in 1290 AD. It is said that every household used to prepare cloth in order to be self-sufficient at least in clothing. The industry was mainly confined to the cottage and cloth manufacture was a family occupation. Spinning, weaving and other processes were done only by hand. Even the best fabrics were made with the help of rudimentary tools by people in their own home.

23. It is evident that the Indian cotton textile industry is as old as the Vedic age. Cotton clothes were largely exported to other countries. The yarn was hand spun and the cloth hand woven and this super skill of weavers has been handed over from generation to generation. With the establishment of British rule in India along with its attendant demonstration effect the Indian industry got throttled to make way for the marketing of the British manufactured products. With the introduction of the spinning Jenny in England, hand spinning which provided occupation to a large number of people was completely replaced by the increased use of mill yarn. At the outset, large quantities of mill yarn were imported and subsequently indigenous mill yarn was made available to handlooms and this struck a mortal blow to the independence of the industry.

24. With the introduction of powerlooms, the cost of production reduced considerably and the impact was so far reaching that not only did the exports of cotton textiles from India dwindle from the middle of the 19th century but also the import of cotton fabrics in India gained momentum. The export of cotton piece goods which amounted to Rs.165 lakhs in 1816 -17 declined to Rs.8 lakhs by 1830-31, whereas during the same period import of cotton yarn and piece goods went up

from Rs. 3 lakhs to Rs. 60 lakhs (Report of the Fact Finding Committee, Handloom and Mills, p.5)

25. However, in spite of such adversities, the handloom industry managed to survive largely because of the strong preference of Indian women to saris and khans (bodice cloth) manufactured by handlooms. Even men's attire-dothies and upper cloth-produced by the handlooms were in good demand and hence the mechanical spinning mills and the handloom industry remained complementary to each other for some more time.

26. With the establishment of the first textile mill in Bombay in 1851, the handloom industry started facing competition from indigenous textile mills too. The textile mills which had till then supplemented the efforts of handloom industry by supplying yarn now started supplanting handloom industry by denying yarn as more yarn is consumed within the mills itself. Since 1851 textile mills started expanding by leaps and bounds in the country.

Ninteenth Century :

27. By 1879 there were 56 mills with 1.43 million spindles and 13000 looms in the country. The rate of expansion was further accelerated since the beginning of the 20th century and by 1913-14 there were 150 mills with 6.62 million spindles and 96688 looms in the country. They offered unfair competition to the handloom industry.

28. The attention of the government towards this matter was drawn for the first time in 1928 by the Royal Commission on Agriculture. The Commission felt the need for the development of village industries on co-operative lines which was so essential for their survival in the face of increasing competition from the organized industry. However, no step was taken in this regard till 1934. At that time the Government of India announced a decision to provide subsidies for the state governments by paying a sum of Rs.5 lakhs.

29. In 1941 the Government of India appointed a Fact Finding Committee. The Committee recommended the formation of an All India Handloom Board to look after the raw materials, marketing and administration of grants in aid. An all India Handloom Board was constituted in 1945 which functioned till 1947. Meanwhile to ensure yarn supply a scheme was evolved according to which the entire production of yarn by mills in India (free yarn as it was called after consumption in their own

weaving sheds) was pooled together and distributed to various states for supply to consumers, the principal consumers being handlooms, powerlooms and miscellaneous textile sectors. Even then the supply of yarn was found inadequate.

Handloom Sector during Post Independence :

30. In fact, the textile mill sector when compared to the handloom sector produced enormous quantity of cloth within short period, which had its rise with the effect of the Industrial Revolution. It is a capital intensive type of industry with technological development. Besides, in recent years, there has been a phenomenal growth in this sector not only in terms of numbers but also in term of mass production. Notably, the increased number of powerlooms and their production create unemployment and underemployment among the handloom weavers.

31. Powerlooms sector alongwith its mill counterpart took away most of the yarn production of the country and it produced and sold similar varities of cloth at much cheaper price than handloom cloth. To counter this, the Government took a series of measures to curtail the competition of powerloom and mill sectors against handloom sector. In 1948, the government set up a Handloom Standing Committee and a Handloom Development Fund of Rs. 10 lakhs was also placed at the disposal of the Committee. As a result of all this the industry functioned fairly satisfactorily till 1951.

32. A protected market was created for handloom products by a policy of reservation. It was C.Rajagopalachary, the then Chief Minister of the composite Madras State in 1948 who was instrumental to this. Thus the notification of Cotton Control Order 1948 under Section 3 of the Essential Commodities Act was issued. By the Act certain items of cloth like saris and dhothies were exclusively reserved for handlooms with effect from June, 1,1950. However, the mills challenged the validity of the reservation notification in Courts of Law from time to time.

33. In the early 1950's the problems of the industry worsened owing to national and international reasons such as the modification of United States stockpiling programme, larger availability of consumer goods including mill cloth and anti inflationary measures taken by the government. The government launched a programme of assistance for rehabilitating the industry to enable it to play its rightful role. The programmes consisted of the following:

(i) Setting up of an All India Handloom Board with comprehensive functions.

(ii) Levy of an additional excise duty on mill made cloth.

(iii) Appointment of a Textile Enquiry Committee to make detailed enquiry into various sectors of textile industry viz., the mills, powerlooms and handlooms with a view to determining the place of each in the national economy and their interrelationship, and

(iv) Enforcement of certain measures directed towards ensuring an assured market for the products of handloom industry, for example, restriction on the production of dhothies by mill industry to 60 per cent of average monthly packings on this variety of cloth during the 12 months ending in March 1952, prohibition of piece dyeing of dhothies and saris by mills etc.

34. An All India Handloom Board was set up in 1952. The functions of the Board were to advise on problems of handloom industry and in particular to examine schemes for the improvement of the Industry. Since then based on the suggestions of the Board and several other Committees, the government from time to time implemented several policies and programmes for the rejuvenation of the industry. On the whole, the policy of the government was one of freezing the capacity of the mill sector and increasing cloth requirements was to be met by the handloom sector.

35. To strengthen the competition of handloom sector, excise duty was imposed on the other two sectors namely, mill sector and powerloom sector. It was first introduced in 1953 by the Handloom Act (1953) by which an additional excise duty was imposed on all cloth produced by the mills except for export. Later in 1956, it was extended to powerlooms also with a lower incidence. Here again, for all practical purposes powerloom units with less than four looms were identically treated with that of handlooms on the plea of smallness and decentralization. This resulted in deliberate fragmentation of units in powerloom sector which intensified competition tc the handlooms.

36. A further blow to the handloom industry in the country was inflicted by the Textile Enquiry Committee in its recommendation for phased programme for the conversion of handlooms into powerlooms except 50000 handlooms (Directorate of Commercial Publicity 1965, p.8)

producing special fabrics. The Committee expected that the twin objectives of maintaining employment in the short run and securing the best possible efficiency in the long run would be achieved.

37. Based on this recommendation during the Second Five Year Plan the government allowed installation of 35000 powerlooms in the cooperative sector. However, the scheme was discontinued in 1961, as it was found that large beneficiaries were not handloom weavers due to the opportunity largely seized by the mill owners. Since then there was significant increase in the number of unauthorized powerlooms in the country.

38. For a long time lack of adequate finance, both long term and short term, hindered the growth and development of the sector. The institutional sources for financing capital expenditure for handloom sector were partially limited. In the absence of institutional finance most of them relied on middle men or money-lenders. The Rural Credit Survey Committee of the Reserve Bank of India (RBI) which has gone in depth into the credit aspects of rural industries have particularly emphasized the importance of institutional finance schemes for handloom industry to free weavers from the clutches of money-lender, merchants and master craftsmen. It recommended the provision of credit to cottage industries by RBI along with that of agricultural credit.

39. In 1957-58, RBI Scheme of finance was devised. Finance was made available for working capital to primary societies through central co-operative banks. Even though the scheme was in operation since 1957, most of the societies were unable to avail the facilities either due to the weakness of the intermediary institution or due to non conformity of primary weaver societies to rigid norms of efficiency laid down by the RBI. The benefits have only accrued to those states where co-operatives are efficiently organized and hence the programme practically made no impact in northern and eastern zones where the co-operative societies are weak.

Government Measures during Post independence

40. The Textile Commissioner issued a notification just after Independence, in June, 1950, by which the cotton textile mills and the powerloom units, with five and more looms were prohibited from producing a set of varieties, viz.,

    a. Dhoties with border exceeding a width of 0.25 inches and containing coloured yarn or jari.

b. Lungies and gamches or sarongs with check pattern.

c. Chaddars, bed sheets, bed covers and counter panes with checks or strips.

d. Dusters of all sorts.

e. Low reed pick cloth.

f. Table cloth and napkins.

g. Coarse cloth of plain weave.

h. Sarees with border exceeding 2.5 inches and

i. Towels on honeycomb weave.

41. The Textile Enquiry Committee under the Chairmanship of Nityananda Kanungo was appointed in 1952. The Commmittee recommended a phased programme and suggested that at the end of 20 years, the handloom should be converted into improved semi automatic handloom or decentralized powerloom. The Handloom Boards, however, did not accept this recommendation. In 1955 the Planning Commission appointed 'The Village and Small Scale Industries Five Year Plan Committee, (Popularly known as Karve Committee) to prepare a scheme industry - wise and state wise for the utilization of resources and it has been earmarked for the development of village and small scale industries particularly handloom industry as an integral part of the Five Year Plans in India.

42. In 1957, a sample survey on the cotton weavers Industry in Bombay was conducted by Bureau of Economics and Statistics, Government of Bombay. It attempted to express the types of handloom establishments based on a sample survey.

42. In 1959, an investigation namely, "Survey of the Handloom Industry in Karnataka and Sholapur" was conducted by the National Council of Applied Economic Research, New Delhi. It was jointly sponsored by the All India Handloom Board and the Ministry of Commerce and Industry. It elucidated the organizational structure and the size of co-operative and non co-operative handloom sectors. It pointed out the need for giving encouragement to the handloom industry in those areas. (F.S. Lokanathan, 1959).

43. During the same period, the Census of India - 1961 made a study on "Handicrafts and Artisans of Madras State". It endeavoured to examine the conditions of handloom industry in Tamil Nadu. It examined how far the Gandhian Village concept is being maintained in Tamil Nadu

and to what extent the craft has to be sustained on a competition basis. This study consists of two parts, namely Individual Handicrafts on some specified handicrafts and Village-wise list of crafts. A brief note on important handicrafts like handloom weaving practiced in the state was also found (P.E. Number, 1961). A decade later, "The Report of the working Group on Handlooms" was prepared by the Ministry of Commerce, Government of India. It classified the handloom weaver based on the established looms. It suggested that less capital and labour intensive type of handloom industry is most suitable to India.

44. The Madras State Handloom Industry and Trade Corporation had published a series of reports during 1972, 79, 81 and 83 on the development of Handloom Industry. At this stage it is essential to mention the study made by John D.K. Sunder Singh in 1979, which was a survey on "The Handloom Industry in Madurai City". This empirical investigation on the handloom industry reveals a notable fact that the handloom industry is a sick one in the co-operative sector while it is a profitable one in the non- co-operative sector in Madurai city. (John D.K. Sunder Singh, 1980)

45. In 1960, the Union Minister of Commerce and his other cabinet colleagues framed the following measures for the development of handloom sector:

    (i) The existing All India Handloom Board will make a statutory body.

    (ii) Spinning mills were asked to allot 25% of the yarn produced by them at cost price to the handloom industry.

    (iii) Handloom Industries should produce controlled cloth (Janatha Cloth)

    (iv) Government will undertake, if necessary, semi legislative measures on reservation of handloom cloth.

    (v) Government issue cash subsidy to handloom industry and

    (vi) Arrangements would be made to provide adequate credit to handloom sector.

In spite of all these measures, notable changes have not occurred in this sector during the third and fourth Five year plan periods. Hence the Planning Commission appointed a high power study team in 1974 named Sivaram Committee Team. The Committee attempted to study the problems of handloom sector. The major policies and objectives drawn by the committee were as follows:

a. To expand the co-operative coverage of handlooms to 60 percent by the end of 1980-81.

b. To set up a number of export-oriented production centres with a view to improving the quality and design of the handloom cloth and

c. Decentralized powerloom should not be treated as hostile to handloom.

47. Moreover, in October 1975 the previous reservation Order, originally issued in 1950 was updated by removing the lacuna and was reintroduced in favour of Handloom Industry. Further in 1980, the Development Commission approved by the government for handloom sector presented various package schemes such as

i) Implementation of progressive schemes for modernisation on scientific basis to attain higher productivity,

ii) To bring all weavers under co-operative fold,

iii) To extend financial and technical assistance,

iv) To control yarn prices,

v) To produce 3 metres of cloth per loom per day.

48. The Textile Policy (1981) stressed that special efforts would be made to ensure availability of adequate yarn to enable the handloom sector to achieve the production target allotted to it. The National Handloom Development Corporation assigned a key role for the handloom sector in the procurement and distribution of yarn at a reasonable price. The above cited policies are implemented during Five Year Plans in India to strengthen the handloom industry and to accelerate its growth against the powerloom and mill sectors.

49. During the Fifth plan period, priority has been accorded for the development of handloom through the 20 Point Economic Programme. In accordance with the Sivaram Committee recommendations and the schemes included with the 20 Point Programme, the Government of India has decided:

i) To revitalize dormant handloom co-operative societies and set up co-operative coverage from the present level of 30% to 60% by the end of Fifth Plan.

ii) To assist the apex institution by way of share capital in order to enable them to play a more effective role both in production and marketing and

iii) To strengthen and intensify the activities of the weavers' service centres at the state level.

50. During the Sixth and Seventh Five year plan periods, an expanding role is envisaged for the handloom sector that will include the production of the entire requirements of Janatha Cloth. Inspite of all the steps and development schemes implemented for the socio-economic development of handloom sector, one could obviously notice that there exist several problems pertaining to the handloom co-operative societies in different parts of the country.

51. Two schemes viz. Intensive Development of Handlooms and Export Oriented Projects were launched by the Government in 1976 as suggested by the High Powered Committee on Handlooms. Under Intensive Development of Handlooms as package of services covering modernization, training, input, marketing, finance etc. is provided to individual weavers. It aims at improving productivity to change the pattern of production and to free the weavers from the clutches of master weavers. Project Executive Officer with supporting staff have been sanctioned for each project. Several such projects came into operation.

52. The exports of products have been increasing year after year. But due to scattered nature of the industry, it has not been possible to exploit fully the growing export market by diversifying production. In addition to this, there are the problems of finance and inputs which impede the smooth functioning of the industry. Export Oriented Projects have been put into operation on some of the handloom centres which contribute to exports. A package of services covering modernisation, supply of raw materials, marketing, credit, etc. have also come into operation.

53. The Government came out with a Textile Policy in 1978 which was mainly intended to reformulate the controlled cloth scheme by which its manufacturing operation was shifted over to handlooms and National Textile Corporation. The burden of the subsidy to be provided to the producers was to be met by mills by the arrangement evolved. The policy also stressed the need for modernization, limitation of capacity of powerlooms, freezing of the capacity of mills, stabilization of raw material prices and the harmonious balance between the use of cotton and synthetic fibres. In March 1981 the policy was further revised. But no major deviation was made from the earlier policies.

54. To obviate the possibility of further litigation, a separate enactment viz. Handloom (Reservation of Articles for Production) Act, 1985 was

enacted by the Government. Under Section 4(1) of the Act an Advisory Committee has been appointed to recommend articles for reservation. As per the recommendations of the Committee, 22 items of clothings were reserved for handlooms through a notification issued on August 4, 1986 under Section 3(1) of the Act. Though this Act too was challenged, the Supreme Court upheld the constitutional validity of the Act and the reservation notification.Thus for four decades the reservation orders remained on paper. However, as of now the provisions of the Act are stringent, in that, anybody who produces an article in contravention of the order under Section 3 will be committing cognizable offense punishable with imprisonment for a term of 6 months or fine upto Rs. 500 or both.

55. According to S.K. Misra, there were about 30.20 lakh handlooms in the country in 1985 which produce 25% to 30% of the total textile production in the country. Almost all the silk fabric of the country and more than 90% of the exported silk fabric are woven on handlooms. The statistics and progress of the handloom sector during the Fifth and Sixth plan periods are summarised in the Table - 1.

Table 1

Progress of Handloom Sector During Fifth and Sixth Plan

Sr. No	During 5th plan as on 31.3.80	During 6th Plan as on 31.3.85
1. No.of handlooms	30.20 lakhs	30.20 lakhs
2. Total Production of handloom fabric	2900 million mts.	3600 million mts.
3. Handlooms brought under the cooperative fold	13.17 lakhs	18.00 lakhs
4. Share capital assistance to apex societies	Rs.11.25 crores	Rs.11.30 crores
5. Share capital assistance to Handloom Development Corporation	Rs.6.76 crores	Rs. 10.62 crores
6. Rebate	Rs.9.23 crores	Rs.43.40 crores
7. Subsidy on production of Janata cloth	Rs.36.03 crores	Rs.225.09 crores
8. Modernization of looms (in numbers)	—	1,18,000
9. Processing facility	Rs.7.15 crores	Rs.9.15 crores
10. Credit received from financial institutions	Rs.147.22 crores	Rs.696.00 crores
11. Market turnover of State Apex Coop. & HDC	—	Rs.460.00 crores

Source: Indian Textile Journal, No:1, 1985.

56. On 6th June 1985 the Government of India came out with a New Textile Policy which basically departed from the earlier ones. The new policy almost permits all sectors to grow according to their inherent strength. The overriding objective is the protection of consumer interests in providing cheap cloth. To enable handlooms to realize their full potential, the policy outlines the following steps.

    i. Development of handlooms through co-operatives, central and state level Corporations.

    ii. Greater emphasis on modernization of looms and provision of technological and other inputs to raise productivity, quality and finish of products.

    iii. Special efforts to ensure adequate availability of yarn and other raw materials through the operation of National Handloom Development Corporation.

iv. Encouragement for the production of mixed blended fabrics on handlooms.

v. Strict enforcement of the Reservation Act.

vi. Fiscal measures to improve competitiveness of handlooms.

vii. To improve marketing.

viii. To strengthen the data base for better planning and execution of development programmes, and

ix. Shifting to handlooms the responsibility for the entire production of controlled cloth which at present is fixed at 650 million metres which will be raised over the years.

57. The Central Government has come out with a two pronged strategy with an outlay of Rs.300 crores to develop the industry. It is proposed to provide looms, work sheds and working capital to about 3.27 lakh loomless weavers in the country in about three years. The second aspect of the strategy is to provide intensive training to a total of one lakh weavers under TRYSEM. The beneficiaries would be given stipend, free tool kits, dyes and chemicals. This is expected to substantially improve the capacity and quality of production of the handloom weavers. The major schemes related to the setting up of 3000 handloom development centres and 500 quality dyeing centres all over the country in areas with a concentration of weavers.

58. Thus a review of the policies and programmes of the government attempted above reveals that comprehensive measures were adopted for the development of handloom industry in the country. Against this background if we are to look at the performance of the industry based on the available data at macro level it can be seen that the industry made impressive performance in recent years. The estimated annual output of the handloom industry which ranged from 1776 million metres to 2574 million metres during the three decades starting from 1951 rose to 4155 million metres by 1994. The export performance of the industry was also commendable. The total value of handloom export rose ten fold during the 1972-73 - 1990-91 period. However, a close look at the sector-wise performance of the textile industry would reveal that the beneficiaries of the government's protective policy was the powerloom sector. This is in spite of the restrictions put on the growth of powerlooms. Regarding the composition of textile output, when the total cotton cloth output increased by 113.5 per cent during the period from 1951-52 to 1985-86, the mill sector output declined by 9.95 per cent and handloom output increased by 82.71 per cent. At the same time the powerloom sector recorded a growth of 18.95 per cent. As a

result the share of the powerloom sector which was a meagre 5 per cent in 1951 rose to as high as 46.62 per cent by 1986. The share of the other sector declined perceptibly. Thus the powerlooms have overtaken the handlooms in the race. In this context it also needs to be recognized that there are estimates based on hank yarn delivery reported by mills.

59. It has been noted that there is large scale diversion of hank yarn at around 35 per cent of hank yarn to powerlooms (Jain, L.C.1995). It is also widely known that a significant part of handloom products are marketed as handloom clothes and all this would mean that the performance of the industry is not all that rosy as shown by official figures. It is against this backdrop that we look at the broad spectrum of the development of the industry at a macro level. The Statewise distribution of Handlooms is given in the Table - 2.

Table - 2

Statewise Distribution of Handlooms (1988)

Sr. No	State	No.of Handlooms (in lakhs)
1.	Andra Pradesh	5.29
2.	Assam	2.00
3.	Bihar	1.00
4.	Gujarat	0.24
5.	Haryana	0.42
6.	Jammu & Kashmir	0.37
7.	Karnataka	1.03
8.	Kerala	0.95
9.	Madhya Pradesh	0.43
10.	Maharashtra	0.80
11.	Manipur	3.14
12.	Orissa	1.05
13.	Punjab	0.22
14.	Rajasthan	1.44
15.	Tamil Nadu	5.56
16.	Tripura	1.00
17.	Uttar Pradesh	5.09
18.	West Bengal	2.56
19.	Other States / Union territories	0.37
	TOTAL	32.96

Source : AIFCOSPIN Silver Jubilee, Annual, 1988

60. The major centres of handloom weaving are Benares, Machlipattanam, Kanchipuram, Salem, Nagpur, Tanda, Hyderabad, Jaipur, Jodhpur, Kota, Gwalior, Indore, Arni, Madurai, Tanjore, Surat, Bhopal, Lucknow, Delhi, Murshidabad, Tiruchirapalli, Aurangabad, Baroda, Mehasana, Sambar, Amristar, Ahmedabad, etc.

61. This industry operates over a broad spectrum of product mix, ranging from conventional sarees, bed sheets, long cloth, lungis, napkins, towels, etc., at one end to ornamental fabrics like Madras muslin, brocades, chintizs, phulkari, embroidery etc., at the other end. The yarn used by this sector is mainly cotton yarn, of counts ranging from coarse count of 10s to superfine count of 100s. In the centres which are famous for producing decorative ornamental fabrics, pure silk, and jari yarns of gold and silver are also utilized in large quantities.

62. According to an estimate of the Thomas Committee of Government of India, number of weavers employed on full and part time basis in handloom weaving activity are approximately 2.5 million and the total population which is dependent on this sector is more than 10 million. The weavers in the handloom industry work under the master weaving system, or work for cooperative societies, or operate their handlooms independently. Since handloom weaving is traditional cottage industry, nearly all members of a weaver's family are involved at different stages of weaving activity. It has been reported by the Kanungo Committee that only 55.7 percent of weaver's family are gainfully employed. The extent of under employment in a weaver's household is of the order of 37.5 percent. Female and child members of a weaver's household are engaged in pre-weaving operations and work 20-21 days in a month and 5-6 hours a day. Male members are engaged in weaving operations and they work 24 days in a month and 19 days in slack periods.

CHAPTER - III

GROWTH OF TECHNOLOGY IN HANDLOOM INDUSTRY

Since the handloom industry is a rural based cottage industry, the labour content in pre-weaving and weaving operation is perdominent as compared to mechanical operations. The efforts in machinery development for the handloom industry have been oriented to improve machine and labour productivity without sacrificing traditional labour involvement. This is necessary to sustain the employment generating potential of this industry. The production technology used in weaving of handloom fabrics is briefly described below:

Bobbin Winding :

2. In the handloom industry, bobbin winding is done by female members of weaver's families. An ordinary or improved charkha is used for this purpose. The winding speed of the formal model is 90 mts/min. and that of the latter models about 140 mts/min. This equipment is cheap, easily available even in the remotest centres of handloom weaving, and occupies less space and does not require electric power. However, certain amount of dexterity is required to ensure uniform yarn tension and to make clean and well built bobbins. Yarn tension is controlled by finger tip sensing.

Warping :

3. Both vertical and horizontal sectional warping machines are used for warping operations. The former is widely used in many handloom centres. It costs approximately Rs.1000/- and is operated by a warper who is assisted by a helper. A beam of 5600 ends and 500 metres length can be prepared in one day. The machine requires a floor space of 10 ft x 10 ft.

Yarn Sizing :

4. Yarn sizing is done by warping yarn of full beam length around two poles in a street and applying size paste manually. Yarn is dried in natural environment. The size paste consists of natural adhesives, like wheat flour, maize starch or potato starch. The weaver's beam is prepared by winding the sized yarn using a beaming machine which is a simple, manually operated equipment.

Weft Preparation :

5. The procedure adopted for weft winding is to employ the charkha using the finger tips for tensioning the yarn. This is a low cost operation and is done mainly by females and children.

Weaving :

6. A large variety of handlooms are used in different centres of the handloom industry from the oldest throw-shuttle loom to semi-automatic and automatic handlooms. Throw shuttle pit loom is the most primitive loom in which head shafts are operated by the weavers with his legs and shuttle is picked through shed by his hands. Frame loom is a modification of a fly shuttle loom, in which shedding and picking operations have been modified to relieve the weaver from the strain of manual shedding and picking.

7. The pedal loom is a modification of a frame loom, and either dobby or jacquard attachment has been adopted on the pedal loom to weave shirtings, towels, gauze and bandage cloth. In fly-shuttle loom, the race board is made of wood only. On the loom, when no take-up motion is used, sley movement is free in both directions; however, when five wheel or worm wheel type take-up motion is installed, the sley movement is restricted to the forward direction by mechanical restrainers made of wood or leather fitted on the front rest. Backward motion is free, but movement of the take-up motion pawl is restrained to the required level by a plate or nail below the pulling pawl which prevents the take-up motion pawl from engaging more teeth than required. On semi-automatic looms, pedal looms and Chittaranjan looms, the sley movements are restrained by a stud on the fly wheel or crank.

8. Negative frictional let-off motion is used on many silk handlooms. In this motion, the chain has been replaced by a leather belt which is wrapped around the beam ruffle. Other end of the belt is attached to a lever to which stone weights are hung. This mechanism is also used on semi-automatic handlooms and handlooms with take-up motion attachment.

9. Several auxiliary mechanisms are used in the handloom industry for producing ornamental fabrics. Some of the important mechanisms are multi-treadles, dobbies and jacquards. Multi-treadles are used for weaving twills, sateen, fancy shirting and suiting. Different types of dobbies are used for weaving extra warp design in sarees and for weaving all-over patterns. The common dobbies are barrel dobby, lattice dobby and single-lift single-cylinder dobby. The last one is similar to

the jacquard and uses a punch card. In addition to these dobbies, double-lift single-cylinder dobby and positive dobby have also been developed for the handloom industry by the Indian Institute of Handloom Technology (IIHT), Varanasi. These dobbies require less effort on the part of weavers and double-lift single-cylinder dobby can be mounted on pedal looms and semi-automatic handlooms.

10. Single-lift single-cylinder jacquard is the most widely used jacquard in the handloom industry. These are made in Benares, Mau, Panipat and Bombay. Double-lift double-cylinder jacquard has been developed by IIHT, Benares. It is operated by two treadles. In Mau system, the jacquard is operated by the backward movement of the sley. This system gives higher productivity, however, it is not possible to lift a large number of warp threads in this system.

11. Overall efficiency in handloom weaving is reported to be 30 percent. Of this the loss in loom efficiency due to warp breaks, shuttle changes, etc. accounts for 15 percent to 20 percent. Various suggestions have been made to reduce efficiency loss and to increase productivity and quality in handloom weaving. The stoppages due to operations like adjusting let-off, take-up, heald shaft and temples occur very frequently in handloom weaving. This can be reduced by modified let-off and take-up motions, use of roller temples and proper healdes. In many looms weaver's beam is not provided with flanges. These beams are fixed rigidly and there is no free movement for proper let-off of the warp while weaving. This results in curled, folded and uneven selvedges which become prominent after weaving. Use of flanged beams and roller temples have been suggested as remedial measures to avoid these defects.

12. For winding, cycle wheel charkha and winding machine have been recommended to wind long and continuous lengths of yarn on bobbins and pirns. Introduction of drums warping and sectional warping machine has been recommended to improve productivity in warping operations against the conventional street warping procedure. Attachment of beaming mechanism and measuring and full beam stop motion on these warping machines will further improve warping productivity.

Synthetic Weaving in the Handloom Industry

13. Weaving of synthetic fabrics has been identified as a major thrust area for the development of handloom industry in India in the present century. Although technology of synthetic weaving is well established in the mill sector, the handloom industry has still to develop its own

appropriate technology. Indian Institute of Handloom Technology and Weaver's Service Centre, Varanasi have been working on loom developments for synthetic weaving. They have succeeded in modifying the pit loom and frame loom for weaving polyester and its blends. However, further research work is still to be done for pre-weaving operations, fabric development and design and chemical processing of polyester and its blends.

14. For winding operations, a mechanized bobbin winding has been developed. This winder consists of 28 to 56 spindles and has an average winding speed of 100 mts/min. and requires a 1 hp motor. The cost of such a machine is Rs.4,500 for 56 spindles. Two operations are needed to look after the winding operations. Maintenances of uniform winding tension is an added advantage along with reduction of winding charges from Rs.6 per kg. for conventional charkha to Rs.3 per kg. for the mechanized version. The disadvantages are additional space requirement, higher investment, and power consumption. The ladies at home will lose their earnings. The bobbins used by the art-silk industry, are of 3" x 2" x 1.5" size and hold large quantities of yarn. Light weight fibre bobbins of this size can be suitable for polyester twisted yarn.

15. Horizontal sectional warping machines had been recommended by IIHT, Varanasi for warping of polyester filament yarn. This machine occupies space of 14' x 28'. The cost of the machine, with drum of 5 metres circumference, is about Rs.10,000 and requires power of 2 hp. It is possible to get warp lengths of 500 mts. or more. Compact beam of uniform tension along the length and width of the beam can be obtained on this machine. The production on such a machine is 400-500 mts. in 12 hours and requires one warper and one assistant for operation.

16. Nose unwinding from cones has been recommended in place of side unwinding from warper's bobbins. Two hundred and fifty meters of warp length on warper's beam has been recommended against the normal practice of preparing beams of warp length varying between 50-500 meters. Normal precautions, like the use of beam papers to prevent sinking in of warp threads, under tension, clean warp beam with flanges are required.

17. For sizing of zero twist yarn, single thread sizing, based on the Japanese system has been recommended instead of the traditional procedure of street sizing. Certain additional attachments on winding machines can be installed to make it suitable for single thread sizing. Use of polyvinyl

alcohol, ammonium salt of polyacrlic acids, polymethyl acrylic acid, glycerol and small quantities of emulsion polymers, like polyvinyl acetate, have been recommended for synthetic filament yarn. The average size pick-up for filament yarn should be 4 to 5 percent.

18. Bar pirn winders used in powerloom centres of Surat and Ahmedabad have been recommended for weft winding of filament yarn. These machines are available in 20 spindle capacity and cost around Rs. 3,000. One machine occupies space of 6' x 3' and requires a 1 hp motor. The speed of such a machine is 150 mts/min. Conventional practice of preparing pirns on manually operated charkha is not suitable for preparing filament weft as improper control of tension, and soiling of weft will result in faulty cloth. Though it is possible to weave filament yarn fabrics on many handlooms currently used in the industry, it is necessary to introduce modifications to improve product quality and to increase efficiency of the loom. Pit loom, frame loom and semi-automatic handlooms can be modified in the following ways, by the introduction of or use of:

    i) Smooth revolving take-up motion

    ii) Rubber covered enery roller

    iii) Separate cloth roller to get longer lengths of cloth.

    iv) Rubber roller temples

    v) A smooth sley race board covered with plush fabrics

    vi) Restraining sley movement to get uniform pick density

    vii) Use of glass or aluminum lease rods.

19. Five wheel or worm wheel type take-up motion has been recommended to get uniform pick density on handlooms. This will also require restricted and accurate movement of the sley in the forward direction. This has been achieved on handlooms by the use of restrainers made of wood or leather fitted at front post or by fitting a stud on the fly wheel or crank on semi-automatic looms, pedal looms and Chitranjan looms.

20. Modification of frictional let-off motion which uses a leather belt wrapped around beam ruffle and stone weight at other end is required as it gives defect of weft bars. In the modified version of let-off motion, a strong iron nail is taken and fixed on the wooden beam. The rope carries a heavy weight at the other end, at one side and a rope tied to this nail is fixed around a few turns on the beam situated at a height of 6 ft above the warp beam. The position of the weight is near ground

level in the beginning and the vertical distance between pulley and weight is 6 ft. As weaving proceeds, the rope coils round slowly over the side of the beam and the weight is lifted slowly.

21. Multi-treadles used for weaving of fancy sorts require modifications to weave filament yarn. Use of a hard plastic pipe covering for string connecting upper jack arm with lam rod has been recommended to prevent abrasion of filament yarn. Dobbies and jacquard are suitable for filament weaving. However, precautionary measures are required to prevent oil stains. Temples used on conventional handlooms consist of two wooden sticks with pin selvedges to the end. However, to prevent weft curling at selvedges and damage to the selvedges, it should be replaced by a rubber roller. Wooden sley of fly shuttle loom used for weaving of silk yarn should be replaced by a race board covered with plush or velvet. This will reduce friction between the shuttle and the warp sheet as warp yarn in such cases sinks into the velvet and the shuttle rides over the velvet.

22. The shuttle box of conventional handlooms also requires several modifications. Use of a spring, swell and check strap is essential to restrict the movement of the shuttle in the box to get good selvedges. Use of a rubber covered take-up roller for weaving of synthetic yarn requires a separate cloth roller. The roller can be driven by frictional contact with the take-up roller, or by a special type of winding mechanism developed at IIHT, Varanasi.

Growth of Manufacturing Process of Handloom Cloth :

23. Weaving is the basic process among the various manufacturing stages of handloom cloth. On a casual observation, weaving processes may appear to be a simple process but in practice, it involves a number of diligent preliminary processes and stages. This section attempts to illustrate the various types of looms and other raw materials used for weaving as well as the preliminery production processes of handloom cloth of various coarse and fine varieties.

The Basic Tool-Handloom and its Types:

24. The process of weaving, primarily constitutes interlacement of two sets of threads viz. warp and weft and the equipment which operates this interlacement is called 'loom'. The handloom is made up of a stick or wooden frame for weaving but more often it is defined as a frame for weaving equipped with some wooden devices. It is distinguished from that of powerloom on the basis of the source of power used for weaving. It is generally classified either on the basis

of the raw materials used, the loom structure, its laying position on ground or place of its origin. However, the looms which are popular in olden days are called traditional looms.

25. In ancient days, there were many types of looms such as free warp loom, warping loom, box-frame free warp loom, warp weighted loom, vertical-warp loom, horizontal-warp loom, table loom, card and frame loom, bow loom, crossed stick loom, mat loom, hole-board loom, stand warp loom, back-strap loom etc., which were used in different places during different times.

26. In India, various types of looms are traditionally in practice. However, the types of handloom used particularly during the present century, is highly notable. They can be noted on the nature of cloth produced or the places of their origin. They are generally named as pit loom, frame loom, Manipuri loom, Rajasthani loom, Kashmiri loom etc. Very recently, automatic and semi automatic jacquard looms and mechanical jacquard looms are becoming familiar in India.

27. The sound of the handloom is the music of the Indian rural home. In the process of weaving, the handloom weaver achieves a harmony of motion and rhythm. His manipulation of foot pedals compliments the throwing of the shuttle and a perfect weave demands perfect co-ordination between the mind, hand and foot to produce a smooth and easy rhythm. The harmony of sound reflects a close understanding between the weaver and his loom. The excellence of the fruit of his labour lies in the skill of the weaver and his ability to achieve a rapport with his equipment. Handloom creations are products of the artistic traditions of the area of production. Different geographical areas are renowned for their characteristic fabrics, which are the fruit of a long association between the weaver and the equipment and technique that he employs. The structure of the loom and the processes adopted to produce specific types of fabric are, therefore, subject to geographical variations.

28. Though the methods employed in making handloom fabric are simple, the results are rather extraordinary. The human involvement and ingenuity results in creations which are unique and aesthetically delightful. The types of handlooms used in India include primitive looms like the loin looms; vertical looms such as drugget and carpet looms; pit looms; frame looms and semi-automatic looms.

Primitive Looms :

29. The term 'Primitive' merely indicates that the structure of these looms and the process employed in their working, though outmoded, have

remained unchanged for generations. These primitive looms still exist in the Eastern zone as well as in tribal tracts of Madhya Pradesh, Orissa and Bihar. They are also used in those parts of the country where some types of druggets, durries, carpets, newars, tapes and coarse blankets are woven.

30. The primitive looms are mostly simple in structure, the weft being threaded by hand for interlacing the warp ends. They do not have heavy frames or permanent fixtures and are easily portable. These looms are capable of producing a wide range of varieties and designs, difficult to replicate even on the most modern looms. The ancient loin loom found in Manipur, Tripura and Assam is a typical primitive loom. The greatest advantage of this loom is the unlimited scope it offers for ingenious designing.

31. The 'dhak bundas' of the Garo tribe, the 'blast' cloth of Tripura, the 'Phenok belt' and 'longham' of the Nagas and Vaishnava ladies of Manipur and the 'dance dresses' of Naga girls provide ample testimony of the versatility of the loin loom. This is the reason for its survival even to this day. Other primitive looms include tribal looms, vertical looms, newar looms, tape looms etc.

Pit Looms :

32. Pit looms are the most widely used handlooms in India. These are of two types. Till the advent of the fly shuttle sley, invented in England during the eighteenth century, throw shuttle pit looms were predominant. Interestingly, even today, the finest varieties of fabrics, known for their beautiful designs and textures, are produced on throw shuttle pit looms. The famous 'brocades' of Varanasi, the 'Jamdanies' of Tanda, the 'Patola' saris of Patan, the 'Himroos' of Aurangabad, to mention only a few of a vast range of exquisite hand-woven fabric of India, are produced on these simple throw shuttle pit looms. As the name implies, the looms stands over a pit and the process of picking is done by throwing the shuttle across the sley by hand. In Banaras, Kanchipuram and Chenderi looms, the speciality lies in the use of an accessory, known as 'Jala' or 'Adai' for evolving intricate designs in extra weft figuring. This is a patterning unit which assists in the selection of warp thread while weaving designs.

33. The fly shuttle pit loom is the most popular hand operated loom in the country. Its popularity is due to its productivity being 3 or 4 times more than that of an ordinary throw shuttle loom. It has all the advantages of a throw shuttle pit loom, but is unable to produce intricate extra weft figured patterns. In combination with dobbies and jacquards,

a wide variety of intricate designs can be produced on fly shuttle pit looms.

34. The strength of the handloom industry today can largely be attributed to the introduction of the fly shuttle in pit looms. In this loom, the sley carries a race board and two shuttle boxes, one either side, with a picker propelled by means of strings. Close texture fabrics like the RMHK, Bleeding Madras lunghies and other Madras items of fabrics can more easily be woven on the fly shuttle pit loom than on any other handloom. Some of the typical fly shuttle pit looms include the 'uppada' loom, Venkatagiri loom, Salem loom, Madras handkerchief loom, Mau loom, Sandila loom, Nagpur loom etc. In some of these looms, improved appliances, jacquards and dobbies are attached to increase the scope of designing, to improve the quality of cloth and to enhance the productivity.

Frame looms :

35. Frame looms have come into existence due to certain advantages they have in weaving designed varieties with more than two treadles. These are also helpful in weaving fabric requiring mass production. In parts of West Bengal, Assam and elsewhere in Eastern region, improvised frame looms are replacing pit looms. These looms are also popular in many parts of Kerala, Tamil Nadu, Haryana, Delhi and Punjab where attractive furnishings, bed sheets and madeup items are manufactured on a large scale. Frame looms are employed in Surat, Sholapur, Shantipur and Madurai for weaving fine count fabrics with extra warp and cross border designs, dress materials, striped and check materials, jacquard fabrics, towels, crepe and furnishings.

Semi-automatic Looms :

36. Semi-automatic looms are now acquiring popularity in some weaving centers in the country. Only a limited range of fabrics can be manufactured on these semi-automatic looms. These looms are operated by human effort by pedaling with legs or by moving the sley by hand. The Chittaranjan loom, the Hattersley pedal loom, the Madanpura loom, the Banarasi semi-automatic loom are some typical examples of this type of loom. Although productivity of these looms is considerably higher than that of traditional looms, their versatility is limited.

Processes :

37. A number of preparatory processes and accessories have to be adopted to convert yarn into a form suitable for application on the loom. Whether it is the simple loin loom of Manipur or the heavy frame loom of Malabar,

two types of motions, viz. primary motions and secondary motions, are essential features in weaving, Primary motions comprise i) shedding, ii) picking, and iii) beating, whereas the secondary motions include i) take up motions and ii) let off motion. Each category of handlooms has its special method (some antiquated and some improved) of effecting these primary and secondary motions.

38. The warp is prepared in ball or beam form and the yarn for weft is converted into pirns. The process adopted in different centers are similar but for some minor alterations. Horizontal mill warping is adopted in almost all centers for fine varieties. In case of medium and coarse counts, vertical mill warping is generally adopted. Improved horizontal warping machines are widely used in many centers.

39. Many handloom centres still use the traditional method of 'street warping' and 'brush sizing'. Rice starch, coconut or groundnut oil and rice gruel form the important ingredients for sizing in most handloom centres. in some centres, ragi or tamarind kernel powder is also used as starch. In some centers, even in finer counts, hank sized yarns are used. The use of slasher sized warp as in Nagari and other centers is also becoming a common feature. If the fabric to be woven is the same as on the previous warp, the ends of a new warp are pieced with that of old warp. When a different variety has to be woven, drawing-in is resorted to.

40. It is evident that a highly sophisticated process of dyeing cotton existed in India as far back as five thousands years ago. The indigenous dyeing industry was, at one time, before the import of chemical dyes, the cynosure of neighbouring eyes. There is ample evidence to show that the deep subdued and composite tints produced by vegetable dyes were once the aspiration and despair of artistic European dyers.

41. Post-loom processing applied on handloom fabrics include bleaching, mercerizing, dyeing, printing, calendering etc. Printed handloom items have patterns printed subsequent to the weaving of the cloth, by application of dye-stuffs or pigments on to the surface of the cloth. Tie and dye and Kalamkari processes are special methods adopted for producing very special and unique effects. Normally, loom state 60s x 40s, 40s x 40s, Madras check/plaids/kataris/stripes/ribs etc., are given one washing in running water resulting in a shrinkage of about 3 to 5 percent. Fast colours are invariably used for dyeing handloom fabrics, except for varieties such as RMHK and 'bleeding' Madras fabrics.

42. The principal fastness properties taken into consideration in the handloom industry are: i) fastness of washing, ii) fastness to light, and iii) fastness to rubbing. The degree of colour fastness is determined by the particular enduse of the fabric, viz, whether it is for dress materials, hangings, upholstery etc. Normally, handloom fabrics stand for 40° C, colour fastness to washing.

43. One of the greatest merits of hand-woven fabrics lies in their versatility and ability to achieve extensive ornamentation in terms of texture, colour and design. Today, the handloom exporting community in India is putting all its efforts into emphasizing this unique aspect of hand-woven textiles while ensuring that they conform to the requirements of the overseas consumer market.

Stages of Production Processes :

44. There are several stages involved in the process of production of handloom cloth starting from the stage of purchase of yarn. They are dyeing, loosening, twisting, winding, warping, dressing, sizing, piecing and fixing the warp with the loom for weaving. Yarn is usually purchased either from the local market or from the co-operative market or directly from spinning mills. It may be classified either as mill made yarn or hand-spun yarn and either dyed yarn or undyed yarn. If the yarn is undyed it has to be processed before it goes to warp and weft. The counts of yarn used for weaving may differ from cloth to cloth and the size of the cloth is based on the reeds of loom.

45. The warp and weft yarn may be obtained either from dyed yarn or from undyed yarn. If it is undyed, it has to be dyed locally. In the non co-operative sector, few master weavers have dye-houses within their own establishment. The independent master weavers make dyeing process from the local dye-houses. But, in the case of co-operative sector, a few active co-operative societies have their own dye-houses. Most of the co-operative societies make dyeing yarn either from co-operative dye-houses or from government approved dye-houses.

46. Dye houses are run by different classes of people who specialize in it. The cost and the process of dyeing are based on the weight of yarn and dye & chemicals used. The dyeing process is based on a specific temperature. The quantity of colour powder depends upon the types of colour, shade and effect on yarn.There are two types of dyeing-direct colour dyeing and fast mixing colour dyeing. Dark shade needs high percentage of colour and light shade needs low percentage of colour.

47. The third stage covers loosening, twisting, rewinding and warping of the yarn. Loosening and twisting are based on the counts of yarn; rewinding of yarn is done on reels and hands. Rewinding is done in the case of weft yarn or breadth wise yarn. This is done with the help of charka wheels by women and children workers. Wages are paid on piece rate basis and the rate of wage varies according to counts and weight of yarn. After rewinding, the yarn has to be warped. The warp yarn is usually wraped on round wooden frame. The processes of loosening, twisting, rewinding and warping are usually done by the family members of the co-operative weavers in the co-operative sector and by job workers in the non-co-operative sector.

48. Dressing and sizing are usually done at the time of dyeing and repeated after warping. Before sizing, it is to be noted that in the case of fine varieties, the warp yarn is dropped into a solution made up of boiled rice gruel and coconut oil and is squeezed and stretched. Then, the warp is given a dressing by stretching it in the open street. For this purpose, cross-wise bamboo rods are used. Dust and dirt are removed from the threads and finally the broken ends of the threads are joined. After these processes, the warp is removed from one end of the bamboo and is wound on a hank till it reaches the other end. Now, the new warp is ready for the next process of piecing.

49. The above said processes of dressing and sizing are practiced in open space only to the fine varieties of sarees but in the case of coarse varieties these processes are completed within the factory itself by job workers. The usual charges for these works are based on the various counts of yarn and the length of the warp. In the case of sarees, the warp length will be 50 metres and in the case of towels, lungies and dhoties, it will be 250 metres.

50. Piecing refers to the joining of the thread ends of the old warp with the thread ends of the new warp. Each loom contains at least one set of reed and one set of healds. The numbers of reeds and healds depends upon the thickness of the cloth. The thinner thread needs more reeds and healds and vice versa. There are two sizes of reeds, one is 50" width (for dhoty and saree) and the other is 36"width (for towel and shirting cloth). The new warp which joins with the old warp by means of piecing is again stretched in the street in the case of the fine varieties. The wage rates for this work is usually fixed based on the sizes of reeds, length of warp and design of the cloth.

51. After piecing, warp yarn is divided by many segments and is fixed into the loom. One end of it is fixed to the cloth beam and the other end to warp beam. The distance of the cloth beam and warp beam may depend

upon the length of the cloth weaving. For a normal six-yards saree, the warp has a distance of 12 feet and for towels, dhoties etc., the distance will be 6 to 8 feet between the cloth and warp beam.

52. The ordinary check and straight line designs are prepared by the segments of warp and weft yarn. In the case of flowers and curve designs, the handloom designers used jacquard punch card methods. The jacquard box includes design cards with hooks. The number of hooks differ from cloth design to design. Turkish towels, half and full jacquard towels of the coarse varieties and putta border and petni designs on pure and art silk sarees of fine varieties are usually woven by the jacquard looms. Wage will normally be more for these complex nature of weaving. The weavers are usually getting wage for their work on the basis of the variety and length of the cloth.

53. The above cited preliminary production processes including weaving of handloom cloth are almost similar in various sectors of handloom industry. However, one can obviously notice the existing variation among the other factors of production viz. capital, fixed and variable costs, wage structure, types of employment, quality and quantity of goods associated with the production of cloth in this small industry. These basic economic variables, particularly relating to production and marketing aspects of the handloom industry vary with different organizational structures and administrative functions.

CHAPTER - IV

DATA ANALYSIS ON GROWTH AND PROSPECTS OF HANDLOOM INDUSTRY

The data collected from Ministry, Federation, Boards, Reserve Bank of India, Regional Office, Annual Reports, Census of Handlooms, Khadi and Village Industries Commission, Export Promotion Council, Textile Committee etc. are analysed in this chapter. The present chapter has been categorised into two, viz., Development of handloom sector in pre-liberalisation period and Development of handloom sector in liberalisation period. The analysis of the development of handloom sector includes Production and Consumption of Cotton, Silk, Wool, Cotton Yarn in the handloom sector, Production and Consumption of cloth, Handloom and weaving labour, Prices, Export, etc.

Development of Handloom Sector during Pre-Liberalisation Period :

2. The pre-liberalisation period denotes the period since independence (1947) to the period before liberalisation (1990) in India. Evolution of textile policy since independence is quite interesting. The policy was framed and modified with changing times as can be seen from the following analysis.

3. After Independence, Government resorted to planning with an emphasis on import substitution and self reliance. The same policy was extended to the textile field. The emphasis throughout this period was on fulfilment of the domestic demand with exports being considered as a marginal outlet for surpluses. Employment had been a major concern of the government and strong exit barriers were created even for unviable activities. This led to high cost operation and loss of competitiveness in majority of industries. When synthetic fibres came on the scene, they were considered to be rich mens' fibres. This bias against synthetics had its root in the fact that cotton had been grown indigenously whereas synthetics had to be imported and there was an apprehension that synthetics would disrupt the cotton economy in many states.

4. The policy bias against cellulosics and synthetic fibres arose from the view, 'cotton for masses and synthetics for the classes' as well as a concern for cotton producers. Cellulosics have been put in the category of synthetics and along with Man-made fibres have always been subject

to higher rates of indirect taxation vis-a-vis similar cotton based products. Industrial licensing policy licensed relatively small plants for production of specified outputs with little inter-fibre flexibility and domestic costs of manufactured synthetic fibres and polyester filament yarn were high on account of uneconomic plant size in an industry where scale economies were very important. Upto the textile policy of 1985, a freeze on looms was imposed on the composite mills with a view to protecting and encouraging the decentralised sector. Restrictions were also -imposed on installation of automatic looms purely to protect employment.

5. The textile industry was divided by the Government into five categories of textile production. No one was allowed to move from one to another.

   (i) Cotton, including cotton yarn, hosiery and rope

   (ii) Jute, including jute, twine & rope

   (iii) Wool, including wool tops, woollen yarn, hosiery and carpets

   (iv) Silk, including silk yarn and hosiery

   (v) Synthetic, artificial (man-made) fibres including yarn and hosiery of such fibres.

6. The Indian industry had been able to export yarn in substantial quantities in earlier years, but government with the objective of ensuring adequate yarn for handlooms put quota restrictions on the export of yarn. Until 1985, the inherent advantages of power looms were further reinforced by regulatory and fiscal favours. Excise duties were lower for powerloom cloth processed by independent power processors. For the handlooms sector, there was no excise duty for the yarn at fabric stage. Instead, there was a subsidy.

7. In June 1985, the Government announced the Textile Policy based on the recommendations of the Expert Committee. According to an analysis of various difficulties faced by the industry, the crisis of textile industry was neither cyclical nor temporary but suggested deeper structural weaknesses. The government reviewed the textile policy and after careful consideration, formulated its new policy for the restructuring of the textile industry. This policy makes a major departure from earlier policies in that it views textile industry in terms of the stages of manufacturing processes and allows full fibre flexibility to India with longer term perspective.

8. Textile policy, 1985 sets out a number of objectives. The multiplicity of objectives had inhibited the achievements of the main task of the

textile industry that is to increase the production of cloth of acceptable quality at reasonable prices to meet the clothing requirements of growing population. The main elements of this policy are:

- ★ Dismantling the sectoral approach to the industry relating a special treatment for nonpower technology.
- ★ Adopting a multifibre orientation and fibre flexibility;
- ★ Providing adequate raw material at reasonable and stable prices;
- ★ Reducing levels of duties on synthetic raw materials;
- ★ Removing entry and exit barriers;
- ★ Emphasising modernisation and technology and machinery imports at international prices; and
- ★ Making Indian textiles more competitive in the world market.

9. This policy removed the constraints and restrictive policies of the earlier years. It brought into sharper focus the objectives of the policy with respect to the consumer, labour, employment, exports and so on in the comprehensive framework, which laid greater emphasis on cost efficiency and free play of market forces with dismantling of the restrictive policies. In terms of structural changes this policy tried to redress the balance of power between suppliers of inputs and the industry. Progressive reduction in duty of fibres was expected to stimulate demand and the removal of exit barrier, although conditional, meant a new equation between labour and the industry.

10. The policy removed the entry barrier for all segments of the industry, i.e., the organised spinning, the organised composite sector, the decentralised powerloom sector and the independent process houses. This coupled with the removal of the barriers through an endorsement of closure of the uneconomic activity meant that production would be carried on in the most cost efficient segment. The Textile Policy of 1985 adopted a distinct Multi-fibre approach. To quote Statement of Textile Policy, June 1985:

"The Multi-fibre approach implicit in providing fuller flexibility would be guided by the following considerations:

- ★ Full fibre flexibility as between cotton and man-made fibres/ yarn would be provided to the textile industry. Greater fibre flexibility in the use of wool shall be provided in a phased manner to units licensed for cotton and man-made textiles; woollen units shall be given full fibre flexibility;

- ★ Adequate availability of man-made fibres/yarn at reasonable prices shall be ensured by increased domestic production supplemented as necessary by imports;
- ★ Creation of capacity by new units and expansion of capacity by existing units for production of synthetic fibres/yarn would be so determined as to realise economies of scale in order to reduce costs of production;
- ★ Fiscal levies on man-made fibres/yarn and on the intermediates used as inputs for the production of such-fibres/yarn, shall be progressively reduced in such a manner as to facilitate absorption of increased domestic production so that the benefit flows to the consumers in the form of lower prices of synthetic and blended fabrics; and
- ★ The export window shall be kept open for man-made fibres/yarn.

11. The policy talks about providing fuller fibre flexibility to the textile industry quite emphatically. An important aspect of this flexibility involves the progressive reduction of fiscal levies on man-made fibres and yarns and also on intermediates used as inputs for their production. This step was taken to facilitate the absorption of increased domestic production so that the benefit flows to the consumer in the form of lower prices of synthetic and blended fabrics. Government set up in May 1988 a Committee headed by Shri Abid Hussain to assess the impact of policy on different sectors of textile industry. The Committee concluded that the policies did not address themselves adequately to the institutional, financial and other aspects required to achieve the objectives they had set for themselves. The Committee made far-reaching recommendations in respect of raw materials (Cotton and Synthetic fibre/Yarn), the spinning sector, the weaving sector (handloom, powerloom and mills), exports, fiscal levies and modernisation. The recommendations put by the Abid Hussain Committee for cotton are as follows;

12. The policy on cotton should be guided by the following considerations:

(i) Stability in the prices of cotton is of paramount importance to the industry.

(ii) Over 80 per cent of textile exports are cotton based due to our comparative advantage and strength in cotton. The price policy for cotton must be such that we retain our comparative advantages.

(iii) Cotton growers must receive remunerative prices. The Government must give a full commitment to buying all the available cotton at least at the minimum support price.

(iv) India must be regarded as a stable supplier in international markets.

Cotton

13. Cotton has played a dominant role in the growth of handloom industry in the country. Cotton is still the predominant fibre used in the handloom sector. The area, production, consumption, import and export of cotton in India during the period from 1980-81 to 1989-90 is given in Table-3.

TABLE - 3

AREA, PRODUCTION, CONSUMPTION, IMPORT AND EXPORT OF COTTON

(Lakh bales of 170 Kg. each)

Cotton Years (Sept./Aug.)	Area (Lakh Hectares)	Production (Lakh Bales) (As per DCD)	(As Per CAB)	Cotton Consumtion by Mills	Import	Export
1980-81	78.23	70.10	78.00	76.78	–	6.97
1981-82	80.57	78.84	84.00	71.23	0.50	4.00
1982-83	78.71	75.34	77.17	75.61	NIL	6.65
1983-84	77.21	63.86	75.16	84.85	NIL	3.53
1984-85	73.82	85.06	101.50	91.50	0.50	1.79
1985-86	75.32	87.27	107.00	91.67	NIL	4.50
1986-87	69.48	69.05	95.00	95.20	NIL	13.67
1987-88	64.59	64.32	90.00	94.91	3.00	0.44
1988-89	72.97	87.44	106.00	96.66	2.25	0.77
1989-90	76.88	114.22	135.75	102.36	NIL	13.71

Note : 1. DCD - Directorate of Cotton Development, (Ministry of Agriculture)

2. CAB - Cotton Advisory Board

14. Cotton textiles account for around five percent of the total value of production in the organised manufacturing sector. It was the single largest industry during the early eighties accounting for nearly 12 percent industrial production. However, the industry grew only by 2.4 percent per annum during the eighties. As on November 1996, there were 1581 textile mills in the organised sector of which 275 were composite mills. During 1980-81, the country had 415 spinning mills and 278 composite mills. The total spinning capacity of the 1581 mills was 31.82 million spindles in November 1996 as against 21.23 million in 1981. Over one third of the spindles were in the composite mills.

15. Of the 1581 mills, 188 are in the public sector and 146 are in the cooperative sector. The private sector accounts for the bulk of the industry with 1247 mills. Loomage in the organised sector, has however, declined from 2.07 lakh in 1981 to 1.32 lakh in 1996 losing ground to powerlooms and handlooms in the decentralised sector. The production data from the table-4 of cotton for the last 10 years show that cotton production rose from about 78 lakh bales in 1980-81 to 136 lakh bales in 1989-90. However cotton production declined to 90 lakh bales in 1987-88 due to climatic and other factors.

16. Though India has the largest cotton acreage in the world (about a million hectares constituting about 25 percent), due to very poor yield per hectare (about 320 Kg.), India ranks third in the world, in terms of cotton production accounting for about 5 percent of the world production. Lower yield per hectare and fluctuations in the production of cotton from year to year have been largely due to the fact that almost two-thirds of the acreage under cotton remains unirrigated and depends on the vagaries of weather. The average yield varied between 215 kgs. to 320 kgs. per hectare in almost two decades.

17. Table - 4 reveals that the trend in consumption of cotton by textile mills largely depends on the production trend. So far, the import of cotton has been negligible as compared to the total consumption in a year. The export of cotton varies depending on the size of the cotton crop. The mill consumption of cotton has increased from 76.78 lakh bales (of 170kg. each) during 1980-81 to 102.36 lakh bales (of 170 kg. each) during 1989-90. This corresponds with the increase in cotton production from 78 lakh bales in 1980-81 to 135.75 lakh bales in 1989-90, due to the expansion in the consuming industry.

Spun Yarn :

18. The primary product of the textile industry is spun yarn which is almost entirely manufactured by the organised sector. It is also the raw materials for the composite/weaving mills and for the handloom, powerloom, hosiery sectors. Thus, an adequate availability of yarn determines the prospect of the textile mills and the handlooms and powerloom weavers. The production of spun yarn has consistently been increasing, due to an increase in the spinning capactiy. There are three types of spun yarn, viz., cotton yarn, blended yarn and 100% non-cotton yarn. The production details are given in Table - 4.

TABLE - 4

PRODUCTION OF SPUN YARN

(Million Kg.)

Years	Cotton	Blended/Mixed	100% non-Cotton	Total
1980-81	1067	144	87	1298
1981-82	989	167	93	1249
1982-83	966	129	84	1179
1983-84	1122	134	75	1331
1984-85	1183	129	70	1382
1985-86	1253	129	72	1454
1986-87	1302	144	80	1526
1987-88	1321	152	82	1555
1988-89	1310	185	92	1587
1989-90	1372	173	107	1652

Source : Office of the Textile Commission, Mumbai, 1997.

19. Table 4 reveals that the dominant share in the spun yarn production is that of cotton yarn which accounted for about 82 percent to 86 percent of the total spun yarn in the beginning of the 1980's to the middle of 1980s. The trend in the production of cotton yarn in the past had fluctuated due to a shortafall of cotton crop.

TABLE - 5

PRODUCTION OF COTTON YARN (COUNT GROUP-WISE)

(Million Kg.)

Years	1-10s	11-20s	21-30s	31-40s	41-60s	61-80s	81s & above	Total
1980-81	118	297	289	244	67	34	18	1067
1981-82	107	257	257	246	66	38	18	989
1982-83	113	247	234	245	72	40	15	966
1983-84	117	290	256	299	91	48	21	1122
1984-85	126	299	256	306	115	58	23	1183
1985-86	134	317	271	324	121	61	25	1253
1986-87	139	329	281	337	126	64	26	1302
1987-88	141	334	285	342	128	65	26	1321
1988-89	144	277	248	419	133	55	34	1310
1989-90	160	313	247	436	122	61	33	1372

Source : Office of the Textile Commission, Mumbai, 1997.

20. The details of deliveries of spun yarn during the post independence period are presented in Table - 6.

TABLE - 6

DELIVERIES OF SPUN YARN

(Million Kg.)

Years	Hanks	Cones	Beams & Pirns	Others	Total
1980-81	330	359	26	10	725
1981-82	326	393	25	12	756
1982-83	331	433	21	13	798
1983-84	341	474	26	16	857
1984-85	357	489	28	17	891
1985-86	377	515	29	18	939
1986-87	394	540	31	18	983
1987-88	401	550	31	20	1002
1988-89	354	749	29	32	1164
1989-90	348	803	26	37	1214

Note : 1. Cones include Hosiery Cones.
2. Above data from 1980-81 to 1989-90 excludes the deliveries of cotton yarn by Small Scale Spinning Units.
3. Sewing thread not included.

21. Of the total 1214 million kg spun yarn, 348 million kg (28.7 percent) and 803 million kg. (66.1 percent) is delivered in hanks and cones respectively. A meagre percentage (5.2 percent) of the total spun yarn is delivered in the Beams and pirns in the year 1989-90.

Silk and Wool :

22. The silk and woollen sectors have important places in the textile industry because of their natural features. The data about the mulberry silk production in India is exhibited in Table 7.

TABLE - 7

MULBERRY SILK PRODUCTION IN INDIA

YEARS	Area Under Mulberry (000 Hectare)	PRODUCTION OF		
		Reeling Cocoons (000 Tonne)	Raw Silk (Tonne)	Silk Waste (Tonne)
1980-81	170	58	4,593	1,376
1981-82	180	55	4,801	1,523
1982-83	197	67	5,214	1,825
1983-84	207	71	5,681	2,017
1984-85	215	75	6,895	2,464
1985-86	218	77	7,029	2,504
1986-87	230	82	7,905	2,837
1987-88	242	87	8,455	3,086
1988-89	268	96	9,683	3,399
1989-90	294	110	10,805*	3,921

Source : Central Silk Board.

* : Revised.

23. The area under mulberry production has increased from 170 thousand hectare in 1980-81 to 294 thousand hectare in 1989-90.Similarly the reeling cocoons and raw silk also increased year by year. During the ten year period from 1980-81 to 1989-90, there was nearly two fold increase in the production of raw silk which is mainly used in the handloom sector. With the increase in the production of raw silk, the related raw materials like Tassar, Eri and Muga have also been increased during this period (before liberalisation). The production of spun silk yarn and Noil yarn had also increased during the same period. These figures are exhibited in Table -8 Table -9.

TABLE - 8
PRODUCTION OF RAW SILK IN INDIA

(tonnes)

Years	Mulberry	Tassar	Eri	Muga	Total
1980-81	4,593	265	135	48	5,041
1981-82	4,801	257	147	44	5,249
1982-83	5,214	284	213	37	5,748
1983-84	5,681	418	270	54	6,423
1984-85	6,895	444	279	55	7,673
1985-86	7,029	464	352	52	7,897
1986-87	7,905	548	392	55	8,900
1987-88	8,455	463	522	58	9,498
1988-89	9,683	358	565	45	10,651
1989-90	10,805*	465	589	57	11,916

Source : Central Silk Board.

: Revised.

TABLE - 9
PRODUCTION OF SPUN SILK YARN AND NOIL YARN

(tonnes)

Years	Spun Silk Yarn	Noil Yarn
1980-81	73	93
1981-82	89	98
1982-83	92	100
1983-84	82	59
1984-85	91	80
1985-86	162	185
1986-87	168	157
1987-88	183	128
1988-89	185	157
1989-90	170	127

Source : Central Silk Board.

24. Table - 9 reveals that the production of spun silk yarn raised from 73 tonnes in 1980-81 to 170 tonnes in 1989-90. Similarly the production of noil yarn increased from 93 tonnes in 1980-81 to 127 tonnes in 1989-90 in India, before liberalisation. During the same period, the production of silk fabrics has increased from 800.43 lakh sq. metres in 1980-81 to 1998.51 lakh sq. metres in 1989-90. Due to the extension of area under mulberry production in India, before liberalisation, the production of raw silk, silk yarn and silk fabrics have increased significantly.

25. The development of installed capacity in the woollen industry is given in Table 10. From the Table 10 it is clear that the installed capacity in the woollen industry in powerloom sector was increased from 4,769 in 1981 to 7,047 in 1990. But the growth rate was not steady, compared with the powerloom in the other sectors. The installed capacity in worsted spindles was 2.46 lakhs in 1981 and increased to 4.67 lakhs in 1990. Similarly the non-worsted spindles installed capacity in the woollen industry was increased to 1.77 lakh in 1981 to 2.91 lakhs in 1990.

TABLE - 10

INSTALLED CAPACITY IN THE WOOLLEN INDUSTRY

Years	Worsted Spindles (lakh)	Non-worsted Spindles (lakh)	Power looms (Nos.)
31.12.1981	2.46	1.77	4,769
31.12.1982	2.47	1.77	4,769
31.12.1983	3.07	1.99	3,160
31.12.1984	3.12	2.03	N.A
31.12.1985	3.20	2.03	5,220
31.12.1986	3.26	2.09	5,800
31.12.1987	3.49	2.25	5,800
31.03.1988	4.29	2.63	7,040
31.03.1989	4.54	2.81	7,040
31.03.1990	4.67	2.91	7,047

Cloth :

26. The NCAER (1989) report observes that in no other country a household allocates more than 10 percent of consumption expenditure on clothing. During the 1980's households in USA, Japan, France, U.K, Canada typically spent around 6 to 7 percent of consumption expenditure on clothing and footwear. In South Korea, Phillippines and Sri Lanka, households spent about 6 to 7 percent of the final consumption expenditure on clothing and footwear.

TABLE - 11

SHARE OF CLOTHING AND FOOTWEAR EXPENDITURE IN TOTAL PRIVATE EXPENDITURE

Country	Share (at current Prices) (%)
United Kingdom	6.58
USA	6.47
Sri Lanka	7.32
Philippines	3.69
Canada	5.19
France	6.18
Japan	6.00
India	10.00
South Korea	4.19

Source : NCAER, 1989.

27. One of the basic necessities of life, viz, cloth is produced by the textile industry. All the three sectors of the industry, ie., mills, handlooms and powerlooms (including hosiery) produce cloth. Table - 12 reveals that cloth production in the organised mill sector declined during the ten year period. The fall in the mill sector was offset by growth in the decentralised sector. Weaving in the powerloom sector increased during the same period. But the cloth production by handloom sector was increased from 3109 million sq. metre in 1980-81 to 3924 million square metre in 1989-90. The share of each sector in cloth production was 36.43 percent by mill sector, 24.98 percent by Handloom sector and 38.59 percent in powerloom sector in the year 1980-81. But the share was increased to 68 percent in powerloom sector in 1989-90. The share of cloth production was decreased to 12.95 percent in mill

sector and 19.05 percent in handloom sector. It is inferred that the handloom sector is highly dependent upon the organised mill sector for procurement of yarn. Spinning mills in the organised sector are required to supply 50 percent of their yarn despatches to the decentralised sector in hank form. The details about the per capita availability of cloth during the period from 1980-81 to 1989-90 is given in Table - 13.

TABLE - 12

PRODUCTION OF CLOTH BY MILLS, HANDLOOMS AND POWERLOOMS

(Million Sq. Mtr.)

Years	Mill	Handloom	Powerloom	Total
1980-81	4533	3109	4802	12444
1981-82	3987	3046	5275	12308
1982-83	3006	3234	5445	11685
1983-84	3654	3429	6026	13109
1984-85	3593	3639	6316	13548
1985-86	3544	4135	9534	17213
1986-87	3483	4305	10149	17937
1987-88	3178	4370	10429	17977
1988-89	2902	3993	13123	20018
1989-90	2667	3924	14007	20598

Source : Ministry of Textile, 1991.

TABLE - 13

PER CAPITA AVAILABILITY OF CLOTH

(In Sq. Mtr.)

Years	Cotton	Blended/ Mixed Fabrics	100% Non-Cotton Fabrics	Total
1980-81	12.84	2.18	2.28	17.30
1981-82	12.17	2.59	2.37	17.13
1982-83	11.81	2.12	2.15	16.08
1983-84	12.60	2.02	2.71	17.33
1984-85	12.57	1.94	2.68	17.19
1985-86	15.37	2.19	3.99	21.55
1986-87	15.21	2.33	4.30	21.84
1987-88	14.04	2.22	4.70	20.96
1988-89	14.99	2.80	5.21	23.00
1989-90	14.63	2.41	5.61	22.65

Source : Ministry of Textiles, 1991.

28. From the table -13, it is clear that following the increase in the overall cloth production, the per capita availability of cloth in India has also increased, despite the growth in population and exports of apparels and fabrics. The availability of cloth which was 17.30 sq. metre during 1980-81, rose to 22.65 sq. metre during 1989-90.

TABLE - 14

PER CAPITA CONSUMPTION OF CLOTH

(In sq. Mtr.)

Years	Cotton	Non-Cotton	Blended/Mixed	Total
1980	10.56	1.21	1.66	13.43
1981	9.57	1.01	1.73	12.31
1982	10.04	1.22	2.26	13.52
1983	10.12	1.44	2.14	13.70
1984	9.93	1.84	2.06	13.83
1985	10.79	2.22	2.44	15.45
1986	10.71	2.36	2.72	15.79
1987	10.75	2.40	3.20	16.35
1988	9.17	2.26	3.44	14.87
1989	8.40	2.82	3.85	15.07
1990	7.44	2.76	3.83	14.03

Source : Textiles Committee.

29. The per capita availability has increased more significantly in the case of 100 percent non-cotton fabrics during the last decade, ie., from 2.28 sq. metres in 1980-81 to 5.61 sq. metres in 1989-90. However, the per capita availability of cotton cloth grew from 12.84 sq metres to 14.63 sq. metres during the same period. But the annual increase in this case works out to a nominal percentage. The main findings of this analysis is that despite the increase in per capita availability of cotton cloth during the last decade, the per capita consumption of cotton cloth has decreased from 10.56 square metres in 1980 to 7.44 sq metres in 1990. But the per capita consumption of non-cotton and Blended/Mixed cloth had risen proportionately during the same period.

Fibre:

30. The manmade fibre and yarn industry comprises fibres and filaments of both cellulosic and non-cellulosic origin, generally called rayon and synthetic fibres/yarn respectively. While rayon is a regenerated fibre wholly or mainly of cellulose (wood based) and includes Viscose, Acetate and Cuprammonium, synthetic fibres or filaments are produced from

polymers of chemical elements or compounds and include acrylic, nylon and polyster. The man made fibre and yarn industry plays a very important role in the domestic textile industry as over 30 percent of the raw material consumed is manufactured from the man-made fibre and yarn industry.

31. The full fibre flexibility enunciated in the June, 1985 Textile Policy envisages increase in the indigeneous availability of man-made fibres and yarn by creation of additional capacity as also by necessary imports. The details of consumption of major fibres/yarn by the textile industry in India is presented in Table 15.

TABLE - 15

CONSUMPTION OF MAJOR FIBRES/YARN BY THE TEXTILE INDUSTRY IN INDIA

(Thousand Tonnes)

Years	Cotton	Man-made Fibre		Man-made Filament		Total (including Other Fibres)
		Cellulosic	Synthetic	Cellulosic	Synthetic	
1980-81	1313 (82.68)	145 (9.13)	39 (2.46)	47 (2.96)	44 (2.77)	1588
1981-82	1229	175	48	45	62	1559
1982-83	1195	121	56	40	70	1482
1983-84	1418	111	62	43	93	1727
1984-85	1475	119	73	35	98	1808
1985-86	1559	105	85	43	93	1911
1986-87	1624	97	110	45	128	2013
1987-88	1649	119	108	43	149	2142
1988-89	1622	129	123	43	189	2186
1989-90	1689 (73.21)	148 (6.42)	133 (5.77)	46 (1.99)	204 (8.84)	2307

Source : Textile Committee.

Note : Figures within parenthesis denote percentages.

32. Table 15 reveals that the consumption of cotton fibre has increased from 1313 thousand tonnes in 1980-81 to 1689 thousand tonnes in 1989-90. The consumption of man made filament synthetic fibre had dominated during the ten year period ie., 2.77 percent share in total fibre consumption in 1980-81 rose to 8.84 percent in 1989-90. The cotton fibres dominated to the level of 73.21 percent share in the total consumption of fibres in 1989-90. The analysis of production of silk

fabrics in India is given Table - 16. The table reveals that the production level of silk fabrics had increased from 800.43 lakhs sq. metres in 1980-81 to 1998.51 lakh sq. metres in 1989-90. The value of the production of silk fabrics had also increased from 27,765 lakhs in 1980-81 to 1,87,726 lakhs in 1989-90.

TABLE - 16

ESTIMATED PRODUCTION AND VALUE OF SILK FABRICS IN INDIA

(Unit: lakh)

YEARS	SILK FABRICS	
	PRODUCTION (SQ. MTR.)	VALUE (RS.)
1980-81	800.43	27765
1981-82	877.14	35463
1982-83	1018.83	48789
1983-84	1180.20	63381
1984-85	1308.84	81918
1985-86	1440.15	103615
1986-87	1584.45	112123
1987-88	1737.12	110605
1988-89	1820.73	139255
1989-90	1998.51	187726

Source : Central Silk Board

Development of Handloom Sector during Liberalisation period :

33 . In pursuance of the liberalised industrial policy of the Government, Textiles (Development and Regulation) Order, 1992, has been issued replacing Textiles (Control) Order 1986. In the case of SSI units including powerloom as well as non-SSI units, now there is no restriction on establishment or expansion of capacity of these units adhering to prevalent central or state laws relating to locational and environmental guidelines. However, in case of non-SSI units, to be established within 25 kms. of the periphery of a metropolitan city having a population of more than 10 lakh as per census of 1991, a license is required. However, this restriction is not applicable in case of units to be set up in areas designated as "Industrial Areas". The restriction on wool and silk powerlooms have also been removed in this order.

34. As per the recommendations of the 1985 Textile Policy, the Government had already reduced excise duties on synthetic fibres and yarn considerably. However, cellulosics which have been akin to cotton and can act as cotton for all practical purposes, have been discriminated and are not treated on par with cotton. Although the gap has narrowed, the tax policies still discriminate against MMF vis-a-vis cottons; and this discrimination at the fibre stage continues into the yarn and fabric stages: e.g., while the excise duty on cotton yarn in 1997-98 was 5.75 percent, it was 20.7 percent on blended yarn and 34.5 percent on PFY. In 1998-99 Budget, this is same as earlier year. The policy bias against cotton and Viscose Staple Fibre in the shape of different tax structure for cotton and cellulosics needs to be removed thereby increasing the domestic base of cellulosic fibres and providing the factories an additional source of demand.

35. On account of the mix of the policies, India's consumption of textiles and garments are still heavily weighted in favour of cotton based products. World consumption is predominantly in the synthetic blends as can be seen from the Table - 17. Synthetic consumption as a proportion of total consumption of different fibres in 1995 was roughly 18.5 percent in Korea, 53.9 percent in Germany, 31.05 percent in Spain, 65.7 percent in UK and 66.4 percent in USA. In India, production pattern follows consumption pattern quite closely. Although domestic production and consumption of MMF has been increasing, the Policy bias still prevails and needs to be redressed. The explanation of Policy bias is given below:

TABLE - 17

WORLD FIBRE CONSUMPTION IN IMPORTANT COUNTRIES

(In Thousand Tonnes)

Name of the Country	Fibre Consumption							
	Cotton		MMF		Others		All Fibres	
	1994	1995	1994	1995	1994	1995	1994	1995
France	115978	106789	53745	56065	8200	1800	219000	184200
Germany	130000	112300	81000	70100	Nil	Nil	115000	130000
India	1942900	2101280	450850	538450	92165	100980	2485915	2470710
Japan	290214	263662	292786	269089	134216	105963	717216	638704
Korea Rep.	348222	327046	87969	80733	26736	28384	462927	436163
Malaysia	41220	39820	31175	23880	1410	14500	86945	78200
Spain	141472	130830	64876	60881	5750	4319	212098	196030
Switzerland	42870	35132	2804	2565	55	20	45729	37717
UK	19100	21600	214500	204400	88700	85300	322300	311300
USA	2372600	2351200	4868100	4785600	69500	66600	7310200	7203400

Source : Ministry of Textiles, 1997.

36. Controls on export of cotton and cotton yarn mean that prices of raw cotton are typically below the prices prevailing in the international market; this means that the consumers of cotton enjoy implicit subsidy. Import duties on synthetic yarn and cellulosics are still high and the domestic duties such as excise are lower for cotton yarn and fabric.

37. The analysis carried out by Sanjay Kathuria (1998) on competitiveness of different textile fibres reveals that the country enjoys the natural advantage in exporting cotton (arising out of India's competitiveness in cotton production). Promotion of the handloom sector has been a central theme of the Textile policy. There is reservation of 22 textile articles for exclusive production in the handloom sector. Similarly there is hank yarn obligation which stipulates that spinning mills should supply not less than 50 percent of the hank yarn marketed by them in the form of the hanks for use by the handloom sector. All these policy restrictions impair the efficiency of the industry and result in an upward shift in the supply curve. This in turn results in a lower measured Export Tax Equivalent (ETE) than would have prevailed in a less constraining policy environment.

38. As noted by Pursell and Sharma (1995), India has begun the process of policy reform that will be required to take advantage of the new opportunities unfolding before it. The agreements by India and Pakistan to open up imports of textile products is particularly important both for its direct impact on their economies, and because of the negotiating leverage they provide, should the US or the EU contemplate negotiations on extending the MFA quotas. The availability of imported textiles and apparel should help to make the domestic market for these goods more competitive and in maintaining international quality standards.

39. However, much more needs to be done to take full advantage of the new market opportunities. When the textile industry is likely to more than double in just over ten years and the apparel industry to more than triple in size, it would seem desirable to focus policies on restructuring the development of new industries rather than on preserving the historical structure of an industry where change is inevitable. The hallmark of the early phase of Rajiv Gandhi's tenure was a decisive attempt as a shift from the framework of state controlled import substitution to that of a liberalised market economy and export oriented growth. The economic discourse centred on the concepts of modernisation, efficiency, productivity and market governed competition which distinguished it from the earlier ideological percepts of employment generation equality, social justice and socialism.

40. In the context of this new liberalised dispensation, one has to locate concerned policy initiatives like New Textile Policy (NTP), New Education Policy, New Exim Policy, etc. It would be pertinent to note that while all these policies were in tune with the liberalisation refrain, the modus operandi in their introduction and enactment point to real or perceived responses to the early liberalisation. The NTP introduced by Rajiv Gandhi's government in 1985 marked a decisive departure from the earlier policies not only in terms of priorities and emphasis, but even in the very way of understanding the textile industry. For the first time in the post independence period, emphasis has been placed on productivity in sharp contrast to the hitherto thrust on employment. The measures intended under NTP to preserve handlooms are:

    a) Modernisation of looms to improve handloom productivity and quality;

    b) Necessary measures to encourage and increase spinning in khadi sector, given its large employment potential;

    c) Ensuring the availability of yarn and other raw materials at reasonable prices;

d) Encouragement for the production of mixed and blended fabrics on handlooms by making manmade fibre adequately available at reasonable prices by increasing domestic production supplemented by imports.

e) Providing market facilities, and

f) Introduction of Contributory Thrift Fund and Workshed-cum-Housing Scheme.

41. The fairly well accepted way of viewing the textile industry and its problems for policy making and scholarly analysis has been in terms of sectoral differentiation in three sectors being handlooms, powerlooms and mills. Since yarn is the principal input for textile production further differentiation in each sector on the basis of fibre use (i.e. cotton, silk, wool and synthetic fibres) is also seen as a useful method of understanding the textile industry.

42. Handloom (Reservation of Articles for Production)Act, 1985 (22 of 1985) reserving 22 varieties of articles for exclusive production in the handloom sector is a major concrete initiative in the direction of protecting handlooms from the power loom and mill sector. In spite of the promise made in the textile policy that this act "Shall be strictly enforced and the machinery for doing so shall be suitably strengthened", the track record of the last decade points to the contrary. It would be necessary to note that the contribution of the mill sector to total textile production had steadily declined over the years, while the share of powerlooms has recorded a phenomenal increase.

Cotton during liberalisation period :

43. Cotton is the main fibre used in the textile sector. The data on area cultivation, cotton production, cotton consumption by mills for producing cotton yarn and import and export level of cotton are exhibited in Table - 18. During the post-liberalisation period, the area under cultivation of cotton was increased from 73.95 lakh hectares in 1990-91 to 86.46 lakh hectares in 1999-2000. Similarly the production of cotton had also increased from 117.0 lakh bales in 1990-91 to 156.0 lakh bales in 1999-2000, as per the Cotton Advisory Board. Due to climatic and other factors, the cotton production declined to 121.5 lakh bales in 1993-94. The crop estimate for 1999-2000 has been placed at 156.0 lakh bales (revised cotton year, October-September), i.e. 5.45 percent less than the last years level of 165 lakh bales. The main reason for the fall in cotton production is sharp fall in production

in the state of Gujarat. This fall in production can be attributed to the delayed rainfall in the state. (Table - 19 & 20)

TABLE - 18

AREA, PRODUCTION, CONSUMPTION, IMPORT AND EXPORT OF COTTON

(Lakh bales of 170 Kg. each)

Cotton Years (Sept./Aug.)	Area (Lakh Hectares)	Production (Lakh Bales) (As per DCD)	As Per Mills CAB)	Cotton Consumption by Mills	Import	Export
1990-91	73.95	97.59	117.00	107.57	-	11.90
1991-92	76.01	102.76	119.00	103.09	3.00	0.77
1992-93	75.41	120.67	138.00	112.81	1.15	13.76
1993-94	74.40	118.55	121.50	114.00	3.00	3.90
1994-95	78.61	117.56	138.50	119.37	5.39	1.08
1995-96	90.63	-	170.20	138.29	0.50	8.00
1996-97*	91.22	145.26	177.90	150.41	0.30	16.82
1997-98*	89.04	113.88	158.00	143.24	4.13	3.50
1998-99*	92.87	121.77	165.00	145.53	7.87	1.01
1999-2000*	86.46	104.49	156.00	151.75	19.00	1.00

Note : 1. DCD - Directorate of Cotton Development, (Ministry of Agriculture)

2. CAB - Cotton Advisory Board

: CAB as on 18.07.2000.

TABLE - 19
AREA OF COTTON CULTIVATION IN INDIA

(Lakh hectares)

STATES	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
Andhra Pradesh	6.57	6.48	7.33	6.55	7.28	10.57	10.07	8.98	12.78	10.15
Gujarat	9.21	12.16	12.46	9.21	13.28	14.10	15.24	15.19	16.07	15.16
Haryana	4.89	4.90	5.43	4.90	5.52	6.46	6.49	6.38	5.82	5.10
Karnataka	5.96	5.38	5.72	5.96	5.96	6.74	6.68	5.18	6.08	6.00
Madhya Pradesh	5.87	5.92	4.80	6.08	5.15	5.37	5.27	5.17	6.08	5.14
Maharashtra	27.30	26.73	24.80	27.30	27.60	30.65	30.80	31.19	31.99	32.54
Punjab	7.01	6.80	6.97	7.01	6.06	7.50	7.42	7.27	5.62	7.49
Rajasthan	4.55	4.54	4.21	4.55	4.61	6.06	6.54	6.45	6.45	4.75
Tamil Nadu	2.17	2.45	2.71	2.39	2.71	2.65	2.60	2.47	2.43	2.25
Others	0.42	0.65	0.48	0.45	0.43	0.53	0.50	0.56	0.62	0.72
Total	**73.95**	**76.01**	**75.41**	**74.40**	**78.63**	**90.63**	**91.66**	**89.04**	**92.87**	**86.46**

The CAB has already estimated arrivals of 1.50 lakh bales in Sept. 96. Therefore the crop estimate for 13 months period (Sept. 95 to Sept.96) is 162.70 + 1.50 = 164.20 lakh bales.

Note : *Source* - Directorate of Economics & Statistics, Ministry of Agriculture & Cotton Advisory Board.

TABLE - 20
PRODUCTION OF COTTON CULTIVATION IN INDIA

(Lakh bales of 170 Kg. each)

STATES	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
Andhra Pradesh	18.75	18.82	21.80	23.50	27.80	28.85	26.50	25.50	25.00	22.00
Gujarat	15.00	15.16	22.60	19.00	26.50	32.20	34.25	42.00	47.50	28.50
Haryana	11.50	14.06	14.06	10.00	11.50	11.50	13.50	9.00	7.00	10.50
Karnataka	8.00	8.85	10.70	9.00	9.40	10.45	9.00	7.50	8.75	8.00
Madhya Pradesh	16.00	8.94	9.65	14.50	15.50	14.45	18.75	22.50	18.75	15.50
Maharashtra	15.00	12.48	20.50	14.00	16.00	28.60	33.00	21.50	26.50	36.50
Punjab	17.25	23.71	21.85	14.00	15.00	14.90	16.00	7.25	5.00	8.00
Rajasthan	9.50	10.23	10.84	11.00	10.00	14.50	14.00	11.00	11.50	13.00
Tamil Nadu	5.00	5.75	5.00	5.50	5.80	6.00	5.50	5.00	5.50	5.50
Others	1.00	1.00	1.00	1.00	1.00	1.25	1.00	1.00	1.25	1.50
Total	**117.00**	**119.00**	**138.00**	**121.50**	**138.50**	**162.70**	**171.50**	**152.25**	**156.95**	**149.00**
Cotton, consumed in loose not accounted for State-wise								1.50	5.00	
Grant Total									164.20	176.50

The CAB has already estimated arrivals of 1.50 lakh bales in Sept. 96. Therefore the crop estimate for 13 months period (Sept. 95 to Sept.96) is 162.70 + 1.50 = 164.20 lakh bales.

Note : *Source* - Directorate of Economics & Statistics, Ministry of Agriculture & Cotton Advisory Board.

44. Thus, so far there has been an overall growth in the production of cotton in the country over the years though the growth is not steady and consistent. On the contrary, the production has been fluctuating from year to year. The major cotton producing states are Maharashtra, Gurjarat, Andhra Pradesh, Madhya Pradesh and Rajasthan. The Western region comprising Gujarat, Maharashtra and Madhya Pradesh produced around 52 percent. Since this belt is heavily dependent on the vagaries of monsoon, the fluctuations in acreage, production and productivity vary rather widely. Hence its share in the total cotton production has varied from as low as 44 percent in 1995-96 to as high as 52 percent in 1999-2000.

45. The southern belt comprising Andhra Pradesh, Karnataka & Tamil Nadu together produce about 23 percent of cotton followed by the northern belt comprising of punjab, Haryana and Rajasthan producing about 20 percent of cotton. The balance quantity of cotton is produced by the remaining states put together. The cotton yield was relatively higher in Madhya Pradesh, Rajasthan, Tamil Nadu, Andhra Pradesh and Harayana as compared to the all-India yield. The Madhya Pradesh yield appears to be high due to migration of substantial quantities of cotton from Maharashtra.

46. The trend of yarn production determines the trend in consumption of cotton by textile mills. Till 1997-98, the import of cotton has been negligible as compared to the total consumption in a year but increased substantially during 1999-2000 due to the poor quality and high price of the domestic cotton. During 1999-2000 the import of cotton was 12.5 percent of cotton consumption. However, the export of cotton varies depending on the size of the cotton crop.

47. The mill consumption of cotton has increased from 107.57 lakh bales (of 170 kg. each) during 1990-91 to 151.75 lakh bales (of 170 kg. each) during 1999-2000. This corresponds with the rise in cotton production from 117.0 lakh bales (of 170kg. each) in 1990-91 to 156.0 lakh bales (of 170 kg. each) during 1999-2000. The variety wise consumption of cotton by mills for the last eight years (1992-93 to 1999-2000) and cotton Balance sheet for the last ten years (1990-91 to 1999-2000) are given in Table -21 and Table - 22 respectively.

TABLE - 21
VARIETY-WISE MILL CONSUMPTION OF COTTON

(Lakh bales of 170 kg. each)

COTTON Variety	COTTON YEARS							
	1992-93	1993-94	1994-95	1995-96 (Oct.to Sept.)	1996-97 (Oct.to Sept.)	1997-98 (Oct.to Sept.)	1998-99 (Oct.to Sept.)	1999-2000 (Oct.to June)
Short staple	3.65	4.21	6.45	9.77	11.30	8.20	6.13	5.33
(below 20 mm)	(3.23)	(3.69)	(5.40)	(7.07)	(7.51)	(5.72)	(4.21)	(4.74)
Medium staple	49.75	47.64	43.27	50.71	53.79	45.04	42.19	36.84
(20.50 to 25.50mm)	(44.10)	(41.77)	(36.25)	(36.67)	(35.76)	(31.44)	(28.99)	(32.74)
Medium long staple	18.23	23.15	22.56	26.09	29.62	27.64	25.77	18.61
(26.00 to 27.50mm)	(16.16)	(20.30)	(18.90)	(18.87)	(19.69)	(19.30)	(17.71)	(16.54)
Long staple	30.30	30.29	35.13	41.52	47.63	53.68	58.18	36.35
(28.00 to 33.50mm)	(26.86)	(26.56)	(29.43)	(30.02)	(31.67)	(37.48)	(39.98)	(32.31)
Extra long staple	9.27	7.86	7.06	7.47	7.24	6.07	5.78	3.29
(34.00 & abovemm)	(8.22)	(6.89)	(5.91)	(5.40)	(4.82)	(4.24)	(3.97)	(2.92)
Total Indian Cotton	111.20	113.15	114.47	135.56	149.58	140.63	138.05	100.42
	(98.57)	(99.21)	(95.89)	(98.03)	(99.45)	(98.18)	(94.86)	(89.25)
Foreign Cotton	1.61	0.90	4.90	2.73	0.83	2.61	7.4	12.10
	(1.43)	(0.79)	(4.11)	(1.97)	(0.55)	(1.82)	(5.14)	(10.75)
Grand Total Indian + Foreign Cotton	112.81	114.05	119.37	138.29	150.41	143.24	145.53	112.52
	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
SSI MILLS						6.54	6.24	6.07

Note: Figures in bracket indicate % to the total.

(E) = Extimated on the basis of actual data for 8 months.

TABLE - 22

COTTON BALANCE SHEET FOR THE LAST SEVEN YEARS

(in Lakh Bales of 170 Kg. Each)

	1990-91	1991-92	1992-93	1993-94	1994-95 (Oct. 95-Sep. 96)	1995-96 (Oct.96-Sep.97)	1996-97 (Oct-Sep)	1997-98 (Oct-Sep)	1998-99 (Oct-Sep)	1999-2000 (Oct-Sep)
SUPPLY										
Opening Stock	33.04	22.64	32.78	33.15	26.75	23.52	39.16	30.38	30.00	36.50 ***
Crop	117.00	119.00	138.00	121.50	138.50	164.20	177.90	158.00	165.00	156.00
Import										
(DGCIS)	-	3.00	1.15	3.00	5.89	0.50	0.30	4.13	7.87	19.00
(Value CIF)										
Rs. in crore		(194)	(90)	(306)	(696)	(59.50)				
Total	150.04	144.64	171.93	157.65	171.14	188.22	217.36	192.51	202.87	211.50
DEMAND A) Consumption										
i. Mill	108.00	103.09	112.81	114.00	119.37	138.29	150.41	143.24	145.53	151.75
ii. Non-Mill	7.50	8.00	8.00	8.00	9.50	9.50	11.86	9.23	13.29	11.00
iii.Small Spinners	–	–	4.20	5.00	6.17	6.50	7.89	6.54	6.24	8.75
IV. Sub Total	115.50	111.09	125.01	127.00	135.04	154.29	170.16	159.01	165.36	171.50
DEMAND B) Export										
i. Quota	13.45	1.35	17.855	5.695	1.856	15.90	14.42	7.20	5.00	5.00
ii. Registered	12.315	0.809	15.413	4.024	1.128	13.51	12.60	4.02	-	-
iii. Shipped	11.90	0.77	13.766	3.90	1.08	8.00	16.82	3.50	1.01	1.00
IV Value of III (FOB)	621.00	39.00	725.00	238.23	83.39	961.16	1647.52	-	-	-
(A)IV + (B) III	127.40	11.86	138.776	130.90	136.12	162.29	186.98	162.51	166.37	172.50
BALANCE	22.64	32.78	33.15	26.75	35.02	30.93**	30.38	30.00	36.50	39.00

Note: Govt released 7.20 lakh bales of export quota after CAB meeting in respect of Pvt.
Traders and all federation for the cotton season 1997-98 (Oct. -Sept.).

* : Inclusive of spillover 1995-96 i.e. 4.69 lakh bales.

** : Inclusive of 5.00 lakh bales which is not accounted for in the production figures given in the pressed bales (Ad-hoc) in CAB meeting held on 17-9-97.

*** : The opening stock & closing stock for 1998-99 are based on verified figures. Therefore, the non-mill consumption is taken as the balancing figure. Closing stock of 1998-99 is taken as the opening stock for 1999-2000 hence it is verified figure.

48. It is clear that the variety wise consumption data for 1999-2000 (October to June) show that about 33 percent of the cotton consumption is that of medium staple variety (20.50 mm to 25.50 mm) followed by 32 percent of long staple variety (28.00 mm to 33.50 mm), about 17 percent is of medium long staple variety (26 mm to 27.50 mm). About 4 percent is of short staple variety (below 20mm), about 3 percent is of extra-long staple variety (34.00 mm and above) and foreign cotton consumption contributes about 11 percent.

Cotton Yarn During Liberalisation period :

49. Another method of asseseing the relative position of different sectors in the industry is on the basis of production and delivery of yarn. The production, availability, consumption and stock of cotton yarn, deliveries of spun yarn and deliveries of hank yarn are in Tables 25, 26, 27, 28, 29 respectively.

TABLE - 23

PRODUCTION, AVAILABILITY, CONSUMPTION AND STOCK OF COTTON YARN

(Million Kg.)

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
1. Opening Stock	76	99	97	107	86	126	139	76	90	95
2. Production	1510	1450	1569	1697	1696	1894	2148	2213	2022	2204
3. Exports	90	126	128	179	229	263	461	485	487	555
4. Domestic Availability (1)+(2)-(3)	1496	1423	1538	1625	1553	1757	1826	1804	1625	1744
5. Apparent Consumption										
(i) Handlooms	342 (24.42)	328	377	422	438	504	519	540	473	514 (30.76)
(ii) Powerlooms	753 (53.90)	719	822	903	834	929	982	975	887	928 (55.54)
(iii) Textile Mills & Others uses	302 (21.62)	279	232	214	155	185	249	199	170	229 (13.70)
6. TOTAL	**1397 (100)**	**1326**	**1431**	**1539**	**1427**	**1618**	**1750**	**1714**	**1530**	**1671**
7. CLOSING STOCK (4)-(6)	99	97	107	86	126	139	76	90	95	73

Source: Ministry of Textiles, 2000.

Note : Figures within parenthesis denote percentages.

TABLE - 24

PRODUCTION OF COTTON YARN (COUNT GROUP-WISE)

(Million Kg.)

Years	1-10s	11-20s	21-30s	31-40s	41-60s	61-80s	81s & above	Total
1990-91	197	354	277	456	129	64	33	1510
1991-92	211	342	255	440	113	54	35	1450
1992-93	241	346	284	487	136	44	31	1569
1993-94	278	385	314	494	144	45	37	1697
1994-95	282	389	321	470	145	46	43	1696
1995-96	310	415	391	490	153	95	40	1984
1996-97	479	511	405	515	136	60	42	2148
1997-98	503	508	427	542	144	52	37	2213
1998-99	450	489	396	468	131	49	39	2022
1999-2000	509	504	455	524	131	44	37	2204

Source : Textile Committee, 2000.

Note : From 1992-93 data includes production of spun yarn by S.S.I. Units.

TABLE - 25
PRODUCTION OF 100% NON-COTTON YARN (COUNT GROUP-WISE)

(Million, Kg.)

Fibre Type	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
Viscose	69.91	72.67	70.28	70.11	70.94	76.71	45.54	52.18	46.14	51.34
Polyester	4.46	8.34	10.02	13.37	21.13	29.96	33.33	58.45	72.86	99.09
Acrylic	29.62	37.03	39.40	50.63	60.72	80.29	79.35	71.28	67.66	60.48
Others	3.20	3.43	5.43	6.15	5.47	8.63	3.80	3.64	4.13	9.72
Total	**107.19**	**121.47**	**125.13**	**140.26**	**158.26**	**195.59**	**162.12**	**177.55**	**190.79**	**220.63**

Source: Ministry of Textiles, 2000.

TABLE - 26

AVERAGE COUNT OF SPUN YARN PRODUCTION

(Million kg.)

Years	Cotton Yarn	100% Non Cotton Yarn	Blended Yarn
1989-90	31.97	29.98	40.28
1990-91	31.13	31.05	39.59
1991-92	30.76	31.07	39.85
1992-93	30.43	30.57	39.06
1993-94	30.19	31.39	38.32
1994-95	30.24	31.33	35.65
1995-96	30.65	30.88	34.67
1996-97	27.91	32.30	34.01
1997-98	27.80	32.23	32.82
1998-99	27.84	31.61	32.39
1999-2000	27.46	31.06	31.65

Source : Ministry of Textiles, 2000.

TABLE - 27

DELIVERIES OF SPUN YARN

(Million Kg.)

Years	Hanks	Cones	Beams & Pirns	Others	Total
1990-91	375	918	30	40	1363
1991-92	364	927	24	33	1348
1992-93	415	1037	26	32	1510
1993-94	464	1152	25	56	1697
1994-95	490	1125	17	52	1684
1995-96	571	1261	26	70	1928
1996-97	590	1355	28	80	2053
1997-98	598	1420	26	121	2165
1998-99	529	1346	26	158	2059
1999-2000	574	1431	26	152	2183

Note : 1. Cones include Hosiery Cones.

2. Above data from 1980-81 to 1991-92 exclude the deliveries of cotton yarn by Small Scale Spinning Units, from 1992-93 includes the deliveries of cotton yarn by Small Scale Spinning Units.

3. Sewing thread not included.

TABLE - 28
DELIVERIES OF COTTON YARN

(Million Kg.)

Years	Hanks	Hosiery Cones	Weaving Cones	Beams & Pirns	Sewing Thread	Other	Total
1989-90	310	176	459	22	21	28	1016
1990-91	342	197	530	26	22	31	1148
1991-92	328	205	496	18	24	27	1098
1992-93	377	236	568	19	19	21	1240
1993-94	422	271	615	17	25	31	1381
1994-95	438	267	556	11	24	31	1327
1995-96	504	362	546	21	24	46	1503
1996-97	519	398	564	20	27	52	1580
1997-98	540	436	522	17	29	55	1599
1998-99	473	413	458	16	31	54	1445
1999-2000	514	421	494	16	34	55	1534

Source : Ministry of Textiles, 2000.

Note : From 1992-93 data include SSI Units.

TABLE - 29
DELIVERIES IN HANK YARN

(Million Kg.)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
Cotton	310	342	328	377	422	438	504	519	540	473	514
Blended	1	1	1	1	Neg	1	1	4	5	8	9
100% Non-cotton	37	32	35	37	42	51	66	67	53	48	51
TOTAL	348	375	364	415	464	490	571	590	598	529	574

Note : From 1992-93 data include the deliveries of cotton hank yarn by SSI Units.

50. Though it would be difficult to establish how much of cotton yarn has been made available to the mill and powerloom sectors, as far as handlooms are concerned on the basis of the data available on the hank yarn delivery and assuming that all this is converted into cloth on the handlooms it would be possible to guess how much cloth is produced on handlooms. It is pertinent to note that while the hank yarn obligation of the spinning mills was 50 percent of the total yarn production, the cotton hank yarn delivered between 1987-88 and 1994-95 never did exceed 26 percent, instead has declined to 23.10 percent in 1992-93.

51. According to the Report of the Working Group on Textiles for the Plan (1978-83), it is estimated that 1 kg. of cone or hank yarn yields 10 metres of powerloom or handloom cloth. Thus the hank yarn delivered should (assuming that all this reached the handloom sector) match with the cotton cloth produced on the handlooms in the proportion of 10 metres per 1 kg. of yarn. Table - 23 reveals that the production of cotton yarn had increased from 1510 million kg. in 1990-91 to 2204 million kg. in 1999-2000. Similarly the exports of cotton yarn had increased from 90-million kg. in 1990-91 to 555 million kg. in 1999-2000. The consumption of cotton yarn by various sectors increased from 1397 million kg. in 1990-91 to 1671 million kg. in 1999-2000. It is clear that the consumption of cotton yarn by handlooms sector was 24.48 percent of the total consumption in 1990-91 and it rose to 30.76 percent in the year 1999-2000. After liberalisation, the consumption of cotton yarn by mill sector has declined from 21.62 percent in 1990-91 to 13.70 percent in 1999-2000.

52. With regard to the production, 100% non-cotton yarn had increased from 107.19 million kg. in 1990-91 to 220.63 million kg. in 1999-2000. The polyster yarn production increased predominately from 4.46 million kg. in 1990-91 to 99.09 million kg. in 1999-2000. The growth of viscose yarn production had declined from 69.91 million kg. in 1990-91 to 51.34 million kg. in 1999-2000. The data on deliveries of spun yarn, hank yarn, after liberalisation period, is presented in Table - 27, Table 28 and Table - 29. It is clear that the cotton yarn delivered was 1016 million kg. in 1989-90. After liberalisation, the delivery of cotton yarn increased to 1534 million kg. in 1999-2000. The delivery of hank yarn had increased from 348 million kg. in 1989-90 to 574 million kg. in 1999-2000. All this inspite of the export of hank yarn for the ceiling fixed by the government. The reason for this should not be very difficult to look for. It cannot, by any stretch of one's imagination, be due to the free availability of hank yarn. As a number of studies and reports of handloom committees clearly point out this cannot but be due to the marketing of powerloom cloth as handloom cloth at various stages.

Manmade Fibre and Filament Yarn during Liberalisation :

53. The total installed capacity of man-made fibre industry was hardly about 474212 tonnes in 1990-91which grew to 1066643 tonnes by 1999-2000. The most significant growth in capacity has been achieved in the case of polyster stable fibre and polyster filament yarn, the capacity of which increased from 230062 tonnes and 158670 tonnes respectively in 1990-91 to as high as 631568 tonnes and 961904 tonnes respectively in 1999-2000.

54. The capacity of viscose staple fibre has also increased considerably, i.e. from 176050 tonnes to 305475 tonnes during the same period i.e. from 1990-91 to 1999-2000 though the capacity is shared by only two main manufacturing units. The capacity of acrylic staple fibre which is correctly placed at 121 thousand tonnes also shows a marked increase as compared to its capacity 63 thousand tonnes in the year 1990-91. As regards production, the man-made fibre sector of the textile industry has been registering remarkable performance in recent years. During 1999-2000, the production of acrylic staple fibre registered a rise in production by 0.50 percent over the 1998-99.

55. During the last five years, the quantum of growth has been more spectacular with annual additional production of 78, 117, 175, 77 and 56 thousand tonnes of yarn respectively. The production of poly-propylene yarn has increased by about 12 percent during 1999-2000 as compared to 1998-99. The growth of the man made fibre and filament yarn industry is closely linked with the availability of the key raw materials required for their manufacture. The easy availability of the key raw materials like DMT, PTA, MEG, capralactum and acrylonituile, constituting a significant portion of the cost of production of these man-made fibres and yarn, would go a long way in boosting the output of such fibres and yarn. In recent years the availability of said raw materials has increased considerably still it is not adequate to meet the entire requirement of the man made fibre/yarn industry.

56. Table - 30 reveals that of the total cloth production in 1990-91, 18 percent of the fabrics/cloth was produced in handloom sector and 57.5 percent by the powerloom sector. The share of handloom production was negligible (18.75 percent) in the year 1999-2000. But the growth of mill sector production declined from 11.0 percent in 1990-91 to 4.37 percent in 1999-2000. The mill sector concentrates more on blended (22.11 percent) and 100% non-cotton fabrics (13.42 percent) in the year 1999-2000. After liberalisation, the 100% non-cotton fabrics increased from 1.59 percent in 1990-91 to 13.42 percent in 1999-

2000. The cotton cloth production declined from 71.80 percent in 1990-91 to 64.47 percent in 1999-2000.

TABLE - 30

SECTOR WISE PRODUCTION OF CLOTH/FABRICS

(Million sq. mt.)

Year	Mill	Handloom	Powerloom	Hosiery	Khadiwool & Silk	Total
1990-91	2589	4295	13348	2696	402	23330
	(11.0)	(18.0)	(57.5)	(11.5)	(2.0)	(100.0)
1991-92	2376	4123	13262	2827	390	22978
1992-93	2000	5219	14644	3182	430	25475
1993-94	1990	5851	15994	3637	426	27898
1994-95	2271*	6180	15976	3748	431	28606
1995-96	2019*	7202	17201	5038	498	31958
1996-97	1957*	7456	19352	5533	540	34838
1997-98	1948*	7603	20951	6394	545	37441
1998-99	1785*	6792	20689	6277	559	36102
99-2000	1714*	7352	23187	6374	575	39202
	(4.37)	(18.73)	(59.15)	(16.25)	(1.5)	(100.0)

Source : Ministry of Textiles, 2000.

Note : Figures in parenthesis denote percentages.

57. After implementation of New Economic policy, the production of 100% non-cotton fabrics by handloom sector had increased from 47 million sq. metre (1.09 percent) in 1990-91 to 857 million sq.metre (11.66 percent) in 1999-2000. Similarly, the Blended fabrics production also increased from 0.26 percent to 1.62 percent during the same period. But the cotton cloth production had declined from 98.65 percent in 1990-91 to 86.72 percent in 1999-2000. Table - 31 reveals that the growth of cotton cloth production in Hoisery sector had fallen from 90.80 percent in 1990-91 to 81.85 percent in 1999-2000. In contrast, the blended fabrics production by hoisery sector had increased from 149 million sq. metre (4.04 percent) in 1990-91 to 802 million sq. metre (12.58 percent) in 1999-2000.

TABLE - 31

FIBRE - WISE PRODUCTION OF FABRICS BY THE HOSIERY SECTOR

(Million sq. Mtr)

Year	Cotton	Blended	100% Non- Cotton	Total
1988-89	1945	142	62	2149
1989-90	2177	105	93	2375
1990-91	2448	109	139	2696
	(90.80)	(4.04)	(5.16)	(100)
1991-92	2548	149	130	2827
1992-93	2944	148	90	3182
1993-94	3357	153	127	3637
1994-95	3307	262	179	3748
1995-96	4488	268	282	5038
1996-97	4940	400	193	5533
1997-98	5403	735	256	6394
1998-99	5121	789	367	6277
99-2000	5217	802	355	6374
	(81.85)	(12.58)	(5.57)	(100)

Source : Ministry of Textiles, 2000.

Note : Figures within parenthesis denote percentages.

58. The powerloom sector concentrated more on the production of blended and 100 percent non-cotton fabrics rather than on the production of cotton cloth. After liberalisation, the cotton cloth production by powerloom sector had declined from 6887 million sq. metre (51.6 percent) in 1990-91 to 6291 million sq. metre (27.13 percent) in 1999-2000.

59. Though fabric production statistics clearly establish the extent of decline of the mill sector due to the expansion of the cost-effective powerloom sector, which could also be a consequence of the mill owners entry into and encouragement to the powerlooms, especially after the Bombay textile strike in the 1980's. From these statistics it is not possible to estimate the extent of damage to the handlooms. But it is widely held that a substantial part of powerloom production is being marketed as handloom cloth by the proliferating handloom cooperatives set up by

powerloom owners to corner loan and market facilities available to the handloom co-operatives. This may account for the relative steadiness in the handloom production figures.

Silk and Woollen industry during Liberalisation

60. The combined contribution of wool, silk and khadi to the fabric production in the country is negligible at about 2 percent. This is due to the constraints in the domestic availability of the raw materials like good quality apparel grade wool and raw silk of superior variety. Considering that silk and woollen textiles have good scope for export, urgent steps are necessary to increase their production. Likewise, the traditional hand spun and hand woven khadi sector has also an important role, being a rural based industry.

61. After liberalisation the area under mulberry cultivation had declined from 317 thousand hectare in 1990-91 to 226 thousand hectare in 1999-2000. But the production of raw silk had increased from 11,486 tonnes in 1990-91 to 13,944 tonnes in 1999-2000. The states of Andhra Pradesh, Karnataka, Tamil Nadu and West Bengal dominated in the production of raw mulberry silk in India. The production of spun silk yarn had increased from 185 tonnes in 1990-91 to 505 tonnes in 1999-2000. The installed capacity in the woollen industry was 4.84 lakh worsted spindles and 3.12 lakh non-worsted spindles in 1990-91. After liberalisation, it rose to 5.85 lakh spindles and 4.19 lakh non-worsted spindles in 1999-2000.

Prices of Textile Items During Post-Liberalisation Period :

62. The Prices of various textile items used in handloom sector during the post liberalisation period are analysed in this section. The prices of raw cotton and other main fibres are presented in Table - 32. The prices of raw cotton, the main fibre for the handloom industry remained at lower level during 1999-2000 than that of 1998-99. The weighted average price of raw cotton declined by 2.4 percent in March 2000 over March 1999. During the last five year period, i.e. March 1995 to March 2000 the weighted average price declined by 21.2 percent. Before liberalisation, the weighted average price of raw cotton was 21.94 in March 1989 and it increased to 47.75 in March 2000.

TABLE - 32

PRICES OF RAW COTTON AND OTHER FIBERS

(Rs/Kg)

Period @	Raw Cotton (Wt. Avg.)	Viscose Staple Fibre(Avg.)	Polyester Staple Fibre (Avg.)	Acrylic Staple Fibre (Avg.)	Raw Wool (Avg.)*
March-1989	21.94	33.43	83.28	68.00	145.07
March-1990	18.15	38.63	70.40	75.50	135.97
March-1991	26.71	44.29	75.31	76.77	72.30
March-1992	33.61	51.72	80.13	97.67	178.44
March-1993	27.69	58.32	79.73	106.72	117.55
March-1994	49.50	59.56	78.50	104.67	112.64
March-1995	60.58	76.53	104.55	106.00	147.95
March-1996	45.71	83.20	89.05	85.50	150.00
March-1997	46.07	79.80	67.56	84.63	180.24
March-1998	55.73	80.09	51.30	88.50	172.60
March-1999	48.93	78.58	47.95	67.75	136.52
March-2000	47.75	78.58	65.71	80.25	129.65

Note: * - Imported Merino Wool Prices.

@ i) Figures upto March 93 relate to month end prices.

ii). Figures from June 93 onwards relate to average of weekly prices for respective month.

iii) Wtd. Avg. Price of raw cotton have been changed from March 95 to March-96 due to revision in the weight as per 1995-96 production data.

63. The weighted average price of cotton hank yarn and hoisery cone yarn declined by 5.3 percent and 4.2 percent respectively between March 1999 and March 2000. The price of cone yarn increased by 3.6 percent during the same period. During the last five year period i.e., March 1995 to March 2000, the prices of hank, cone and hoisery cone yarn declined by 5.5 percent, 1.8 percent and 10.2 percent respectively. The decline in the price of cotton yarn may be attributed primarily to decline in prices of raw cotton in the market. The price of polyester viscose yarn declined by 2.7 percent and polyester cotton blended yarn increased by 1.6 percent during March 1999 and March 2000.

During the last five year period i.e., March 1995 to March 2000, the prices declined by 9.1 percent and 4.6 percent respectively.

64. The index numbers of wholesale prices as compiled by the Office of the Economic Adviser, Government of India is presented in Table - 33. The index numbers of whole sale prices of raw cotton, cotton yarn and powerloom cotton cloth declined by 6.4 percent, 1.5 percent and 1.7 percent respectively in March 2000 over March 1999. The index of cotton mills cloth and handloom cloth and all commodities incresed by 3.2 percent, 2.7 percent and 3.4 percent during the same period.

TABLE - 33

INDEX NO. OF WHOLESALE PRICES

Period	Raw Cotton	Cotton Yarn	Cotton Cloth (Mills)	Cotton Cloth (P.L)	Cotton Cloth (H.L)	Art Silk Cloth	Blended /Mixed Cloth	All Commo-dities
March-1991	171.9	195.4	166.6	192.7	200.6	144.4	121.6	191.7
March-1992	237.7	258.2	196.9	196.9	213.1	158.1	127.0	217.7
March-1993	202.6	252.2	205.7	243.1	216.6	171.1	138.6	233.1
March-1994	376.7	337.4	240.7	245.1	255.2	183.5	139.6	257.6
March-1995	438.1	411.5	292.1	255.1	255.2	176.7	156.1	284.9
March-1996	299.4	381.7	303.1	255.1	386.9	176.7	158.4	299.4
March-1997	302.7	370.2	333.1	250.7	386.9	176.7	181.4	322.2
March-1998	367.9	391.2	337.3	250.7	407.9	176.7	183.2	337.3
March-1999	343.7	393.8	336.5	298.1	436.4	178.7	183.2	353.7
March-2000	321.7	387.9	347.3	293.1	448.2	178.7	183.2	365.8

Note : Source: (1) Office of the Economic Adviser, Ministry of Industry.
(2) P.L = Powerloom, (3) H.L = Handloom

65. The index of art silk cloth and blended mixed cloth remained at same level during March 1999 and March 2000. During last five year period ie., March 1995 to March 2000, the index numbers of wholesale prices in respect of raw cotton and cotton yarn declined by 26.6 percent and 5.7 percent, while the index for cotton mills cloth, powerloom cloth and handloom cloth, art silk cloth, blended mixed cloth and all commodities increased by 18.9 percent, 14.9 percent, 75.6 percent, 1.1 percent, 17.4 percent and 28.4 percent respectively during the same period.

66. The import prices of manmade fibres and their raw materials also increased steadily, after liberalisation, except the items of viscose staple fibre, acrylic staple fibre. Among the manmade filament yarn group, an upward trend in price was noticed except viscose filament, yarn between March 1999 and March 2000. In case of viscose filament, yarn price declined by 12.7 percent. The Nylon filament yarn, polyester filament yarn and texturised yarn increased by 23.4 percent, 27.3 percent and 16.0 percent respectively during the same period. In a five year period, ie., March' 95 to March 2000, the price of viscose filament yarn, polyester filament yarn, texturised yarn declined by 1.0 percent, 41.9 percent and 41.2 percent respectively. The price of Nylon filament yarn increased by 35.3 percent during the same period. The prices of woollen yarn, carpet yarn, shoddy yarn during the post liberalisation period had been steadily increasing due to increase in the cost of raw woollen in India.

67. The census of Handlooms (1987-88) reveals that the productivity per loom per day is 5.12 metre in India. Of the total number of handlooms, 83.81 percent are functioning in the rural areas, remaining 16.19 percent are only functioning in the urban centres. So, it is a rural based industry. Nearly 92.83 percent of the looms are in working condition in India. The productivity per loom was higher only in the States of Delhi, Bihar, Gujarat, Harayana, Madhya Pradesh, Punjab and Uttar Pradesh. Of the total labourers, the share of labour engaged in the handloom weaving was 1996.8 thousand in Assam, 663.3 thousand in Tamil Nadu, 640.6 thousand in Uttar Pradesh, 711.6 thousand in West Bengal, 452.90 thousand in Andhra Pradesh and 334.7 thousand in Manipur. Among the workers, 67 percent of workers are engaged in weaving and the remaining 33 percent of workers are engaged in preparatory work in handloom sector in India. Near 49 percent of the workers are engaged as part time workers in the handloom industry. It is found that 3,20,000 workers are also employed in the carpet industry in India.

68. The New Economic Policy (NEP) was introduced at macro level in India during mid July 1991 with the background of the Stabilization Policy and Structural Adjustment Programme of International Monetary Fund and World Bank. These institutions emphasised the major conditionalities (4D), namely, Devaluation, Deflation, Denationalisation and Deregulation activities. The economic reforms have been implemented in India based on the main characteristics of Liberalisation, Privatisation and Globalisation (LPG).

69. The Liberalisation Policy towards foreign technology and collaborations is enabling Indian Companies to upgrade their production facilities or to establish new facilities which help them to expand the foreign market. A number of companies have, thus, increased foreign business. On the other hand, the removal of curbs on the large scale sector, such as industrial licensing and bans on entering entire sectors reserved for the small and cottage industries, and the elimination of special subsidies for these sectors will make them unable to withstand competition from large industry and cause the loss of millions of jobs.

70. In the post liberalisation era, the textile industry has undergone several changes on account of technology development and trends in fashion. The General Agreement of Tariffs and Trade (GATT) and Multi Fibre Agreements (MFA) extended the coverage of discriminatory quotas from cotton textiles to wool made fibres and the coverage was expanded to include products made of vegetables fibres other than cotton.

71. Dr. Manmohan Singh, in his budget speech, (1996) said that economic reforms had almost doubled the rate of creation of new jobs in the economy from 3.8 million in 1991 to 7.2 million in 1994-95 and predicted that the number of jobs created would be even higher in 1996. There is even some statistical evidence that unemployment may not only have stopped growing but may have started coming down. The most reliable evidence comes from the National Sample Survey. Two successive quinquennial surveys in 1987 and 1992 showed that all the six indicators of rural unemployment, male and female, casual, seasonal and permanent, have been coming down since the mid-eighties.The NSS data also shows an overall decline in urban employment, between 1987 and 1992, but within this trend a rise in 1991 and 1992, the years of transition from the common to the market guided economy.

72. One rough, but reliable indicator of the impact of reforms on employment can be had from the number of job seekers registered with the live registers of the employment exchanges. During the period of transition from June 1991 to 1992, it went up drasatically by 1.7 million from 35.22 million to 36.93 million. But thereafter it has declined fairly steadily to 36.31 million in June 1993, 36.10 million in June 1994, before rising again marginally to 36.41 million in June 1995.

73. After implementation of New Economic Policy, employment in the organised sector has increased from 263.53 lakh persons in 1991 to 282.45 lakh persons in 1997. The changes in the private sector employment were 187.62 lakh persons in 1990 and 195.59 lakh

persons in 1997. Similarly, the employment in public sector has increased from 75.82 lakh persons in 1990 to 86.86 lakh persons in 1997. With regard to the manufacturing sectors, the employment in private sector has decreased to 16.61 lakh persons in 1997 from 18.70 lakh persons in 1990. But in the public sector, 44.57 lakh persons were involved in manufacturing in 1990 and 52.39 lakh persons in 1997.

74. On the other hand the number of employment exchanges and the job seekers level also showed an increasing trend during post reforms period. The number of employment exchanges were 851 in 1990 which increased to 891 in 1995. The job seekers (Educated job seekers and Unskilled Labourers) in India was 34.6 million in 1990 and the number increased to 36.7 million in 1995. But the growth rate of job seekers level was comparatively lower during the post reforms period than before. The workers roll in the textile industry, during post reforms period, shows a declining trend due to the decline in the installed capacity of looms. The workers roll was 1108 thousand in 1991 and 1029 thousand in 1995.

75. In 1996, of the total workers (1029221) on roll in textile industies, the highest level of emploment was provided by the private mills (68.17 percent) and only 31.83 percent of employment was provided by the public sectors, namely, Central Government, State Government and Cooperatives. It is inferred that the policy of denationalisation of textile industries in India provided the lower level of employment during the post reforms period.

76. The Policy implications based on the above analysis are:

    i. The two economically weaker sections-farmers and reelers of the society will be affected by the recent Exim Policy for 1997-2002 on import of raw silk 2A grade.

    ii. Due to heavy competition and comparatively poor quality of Indian Cotton in the World Market, less than 2 lakh bales against the 17 lakh bales quota had been exported to other nations in 1997-98. This type of problem affects the emloyment level in the Export Oriented Units (EOU)

    iii. The cost of credit and interest rates may be liberalised and the major hurdles of competitiveness of India's Textile industries could be solved by cheap credit.

    iv. The mill management come forward to spend a few lakhs in training the workers who would be manning the new machines.

v. The closure of dyeing and bleaching units by the Pollution Control Board for environmental protection create the unemployment problem in our country. The Government may provide finance assistance for structuring the Common Effluent Plant for environmental protection.

vi. The vegetable based dyes could be introduced to use in the powerloom sectors for increasing the export level to developed nations.

vii. The sharp rise in power tariff may retard the growth of the textile industries. In India, at present, the power charge is 250 percent of the wage bill.

viii. As export promotion measure, the export of hank yarn below 40 counts may also be allowed as there seems to be a great demand for such low count hank yarn.

77. The economic liberalisation is likely to increase considerably the demand for cheaper unskilled labour. There is large scale retrenchement of workers. Schemes of voluntary retirement are being pushed in a quite large number of public sector undertakings because of the new policies. The private sector has also shown displeasure in the form of lockouts and closures. Quite a large number of agreements signed after the lockouts, forced the unions to agree to retrenchment of workers. The Government of India has to take the alternative and suitable proposals for solving these problems under liberalisation policy in the labour surplus economy of India.

CHAPTER - V

WTO, GATT, MFA AND HANDLOOM SECTOR IN INDIA

Agreement on Rules of Origin (ARO) and Agreement on Textiles and Clothing (ATC) under WTO :

The inclusion of trade in textiles as a subject for negotiations in the Uruguay Round was itself an achievement. Since 1961, textile trade has been governed by a separate set of rules, permitting the application of discriminatory quotas, in violation of the General Agreement on Tariffs and Trade (GATT's) cardinal principle of non-discriminatory treatment. The separate set began with a Short Term Arrangement (STA) for trade in cotton textiles. It was soon converted into a Long Term Arrangement (LTA) for five years which was twice renewed for terms of three years ending in 1973.

2. A new arrangement, the Multi Fibre Agreement (MFA) came into existence in 1974, extending the coverage of discriminatory quotas from cotton textiles to wool and manmade fibres. The MFA remained in force, after several renewals, until the end of 1994. In between, the coverage was further expanded in 1986 to include products made of vegetable fibres other than cotton.

3. These arrangements were conceived to provide breathing space for the domestic textile industries of the developed countries to adjust to competition from new sources of supplies. The so-called breathing space was stretched to last for more than 40 years. They became open-ended charters for the practice of protectionism on an ever-increasing scale. The restrictions multiplied over the years, encompassing more and more textile products. As time passed, they came to be directed solely against imports from developing countries. At the time of the MFA's expiry in 1994, there was hardly any developing country engaged in textile trade, irrespective of its stage of development or the size of its export, that was not saddled with bilateral quotas in the European Community (EC) or the US, the two largest markets that were also the most protectionist.

4. The two earlier rounds of multilateral trade negotiations in GATT had made no attempt to deal with the so-called problem in textile trade. Indeed, the STA/LTA was devised to buy support of the protectionist lobbies in the US Congress for launching the Kennedy Round in 1962. Ironically, liberalisation of trade among the developed countries was to be paid for by restrictions on the trade of developing countries. The

negotiations for the MFA in 1973 were aimed to clear the way for the Tokyo Round. The objective of trade liberalisation of the two Rounds was not extended to the textile field. On the contrary, EC and the US made the meagre tariff reductions for textile products in the two Rounds conditional upon the continuance of the LTA/MFA.

5. The industrialised countries were not at all keen to negotiate the textile sector in the Uruguay Round. The developing countries, however, insisted on terminating the GATT inconsistent set of rules for textile trade. Their view was that the multilateral trading system of the GATT cannot be strengthened, if such inconsistencies are allowed to continue. Ultimately, the industrialised countries were forced to accept the eventual integration of the textile sector into GATT as a price for the support of the developing countries for the inclusion of trade in services and trade related aspects of intellectual property rights in the agenda of the Round.

6. The Agreement on Textiles and Clothing (ATC) is an integral part of the WTO Agreement and is applicable to all WTO Members. The ATC is a 10 year transitional agreement with a four-stage integration programme. It replaces the Multi-Fibre Arrangement (MFA), which provided the basis on which countries, through bilateral agreements entered into bilateral trade in textiles. The MFA expired with the new ATC, which will gradually integrate clothing and textile products and place them under world trade rules by 2005 entered into force on 1st January 1995.

7. The new Agreement on Textiles and Clothing is built on six main pillars.

   i. The product coverage, which comprises an extensive list of yarns, fabrics, made ups, textile products and clothing;

   ii. Procedures for the four-stage integration of these products into GATT 1974 rules, i.e., on 1 January of 1995, 1998, 2001 and 2005. (When products are integrated on certain dates, they are removed from the Agreement and are freed of any quotas to which they may have been subjected. Any new protection must be based on the relevant provisions of the GATT 1994);

   iii. A liberalisation process which automatically increases the existing quota levels inherited from the MFA;

   iv. A transitional safeguard mechanism to deal with cases of serious damage, or actual threat of serious damage, to domestic industries which may arise during the transition period;

v. Other provisions, which include, among other things, clauses on circumvention of restrictions, on quota administration on quantitative restrictions other than those inherited from MFA, and on actions as may be necessary to abide by GATT 1994 rules and disciplines, and

vi. The Textiles Monitoring Body (TMB).

8. The TMB is the primary forum, within the WTO structure, entrusted with the task of supervising the implementation of the ATC. It consists of a Chairman and 10 other members who act in a personal capacity to ensure that measures taken by WTO Members conform to the ATC, which states that the TMB shall be considered as a standing body and shall meet as necessary to carry out its functions. The TMB relies essentially on notifications and information supplied by members under the relevant provisions of the ATC.

9. WTO discipline includes a number of side agreements on various trade measures such as anti-dumping, subsidy and countervailing measures, safeguard, origin marking requirements, etc, all purported to ensure free and fair trade. But the experience during the post-Marrakesh years has not been very happy for the exporters of the developing countries in regard to several of these measures. There is a growing feeling that these measures, at the hands of the mighty, are capable of being used as instruments to obstruct free and fair trade. The dispute settlement process under the WTO discipline also does not perhaps provide the best remedy, as it is both cumbersome and time-consuming.

10. In this context, an important concern has arisen recently as to how Rules of Origin, another trade related measure under the WTO discipline, will affect the textile trade. As many as 70 unresolved issues are before the WTO Committee on Rules of Origin and there are very strong and clearly opposite views on most of these issues defying any easy and quick solution. Rules of Origin are merely tools to be used in the context of other trade-related measures. The Agreement of Rules of Origin (ARO), an annex to the main WTO Agreement, was designed to ensure formulation of trade neutral and uniform rules of origin in three years. But at the end of three years, negotiations are still going on to finalise a set of Harmonised Rules of Origin encompassing all product sectors.

11. In the meantime, the US has gone ahead and unilaterally formulated its own national Rules of Origin for the textile sector under Section 334 of its Uruguay Round Agreements Act effective from July 1, 1996. These provisions which are already in force in the transition period

pending finalisation of the Harmonised Rules of Origin by the WTO Committee have also become a matter of great concern the way they are already affecting the textile trade. Such unilateral action by the US violates Articles 4.2 and 4.4 of the Agreement on Textiles and Clothing in as much as it adversely affects market access of other WTO members for which no prior consultations were held by the US as required. Many others including the EC have already raised disputes in this regard and it is believed that India has also to do the same.

12. The ARO itself stipulates several general principles, which need to be followed while formulating the Rules of Origin. Some of these are:

    (i) The rules should not themselves create restrictive, distorting or disruptive effects on international trade.

    (ii) The rules should not be used as instruments to pursue trade objectives, directly or indirectly.

    (iii) The rules should not impose unduly strict requirements or fulfillment of conditions not related to manufacturing or processing.

    (iv) The rules should be clear, consistent, transparent, uniform and reasonable not only in formulation but also in application.

    These are equally applicable in the transition period as well as in respect of the final harmonised Rules of Origin.

13. The textile industry is unique in many ways. It involves various stages of production, many of which may involve processing in different countries. Textile trade has evolved over the years making use of the comparative advantage that each trading country has. It is not unusual for the fibres to come from one country, the spinning and/or weaving done in another, dyed or printed in a third country, and cut and/or assembled in yet another. Since no single country may carry out all the processes, origin of a textile product has to be determined with reference to the country of last substantial transformation. While everyone agrees that spinning and weaving giving rise to yarn and fabric respectively, amount to substantial transformation, there is no agreement on the other processes.

14. The US rules of 1996 do not recognise processing of yarn and fabrics such as bleaching, dyeing, printing as substantial. They also do not recognise conversion of fabrics to made-up articles such as bed linen, kitchen and table linen, curtains and draperies, cushion covers, etc. The rules of origin proposed by US under the Harmonised Work Programme are not very different in their effect from their 1996 rules.

For example, according to the latest US proposal for a fabric to fulfill the test of substantial transformation, it must undergo both dyeing and printing accompanied by two or more preparatory and finishing processes. If an imported fabric is dyed by the tie and dye process to produce an exquisite pattern, the origin of the tie and dye product would still go to the country where the gray fabric was woven because no printing is involved.

15. The requirement relating to preparatory and finishing processes is also likely to make the rule very complicated to administer, with consequent border delays and possible allegations of circumvention and harassment by customs. It is like asking one to look at a dish of cooked vegetables and say conclusively whether or not the vegetables were washed before cooking. Apart from administrative difficulties, such rules have the effect of disrupting trade in textiles and altering the market access guaranteed under the Agreement on Textiles and Clothing. Impact of such origin rules on other trade policy instruments is also likely to be severely trade restrictive.

16. The MFA framework provides for imposition of import quotas by developed countries on the exports of these products from developing countries. Much has been written on quota ownership and quota sales and quota rents. Quota rent has sometimes been described as the overprice that exporters collect. Quota sale price would be the amount of money for which the quota owners sell their quotas. Again, this is not the rule; many exporting countries do not grant ownership of the quotas, but only a preference in quota allocation, to firms that have exported previously. Usually this preference is lost if the quota is not utilised. Also, even in countries that allow quotas to be sold, most quota owners prefer to use them, not to sell them.

17. If the quota was bought, it is not sure that all of the amount paid by the exporter will be passed on to the buyer: the whole amount or just part of it may be added to the sale price, or nothing at all. The price will depend on what the market will bear, be it in countries where quotas are owned and may be sold, or in any other country. And then there is the profit that normally accrues, in commercial transactions, to the seller. It would be wrong to conclude that quotas bring an extra benefit to the exporting country. The consumer in the importing country will in the end pay a higher price to create a scarcity so that the protected producers in the importing country will be able to keep their prices high and, in consequence, themselves in business.

18. Nevertheless, there is no doubt that ownership of quotas where they exist-have certain effects in exporting countries. (a) potentially competitive producers may find themselves shut out of the picture, (b) the individuals who own quotas become interested in the maintenance of the restrictive system. Calculation of the cost of managing quotas is difficult. However, it must add up to a considerable amount. In India alone, hundreds of people work for the government in order to issue export authorizations and keep track of quota utilization. There is also, inevitably, some cost to obtain their permits. Some costs also exist for the importer, who must make sure that the quota is not fully taken, must obtain an import licence, and so on. Finally, the government of the importing country has also to bear the costs of controlling quotas. The quotas can discriminate by fibre and by function: typical examples are ladies cotton blouses, gents shrits, etc. The quotas are usually negotiated bilaterally under threat of unilateral restraints by the importer.

19. The MFA quotas are administered by the exporting counties. If the quotas are binding, then the quota rights command a price, and in many countries these rights are allowed to be traded. In order to export, a firm either has to buy a quota in the market or forego selling one it owns. This imposes the cost on the firm exactly analogous to an export tax. The taxes arise from the restrictions imposed by the importing country. The quotas are thus implicit export taxes levied by the exporting country government, which are then redistributed to specific firms (i.e., to those who own the quotas). These taxes arise from the restrictions imposed by the importing country. Export Tax Equivalent (ETE) as the value of the quota divided by the price received by a producer who does not own quota for this product. Quota rents which are one measure of protection, measure a distortion vis-a-vis situation of free trade, and are one element in an overall calculation of the losses and benefits arising from the MFA regime. While quota rents are a gain for the exporting country, these gains must be weighed against the reduction in the price of exports to unrestricted markets, arising from the decline in demand in the restricted markets. Moreover, since the MFA diverts output from low cost to high cost producers, the average cost of world textiles output must increase, leading to a decline in world demand, which in turn reduces the derived demand and hence fibre prices. These costs are important for fibre producing countries such as India. The possibility of India-the highly restricted and dynamic textile exporter, having suffered substantial costs from the imposition of quotas cannot be denied. The higher the rents, the greater is likely to be the overall welfare loss for India, since it would imply tightly

restricted markets and hence higher efficiency losses and greater diversion of world trade from efficient to inefficient producers.

Integrating Trade in Textiles into GATT :

20. From the strictly legal point of view, the maintenance of these restrictions was not consistent with GATT rules. However, MFA provided a legal cover for derogation from GATT discipline. The basic aim of the Agreement on Textiles and Clothing is to integrate the trade in textiles into GATT by requiring member countries maintaining the restrictions to phase them out over a period of 10 years. After the expiry of the 10 year period, i.e., from 1st January 2005, it will not be possible for any member country to maintain restrictions on imports of textiles unless it can justify them under the safeguard provisions of the Agreement on Safeguards. In other words, an importing country can impose restrictions only when, after carrying out investigations, it can establish that increased imports are causing its domestic textile industry serious injury. Furthermore, such restrictions will have to be applied to imports from all sources, and not on a discriminatory basis to imports from one or two countries as is the case with MFA-type restrictions.

21. The methodological base for integrating the textile trade into GATT is the list of textile products contained in the annex to the Agreement. The list covers all textile products, whether or not they are subject to restrictions. The integration process is to be carried out in four stages. At each stage, products amounting to a certain minimum percentage of the volume of the country's imports in 1990 are to be included in the integration process. These percentages are:

- ★ 16 % of the products on the list, on the date of entry into force of the Agreement (i.e., 1 January 1995).
- ★ 17% at the end of the third year (i.e., 1 January 1998)
- ★ 18% at the end of seven years (i.e., 1 January 2002), and
- ★ 49% at the end of the tenth year (i.e., 1 January 2005).

22. In assimilating products into the integration process, countries are under no obligation to limit themselves to products subject to restrictions. The only constraint the Agreement places is that they be from four categories namely, tops and yam, fabrics, made-up-textile products, and clothing.

23. The Agreement, however, tries to provide improved and enlarged access for textile products that may continue to be restricted during the

transitional period. It seeks this by requiring that the growth factors provided for annual increases in the quotas fixed for each category of textile products under bilateral agreements should be increased at escalated rates. Thus if the annual growth rate for a rise in the quota for a textile product (say, shirts) is fixed under a bilateral agreement at 3%, it will have to be increased by,

- ★ 16% per year in the first three years;
- ★ 25% per year in the next four years; and
- ★ 27% in the next three years.

24. This will raise the growth rate to 5.52% in the tenth year, if the size of the quota is 100 tonnes at the beginning of the transitional period, it will more than double to around 204 tonnes in the tenth year. The Agreement on Textiles and Clothing also requires countries applying non-MFA restrictions to phase them out in a period of 10 years. The programme for the gradual phasing out of such restrictions is to be prepared by the importing country and presented to the Textile Monitoring Body (TMB). The Body has been established under the Agreement for the surveillance of its operation.

25. Our quota problems under the MFA exist with six countries now, namely, USA, EU, Canada, Finland, Norway, and Austria. They, especially USA and EU account for nearly two-thirds of the world trade in textiles and clothing. USA and EU account for over 60 per cent of our textiles and clothing exports. It is a matter of great advantage to us that from the date of coming into force of the WTO on Textiles and Clothing (1 January, 1995) no bilateral arrangement will exist and only the multilateral arrangement envisaged under the WTO will apply to this sector. Bilateral arbitrariness and discriminatory practices adopted by the quota countries will end immediately.

26. The sector will be under pressure with the removal of Quantitative Restrictions (QRs) on imports from April 1, 2001. India is also committed to move to lower customs tariff (around 20 per cent) for most products. Textile Companies are already complaining of the Chinese onslaught in several sectors. Industrial and political circles fear that cheap imports could flood the market and might take away means of livelihood. For example, the decision to allow silk imports from China affected the domestic industry in Karnataka so badly that it became a raging issue during the last general elections. Trade circles allege that it was a major issue that contributed to the defeat of the ruling party, which was supported by the then Union Commerce Minister, who also lost his ministerial berth at the centre.

27. It must be noted that only India, Pakistan and Indonesia are pushing for faster liberalisation. Other exporters like Hong Kong, Taiwan, and South Korea are not so keen because of their enjoying big quotas under MFA. Faster liberalisation is not acceptable to countries like Sri Lanka, Bangaladesh and Jamaica, because of their apprehension that they may not be able to compete with India, Pakistan and Indonesia. We have also been criticised for restrictive approach to textile and clothing imports into our country and our tariffs are also comparatively high. Implications of ATC of WTO on India is low labour cost. It is important to realise that low labour costs do not necessarily lead to price competitiveness. Labour cost is only one component of total input costs. Higher capital and energy costs can very easily nullify the advantage of low wages. In addition, if raw materials are not available at international prices, a labour advantage does not transparent tax structure, manifested through excise duties and sales tax.

28. To improve India's textile and garment exports a multi pronged strategy is required. To a certain extent, one is talking about proactive strategic action by trade and industry, so that technological upgradation takes place and strategic alliances and joint ventures are set up. Much of the technology used in textiles, and clothing sector is outdated, and there is an inability to handle bulk orders and stick to delivery schedules. Large investments are therefore required to modernise textile mills, to replace outdated machinery. Therefore the quality of processed fabrics varies from one lot to another and the quality of weaving and processing leaves a lot to be desired.

29. Foreign Direct Investments (FDI) in the textiles and clothing sector must also be attracted so that more of the sourcing is done from India. Historically FDIs have not been attracted because garments were reserved for the small-scale sector. Yet, exports of garments from countries like South Korea and Hong Kong took off, because of sourcing by garment firms from western Europe and United States. As these traditional areas of sourcing lose their competitiveness alternative destinations for investments are being sought. On the question of value addition, if some garments are retailed, the value addition can increase significantly. This requires large textile houses to market their own brand names through self-owned retail stores. Retailing, branding and strategic alliances are not easy for small exporters. Small exporters can continue to survive as ancillary units. Otherwise Multi National Companies (MNCs) will eat up smaller units through takeovers because of severe competition.

30. There has been a hang-up about promoting powerlooms at the expense of mill production, although economics of scale justify production of cotton cloth in mills, the propping up of power looms does not mean special fiscal treatment for powerlooms alone. The discrimination against the organised mill sector also works through labour legislation, which only applies to the organised labour force. Just as there has been hang up about promoting powerlooms, there has been a similar hang-up about promoting handlooms. Institutional support, fiscal concessions and subsidies to the handloom sector have existed. These can perhaps be justified, although here too, there is scope for a debate about whether this is the best way to prop up handlooms. However, what is impossible is to justify various regulatory policies. However, this is not valid argument. Transplantation techniques have been successfully used in China. Dry farming techniques have been used in Israel and Egypt. Bio-engineering has led to the development of high-yielding varieties of cotton. Yields can also go up if the land ceiling legislation is amended so that economics of scale can be exploited.

31. Transition period of 10 years essentially needs to be fully utilised by us. What is of greater importance is the strengthening of our competitiveness in the textiles and clothing sector. In a quota free world, we will face fierce competition from countries like China, Pakistan, Bangladesh, Sri Lanka, Indonesia, and Vietnam. Garment units from Taiwan and Hong Kong are already being moved into China, while South Korea has shifted its base to low cost Asian countries. It is of urgent importance that government and industry get together and push through a concrete programme for upgradation of technology, quality consciousness, and aggressive marketing. We need to invest substantially in this sector for the modernisation of our garment industry and of textile industry to get high quality fabrics. We also need to diversify our export products. Our competitive strength lies in cotton-based products so the enhanced production of raw cotton of the requisite quality at competitive prices would need to be ensured to meet ATC challenges of the WTO. The 10 year period may be a blessing in disguise to ensure our competitive strength in the world trade of textiles and clothing.

32. World trade in textile and clothing has been subject to an increasing array of bilateral quota arrangements over the past three decades. The range of products covered by quotas expanded from cotton textiles under the Short-Term and Long-Term Arrangements of the 1960s and early 1970s to an ever-increasing list of textile products fashioned from natural and man-made fibres under five extensions of the Multi-Fibre Arrangement (MFA). In the industrial sector, most developed

countries did not apply the rule against the use of quantitative restrictions to trade in textiles, a sector of particular interest to developing countries. There was one significant difference between the restrictions applied in the agricultural sector and those applied to textiles. With some notable exceptions, the restrictions maintained in the agricultural sector were outside the scope of GATT rules. In the case of textiles, the restrictions were authorised under GATT auspices. MFA permitted countries to derogate from the basic obligation to impose restrictions on imports of textiles and textile products, provided the conditions it laid down were met.

CHAPTER VI

EXPORTS OF HANDLOOM TEXTILES

The cotton textile industry has been growing in importance in recent years because of its valuable contribution to foreign exchange earnings through exports of yarn, fabrics, garments and hosiery products. The details of exports and foreign exchange earnings during the period from 1981-82 to 1989-90 (before liberalisation) is given in Table - 34.

2. The total value of exports of textiles from India increased from Rs. 1335.70 crores in 1980-81 to Rs. 6635.90 crores in 1989-90. The share of cotton textiles including handloom fabric and madeups in the total exports was 9.22 percent in 1980-81 and it had declined to 5.15 percent in 1989-90. The total value of exports of textiles from India increased from Rs. 8250.90 crores in 1990-91 to Rs. 48811.72 crores in 1999-2000. After implementation of New Economic Policy, only cotton, rayon/synthetic and woollen items occupy a major share in the export of India's textile goods. The table-31 reveals that India's export performance in the textiles sector in the recent years has been remarkable. Textile exports have now emerged as the largest gross and net foreign exchange earner for the country, contributing about 35 percent of India's total export earnings. India's share in world export of textiles and clothing is exhibited in Table - 35.

Table - 34
India's Exports of Textiles (Before Liberalisation)

(Rs. crore)

Year	Cotton Textiles Fabrics, Madeups (mill made/Power looms) including yarn and sewing thread	Cotton Textiles (Handloom) Fabric madeups	Manmade Fibre Textile (***)	Woolen Textile (*)	Silk Textile (**)	Ready Made Garments	Total
1981-82	284.10	123.20 (9.22)	37.40	151.50	69.70	669.80	1335.70
1982-83	314.50	129.40	55.20	172.60	82.90	629.30	1383.90
1983-84	319.40	125.90	51.50	123.30	94.50	734.60	1449.20
1984-85	471.60	168.40	54.00	152.60	122.90	948.30	1917.80
1985-86	469.60	161.30	49.90	152.50	156.20	1096.10	2085.60
1986-87	560.60	165.70	68.30	173.20	194.90	1503.00	2665.70
1987-88	1035.60	239.30	159.00	162.90	199.90	1999.50	3796.20
1988-89	1057.30	284.10	269.00	271.90	273.90	2278.10	4434.30
1989-90	1483.20	341.80 (5.15)	589.20	434.60	314.90	3472.20	6635.90

* - Woolen textiles excl. hand knitted, woolen carpet, druggests, readymades, knitwears etc,

** - Silk textile including readymade garments.

*** - Man-made fibre textiles, excluding knitwear and readymade

TABLE - 35

SHARE OF TEXTILE EXPORTS IN THE EXPORTS OF ALL COMMODITIES FROM INDIA

(Excluding Jute, COIR & HANDICRAFTS)

(Rs. Crore)

Year	Export of All Commodities	Export of Textiles	Share of Textile Exports in Total Export (%)
1990-91	32,555	8,251	25.34
1991-92	44,042	12,041	27.34
1992-93	53,688	16,295	30.35
1993-94	69,751	21,187	30.37
1994-95	82,674	26,607	32.18
1995-96	106,353	29,734	27.96
1996-97	117,525	34,851	29.65
1997-98	120,614	39,160	32.47
1998-99	141,604	44,821	31.65
1999-2000	162,738	48,812	29.99

Source: Ministry of Textiles, 2000.

TABLE - 36

EXPORT OF TEXTILES AND CLOTHING - WORLD AND INDIA

(Billion US Dollars)

Year	Textile and Clothing		Indian Share in World Exports (percentage)
	World Exports	India's export	
1991	226.59	5.06	2.23
1992	250.02	6.03	2.41
1993	241.76	5.89	2.44
1994	270.65	7.53	2.78
1995	307.52	8.47	2.75
1996	313.54	9.70	3.09

Source: ICMF, Annual Report, 1997-98.

3. During the post-liberalisation era, the world exports has increased from 226.59 Billion US $ in 1991 to 313.54 Billion US $ in 1996. Similarly India's exports also increased from 5.06 Billion US $ to 9.70 Billion US $ during the same period. The share of India's export had risen only from 2.23 percent in 1991 to 3.09 percent in 1996. Further, the total export quantity of fabrics was 1537 million Kgs. in 1992-93 and it rose to 2803 million kgs. in 1999-2000. The value of exports increased from Rs. 2978 million in 1992-93 to Rs. 71067 million in 1999-2000. The export of cotton fabrics dominated in all the years after liberalisation.

4. The export value of man-made fibre textiles increased significantly from Rs. 165.17 crores in 1987-88 to Rs. 4,732.76 crores in 1999-2000, after liberalisation. The share of man-made fibre textiles which was almost negligible during 1981-82 (2.8 percent) now accounts for about 8 percent in total textile exports. The export of woollen textiles which accounted for 11 percent during 1981-82 has now declined to around 2 percent. The value of export items increased from Rs. 49,285 lakhs in 1992-93 to Rs. 4,11,030 lakhs in 1999-2000. The garments segment accounted for about 41 percent of the total textile exports during 1999-2000. The trade in garments has given not only in the value terms but there has also been a remarkable diversification in the range of products and the direction of exports of different countries. The export of garments rose from Rs. 22,208 crore in 1998-99 to Rs. 23,983 crore in 1999 - 2000.

5. The price realisation by export per square metre in millmade sector cotton cloth has doubled from Rs. 16.58 in 1991-92 to Rs. 34.72 in 1997-98. Similarly the price realisation by exports of handloom cotton cloth was Rs. 24.62 per square metre in 1991-92 and doubled, after liberalisation, to Rs. 51.15 per square metre in 1996-97. The sector wise classification of exports of cotton cloth during the period from 1985-86 to 1995-96 is presented in Table - 38. It is significant to note that the share of exports of cotton cloth by handlooms sector has declined from 8.0 percent in 1985-86 to 1.6 percent in 1995-96. But the share of powerloom sector exports increased from 33.5 percent in 1985-86 to 75.5 percent in 1995-96. The share of handloom sector exports also declined from 7.2 percent in 1985-86 to 1.3 percent in 1995-96. But the total share of powerloom sector exports had doubled from 40.4 percent in 1985-86 to 80.3 percent in 1995-96.

TABLE - 37

PRICE REALISATION/SQ METRE IN RUPEES (SECTOR WISE COMPARISION)

Year	Mill Made cotton cloth	Powerloom cotton cloth	Handloom cotton cloth	Knitted cloth
1991-92	16.58	10.57	24.62	19.24
1992-93	19.39	12.38	31.87	21.90
1993-94	22.98	12.84	35.83	21.20
1994-95	26.17	14.80	40.67	21.95
1995-96	31.09	16.60	42.73	26.49
1996-97	32.35	15.75	48.79	26.52
1997-98	34.72	16.65	51.15	27.25

Source: Ministry of Textiles, 2000.

TABLE - 38

SECTOR - SHARES IN EXPORTS

(Percentage of Value)

Year	Cotton			Total		
	Mill	Powerloom	Handloom	Mill	Powerloom	Handloom
1985-86	58.5	33.5	8.0	52.4	40.4	7.2
1986-87	50.7	43.9	5.9	44.0	50.8	5.2
1987-88	43.7	51.0	5.3	39.0	56.3	4.8
1988-89	38.1	56.5	5.4	33.1	62.2	4.7
1989-90	38.3	57.3	4.4	30.5	66.0	3.5
1990-91	38.2	58.6	3.2	28.6	69.0	2.4
1991-92	28.5	68.2	3.2	22.1	75.4	2.5
1992-93	25.2	71.5	3.3	20.4	76.9	2.7
1993-94	23.6	73.9	2.5	19.6	78.3	2.1
1994-95	21.0	76.9	2.0	17.1	81.2	1.6
1995-96	22.9	75.5	1.6	18.5	80.3	1.3

Source: ICMF Annual Report, 1997-98.

6. The following are the **main issues** for the globalisation of textile industry in India:

i. The recent modification in the Exim Policy for 1997-2002 on import of raw silk paved the way for import of mulberry raw silk 2A grade and above by six main agencies without import license. The notification may help in raising fabrics export and put into peril the livelihood of two economically weaker sections-farmers and reelers of the society.

ii. There was no problem of supplies of cotton to mills and issue was lack of demand for products. Out of the cotton export quota of 17 lakh bales for the year 1997-98 less than 2 lakh bales had been exported to other nations.

iii. The cost of credit with interest rates at around 10 percent, was one of the major hurdles in the way of competitiveness of India's textile industries.

iv. The textile mill management in India, spent crores of rupees on modernising their equipments but were not ready to spend a few lakhs in training the workers who would be manning the new machines.

v. Shipment delays could deal a blow to the exporters as foreign buyers insist on timely delivery.

vi. In Tamil Nadu, over 600 dyeing units were ordered by the Tamil Nadu Pollution Control Board (TNPCB) to close the units as per the directives of Green Bench of the High court on grounds of causing pollution to the environment. The closure of dyeing and bleaching units has started hitting the flourishing export trade.

vii. The mills are now confronted with the problem of "plenty" both in terms of installed capacity and production level. During the boom period which started in 1987-88 and continued till 1994, there was a phenomenal growth in capacity addition of textile mills. The liberlisation policy too has spurred others pursuing different vocations to venture into the textile sector. Thus many units, mostly small scale had come up in far-flung areas. However, excess capacity has now turned out to be a bane.

viii. The problems in powerloom sector relating to the use of dyes have been responsible for a reduction in imports by developing countries like Germany as the consumers were insisting that only fabric processed with vegetable based dyes were acceptable to them.

xi. The sharp rise in the power tariff has also added to the woes of the mills, as their recurring expenditure would increase. The present tariff of 50 paise increase per unit amounts to Rs. 5 lakhs a month for a unit of 25,000 spindles. A decade ago, the power charges were 75 percent of the wage while it is 250 percent now.

7. The suitable suggestions for the growth of handloom sector in the globalised economic condition in India:

i. To protect the domestic industry, a higher import duty on imported raw silk should be imposed.

ii. The Government may reduce the electricity tariff or extend subsidy facility to the mills.

iii. The present rate of four percent sales tax on cone yarn should be reduced to two percent and there should be no tax on hank yarn which has a two percent tag now.

iv. Cotton cone yarn is at present reeling under the highest excise duty of 5 percent and should be reduced to 2 percent. The export of hank yarn below 40 counts may also be allowed as there seems to be a great demand for such low count hank yarn. Hank yarn production in the country already exceeds the demand and hence the hank yarn obligation may be abolished immediately.

v. The Handloom Export Promotion Council (HEPC) also demanded that Shipping bill endorsement so far as cotton handloom fabrics, lunghis, real Madras handkerchiefs etc., should be transferred from Tex Procil to the HEPC to enable merchant exporters to claim duty drawback.

vi. The investment limit in plant and machinery for a small scale sector may be fixed at Rs. 3 crores for the textile industry concerned. The limit should be retained not only for the ready made garment units but for all segments of the textile industrys.

vii. Unless the obsolete machinery used by various sectors of the textile industry is replaced, the industry would not be able to survive international competition both within the country and in the world markets. The Government must subsidise interest under the proposed Rs. 25,000 crores Textile Modernisation Fund to the extent of five percent. The fund would be operated by financial institutions.

viii. Indian textile industry has still a long way to go to be ready for the WTO agenda and cater to the new demands of the international market. More participation in trade fairs such as Contest India can be of invaluable help in preparation efforts.

ix. The Government should direct the Pollution Control Boards to devise a simple and cost effective technology to treat effluents in the interest of small dyeing units.

x. It is also suggested that in view of huge surplus capacity, non-viable and obsolete machinery should be allowed to be scrapped apart from reducing excise duties and allowing a higher debt-equity ratio with reasonable interest rates for working capital.

CHAPTER VII

INSTITUTIONS FOR HANDLOOM SECTOR

Supportive organisation

The decentralised handloom textile industry of India has developed over the last seventy years on its own inherent strength. In many centres, this industry has its origin in traditional handloom weaving and hand processing. Over the years, powerlooms were slowly introduced by handloom weavers and traders of handloom fabrics to increase the productivity and scale of operations. Frequent recession in the composite textile industry has also helped in the growth of decentralised powerloom weaving. The discarded looms of composite mills were purchased by traders and entrepreneurs in powerloom centres. This pattern of growth was quite natural and has continued till date without the support of any statutory supportive organisations.

2. However, to tackle its own problems, the decentralised handloom textile industry has developed many supportive organisations which are operated on a cooperative basis by the entrepreneurs and traders of this industry. The supportive institutions which help in the healthy growth of the decentralised textile industry can be grouped as follows:-

   (i) Commercially supportive institutions

   (ii) Administrative supportive institutions

3. Commercially supportive institutions include local trade associations, research organisations, cooperative organisations, like spinning mills, banks, textile markets and other commercial service facilities like transportation, sundry supplier, etc. This group of organisations has developed on its own strength without any support of state or central government. The contribution of these two classes of supportive organisations in the growth of the decentralised textile industry in different centres varies. Similarly, the extent of the growth of commercially supportive organisations is also varying in different centres of the powerloom industry.

4. For a decentralised sector, organisational structure is always complex. Level of organisation comprises, Government of India, AIHB, NABARD, NHDC, NCDC, ACASH, AIHFMCS, HPC and H&HEC at the national level; State Bank, State Handloom Development Corporation at the state level and primary co-operatives at the grass root level. The office

of the Development Commissioner for Handlooms is the nodal agency for the development of handlooms. The common financial linkage thus serves as a controlling tool, quite often eroding the independent nature of the units.

Handloom Export Promotion Council - HEPC :

5. In order to motivate, coordinate and facilitate exports of handwoven goods, the Government of India constituted the Handloom Export Promotion Council in 1965. To the 1600 firms registered with it, the HEPC provides a variety of services aimed at promoting exports of cotton handwoven goods. As the nodal authority for export of cotton handloom products from India, the HEPC advises Government and other authorities on policies and measures in relation with handloom trade.

6. The HEPC also collects market intelligence and trade information to provide feed-back to Government and other agencies and for dissemination to its members. It acts as a liaison agency between exporters on the one hand and importers, trade organisations and Governmental institutions on the other. In order to establish contact with buyers and to provide exposure to handloom products overseas, the HEPC undertakes publicity initiatives and organises trade delegations and participation in International Exhibitions.

7. The HEPC has prepared a data-base on the exportable varieties of Indian handwoven fabrics. The nature of the equipment and processes employed at various handloom centers is being studied in order to facilitate modernisation and technical upgradation of this age-old industry. An ambitious programme has been initiated to identify and apply the appropriate technology for specific products at different production centres, in order to improve quality of output and increase productivity. To meet the exacting requirements of the international textiles market, the HEPC disseminates to manufacturers information regarding the latest developments and trends in the world of fashion. Indeed, it is a long way from the rustic craftsman at his loom to the glamourous model treading the international ramps of fashion.

8. The magnitude of the task of the HEPC is clearly evident: to provide exposure and publicity in world markets for the wondrous creations of millions of handlooms scattered throughout the sub-continent, on the one hand, and, on the other, to induce the rural craftsman to produce fabric according to the changing predelictions of the consumer market. The proof of HEPC's efforts lie in the manifold increase in exports of handloom products during the last two decades. Handwoven items

from India are to be found in all major textile markets, covering a wide range of product groups. Although this penetration has been partially enabled by the general absence of quotas and restraints on handloom goods, the abolition of quota exemptions in the near future is not expected to affect the fortunes of handloom exports. The products of the handloom command a special and unique identity. They are the fruit of a long heritage of unequalled craftsmanship, creations which cannot be replicated on more sophisticated looms, products which can cater to all needs from the most sophisticated to more mundane. Herein lies the strength of the handloom tradition and its guarantee of success for the future.

Handloom Cooperatives :

9. From a very high degree of perfection for centuries the Indian Handloom Industry started its down journey from the day of invention of spinning jenny in England, closely followed by power run mechanical loom. It was Mr.F.D. Haveli, reporter on Art and Industry to the Government of Madras, who first mooted the idea of forming weavers cooperatives as far back as 1907. The Royal Commission on Agriculture observed in 1928 that "That survival of village industries in fast increasing competitions, it is essential that they are developed on cooperative basis". The Government of India in 1934 announced an annual subsidy of Rs. 5 lakhs for each State Government for improving the Handloom industry. The meager financial assistance thus provided, acted as the seed, for the present cooperative organisation for handloom industry in the country and was responsible for starting an Apex Weavers Cooperative Society in the Madras province in 1935. That was the beginning of Cooperativisation of Handlooms. Even today, the weavers cooperatives are by and large confined to handloom weaving, though, about 5 percent of powerlooms are also covered under cooperatives.

10. Cooperatives, follow generally two levels of organisations within the state-primary at the grass root level, concentrating on production link up to federated marketing cooperative at the state level. Some States have three tier system like in Maharashtra, were Regional level cooperatives comprising 6-7 districts are also in operation. However, wherever a three tier system is adopted, generally, one of the tiers is ineffective, either Regional or State Level. There have always been difficulties in demarcating roles at the state level between state, cooperative and private agencies. Within the state Government Departments act as State Level Policy Framers, concentrating more on regulatory role than developmental role. The State Level Corporations

are first commercial and then developmental in their functions. Cooperatives assume developmental role first and the commercial role becomes secondary. The private agencies like master weavers wholesalers, retailers and distributors are only commercial and have nothing to do with development whatsoever.

11. In general the development role is placed at second priority and the duplication and conflict between agencies push the helpless weaver to the wall. Paradoxically, for a primary handloom cooperative the only variable available is the weavers wage and any fluctuations due to change in economic environment always results in lower wage earnings by weaver or no earning at all. The management of Handloom Cooperative for all tiers cannot be the same. While Regional, State and National level Societies follow similar type of managerial structure the Primary Handloom Cooperatives follow a slightly different one.

12. While the General Body of the Primary society is the Supreme Policy making organ of the Primary Handloom Weavers Cooperative Societies (PHWCS), it also exercises control over the overall performance of the elected members. Generally, the elected board places its plan of action, budget estimates, investment proposals, broad changes in the proposed working etc., before the General Body. Based on the GB guidelines the Board is expected to function. Board or a subgroup of the Board chalks out the detailed plan of action, production programme, raw material supply, weavers wage depending upon the complexity of design, preparatory work like sizing, yarn dyeing, purchase of yarn and dye-stuff, credit etc. Board also determines the amount of yarn, dye stuff and other inputs to be advanced to weavers depending upon the credibility of the members etc.

13. The Secretary is the Chief Executive in PHWCS. The secretaries fall in three categories. In some states, he/she is an 'Appointed Secretary' by the society. Many states have 'Cadre Secretaries'. In yet another system, 'Secretary' is one of the elected members of the Board. While the cadre secretary is more Governmental in approach, the appointed secretary is generally dynamic. However, if appointed secretaries are not local persons they have a tendency to be mobile.

14. The Cadre secretary has less motivation and is subjected to routine transfers but basically better trained to handle the affairs of the society. Appointed secretaries lack training in book keeping, finance and accounts etc. Elected secretaries are either as good or as bad as appointed secretaries. The basic lacuna in the sound management of the PHWCS has been ineffectiveness of the secretaries. The literacy

level in weavers being low, the secretary should be a friend, philosopher and guide rather than a mere official.

15. On the other hand a master weaver provides all the three qualities to the weaver but also exploits the weaver. Hence a master weaver is still acceptable to the weaver community. Of course, the lack of loyalty of the weaver to the society and absence of good leadership are also responsible for the poor working of the societies. Good linkages have also been responsible for success of the society. Even between the Apex HLWCS and the PHWCS the linkage has been strong in as much as 100 percent of the procurement of the state level society is generally from the primaries/cooperatives. However, Apex cooperatives procure far less than the anticipted level.

16. The scope for professionals is limited in PHWCS because of low scale of operation. As a result, the primaries do not foresee the market needs, market changes and fail to adapt themselves to changes. They tend to be more traditional than innovative. This results invariably in unsold goods. A Few working Regional level Societies are no better than a good primary society.

Development Commissioner for Handloom (DCH) :

17. Consequent upon the recommendation of the Sivaraman Committee, Development Commissioner for Handlooms (DCH) at the Central Government level was established in 1976 as nodal agency and charged with the responsibilities of development of the handloom sector. The Schemes in operation are:

    i. Schemes to strengthen the organisational framework like increasing membership by cooperatives.

    ii. Establishment of Cooperative Spinning Mills and Hank Yarn Obligation Schemes.

    iii. Development Assistance (MDA) (Market Support Schemes) for offering discount on cloth marketing, opening of showrooms, publicity, organising exhibitions etc.

    iv. Janata Cloth Scheme is in operation with twin purpose of sustaining employment among weavers and supply of cheaper cloth to economically weaker sector of the society.

    v. Area Development Projects aim at development of integrated handloom villages and special schemes for hill area and Scheduled Caste & Scheduled Tribe Development.

vi. The productivity oriented schemes aim at moderning looms and purchase of looms & accessories.

vii. Welfare Schemes - like Housing cum Worksheds and Thrift-Run Scheme.

viii. Research & Development input and Training though Weavers Service Centres and Indian Institute of Handloom Technologies.

ix. Establishment of Weaving sheds pre & post loom processing facilities.

18. With a view to encouraging the textile mills to modernise their old machinery with modern ones, the Government had set up a Textile Modernisation Fund Scheme, (TMFS) in pursuance of the Textile Policy of June, 1985, for providing modernisation assistance at concessional rates of interest. The assistance sanctioned and disbursed under the scheme till 31.12.1993 was Rs. 1288.46 crore and Rs. 897.48 crore respectively, including foreign currency loans. However, the Textile Modernisation Fund Scheme was discontinued by IDBI from August 1991 due to resource constraints.

19. Considering the felt need to upgrade technology in different segments of the textile industry, Government of India has launched a Technology Upgradation Fund Scheme (TUFS) for Textile and Jute Industries, w.e.f. 1.4.1999, for a period of 5 years, i.e., up to 31st March 2004. The main feature of the scheme is that it provides a reimbursement of 5 percent point on the interest charged by the lending agency on a project of technology upgradation in conformity with this scheme. There is no cap on funding under this scheme. It is an open-ended scheme depending on the capacity of the industry to absorb funds in bankable and techno-economically feasible proposals. Technology levels are bench marked in terms of specified machinery for each sector of the textile industry. Machinery with technology levels lower than that specified will not be permitted for funding under the TUF scheme.

20. The identified sectors in the textile industry, viz., spinning, silk reeling & twisting, wool scouring & combing, synthetic filament yarn texturising, crimping and twisting, manufacturing of viscose filament yarn (VFY), weaving/knitting including non-wovens and technical textiles, garments, made-up manufacturing, processing of fibres, yarns, fabrics, garments and made-ups and the jute sector are eligible to avail of these concessional loans for their technology upgradation requirements. Investments in common infrastructure or facilities by an

industry association, trust or co-operative society and other investments specified are also eligible for funding under the scheme.

21. IDBI is the nodal agency for textile industry excluding SSI sector and SIDBI is the nodal agency for SSI textile sector. IFCI is the nodal agency for the jute industry. IDBI has co-opted 76 financial institutions comprising of 4 AIFI's, Exim Bank, 25 scheduled commercial banks and 46 SFC's/SIDC's/twin Function IDC's and 1 co-operative bank. SIDBI has co-opted 130 financial institutions comprising 81 scheduled commercial banks, 2 co-operative banks, Exim Bank and 46 SFC's/ SIDC's/twin function IDC's. Loans under the scheme are extended by the nodal agencies /co-opted institutions to the identified segments of the industry for the projects of conformity with the scheme from their own resources. Government funding is limited to reimbursement of interest at 5 percent on the interest charged by the lending agency on a project of technology upgradation in conformity with the scheme.

23. The functioning of the scheme is being periodically monitored by an Inter-Ministerial Steering, chaired by Secretary (Textiles). The Committee also makes suitable amendments to the scheme based on the feed back from the industry. A Technical Advisory cum Monitoring Committee (TAMC) under the chairmanship of Textile Commissioner has also been set up to assess the eligibility of any other textile machinery equal to or higher than the benchmarked technology not listed in the scheme or developed during the course of the operation of the scheme as well as to suggest necessary changes in the financial norms for the smooth operation of the scheme. The progress of TUFS up to 31 st March, 2000 is given in the Table - 39.

24. To take care of the interest of the workers rendered jobless due to the permanent closure of textile mills (partial closure of mills also included by a subsequent amendment of the scheme), the Government had created the Textile Workers Rehabilitation Fund Scheme, in pursuance of the Textile Policy of June 1985. Under this scheme the workers whose wage was upto Rs. 2,500 per month or less are given relief on a graded scale for three years immediately after their retrenchment from employment. Till 31.03.2000, Rs. 125.70 crore were disbursed to 59,461 workers involving 38 textile mills. State-wise details of workers affected and relief amount paid under the scheme are presented in Table - 40.

TABLE - 39

PROGRESS OF TECHNOLOGY UPGRADATION FUND SCHEME AS ON 31/03/2000 (PROVISIONAL)

NODAL AGENCIES	NO. OF APPLICATIONS RECEIVED DISBURSED	TOTAL COST OF PROJECT	AMOUNT OF LOAN REQUIRED	NO.OF APPLICATIONS SANCTIONED	AMOUNT SANCTIONED	NO. OF APPLICATIONS	AMOUNT DISBURSED
IDBI	98	3207.03	1457.21	80	1181.94	46	338.88
IFCI	11	585.84	379.24	9	353.69	8	70.88
ICICI	22	629.55	396.01	21	386.44	13	168.57
IIBI **	1	11.50	8.50	1	42.50	0	9.00
EXIM BANK	12	269.71	234.86	8	160.06	6	47.45
PLIs Co-opted by IDBI	29	562.15	144.08	23	106.47	12	27.93
sub-total	173	5265.78	2619.90	142	2231.10	85	662.71
SIDBI	91	220.21	139.05	42	48.30	24	19.06
PLIs Co-opted by SIDBI	115	112.09	76.14	105	65.60	54	20.13
Sub-total	206	332.30	215.19	147	113.90	78	39.19
Total	379	5598.08	2835.09	289	2345.00	163	701.90
SBI Co-opted by IDBI & SIDBI	28	172.50	113.99	20	76.12	16	43.64
Grand Total	407	5770.58	2949.08	309	2421.12	179	745.54

** - All sharing case

Source: Ministry of Textiles, 2000.

Table - 40

State -Wise Disbursements under the TWRF Scheme since its inception upto 31-03-2000

State	No.of eligible workers	No.of workers paid	Amount paid (Rs.)	No.of workers yet to be paid
Delhi	5,187	5,169	119,231,275	18
Gujarat	62,622	43,193	943,469,924	19,429
Madhya Pradesh	3,752	3,536	65,696,616	216
Maharashtra	3,225	2,984	60,913,120	241
Tamil Nadu	4,595	4,579	67,655,330	16
Total	**79,381**	**59,461**	**1,256,966,265**	**19,920**

25. The Mill Gate Price Scheme was introduced in the year 1992-93 with an objective to supply yarn at Mill Gate price to the handloom weavers through National Handloom Development Corporation (NHDC). Under the scheme, till the year 1994-95 the rate of reimbursement to the NHDC was 2 percent of the value of yarn supplied which has been enhanced from 3.5 percent in 1995-96 to 4 percent from 1997-98 on wards. The agencies covered upto 1994-95 were limited to state Apex/ Regional Primary Weavers Cooperative Societies and Handloom Development Corporations which has been extended from 1995-96 onwards to the Handloom Development Centres and Primary Societies having a turnover of more than Rs 50.00 lakhs. Since 1997-98, All India Handloom Organisations, Handloom Development Centres, approved Export Houses, NGOs fulfilling CAPART norms, etc. are eligible to avail the benefit under the scheme.

26. In line with the Government of India's decision to promote production of high value items in the handloom sector as well as the increasing use of jute and jute blended yarn for production of jute and blended fabrics, the Govovernment of India from 1996-97 has decided to include supply of silk and jute yarn also under the scheme. Under the scheme, supplies of yarn have increased from 49.42 lakh kgs. in 1993-94 to 117.00 lakh kgs. upto December 1998.

27. The importance of handloom sector in the national economy cannot be overemphasised on account of having the advantage of flexibility of small production run, uniqueness, innovation and adaptability to the exports requirement, and contribution towards export earning. Export of handloom has been therefore identified as "Thrust Area" for the overall development of the sector. The Government is exploring the possibility of making optimal use of the resource. In order to give substantial impetus to the export of handloom fabric, made-ups and other handloom items from the country, scheme for Development of Exportable products and their marketing has been introduced during 1996-97. Under the scheme, assistance is available for developing exportable products, for building up of production capability for export and thereafter marketing it.

28. Project package scheme introduced in the year 1991-92 has continued during the IX plan period in its modified form by merging the scope of the integrated Handloom Village Development and Margin Money for destitute weavers scheme. The restructured and expanded scheme aims to provide necessary support in a comprehensive manner and to mitigate the pre/on/postloom problems of the handloom weavers. Although ginning and pressing of cotton plays a crucial part in determining the quality of yarn and fabric, the sector is plagued with the problems of old and obsolete machineries; NCDC in order to help cotton growers market their produce, kapas (raw cotton), after primary processing is implementing schemes for establishment of modern units and for modernisation of existing ginning and cotton bale pressing units in the co-operative sector. So far 76 ginning and pressing units could be assisted entailing a total sanction of Rs. 1131 lakhs.

29. NCDC is implementing two central schemes whereunder funds are provided to the state Governments. For contribution to the share capital of the co-operative spinning mills in growers and handloom weavers sectors. Further, the corporation provides assistance for modernisation/ diversification/expansion of existing spinning mills and margin money for raising working capital. In order to initiate long term modernisation of co-operative cotton processing sector, NCDC implemented the NCDC-III project-cotton component" from 1984-85 onwards with World Bank Finance. Both term loan and investment loan towards establishment of 14 spinning mills attached with ginnery projects in major cotton producing states of the country were provided by the NCDC under this project .

30. Upto March 97, NCDC has financed establishment of 69 new, expansion of 32 and modernizataion of 13 co-operative spinning mills

besides providing margin money assistance involving a total commitment of Rs. 415.48 crores. NCDC has been providing financial assistance for the Development of Handloom sector for strengthening the share capital base of co-operatives, construction of common worksheds, construction/renovation of showroom/godown/ showroom cum-godowns, establishment of pre and postloom processing facilities, creation of posts under Technical & Promotional Cells and assistance for preparation of project reports/feasibility studies. The corporation has assisted 3124 units involving financial assistance of Rs. 8795 lakhs.

National Bank for Agriculture and Rural Development (NABARD) :

31. NABARD is providing refinance facilities to State Cooperative Banks for:

    i. Financing the procurement and marketing of cloth as well as yarn supply by Apex Regional Weavers Societies and

    ii. Central cooperative banks for financing the production and marketing activities of Primary Weavers Societies.

32. Under the NABARD scheme cash credit accommodation is made available through State Cooperative Banks at 2.5 percent below the bank rate for production and marketing to primary societies and procurement and marketing to Apex Cooperative Societies, on condition that bank will charge the same rate of interest to the societies. For trading in yarn, NABARD provides re-finance at bank rates. NABARD has also schemes to provide long term finance for renovation of showrooms and housing cum worksheds.

33. There have been several constraints in channelising credit to the handloom sector. These fall in two categories (a) Organisational and (b) Operational. Analysis of credit flow indicates that there is growth from year to year. However, actual credit flow to the Primary and Apex Cooperatives has been only about 50 percent of the targets set. Out of these, two states, namely, Tamil Nadu and Andhra Pradesh account for nearly 70 percent of the credit limit sanctioned.

34. The present system envisages credit limits to Apex Cooperatives and Primary Cooperatives on the basis of 40 percent of anticipated production/sales turnover. Additional credit limits are also sanctioned during festival season subject to the condition that the overall credit limit does not exceed 75 percent anticipated production/sales turnover. However, the Apex societies do not have capacity to hold stock for long duration. Consequently, Apex societies are unable to make payment

for 6-7 months to the primary cooperatives during lean seasons. Primary Cooperatives are also required to hold large inventory not only in view of seasonal sales but also because Apex societies do not lift production.

35. Another reason for inability of Apex societies to make prompt payments to the primaries, is the Government dues under rebate. Janata subsidy and credit sales to Government Department due to budgetary constraints at the State Government level, delays in release of funds have become common. The financial performance of majority of the primaries has been poor. Heavy accumulation of inventory and large debt create high current ratio which is not prevalent in any other sector. Gross profit margin is too little to meet expenses. Thus the capacity to absorb cash credit reduces.

36. While the cooperatives are permitted 3 lines of credit viz, credit to primary societies for production, credit to Apex level societies for procurement and sales and credit for supply of yarn to apex level cooperatives, the State Handloom Development Corporations do not enjoy similar facilities, although, SHDCS undertake all three functions namely, production, marketing and yarn supply. There are many rates of interest for different handloom activities. For example, the production procurement and marketing of cloth has rate of interest of 7.5 percent and yarn trade by cooperatives attracts 12 percent interest rate. For pre-loom processing like warping and sizing by cooperatives the rate of interest charged is 11 to 13.5 percent. National Handloom Development Corporation pays 16.5 percent for yarn supply operations. The spinning mills for production of hank yarn pay 18 percent rate of interest.

Khadi and Village Industries Commission (KVIC) :

37. The Khadi and Village Industries Commission (KVIC) is a statutory body created by an Act of Parliament in 1956. It is charged with the planing, promotion, organisation and implementation of the programme for the development of Khadi and other village industries in the rural areas in coordination with other agencies for rural development. It was established in April 1957 and took over the work of the All India Khadi and Village Industries Board.

38. KVIC has also taken up the tasks of building up a reserve of raw materials and implements for supply to producers, creation of common service facilities for processing of raw materials as semi-finished goods and provision of facilities for marketing of KVI products apart from organisation or training of artisans engaged in these industries. To

promote the sale and marketing of khadi or products of village industries or handicrafts, KVIC may forge links with established marketing agencies wherever necessary and feasible.

39. KVIC is also charged with the responsibility of encouraging and promoting research in the production techniques employed in the khadi and village industries sector and providing facilities for the study of the problems relating to it, including the use of non-conventional energy and electric power with a view to increasing productivity, eliminating drudgery and otherwise enhancing their competitive capacity. KVIC is also entrusted with the task of providing financial assistance to institutions or persons engaged in the development and operation of Khadi and village industries and guiding them through supply of designs, prototypes and other technical information.

40. In implementing KVI activities, KVIC may take steps to ensure genuineness of the products and set up quality standards and ensure that the products of khadi and village industries conform to standards. KVIC also may undertake directly or through other agencies, studies concerning the problems of khadi and village industries besides experiments or pilot projects on the development of khadi and village industries. KVIC is authorised to establish and maintain separate organisations for carrying out any of these activities.

41. Out of the total industrial employment in the country, about 80 percent is provided by the Village and Small Industries sector (VSI). Within VSI, the role of Khadi and village industries in providing employment is important. The traditional industries like khadi, village industries, handicrafts, handlooms, etc., provide about two-third of the employment in the country. KVIs are less capital-intensive and more employment - intensive and can be started with less capital with a shorter gestation period. For rural development and balanced economic growth of various regions, KVIs can play an important role.

42. The gestation period in the case of KVIs is much less as compared to medium and large industries. The production of KVIs is available within a very short time of start up. The activities of KVIs can be organised with least disturbance to ecology and without pollution. The energy consumption of KVIs is the lowest. There is ample scope for introduction of appropriate technologies and upgradation of traditional technologies befitting rural development. Of the total employment in KVI programmes, about 48 per cent is accounted for by women. This is important.

43. The employment of SCs/STs in KVI programmes is about 32 percent. This coverage is higher compared to the national coverage. The activities of KVIs are within easy comprehension and reach of the SC/ST population. KVIs have a favourable incremental capital output ratio as compared to large industries. Adaptability to frequent changes in raw materials, designs and varieties and reduction in the scale of production, providing employment opportunities to uneducated, unskilled, semi-skilled and educated persons prevents migration of rural artisans to urban areas and contributes towards the preservation of forests and trees.

44. Due to small scale of operation of various units and high content of wages in unit cost, KVI products are often costlier. Wage profiles in various KVIs are very low due to lower productivity of equipment and part-time of employment in some industries. Absence of proper processing, packaging and marketing back-up for the products. In some of the products, quality is not comparable to identical products from factories. Government subsidies via sales rebate, interest subsidies etc., have to be contined in view of the price handicap suffered by KVI products.

Research and Development in Handlooms :

45. The priority areas for research in the industry are energy conservation measures, improvement in the quality to boost exports, providing cheaper and more durable fabrics for internal consumption, research on Textile Machiery and improvements in the handloom sector. Technical support in the form of Research and Design to Handloom Industry is being provided by the Weavers Service Centres and the Indian Institute of Handloom Technology. These establishments are manned by Technical Officers and concentrate on creation and development of new designs and colour combinations. The Weavers Service Centres are intended primarily to function as channels through which handloom Industry can receive technical advice and assistance in various stages of handloom production i.e., weaving and pre-loom and post loom processes.

46. Man-Made Textile Research Association **(MANTRA)** is a premier research association of Surat. It is a national R&D Laboratory recognised by DST and is linked to the Ministry of Textiles, Government of India. It has provided a great deal of assistance to the local industry by way of disseminating scientific knowledge acquired through R&D, training and education and testing and technical services. Various other activities of MANTRA have also helped the local decentralised textile

industry to become strong enough in terms of productivity, quality and cost effectiveness to compete in the market.

47. To cope up with the demands of rapidly increasing trading activity at Surat, cooperative societies were set up in the seventies which constructed two major wholesale markets and warehouses. The Surat Textile Market with 1,030 shops and Bombay Mahajan Market with 750 shops commenced their activities in 1972 and 1975 respectively. Both these markets have played a catalytic role in further development of textile manufacturing and trading activities. Today, the entire stretch of land on both sides of Ring Road, in the eastern part of the city is occupied by different textile markets. There are at present more than 50 textile markets with atleast 50 shops in each market in this area. Trading of all types in art-silk fabrics, whether gray or finished, is done through these textile markets.

National Handloom Design Centre and National Handloom Museum :

48. NHDCNHM was established at Pragati Maidan, New Delhi in the year 1983 with a view to collecting old specimens of textiles and techniques of various traditional handlooms for study research and product development.

National Institute of Fashion Technology :

49. Government of India has set up a National Institute of Fashion Technology to cater to the needs of design, fashion and garment technology.

The Textile and Allied Industries Research Organisation (TAIRO) - Kala Bhavan Premises, Baroda :

50. This institution is the first cooperative research organisation in the country to function in collaboration with M.S University of Baroda on the one hand and the industrial sector on the other and their aims culminate in Textile Engineering Research in particular and Textile Industry Research in general.

The Bombay Textile Research Association :

51. The wide scope of work of BTRA covers the entire field of textile research comprising fundamental and applied research in mechanical and chemical processing relating to cotton and blends with man - made

fibres, operational research including statistical quality control and human relations and technical liaison for implementation.

The South India Textile Research Association (SITRA) Coimbatore :

52. The SITRA was initiated by the Government of India and supported by the Textile Industry in South India to undertake fundamental research on fibre physics, fibre technology and mechanical processing of cotton as well as man-made fibres. Their activities also include study of problems of importance to the handloom Industry.

Silk and Art Silk Mills Research Association (SASMIRA) - Mumbai :

53. This is a Cooperative Research Organisation for furthering the technical and scientific interests of the Indian silk and man-made textile industry by means of fundamental and applied research and other relevant services.

The Ahmedabad Textile Industries & Research Association, Ahmedabad :

54. The aims and objectives of research for improved materials, technology and human relations in the textile industry and training.

The Indian Jute Industries Research Association, Kolkata :

55. The Indian Jute Industries Research Association undertakes fundamental research in jute production/manufacture/marketing in India.

Central Silk Board, Bangalore :

56. The Central Silk Board, undertakes fundamental research in all aspects of silk cultivation/rearing/manufacturing/ processing.

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