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Some economic aspects of the Indian cotton textile industry since independence 1947

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SOME ECONOMIC ASPECTS
OF THE INDIAN COTTON TEXTILE INDUSTRY
SINCE INDEPENDENCE 1947

A THESIS
SUBMITTED TO THE FACULTY OF ATLANTA UNIVERSITY
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THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION

BY
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DEPARTMENT OF BUSINESS ADMINISTRATION

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PREFACE

A very few industries in India have affected its economic relations as much as the cotton textile industry. Because of the industry's ramified international character, it merits the attention of students of Economics and Business. An attempt is made here to touch some of the high lights of this industry, particularly after the partition of India. Although some of the statistics may be variant, care is exercised to minimize this discrepancy by relying mostly on governmental publications.

I am very indebted to my friend, Sri. Culli Ram-Mohyn Rao, Vijayawada, India for sending me all of the latest material concerning this topic from India. Mr. Glenn E. Duncan and his parents, Dr. and Mrs. G. A. Duncan of Decatur, Georgia have furnished me materials on the National Cotton Council of America, and I am grateful. I also thank Dr. Morris David Morris, Assistant Professor of Economics, University of Washington, Seattle, Washington, who readily made available to me Dr. Mehta's thesis, "The Indian Cotton Textile Industry: An Economic Analysis". Needless to say, I appreciate the assistance of the faculty of the School of Business Administration of Atlanta University.

I feel especially grateful to Dr. Phyllis A. Wallace for all the valuable guidance and patience in advising me on the thesis and encouraging me to finish on time.
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CHAPTER I

INTRODUCTION

Position of Indian Cotton Textile Industry

The cotton textile industry is taken to mean the industry in which the varieties of cloth such as coarse, medium, fine and superfine are manufactured out of short, medium and long staple cotton (most of the long staple cotton is imported from abroad) for domestic as well as foreign consumption. No attempt has been made to include the subsidiary industries which make apparel and other decorations of design out of this mill and handloom cloth.

The modern Indian cotton textile industry is more than a century old. It holds the premier position in India's economy with a value of income originating of Rs 350-400 crores (about $740-850 million) annually during the period 1948-52. Millions of cotton growers sell their produce to the mills. About one-third of the yarn is utilized by a variety of subsidiary industries such as hosiery manufacture, powerloom, tapes and niwars, cotton banding, cotton belting, fire hose, tyre cord fabric, fishing net, sewing and other thread, jute mills, electric motors, insulated wires and miscellaneous. Out of 1,447 million pounds of total yarn produced by the mills in 1952, the yarn available for handlooms...
and other consumers was 474 million pounds.

It is a major industry which contributes on an average more than Rs 31 crores (about $65 million) annually, by means of income tax, surtax, excise duty, state and municipal taxes to the national exchequer at home. Its annual production accounts in value for nearly a third of the entire industrial production of the country. About 75,000 workers are directly employed by this industry which further extends direct and indirect employment to the producers and suppliers of textile auxiliaries. It also provides sustenance to about 1.5 million handloom weavers by supplying them all the yarn they require. It earns on an average Rs 58 crores (about $122 million) annually of foreign exchange abroad. At present, India is the second largest exporter of cotton textiles in the world. "In relation to the world textile industry, the Indian industry ranks second in the volume of cotton consumed..." In productivity terms of looms and spindles installed, India ranks the third. It is estimated that the annual average quantity of

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2. King Cotton; Modern India Series II, p. 2.

mill cloth for export during 1948-52 was 67 crores (670 million) yards.

At first, the cotton textile industry devoted its attention to spinning rather than weaving. It has a successful and prosperous trade with China. Between 1895-1905, her trade declined owing to the multiplicity of mills in China and Japan. Eventually, the industry in the beginning of this century switched over to the weaving side. This transformation took place due to the growth of competition, both inside and outside the country. The cotton mill industry has been a profitable concern from the beginning and more so in the close of the last century. In order to meet the increased demand of both yarn and cloth within the country and the growing trade with China and other Eastern countries, the industry was called upon to change the economy of the existent pattern of horizontal single process unit, particularly as regards spinning to vertical integration, a unit of spinning, weaving and in many cases even finishing in one and the same mill.

A sum of Rs 100 crores (about $215 million) was invested as fixed capital for the industry as a whole in the years 1946-47 to 1951-52. Although the British influence was pre-


sent, the industry owes its inception to Indian enterprise and resourcefulness. Except for a section of it in the South, it is predominantly owned by Indians. The main countries of the cotton mill industry are Bombay, Ahmedabad, Cownpore, Indore, Sholapur, Madwra, Nagpur and Coimbatore. It is not localized or concentrated at one place.

Although cotton is important in present day life, India has been a land of cotton and her people have grown, woven and worn cotton from time immemorial. India paved the way to the importance and significance of the use of cotton for clothing. Before the Christian era, historians believed that India had a prosperous trade with other civilized countries such as Greece and Egypt. The reputation of cotton skilled weavers and their cotton industries, at a later period, proclaimed their dexterity far and wide. The well reputed Deccan muslins of Bengal are said to be woven out of yarn of 400 counts, and above.

In the first half of the 17th century, England imported cotton piece goods, indigo, sugar, carpets, etc. from India and in return the East India Company (formed in 1600 in London,

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1 There is an evidence, about 3000 B.C. that India was not unknown to the use of cotton. Excavations at Mohenjo-Daro (which represents the India valley civilization of 5000 years ago) reveal the existence of cotton growing and weaving.

2 *King Cotton: Modern India Series II*, p. 8.

3 A count is defined as the number of yarn (or threads) per inch.
its renewal Royal charter gave a monopoly trade power over Asia) brought to India broadcloth, industrial metals and gold. The British who came as traders in the first decade of the 17th century had to fight with other European powers, such as Dutch, Portuguese and French who were already trading with India to establish its supremacy. "In some areas, the East India Company ruled directly through its officials. Elsewhere it stood close behind the thrones of Hindu Maharajars and Moslem Nawabs...."

While India was ruled in the 18th century, Britain witnessed a new era popularly known as the Industrial Revolution. Many scientific inventions and technological improvements came to the forefront. Hargreave's spinning jenny, Kay's flying shuttle, Crompton's mule, Ark Wright's waterframe and other innovations were partly responsible for replacing the ancient methods of manufacturing cotton textiles. Britain enhanced its importance, with her scientific devices, and consequently India lost her ground and became the importer of British cloth. Britain, with her political power and strategy, exported the manufactured cloth to India and created an assured market for her manufactured goods. Dr. R. K. Merkerjee maintains that "the political subordination of India not only led to the strangulation of India's European trade but at home she was left completely at the mercy of England, who forced upon her cotton piece goods without the payment of any duty." Thus India lost much of her foreign markets for piece goods in
Africa, Asia and the Indian Archipelago.

**Early British Influence**

Between 1817-1854, attempts were made to set up cotton mills in India at Calcutta and Pondicherry, and they had an abortive end. It is commonly believed that the cotton mill industry was exclusively owned by Indians. But the facts are otherwise. As early as 1817 the first cotton mill was set up by an Englishman, but it ended in failure. Later in 1830, the Fort Gloster Mills in Bengal was established under European management. Killick Nixon and Company of 1870, the Sassoons of 1888 and Bradbury and Brady of 1890 were some of the examples of British management which dominated the industry in Bombay. The Harveys of Madura Mills and the Staneses of Coimbakore Spinning and Weaving Mills are some of the examples of the South.

This British management and ownership gave rise to Lancastrian type of equipment such as multi-storied buildings, British machinery, etc. Further, the cultural and language barrier that set apart the indigenous workers from the European management gave rise to a new type of personnel known as jobber. The jobbers are intermediate agents who played the

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role of controlling and communicating with the employees.

In a word, the British influence moulded the Indian cotton mill industry to a great extent by her own Lancastrian pattern of equipment and management. Britain being the leader in the establishment of a cotton textile industry in the world, India was no doubt benefited indirectly through her influence. The equipment and installation of the Indian cotton industry were patterned after the Lancashire style. The machineries were made in Britain and the spare parts were imported from Britain. The Indian technicians and management were mostly trained in Britain.

Modern Textile Industry

The first modern cotton textile mill in India was set up in 1818 in Howrah district in Bengal. Later in 1854, the Bombay Spinning Mills at Tardeo in Bombay was established by the Parsi pioneer merchant Cowasjee Nanbhoy Davar. By 1860 two more mills were added. The American Civil War gave impetus to textile industry. During the war, India was presented with an opportunity to export raw cotton worth more than Rs 360 lakhs ($36 million) a year to fill the gap caused by the stoppage of American exports. As a consequence, gold

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1 It was partially owned by Englishmen and the technique and personnel were Lancashire in character. In the same year one enterprising Englishman, James Landon, set up a cotton industry at Broach near Bombay.
and silver poured into India and a part of these funds found its way into the cotton mill industry. By 1865 there were ten mills with 350,000 spindles, 3,400 looms. By 1875, the number rose to 27 with 750,000 spindles and 8,000 looms. Between 1880 and 1947 before partition, the number of cotton mills increased from 56 to 423 (seven-fold), of spindles from 1,461,590 to 10,353,973 (seven-fold) and of looms from 13,507 to 202,662 (fifteen-fold). "By January 1, 1954, there were 400 cotton textile mills in the country consisting of 114 purely spinning mills and 286 composite mills (doing spinning and weaving and in many cases, also finishing). The installed spindleage was 11.619 million, of which 0.185 million were permanently idle. The actual spindleage available was, therefore, 11.43 million. Of these 9.506 million were installed in composite mills and 1.928 million in spinning mills. The installed loomage in the country on that date was 201,718, of which 197,000 looms were active."

It is believed that spindles and looms determine the size of the industry's productivity. Over 60 per cent of them are concentrated in Bombay state and the rest of them are distributed in other centres such Madras, Madhya Pradesh, Uttar

1 Tulsi Ram Sharme, Location of Industries in India, (Hind Kitabs, Ltd., 1948), p. 16.

Pradesh and Madhya Bharat.

Spindle is "the long, thin rod used for twisting and holding up the spun thread when spinning on a wheel or machine". More than 95 per cent of the spindles installed in 1950 were comprised of ring spindles. The other 5 per cent are mule spindles, waste spindles and chapon spindles in the descending order of importance.

A loom is a machine for weaving cloth which is operated by hand or by machine. The pattern of loom distribution in 1950 is as follows: Plain looms 70 per cent, Jacquard looms less than 1 per cent, Dobby looms 27 per cent, Automatic looms 4 per cent. The most prominent among them is the automatic loom. It produces more cloth with less strain to the worker and this affords him relief. Another distinctive feature of the automatic loom is that it insures better quality cloth. The leading textile industries of the advanced countries have all switched over to automatic looms. The role of this loom of the present day economy of India is rather limited and this will be brought out in the next chapter.

Natural cotton can be replaced by man-made fibers. But the physical properties of cotton fibers still outstrip many

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1 Millowners' Association, Clothing India's Millions, (Bombay, 1953).

of its substitutes. "Cotton fibers have a natural twist which provides excellent spinning qualities resulting in strong yarns. An extremely durable fiber with good stability against stretching, it is highly resistant to degradation by heat and has good "bulking" and insulating qualities. High, wet strength, together with absorbency which causes the fiber to swell when wet, results in excellent fabric performance under moist conditions. Cotton fabrics lend themselves to finishing processes providing water repellency, dimensional stability, resistance to mildew and flame, improved electrical qualities and other special requirements." Research, technological improvements and advertisements will exert a tremendous influence in the overall habits, styles and fashions of the people as that of the United States; however, it is too premature to foresee such a violent change in India in the near future. Climatic conditions, regular pattern of customs and habits and other economic reasons may retain their hold in the preference of cotton to other synthetic fibers. A separate section under the caption of "Cotton in Relation to Other Synthetic Fibers" has been developed in the succeeding chapter.

The Position of Cotton Textile Industry During World War I and II

The growth and progress of the cotton textile industry was rather slow and steady prior to World War I. For instance, "the 3.5 per cent countervailing excise on Indian cloth and the famine of 1900 which caused a great scarcity of cotton had hin-
dered the steady progress of the industry. But the Swadeshi Movement and the cutting off of the foreign markets for yarn contributed to the expansion of the weaving side of the industry. However, the industry remained dormant until the outbreak of the war owing to the decline of the Chinese demand for Indian yarn and the fluctuations in silver exchange.

When World War I broke out, the activity of the industry was accelerated but the progress was slackened due to the unavailability of the foreign machinery as the Allies were busyly engaged in the preparation of war equipment. Neither the number of mills nor spindles increased appreciably save an increase of 25 per cent of loom during this period. The reduction of import of foreign cloth gave impetus to an indigenous industry to meet the demand of internal consumption. This in turn reduced the export trade of yarn to foreign countries. The boom period continued until 1922. The continuous, enormous profits, even after the cessation of the hostilities, allowed management to place orders for new machinery. These efforts were shortlived. The depression set in in 1928 and the depreciation of the rupee (Indian unit of account) made them unable to take the delivery of them. Adding to it, the "Khadi Movement" affected the mill cloth. Japan

1 Swadeshi Movement was rather synonymous to Khadi Movement whereby they advocated hand spun cloth and denounced foreign cloth. During the twenties and after, the Indian mill cloth was held to be no better than foreign cloth because they were manufactured by foreign made mills.

2 Ibid.
became a serious rival in the piece goods trade in India.

India not only lost some of her assured foreign markets, such as the Near East and African markets, to Japan but, also, she allowed Japan to invade her own markets. The imports of cloth from Japan in 1922-23 rose from 108 million yards to 652 million yards in 1929-30. Consequently, the cotton mill industries in India and Bombay mill industries in particular sustained a heavy loss after 1924. This led to an agitation for the removal of the cotton domestic excise duty of 1896 and demand for the protection of the industry. The government abolished the excise duty in the beginning of the fiscal year 1926-27. The number of mills rose from 162 to 196 and the spindles and looms from 3,820,336 and 60,781 to 4,715,436 and 77,859 in 1920-21 to 1924-25. The second factor, namely, protection to the industry against unfair competition from foreign countries, particularly Japan, was claimed. The Tariff Board in 1926 inquired into the textile industry's claim for protection and recommended in favor of the industry. The government granted protection to yarn produced in India, but not in piece goods in 1927.

By 1930, an import duty was levied on cloth. In the next year, the import duties on cloth and yarn were raised to 25 per cent on British goods and 31½ per cent on other goods. In 1932, the duty of the British goods was raised to 50 per cent by the recommendation of the Tariff Board, and no provisions to arrest, to dumping of the Japanese goods in India were
made. The Indo-Japanese Trade Convention of 1904 was repudiated and the duty was raised to 75 per cent of the Japanese goods. As a consequence, Japan showed her disapproval by reducing purchases. Eventually a compromise was reached and the duty was reduced to 50 per cent. The contributing factor of the visible progress of the cotton textile industry after 1930 was the protection granted to the industry. The number of mills rose from 339 in 1931 to 365 in 1935, the number of spindles, looms and workers were increased from 9,311,953,182,429 and 395,000 to 9,685,775,198,267 and 414,000 respectively in the same period. Thus the protection gave a fillip to the industry as a whole.

Second World War

The Second World War gave an unprecedented fillip to cloth production in India. The reasons are clear and obvious. During the war, the imports of foreign cloth was not only cut off, but India was called upon to supply foreign countries which had formerly imported their requirements from the belligerent countries. The Indian cotton textile industry was

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A similar trade agreement was made with Britain in 1939. At present these agreements have no consequence for the agreement with Japan expired in 1940 and Britain is at present importing cotton cloth from India (from 16 million square yards of cotton cloth in 1953 to 133 million in 1954) and consequently she has too little to spare her surplus to take advantage of the treaty.
presented with two-fold advantage of meeting her domestic demands on one hand and penetrating into the foreign markets on the other. Her potential competitor, Japan, also entered the war which made India's position much stronger. These factors gave a stimulus to the industry. The production of cloth and yarn were increased in spite of the old and inadequate machinery. The mills and looms were not increased in proportion to their production and the figures stand 10,238,131 mills, 202,388 looms in 1945 compared to 10,059,370 mills, 202,464 looms in 1939.

Although the industry paid higher costs and was subject to heavy tax burdens, it undoubtedly profited enormously from the high level of prices and increased activity. The chain index of profits rose from 100 in 1928 to 760 in 1942. During 1939-45, the percentage increase of cotton consumed and the percentage increase of employment were 33.5 and 15.5 respectively. This transformation was mainly due to the introduction of the double shift system in the cotton textile industry. In spite of the controls imposed on the price of cloth, its production and distribution, the consumer's position was all the more miserable. It was rather hard to obtain cloth at controlled prices for the consumers. In spite of the government's

1 King Cotton: Modern India Series II, p. 15.
2 Ibid.
stringent measures, black marketing and accumulation of stocks prevailed on the retail level. It is indeed "a paradoxical situation where a record output from cotton mills has synchronized with unprecedented scarcity of cloth in the country". The sole factor was the gulf between production and demand. In 1946, the output of cloth fell by nearly 1,000 million yards as producers were unable to dispose of their accumulated stocks at remunerative prices.

Owing to diminished production and mounting prices during the initial stages of the war, a Cotton Textile Advisory Panel was set up in 1942 which represented a cross section of the various interests of the industry to negotiate with the government on the behalf of the industry as a whole. The supply department set up an agent, the Cotton Textile Directorate, at Bombay on their behalf. In consultation with the bodies, prices were determined and orders were distributed to individual mills. The panel endeavored to see that the government's requirements of textile materials were met and in turn the Directorate reciprocated every possible assistance to the industry in obtaining raw materials, stores, dyes, chemicals, coal and technical assistance.

During the first fifty-two months of the First World War, India supplied 42 million tailored items to the armed forces of the common wealth and its allies as against 298 million in the

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1 King Cotton: Modern India Series II, p. 15.
first fifty-two months of the Second World War. This is more than a seven-fold expansion. During the fifth year of the war the factories converted some 215 million yards of textiles, 5 million buttons into 80 million tailored items of clothing.

However, there was one striking change that World War II brought this industry. The economy switched from the position of importing cloth, as in 1939, to a position of exporting to foreign countries. This was a distinctive feature of India's economy. It looked as though the war emergency might be India's opportunity and she mobilized all her efforts and mettle to execute the orders. Many accessories such bobbins, shuttles, pickers and leather beltings were added. New lines of production such as mosquito nets, camouflage nets, cellular, waterproof khaki, cotton and hessian parachutes were made. A new mixture of cotton and jute was introduced and put into the market. New formulae were formulated, latest techniques developed and novel apparatus evolved.

To a large extent, the incentive and drive of the Indian cotton textile enterprisers are laudable, but it is regretted that they never accomplished the desired end. The industry,

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1 King Cotton; Modern India Series II, p. 15.

2 Ibid., p. 15. "A new apparatus, useful for measuring the diameter of fine wire, hair, wood fibers, artificial silk filament and cotton line."
in spite of the tremendous impact of the foreign demand and the fabulous profits (in 1944, the profit was estimated at 12 crores of rupees, about $25 million), scarcely stimulated other basic industries or much less has been able to stand on its own legs without governmental protection. After the wars, the industry was beset with many of its old problems. Many positive factors produce this unhappy state of affairs. If the experience of other modern countries is any guide, rationalization and rehabilitation will ease much of its economic disabilities, such as low production, high prices, less employment, low efficiency and productivity. A separate section has been devoted in Chapter 2.

**The Economy of Cotton Textile Industry After Partition**

The partition of India in 1947 resulted in an unbalanced economy of raw cotton on one side (Pakistan) and the mills to produce textile on the other (Indian Union). Undivided India had enjoyed self-sufficiency in cotton save for small quantities of long staple variety, but now she was deprived of her raw material after partition. India, prior to partition, exported over 2½ million bales of cotton and now she has had to import on an average of one million bales of foreign cotton at a heavy cost, "not only to make good the short fall in domestic production, but also to enable the industry to manufacture finer varieties of yarn and cloth". She has also involved a loss of home market for nearly 800 to 900 million
yards annually. The production of cloth and yarn has dropped to 3,614 million yards, 1,158 million pounds in 1950 against 3,745 million yards, 1,318 million pounds in 1947. It is indeed an herculean task to counter attack the effects of partition. It can be visualized with much prudence and vigilance, the economy of scarcity of cotton may be transformed to an economy of abundance. The transformation is not as easy as it appears to be. However, efforts are being made to increase the acreage production of cotton. The Agricultural Section of the First Five Year Plan advocates the production of 4.229 million bales of cotton in 1955-56. The Indian Cotton Committee has also urged similar plans. It is not only prudence and vigilence of the government and the enterprisers that is essential, but also the nature (monsoon) should be favourable to attain this end, for in India, "today about 93 per cent of the cotton is rain grown; only 7 per cent is produced under some form of irrigation." It is hoped that the completion of the great river valley projects will make available better irrigation facilities to many of the cotton growing areas in India.

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1 Building A Sound Economy (Government of India, 1951), Pamphlet No. 8, p. 14.

2 Read P. Dunn, Jr., Cotton in Pakistan and Indian Union (National Cotton Council), p. 85.
As things stand, the cotton textile industry has overcome some of its major infirmities and it can continue its business and face its future with confidence if proper precautions are taken. To sum up, the Indian cotton textile mill industry has been a profitable concern from the beginning. The industry was affected considerably, both by political subjection and foreign competition. However, in the former extended the technological and managerial ability to the industry and thus gave it a good start. Adding to this, two interwar periods accelerated the progress and growth of the industry. There are certain disabilities which arrest the progress of the industry at present. Fortunately, both the industrialists and the government have recognized the same. They assent to the facts, but dissent from the inference. Since industry is the major one in India, it is, therefore, prudent that the industrialists should take a rationalistic approach with governmental assistance if necessary, and see that the disabilities of the industry are minimized at the earliest possible time.
CHAPTER II

STRUCTURE AND ORGANIZATION OF COTTON TEXTILE INDUSTRY

The cotton textile industry comprises mainly three competing sectors, namely, the handloom, the powerloom and the composite mill industry. The mill industry produces yarn as well as cloth out of the raw cotton. It manufactures different varieties of cloth such as superfine, fine, medium, coarse, etc. The handloom and the powerloom industries are entirely dependent upon the yarn which the mill produces. Originally, the yarn was produced by the handloom weavers by hand spinning. This process being tedious and non economical, the weavers have given it up. At present, both the handloom and the powerloom weavers produce cloth out of mill spun yarn. The chief reason for the conflict of interests between these industries is that "fabrics which may be manufactured by the three sectors cannot always be differentiated and that the markets for the products of all three sectors are competitive for reasons of price, except to a very small extent in the matter of expensive Specialities."

The clash of interests between the handloom industry and relatively modern mill industry is significant in the present day cotton textile industry. The former played a leading role historically in the country's economy.

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1 Report of the Textile Enquiry Committee, p. 28.
For ages, the textile manufactures from India have been of very good quality and high order. The Decca muslins of Bengal, the patalas of Baroda, the fabrics of Assam, Manipur, Ovissa and South India were well known in the overseas countries. "Indian cloth was known to, and used by, the Egyptians, Babylonians, Persians, Greeks, Romans and other civilized peoples of antiquity. At the beginning of the Christian Era, Graeco-Roman traders carried on a brisk commerce in choice Indian muslins and chintzes.

In the middle ages, the Arabs similarly carried Indian cloths to the ends of the earth. The peoples of Japan, China and Indo-China also used to wear them from early days."¹

The East India Company collected these samples of fabrics from various parts of India and preserved them in the government museum in Nagpur for the benefit of textile producers in England. All these materials were manufactured on handlooms. The tradition of handloom weavers has been one of long and distinguished service to the economy of the country. Its present day contribution, according to the Textile Enquiry Committee Report estimate, is 1,400 million yards of cloth annually. This represents about 31 percent of the

¹ P. J. Thomas, Mercantilism and the East India Trade (London, 1926), p. 32.

total output. The target of production under the First Five Year Plan (1951-56) is envisaged 1,700 million yards. Taking into account the various factors, such as the net annual increase of the population and potential standard of living of the people in 1955-56, the planners might have arrived at the above target. The Plan has pointed out that the planners have fixed this target as a result of prolonged discussions with state governments.

The handloom industry which was originally a cottage craft came into prominence particularly during the last war, and its mighty contribution, in times of the cloth scarcity, cannot be minimized. The cottage craft has been developed by a social structure whereby the handloom weaving is pursued by a particular caste. It is the second important enterprise in India. It is primarily a village industry which provided employment for approximately 10 percent of the total employed population. The important cottage industries are cotton and silk textiles, raw sugar, pottery, metal work and a variety of other basic simple consumer goods. Of late, the growth of cottage industries has been stunted due to the internal factory competition and foreign imported goods. Nevertheless, the government has taken steps to preserve this institution by extending them protection. The Textile Enquiry Committee, after going into the question of the handloom industry in

1 The First Five Year Plan, p. 209.
detail, came to "an irresistible conclusion". They maintain, "that the handloom industry has to be made technically more efficient by converting the handloom either into a semi-automatic loom and/or into a powerloom, as power becomes available more generally in the areas where the handloom industry is widely prevalent". At present, the handloom industry may have outlived its utility. It has been eclipsed by the modern medium-sized powerloom and mill industries. In this connection, a little discussion of the structure of handloom and powerloom industries may not be out of place.

**Handloom Versus Powerloom**

The organization of the handloom industry is not uniform in character. There are supposedly independent weavers who purchase yarn, produce fabrics and sell them in the market. There are certain weavers who work on a commission basis. They take yarn from a master weaver and work for him and thereby get a fixed piece rate wage. Sometimes they work with a particular master weaver on a long run contract and receive wages according to the nature of the material fabricated. On such occasions, they get their wages in advance of the work they execute. The next most important type of organization is the Cooperative Society. This organization differs from place to place. For example, the Madras Handloom Weavers' Cooperative Societies purchase and supply the yarn.

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to their members, and partly market the fabrics they produce. The other type of handloom Weavers' Cooperative Societies supplies the yarn to their members and to others. They never undertake the marketing aspect. During the war and particularly in the times of yarn control 1943-48, the Cooperative Societies which concentrated on yarn supplying cum marketing, made some profit and thereby saved some reserves. The yarn supplying Cooperative Societies made only limited profits and consequently some of them incurred a heavy loss during 1952-53 when the yarn prices fell steeply. The Madras Handloom Weavers' Cooperative organization has also lost approximately 25 lacsrupee (about $526 thousand) out of 48 lacsrupee reserve (about $800 thousand). It is interesting to note the cooperative organization set up a cooperative spinning plant at Guntakal (Andhra State).

Throughout the history of the handloom industry, it has lacked finance to be established on a sound basis. The middlemen who have financed these primary producers have frequently exploited them. The middlemen are the intermediate people between the handloom weavers and the producers of yarn. They buy yarn from the mill industry and sell it to the handloom weavers for exhorbitant prices. "Their existence leads to a pyramiding of prices, and in addition, these middlemen have exploited the poverty, helplessness, and ignorance of hand weavers, in regard to the quality, quantity and price
of yarn." The role of the master weavers is rather significant in the economy of the handloom industry. The rise of the master weaver can be traced back as early as 1880 and thereabouts. They lent great elasticity to the marketing feature of the handloom industry. The institution of the master weaver, being undeveloped, unorganized and private by nature, has been exposed to certain abuses. The master weavers acted according to their own benefit rather than the benefit of the handloom weavers as such. The indifferent nature of the master weavers brought about unemployment among the weavers during depression. The structure and the organization of the handloom industry, by and large, have not changed much today from what it was before the war. During the war, the master weavers were eliminated temporarily in many cases and state cooperative organizations stepped into the gap created by the former. The All India Handloom Board began assisting the cooperative organizations of the states since 1953 and now the handloom weavers' cooperative societies have been spreading all over the country.

The powerloom industry utilizes looms operated by electric power. The equipment of the former mainly consists of a weaving unit as distinct from the composite mill industry

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which consists of spinning cum weaving establishments. It can be imagined that the powerloom industry might have come into being from the initiative of a few enterprising relatively rich weavers. There are instances where a weaver owning two or three handlooms has converted more than one of them into powerlooms. They might have started this industry, with weaving section, with the idea of importing yarn from abroad and later from mills within the country. The industry which has only a weaving section is commonly described as the horizontal pattern of organization. It might have occurred to them later, that the yarn imported from the foreign countries would be less economical than the yarn produced at home. Naturally this tendency might have led them to switch over to weaving cum spinning aspect of the industry. This pattern of organization having both spinning and weaving sections of the industry is generally known as vertical integration.

The powerloom industry may be broadly classified into small scale and large scale industries. The former is otherwise known or cottage powerlooms or domestic powerlooms and the latter as medium sized powerloom industries. The cottage powerloom industries have a structure similar to the handloom industry. We have an independent, commission agency and cooperative society of powerloom weavers as that of the handloom. There are even a few joint stock companies. Apart from the weaving aspect, which is operated by power, the other function of the industry, such as sizing, warping and winding,
are all done by the weavers' family or hired workers as that of the handloom industry. Ishalkaranji, Malegaon, Bhiwandi, Surat and Comab of the Bombay State and Burhanpur and Jarbulpore of the Madhya Pradesh State are the examples of the concentration of the powerloom industry.

The medium sized powerloom industry (units having between 6 and 20 looms) is the better organized form of cottage powerloom industry. They often come under the provisions of the Factory Act and some cases are subject to a statutory minimum wage. The example for the latter is the powerloom industry at Ichalkaranji in the Bombay State.

The government of India has granted to the cottage powerloom industry similar concessions and reservations of certain varieties of production of cloth as that the handloom industry. The medium sized powerloom industries are not treated on the same footing as that of the handloom industry, but they have extended certain reservations of producing cloth which are prohibited by the mill industry. In addition to it, unlike mill industry, the powerloom industries are exempted from domestic excise duty on their products and free from price and distribution control. "But the exemption from price and distribution control was due to the fact that during the control period, yarn could be provided to the industry for only a very

1 In 1911, factories Act was passed restricting the hours of work in textile factories to 12. In 1922 it was amended and the working hours were reduced to a maximum of 11 hours per day.
small proportion of its capacity and the costs of production of this sector were, therefore, indeterminate while being considerably higher than those of the organized composite mill industry. The exemption from excise duty was due to the fact that, like the handloom and the small powerloom industry, the larger units also had to purchase yarn from the mill industry with one or two intermediate margins of distribution and also because of the cost of the preparatory processes in many cases.

There is a conflict of interests between the cottage handloom cum domestic powerloom industries and the medium sized powerloom industry. The grievance of the latter is that the government has not extended all the concessions granted to the handloom cum domestic powerloom industries. Being the improved form of the handloom cum domestic powerloom industry, naturally the medium sized powerloom industry expects that it must be treated as that of the former. They have been constantly demanding the exemption from the factory laws such as working hours, rest periods etc. and as regards a statutory minimum wage, contributions to Provident Fund, etc. It is but unfortunate that this medium sized powerloom industry is deprived of the benefits of the composite mill industry and equally deprived of the privileges of the handloom industry.

In this connection, it appears to us that the domestic powerloom industry enjoys more privilege than any of the component industries of the same. The domestic powerloom weaver earns a better wage by producing per unit of time about four times as much as the handloom weaver and at the same time he has been granted all the palliatives of the handloom weaver and exempted from the provisions of the Factory Act. It is hoped that the government of India will consider the pressing issue and see that the medium sized powerloom industry which forms about one-eighth of the handloom industry should not be crushed between the handloom and the organized mill industry.

Experts are divided among themselves on whether the handloom industry should be retained at the expense of the mill industry or altered drastically so as to fit into the modern framework of the economy. Much light has been thrown on the diseconomy of this industry and yet some hold it has a better and prospective future without the expense of the mill industry, provided the former transforms the pattern of outlook towards specialization and can flourish side by side with the

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1 Dr. Subborayon, in his presidential address to the All India Handloom Weavers' conference at the Kala Mantap, Satya Nagar (Jan. 20, 1955) maintained that if the handlooms were gradually converted into power looms, he feared that about one hundred thousand of such powerlooms would be sufficient to displace 1.2 million of handlooms which would eventually mean unemployment. In fact Dr. Subborayon is against such a move.
latter and be a source of strength to each other. When all’s said and done, both the Union and the State governments are in favor of its existence. By and large, the economy of the handloom industry may be a purely ethical and human problem rather than an economic one. In order to understand this sentimental feeling of the government in a proper perspective, a word about the handloom industry in general and weavers in particular is in order.

The dexterity and skill of the weavers is well known. The tradition has been preserved by a particular caste which gave rise to caste guilds, scattered throughout India. The art and technique have been passed down from father to son. The low capital requirement and the unorganized way of business succumbed to the pressure of the modern mill industry. Since the industry is so dispersed, it is difficult to determine the total population of the weavers and their handlooms. Much of its statistics is based on crude estimates. As regards the handlooms in India, the Sample Survey of the Textile Enquiry Committee shows that there were a total of 2.06% 0.13 million handlooms at the time of its census in


2 "With a capital of no more than Rs 50 to Rs 100 (roughly $10 to $20) it is possible for a weaver to set up in the handloom weaving industry". Report of the Textile Enquiry Committee, p. 11.
1953. The committee after eliminating the domestic (non commercial) looms in Assam and the inactive looms, came to the conclusion that the active effective commercial handlooms were 12.4 lac (1.24 million). The volume of employment provided by the handloom industry according to the committee is about 15 lac (1.5 million) workers. The consequence of the 1.5 million workers with their encumbrances depending upon 1.2 million handlooms can easily be imagined. The committee assumed that during the period of yarn shortage in 1943, many of the weavers might have switched over to some other occupation. They agree with the Fact-Finding Committee appointed by the government of India in 1941, that the weaving profession is not a part-time rural occupation, but that the weavers have no other means of livelihood. Their life in general is described as one of misery and privation. The industry is passing through difficult times and it is doubtful whether it is possible to provide sustenance to all of the 1.5 million and more people who depended upon it during the war years (boom period). The government is not in a position to offer them new avenues of life, much less the weavers prefer to leave their traditional calling and seek their position elsewhere.

The unemployment of the weavers may be termed technological unemployment. It has been defined as "that displacement of labor by machinery and improved methods of production which is attributable to advances of the arts and sciences or to
improvements in the technique of management".¹

A large amount of weavers have been out of employment owing to the slump in the commodity markets and increasing competition from mill cloth. It is hardly possible to figure out the exact number of unemployed and underemployed among the weavers due to inadequate statistics. Much less we do not know their alternative employments. As it is, the average existent employed weaver's standard of living is not a covetable one. Most of the unemployed weavers are reluctant to leave their traditional calling and abode. The few who have migrated to urban areas are not better off. They might be disillusioned. The city life is by no means presented with a plethora of jobs. There are not many factories worth the name which can absorb the exodus of the weavers. Already there are unemployed in the city.

The scope of the weaver in obtaining an alternative employment is very much limited. Being trained in one kind of occupation like that of weaving, he is naturally unfit for other occupations like woodcutter, brick layer, carpenter, etc. In India, each artisan feels that his profession is superior to others. He not only feels indignitatem to learn other professions, but also he will be looked down upon by

his community. It is scarcely possible for a barber to become a washerman or vice versa. In other words, the occupations such as goldsmith, blacksmith, potter etc. are not interchangeable or substitutable in India at present. They are generally known as hereditary occupations. The reasons for this watertight compartment occupation are tradition and caste system. Thus the weavers are presented with limited opportunity to fit in the alternate employment of the social structure of the Indian economy. It may not be an exaggeration that most of the weavers remain unemployed throughout the year. Some of them derive their sustenance partly through charitable institutions, temples and sometimes begging for alms. Some may prolong their life by switching over to the profession like marriage brokers, commission agents for small business transactions, street vendors, etc. These are supposed to be independent and honourable professions in India! One can easily imagine that the margin of profits in these transactions are small.

Technological unemployment may be caused due to the introduction of labor saving machinery in the industry. The impact of labor saving machinery will bring about some dislocations in the economy of the country in the beginning and in the long run, they will offset by new openings of employment either within the industry or elsewhere. The intensity of unemployment depends upon the capacity of the labor saving
machinery, the rate at which it is introduced, in elasticity of demand for the product and the extent to which the skill of the old workers are still useful under the new method of production. Further, the operators and mechanics of the industry will be retained. The workers who are replaced by machines will be laid off. Trial employment in general will rise. There will be new openings of employment who manufacture the machinery.

If we assume that the total money expenditure in the economy of the country remains constant, then the position of workers who are replaced by the labor saving machinery may be explained in terms of elasticity concept.

(a) If the demand of the product produced by labor saving machine, is inelastic, there will be less spending on this product. It is assumed what is saved here is spent on other consumer's products. Consequently, there will be more openings in other industries, in addition to workers who absorb in the machinery manufacture concerns. If other industries require more labor compared to other factors of production, "their increased demand may compensate or more than compensate for the lay offs in the innovating industry". If the subsidiary industries require less labor relative to other factors of production, it is hardly possible to absorb all the replaced workers of the innovating industry to the above industries. Further the few workers who obtain employment in those
subsidiary industries may get less wage rates than the usual ones.

(b) If the product is elastic, then the consumers will spend more on that product and less on other products produced by other subsidiary industries. In this case, there will be more demand for that product and the manufactures will in turn place their orders to other subsidiary industries to meet their demand. Thereby more employment is stimulated within the industry and other subsidiary industries.

The condition at present is that the demand for consumption of cloth is inelastic in the direction of price decrease. Since food, the other basic necessity is so expensive, the item clothing may be considered luxury. It is interesting to note, even the middle class people, according to Delhi family budget data, incline heavily on 'miscellaneous' which consists of rent, fuel, transport and amusement in preference to cotton clothing. It is rather hard to ferret out the economic reasons behind this attitude. Extra amount of clothing for an individual is neither necessary nor convention in India. "It would appear that the middle classes in North India, at least, are prepared at a push to go without additional clothing but insist upon their amusements." Is

there any close substitute of cotton clothing which takes off the demand from it at present in India? Japanese and Chinese silk materials are sometimes cheaper than cotton. There is no evidence, however, that those foreign materials have taken off from the sale volume of the relative expensive cotton ones. Is there a case for complementarity? The dress habit of the people of India varies from place to place. If a person buys a pair of "dhoties", there is no hard and fast rule that he should require a coat. There is no convention or necessity as such that one dress necessarily accompanies with the other. Hence the cotton clothing presents itself a wide gap of substitutability and the case for complementarity is not well pronounced at present.

The consumption of cotton clothing being inelastic, if India were an industrialized country according to the elasticity concept, the displaced weavers who can be neither absorbed completely in other subsidiary industries or the weavers who obtain employment in other industries may get less wage rates than the usual one. India is predominantly an agricultural country and the weaver's scope to obtain an alternate employment is limited. Leaving the unemployed weavers position aside, the scope for the employed weavers position is equally circumscribed.

It has been observed that this industry's sharp trade practices are not always desirable and the materials they produce are not of uniform standard quality. There were some
instances where profits of 50 per cent and more were made on exports to Ceylon and cases where handloom products marked 6 yards measured only 4.75 yards on arrival at Ceylon and "dhoties" (men's apparel) marked 2 yards were found to measure only 1.75 yards. The scope of its markets and the capital equipment are at present circumscribed and the weavers, with no fault of their own, are always under the mercy of the government. It is difficult to foresee that they can stand on their own legs and thrive in the present economic competitive climate, unless the government offers palliatives and concessions as they do now, create and/or recreate foreign markets, reorganize the entire primitive structure of the industry and facilitate their attention to a new line of specialization.

The government has made certain provisions to handloom industries such as an exclusive right of production of coloured "sarees", (women's dress) fabrics with a check pattern and restricting the production of "dhoties" by mills. The khadi and other Handloom Industries Development Act, 1953 imposes an additional excise duty on cloth produced by the textile industry. A substantial portion of the proceeds from the levy are utilized for the development of the handloom industry.

During the war, the handloom industry lost some of its

1 "Foreign Markets for Handloom Goods", The Hindu, March 18, 1954, p XVII.
markets due to enemy occupation and difficulties of transport. After the war, the industry faced the difficulty of exchange facilities. Indonesia banned the playkkot lungis (a kind of dhoties) for lack of foreign exchange. Burma stopped importing lungis and began to promote their own handlooms. Ceylon imposed restrictions such as to import one handloom towel, the importer had to purchase five locally made towels etc.

The U. K. entered into competition with Madras handkerchiefs in South and West Africa. The government is exploring all the possibilities to ease and expand the market situations for the handloom cloth in Ceylon, Malaya, Thailand, Indonesia, Pakistan, Arabia, Iraq and Egypt. They are proposing to open emporia at Columbo, Singapore, Rangoon, Bangkok, Chittagong, Karachi, Aden, and other places. It is interesting to hear that steps have been already taken to popularize the handloom products in Malaya, Siam and Indonesia. The emporium is controlled by the Madras State Handloom Weavers' Cooperative Society Ltd., and has been established at a cost $10,000.

It is tacitly assumed that the cotton textile industry has to face competition from another sector of the textile industry, namely, the rayon industry which came into vogue in India after the World War I. The utility and economy of rayon as a substitute for natural fiber has been discarded.

The commercial application of rayon has very many and it has full scope to play its role in other spheres of the industry. According to 1950 report, about 30 per cent of the world rayon production was accomplished in countries such as France, Belgium, Switzerland, Sweden, Spain, Brazil, Canada, Netherlands, Norway, Turkey, Mexico, Colombia, Argentina, India and U. S. S. R. The production of rayon in India is negligibly small and she still imports the quality wood pulp from abroad. Being an infant industry, it depends upon government aid and protection. In a word, the conflict of interest between the cotton textile industry and the rayon industry is not well pronounced in India at present. However, a word about the rayon industry is in order.

Cotton Versus Synthetic Fibers

Many synthetic conversion of fibers made out of cellulose, milk, brine, crude petroleum, oxygen, nitrogen, natural gas, feathers and other raw materials have been introduced since the turn of this century. The synthetic fibers supposedly

1 Isabel Wingate, Textile Fabrics and their Selection, (1953), p. 151.

2 Chemical fibers can be classified into three groups, very synthetic, semi-synthetic and inorganic.

Synthetic fibers: Orlon, Dynal, Acrilan, X-51, Nylon, Dacron, Saran

Semi-Synthetic fibers: Rayon, Acetate, Vicara

Inorganic fiber: Glass
are cheaper, crease-resisting, malleable to mass production, liable to improvement and better service, instrumental to imitation, "easy to carry and easy to care for" and designed to fit the "spirit of the age". Rayon is the most popular among these known fabrics in India.

In 1920, cotton, wool and silk formed 84 per cent, 15 per cent and 1 per cent of world textile production respectively. Thirty years later, the cotton had shrunk to 74 per cent, wool to 11.6 per cent and that of silk to 0.2 per cent and they yielded to rayon which formed 14 per cent of man's needs. It should not mislead one into believing that 14 per cent of the world's needs and negligent percent of India's needs as a remarkable triumph for rayon. The success can be explained in one of several factors. During depression and war years, there was a tremendous panic of cotton, import-export restrictions and regulations stimulated consumption of synthetic fibers. Yet the chemical fibers scarcely seemed to satisfy the needs of the majority of consumers in India. The novel and attractive substitution of cotton has scarcely competed with the old and familiar cotton out of market. The three decades experience of synthetic products in India leads us to believe that the importance of cotton may not be lessened.

1 "India Takes to Rayon", The Hindu Weekly Review, March 18, 1954, p. XII.
It can hardly be denied that the popularity of synthetic textiles is gaining momentum and slowly invading the tastes of the public. India, despite her conservativeness, cannot stand aloof. The gradual increase of rayon powerlooms from 1,000 in 1931 to 25,000 in 1950 and 75,000 handlooms which produce rayon fabrics out of imported yarn are sufficient proof of its steady success of rayon industry. But is should not be imagined taking the adverse factors into consideration, that the present success of rayon industry would be an index to the future prosperity of the same. How about the government's policy towards this industry?

Planners have recognized the importance of this industry. "Development of the rayon industry in the Five Year Plan has been actively taken up and the recently started Industrial Credit and Development Corporation is mentioned as being willing to finance a new project". The policy of the government is

1 Dr. Sir. C. V. Raman, Nobel Laureate in the course of the greetings through the Textile Association (India) to the cotton mill industry observes "...More recently also synthetic fibres have entered the field. But the natural products, cotton, silk and wool are so admirably suited to the needs of the textile industry that one need not fear their being driven out altogether,..."

2 "India Takes to Rayon", The Hindu Weekly Review, March 18, 1954, p. XII.

3 "Rayon Industry Has Bright Prospects", The Indian Express, January 21, 1955, p. 31.
also in favor of the industry. "The import and export policy of the government has also been adjusted with a view to encouraging the domestic rayon industry. A ban on low grade imports has been imposed. Protection has been offered by raising the import duties for yarn and staple fibre to a level which should effectively shield the infant industry from unfair competition".

It is pertinent to observe two important factors of rayon industry in relation to cotton textile industry.

1. Has the synthetic fibre industry a chance to oust and outstrip the cotton textile industry?

2. Is India ready to take synthetic fibre in preference to natural cotton in near future?

As regards the first question, it is believed that the synthetic fibres can scarcely compete and thrive all by themselves at the expense of other textiles. Mr. Michael Day maintains that "most chemical fibres will not replace wool or cotton, but will be blended with them to provide textiles with the best qualities of each". We do not know the present potentialities and the future possibilities of synthetic fibre industry. Until then, cotton will retain its hold in utility and importance.

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1 "Rayon Industry Has Bright Prospects", The Indian Express, January 21, 1955, p. 31.

2 "Saga of Synthetic Fibres", The Hindu Weekly Review, March 18, 1954, p. V.
Let us consider the second question. It is, indeed, too premature to extrapolate the consumers' preference to synthetic fibers as against natural cotton. The conditions in India are changing so violently ever since Independence, it is hardly possible for us to project our imagination to the future. However, as the present things stand, the chances of possibility of consumers' choice, as distinguished from industrial one in synthetic fibres are slender. The uses of rayon today for industrial purposes are very many such as conveyor belts, telephone wire insulation, parachutes, mantles for lamps, etc. The first rayon factory was established in 1947 in Travancore under the name the Travancore Rayon Ltd., with Travancore government cooperation. It came into operation in 1950. The second rayon factory, the National Rayon Corporation was set up in Kalyan (Bombay) in 1951. The third one for the production of acetate yarn has been set up in Hyderabad. The fourth unit, the Gwalior Rayon Silk Manufacturing Weaving Co. Ltd. in Madhya Bharat came into being in 1954. The government wants to encourage this industry by permitting imports of raw materials such as wood pulp, rayon grade caustic soda and sulphur from the U. K., Italy, Japan, in U. S. A. and the Scandinavian countries.

There are certain handicaps which the rayon industry, for that matter any synthetic fibre industry, faces in India today. At the outset, some of the raw materials which go into the making of the synthetic textiles are imported from other
countries. The quality wood pulp, in particular, is still unobtainable in India. So long as the variable cost is high, it is inconceivable to reduce the total cost.

Secondly, the industry being an infant industry, the utility and economy of synthetic fibres are not well known in India. Promotional activity may be conceived as one of the potent methods of pushing and promoting the utility of a product to the public. Unfortunately, the role and scope of the advertisements in India is of not much significance. Illiteracy of the people may be offered as one of the contributing factors for the dampening effect of the advertisements. At present the advertisements can be stimulated broadly by the private enterprises in three media--Newspapers and magazines, movies and exhibitions. Broadcasting comes under public enterprise, and the question of sales promotion through radios does not arise. There are 330 daily newspapers in India and their total circulation is just over 25 lacs (2.5 million). The periodicals and magazines are few and relatively expensive compared to Indian standard of living, and their total circulation may not exceed 2 million. The advertisements

1 "Experiments carried out from time to time with Indian softwoods and grasses like Eta were not successful and consequently the Indian rayon industry continues to be dependent upon imported wood pulp." "Rayon Industry Has Bright Prospects", The Indian Express, January 21, 1955, p. 31.

2 Press Commission Report on the state of the press in India. The commission was appointed on September 23, 1952 and it signed the report only July 14, 1954.
including movies, wall posters, exhibitions etc. are all confined to cities and towns and their influence may not be considered as one of significance. India is a land of villages and 70 to 80 per cent of people remain in villages and the impact of these advertisements may have little effect on them.

Thirdly, climatic conditions, regular pattern of customs and habits and other economic reasons may retain their hold in the choice of cotton in preference to synthetic fibers. In India, as tradition has it, home hand spun cloth lands more respect than a machine made one! This is one of the reasons that the weavers and their old cottage industry still have a place in India.

Fourthly, the warmth or coolness of a fabric depends upon the heat conductivity of the fiber content, nature and coolness of weave. Spun yarn or rayon mixed with silk or wool is warm by character and it is not suitable to the tropical country like India for wearing purposes.

Lastly, rayon, being "fine fabrics", require more care than cotton for washing and laundering. The teeming millions of India are practically deprived of the irreducible minimum requirement of ordinary cotton clothing at present and the suggestions in upkeeping of the rayon apparel readily stand against the acceptance of the majority of the people. Even

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1 Textile Fabrics and their Selection, Isabel B. Wingate, Prentice-Hall Inc. She has given a vivid account in laundering the synthetic fibres as advised by soap manufactures. p.p. 156-157.
if synthetic fibres succeed and penetrate the taste of the public with government encouragement and aid, the process will be slow and will take a long time.

To sum up, rayon is the only known and sizeable synthetic fiber industry at present in India. The competition between rayon industry and the cotton textile mill industry is not very keen at present. However, it is conceivable, due to technological improvements, that there may be competition between the two industries in the future. The progress of the rayon industry is rather significant for the last few years. For instance, the price of yard of rayon fabric in 1951, January was 208 per cent of the price of yard of grey cotton piece goods, 156 per cent of coloured cotton piece goods and 166 per cent of bleached cotton piece goods. In January, 1952, the percentages were 123, 95 and 131 respectively. Though the prices of rayon fabrics are still prohibitive compared to cotton fabrics, nevertheless, there is a scope for rayon industry to cut down its prices. It is in an experimental stage at present in India. If it succeeds in its experiment and evolves a process whereby it can manufacture rayon without foreign component items, then the prices of rayon will naturally come down. Even then the competition may be a more serious threat to cotton growers than the manufacturers of cotton textiles for the machinery employed by the latter can be switched over to the manufacture of rayon
without much expense.

A study of the market structure of cotton textile industry comprises not only the conflict of interests between the various competitive industries but also the volume of production, domestic consumption and sizable exports of cotton textile. The position and economy of the industry pivots on mainly these three aspects. The defect of the one tends to dislocate the entire economy as a whole.

**Volume of Production and Domestic Consumption**

The volume of production of cotton and cloth has been reduced ever since the partition. Efforts have been made to step up production and signs of progress have been noticed during these years. The indication of outstripping the target of the First Five Year Plan is sufficient proof therein. The Planning Commission has laid the target for mill production of 4,700 million yards and that of handloom 1,700 million yards. Both the former and the latter have increased to 4,906 and 1,200 million yards respectively during 1953-54.

India retains about 75 per cent of the cotton acreage, 65 per cent of the production and 98 per cent of consumption

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3 Ibid.
of undivided India. The cotton acreage which India possesses is mostly uncultivated. Whereas, most of the lands in Pakistan are under irrigation. The production of cotton in the Indian Union during 1948-49 was estimated about 1.5 to 1.8 million bales of cotton, compared to an average production before the war (1935-39) of about 4.2 million. The drop of production was due to bad weather and drought. Schemes have been introduced to improve the quality and quantity of the raw cotton in India. There are three main varieties of cotton, namely, long, medium and short staple. The length of these varieties varies from country to country. For example, the long staples cotton in India is not more than 1 inch long. Whereas the American type of Sea Island cotton is as long as 2½ inches. The cotton research departments in India are making efforts to evolve a better quality and length of the stapled cotton. The agricultural experiments proved successful and they evolved a variety of cotton known as "Rajapalyam". It is the best among the known variety of quality cotton in India and its length varies from 1 inch to 1 1/16 inches. The quality of cloth (superfine, fine, medium and coarse) depends upon the length of the stapled cotton and is expressed in terms of "counts". It is generally denoted by "S". For example, the short stapled cotton is required for spinning coarse variety of cloth whose count may be of the order 16 S and less. Whereas the American Sea Island variety
of cotton gives rise to a superfine variety of material of 
over 100S (100 counts). The present production of cotton 
cloth is 6,600 million yards which is manufactured out of 
4.6 million bales of cotton both foreign and domestic. The 
Planning Commission has set a goal of 4.2 million bales of 
cotton. The Indian Control Cotton Committee, taking in pro-
posed irrigation projects into consideration, has recommended 
5.5 million bales of cotton towards the end of the Second 
Five Year Plan. In the meantime short and medium staples of 
cotton would be developed and about five hundred thousand 
bales of cotton may be expected to import foreign cotton from 
Egypt, East Africa and the U. S. A. According to the present 
scheme, India need not alarm of its lost acreage in Pakistan 
and much less she need not depend upon her for the raw 
material.

The per capita consumption of cloth in 1927-28 to 1937-38 
was between 15 and 16 yards. From 1937-38 to 1947-48, it was 
between 12 and 14 yards due to unusual requirements for the 
Indian Armed Forces and the Allies. In 1948-49, there was 
a sudden increment to 17 yards which was "illusory as it 
represented only a considerable reduction in offtake in 
regard to areas which now comprise Pakistan". In 1950-51, 
it was 9.7 yards on account of low production and heavy ex-
ports. Owing to the restriction of exports, the figure shot 
up to 14.5 yards in 1952. The cloth production is increasing 
steadily and the figures for 1952-53 and 1953-54 were 14.98
and 14.77 respectively. The latter year decrease is explained "by the loss of the heavily populated districts of East Bengal and of Punjab, Baluchistan and NWFP which were heavy consumers of cloth, the market for cloth in India in terms of total quantity has contracted".

The objective of the First Five Year Plan is to establish the prewar level of consumption of cloth - 16 yards per hear. It is tacitly assumed that the volume of cloth produced would be sold. Unfortunately, it is observed that the mill industry faces every year an accumulation of unsold cloth. "Internal offtake, however, failed to keep pace with increasing supplies, so much so that heavy stocks of cloth accumulated with the mills. The quantity of cloth dying unsold with the mills in the beginning of October, 1953, was according to one estimate, as much as 475,000 bales valued at about Rs 71 crores. Following such heavy stocks and difficulties in finding storage space and finance, 14 mills in India gave notice of closure, involving 8,510 workers. Two of these actually closed down in October, 1953, resulting in a loss of employment for 1400 workers. These were also reports of forced liquidation of holdings". Therefore the condition prevalent

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2 "Record Production of Cotton Textiles", Commerce Annual Review Number, 1953.
in India is not one of pancyty of textiles but is lack of purchasing power. The First Five Year Plan succeeded significantly in the production aspect but failed to stimulate the consumption side due to high domestic prices.

The population of India including Kashmir, according to 1951 census, was 361 million. The net annual increase is about 4 million. By 1960, the population will be about 397 million or about 400 million. The committee expects that the demand for cotton textiles for 400 million at the rate of 18 yards will be 7,200 million yards by 1960, of course ignoring the unforeseen circumstances such as famine and draught. The consumption of textiles may be taken to mean at the present context items of apparel only. A pair of "dhoties" and a pair of turban for men and a pair of sarees and a pair of blouses for women (not to speak of other necessities such as underwear, shirt, coat for men and bodice and skirt for women) are hardly adequate to last for a year. These items will amount to about 18 yards per head. Hence the question of other consumption textile items such as bed sheets, pillow cases, window and door screens, table cloths etc. are of no consequence. They have rare utility for the majority of the population of India today.

Demand for Export Markets and Future Prospects

The target for export according to the First Five Year Plan is 1,000 million yards. The annual export of textiles
in 1953 was 696.4 million yards. The main justification for such a large export market is to earn foreign exchange. If foreign exchange resources are limited, the Plan maintains the imports of less essential commodities will have to be restricted and measures taken to promote export to the extent necessary. It created a stir in the British House of Commons when Mr. Austin Low, Minister of State at the Board of Trade, expressed that Indian exports of cotton cloth to Britain had increased from 16 million square yards in 1953 to 133 million in 1954. The chief reason for the large export to Britain was that the Indian goods were allowed free of import duty and India on the other hand imposed severe restrictions on British textiles. However, at this rate, it may not be improbable to reach the target envisaged by the First Five Year Plan. It must be recalled that Mr. Kasturbhai Lalbhai, the Indian leader of the delegation pointed out at Buxton in England in 1952, India's target of the cotton textiles export a figure of 1,000 million yards. The representatives


of the cotton textile industry of the U. S. A., U. K., Japan and Western Europe who attended the conference, conceded the target "as being not unreasonable and not beyond the bounds of probability". Nevertheless it is scarcely possible to figure out the future prospects of export market of this industry. Two adverse effects are faced by this industry, namely, foreign competition and the creation of new markets. Since cotton textile industry being an established one, its technology is fairly simple. Therefore countries who desire to strengthen their economic development, naturally think of this industry as one of the foremost industries which they could develop in either centralized or decentralized form. Pakistan, Ceylon, Burma, Indonesia and even Tailand are the examples of the latter type. The underdeveloped countries bent on self advancement in that direction and India being one of the largest cotton producers of the world, should consider this impediment. It must be remembered that the creation of foreign markets if governed by political and other similar considerations. So the Indian cotton textile industry should not rest too much weight on comparative cost facilities. "After all, what decides the pattern of exports in the long run is not what India desires but what the

foreign buyer will buy, for economic reasons of price etc."

Bearing in mind this idea, let us evaluate some of the future possibilities of creating new markets for this industry.

There are at present, four principal textile producing countries in the world, namely, the U. S. A., U. K., Japan and India. These countries have to share the major part of the world market. We should not, however, overlook the potentialities of the Soviet Russia and her satellite countries. Nevertheless it is conceivable, due to unforeseen amicable international relations in some other future date, the U. S. S. R., Czechoslovakia.

Mr. E. P. W. Decosta, editor of Eastern Economist, considers that the sales volume of the mill industry is inelastic in the direction of price decrease. He views the situation that the volume of consumption of cloth depends upon the price of food rather than the price of cloth. He maintains that "the total amount that people spend on cloth has reached in the present circumstances and for a short period, a fairly constant figure. That figure is probably in the region of

1 "Only a few countries are more or less self-sufficient in or more textile raw materials. That is true of the United States with regard to cotton and to a less extent as regards to wool, cotton and flax; of Japan as regards silk".

Rs 350 crores (about $700 million). So far as the middle classes of India and possibly some portion of industrial labour are concerned, there is no doubt that the most important factor here has been paradoxically enough, not the price of cloth but the price of food.¹

It is hoped that the effective execution of the present First Five Year Plan and the potential Second Five Year Plan, they will give rise to higher income and in turn higher standard of living. It is also hoped, owing to several favorable factors such as the completion of irrigation projects and good monsoons, it will be possible to tide over the food scarcity. The individual who hitherto paid a considerable amount of money for food alone, could have some extra money available for expenditure on clothing if foods were cheaper. It would not be too much, the Textile Enquiry Committee feels, to expect 18 yards per head by 1960. It is interesting to note that the per capita consumption of cloth in the U. S. A. is 64 yards, in Germany 34 yards and Japan and Egypt 21 yards and 19 yards respectively and Hungary may emerge out as


² World consumption of cotton piece goods, per capita, in 1926 and in some countries in 1929, when the production of piece goods was at peak level: World - 42 yards, U. S. A. - 64 yards, Canada - 35.8 yards, Sweden - 36 yards, Germany - 34 yards, Malaya - 30 yards, Denmark 0 30 yards, Japan 0 21.4 yards, Egypt - 19.1 yards, Brazil - 18.9 yards, Iraq - 16.9 yards, Greece - 15 yards.
exporters of cotton textiles. The People's Republic of China would probably consume a considerable amount of cotton textiles for sometime from outside. They are rapidly industrializing the country "in order to secure a larger measure of general welfare and better living standards". Japan who is eager to take advantage of the short term possibility, rules out that country as a long term customer for Japanese textiles in a large way.

Countries like Latin America, Africa and S. E. Asia are potential large consumers of cotton textiles. For obvious reasons of geo-politics, the South America would prefer to import goods from the U. S. A., U. K. and Europe rather than India. South America being closer to the U. S. A. and she has been under European influence for a long time, consequently her interests and currencies are closely associated with them rather than India. Similarly, most of the countries in the S. E. Asia and parts of Africa have been the European colonies, naturally their interests have been looked after by the Europeans. Due to politico-economic reasons, "certain commonwealth countries in Africa have relaxed their restraint on the import of goods from Japan". The penetration of

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2 Ibid.
3 Ibid.
Japanese cotton goods to colonial Africa can be recalled as early as late twenties. The U. K. has suffered from an unbroken drastic decline of her export of cotton cloth ever since the World War I. The decline of U.K.'s export of cotton goods was readily substituted by Japan. Her rise was spectacular. Between 1931 and 1935, Japanese shipments of cotton goods to colonial Africa increased threefold. During the World War II, Japan being the Axis power, the commonwealth countries stopped the import of goods from Japan. The inclusion of Japan's admission to G A T T facilitated her position at present. Nor is this all. There is much scope for Japanese textile industry to expand and they have many resources to put into operation. Similarly, West Germany has room to expand her industry. Due to competition, Britain may also change her pattern of business and switch over to the work of multiple shifts. The U. S. A. is the largest producer of raw cotton in the world. The countries economically dependent upon the U. S. A. may have the possibility of buying American goods. Another consideration


2 Multiple Shifts: In an enterprise where a 24 hour is divided into two or three shifts or working periods, the practice of interchanging employees in such a way that over a period of time they will have taken a turn on each of the two or three shifts instead of being confined to a particular shift.
is worth noting. The demand for Indian cotton cloth may be dampened due to the growth of the foreign synthetic fiber industries such as the U. S. A. and Japan.

In the light of these considerations, Indian cotton textile industry export market is not very optimistic. The industry has to compete with the foreign markets on one side and to create the same on the other. The members of the Textile Enquiry Committee are of the opinion that it would be very difficult to push up the target aimed by the First Five Year Plan. If the internal markets expand faster than the external one, the committee feels that it would be difficult to conceive the export of even 1,000 million yards. On the contrary if the demand in India drops, it is more likely, at least partly, taken to mean that other countries who hitherto imported cotton may not be in a position to take as much as they would do normally.

Labor and Productivity

Rationalization is the process by which the volume of production is maximized with reduction in costs through the introduction of new machinery which already tried and used in other countries. Rationalization does not mean technological innovation. The device and the means are already known and the applications are available to every one.

The modern machineries in question are the improvements of the old ones. A plea for rationalization may be taken to mean the rehabilitation of the old machinery by the new. In a word, the process is a substitution but not innovation.

The effects of rationalization upon workers and consumers may be explained in one of four possible ways. Let us assume a new equipment like automatic loom reduces the cost of the textile mill production by 10 per cent. Let us also assume that this automatic loom at the former level of output could be displaced 10 per cent of the workers in the above industry. Now let us consider the behavior of employment in the following situations.

1. Prices of "clothing" are reduced 10 per cent and the demand curve has an elasticity of unity.

This means a reduction of 10 per cent in prices of "clothing" due to rationalization will give rise to a proportionate increase in sales by 10 per cent. The impact of rationalization has caused little effect on the expenditure aspect of the public. Since the textile mill manufacturers have increased their production by 10 per cent, the position of employment will remain approximately constant for the replacement effect caused by rationalization is offset by increase in production. The mill manufacturers will cover their costs, although they are selling a large volume at the same total price because their
costs have been reduced owing to rationalization.

2. The prices of "clothing" are reduced 10 per cent, and the demand curve has an elasticity greater than unity.

In this case, if we reduce the prices of "clothing" by 10 per cent, the total volume of sales will increase more than 10 per cent. Expenditures on "clothing" will increase, which means the percentage increase in total output will be proportionately greater than the percentage decrease in prices. Hence there will be more employment openings in the textile mill industry. The prices of "clothing" being less, it is assumed, the consumers will spend more on "clothing" and less on other products out of their total incomes. However, the increased demand for the "clothing" will give the manufacturers an incentive to place extra orders for other raw materials which go into making of the "clothing". This gives a fillip to subsidiary industries which in turn increase the total employment.

3. Prices of "clothing" are reduced 10 per cent and the demand curve has an elasticity less than unity.

Here the demand situation is inelastic in the direction of price decrease. That is, a reduction of 10 per cent in prices of "clothing" will give rise to less than a proportionate increase in sales by 10 per cent. In this situation, it is assumed that the consumers will spend the same volume of "clothing" as before (prior to rationalization). Naturally, they will get their required volume of "clothing"
with less money due to the reduction of prices. The consumers will derive a consumer's surplus. It is also assumed that the additional money (the disposable income) which they saved in clothing will be spent on other consumer's products. Thus the output and employment will increase in other consumer's industries at the expense of the textile mill industry. It is also assumed that the displaced workers in the textile mill industry will be absorbed in the above industries. Since the item of "clothing" in India at present is inelastic in the direction of price decrease, it is rather doubtful that the rationalization will benefit the textile mill industry as is explained in the situation three. The considerations may make the situation unworkable. There are indications that the price of food is bound to go down in near future due to the Great River Valley Projects. If the food situation improves, there may be improvement in cloth consumption also. In the long run, rationalization will be a benefit to the textile mill industry.

The three assumptions which were referred to are subject to limitations for the consumers' and workers' behavior are unpredictable.

4. The price of clothing is kept as it is and profits rise to 10 per cent.

In this situation the workers displaced in the textile mill industry are deprived of their usual incomes. On the other hand, the manufacturers' profits will rise to 10 per
cent due to rationalization. Now two situations present themselves.

First, if the manufacturers plough back some per cent of their total profits, then the employment in other industries may remain constant.

Secondly, since the prices of the "clothing" are not reduced, there may not be incentive for the consumers to buy additional "clothing". The manufacturers will have no necessity to place orders in other subsidiary industries. Hence there will be adverse effect on increased output and employment in those industries.

These are the four possible situations of rationalization. The fourth situation is dangerous to the economy of the textile mill industry in particular and other consumer industries in general. It not only renders unemployment among the workers but also arrests in consumption of "clothing". By definition, rationalization should be accompanied with reduction in prices. Hence the fourth situation should be avoided. Whereas the other three situations, the importance of rationalization upon workers and consumers are self-explanatory.

Productivity of labor and rationalization of machinery are closely associated with modern economy of the major industries. The cotton textile industry is no exceptional to this rule. Rationalization serves the workers and satisfies the capital at the same time.
Labor

India has an abundant supply of labor, mostly unorganized and unskilled. The percentage of workers gainfully employed in modern industry has been less than one per cent of the total population. The wages of these workers vary from industry to industry and area to area. Their earnings range between $100 and $200 a year for unskilled labor and $200 and $400 a year for skilled and white collar workers. "Part of these wages are ordinarily paid in the form of free services and facilitates such as housing, lunches, medical care, and similar facilities and services. Even after allowing for the fact that anywhere from one and a half to three times as many workers may be required to achieve the output of U. S. labor under the same conditions, real labor cost in India remains much below labor cost in the United States." The Indian labourer ordinarily works 48 hours per week. Under the Indian Factories Act, every worker is entitled to get one day paid leave for every twenty days of labour. Besides they are granted ordinarily a number of national, local and religious holidays and sick leave. In spite of these holidays,

2 U. S. Department of Commerce, Investment in India Conditions and Outlook for United States Investors, (Washington, 1953), p. 4
3 Ibid.
the Indian worker frequently absents himself without notice. "In the cotton textile industry over the 24 months of 1950 and 1951, absenteeism in Ahmedabad generally ranged between 6 and 9 per cent and Sholapur between 16 and 22 per cent."

The figure which is indicated was not always initiated by the workers. In many industries, the workers are usually asked to take unpaid leave when the employer is unable to utilize temporarily his entire labor force. Unfortunately, the trade unions in India are not as militant as their counterparts of Britain and the U. S. A. India being predominantly an agricultural country, the lots of the industrial workers, who form a very small slice of the total population, have never been considered an issue of importance. A good many of the industrial workers in India who form about 10 per cent of the entire population, are village people who come to the cities in the search of employment when they are faced with agrarian distress. They usually come to the cities single, unaccompanied by their family and naturally "maintain strong family ties in the country and regard the city as a temporary residence". When agricultural conditions improve, a large segment of these workers, return to their villages and to

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agriculture. Hence the question of "a continuous association of wage earners for the purpose of maintaining or improving the conditions of their working lives", did not occur as late 1918. The poverty and illiteracy of the workers made it difficult to strengthen the trade union movement. Indian leaders had all along concentrated on the major issue, namely independence and they side tracked the labour problem and reserved it for some future date. It does not mean, however, they ignored the question completely. Those who took the initiative to form trade unions, were biased and tinged with political affiliations. Thus their movements had an abortive end. However, since 1918, trade unionism and strikes have been part of the Indian labor scene. At the outset, the trade union movement made a headway in railways, post and telegraphs, but it took a long time to form a union worth the name among textile workers. Reduction in wages both in Ahmedabad and Bombay mills had brought about strikes and consequently there were 24,967,386 work days lost between 1921-25. The climax was reached in 1928. The cotton mills

\[1\] cf. "the bulk of the imigrant factory workers have little stake in agriculture and their occasional visits to their village homes are more for rest and recuperation than for attending to cultivation". The 1948 Indian Labour Yearbook.

in Bombay city were remained closed for nearly six months and thereby lost more than 22\% million working days out of the total 31\% million days lost in the Indian industry as a whole. The industrial strife was attributed to the organized ability of the communists. After the general strike, the popularity of the trade union movement declined owing to internal dissensions among the leaders. However, the growth of the Ahmedabad Textile Labourers' Association gained momentum under the able leadership of Mahatma Gandhi. This union is one of the strongest in the country.

At present, there are four main trade unions of which the Indian National Trade Union Congress tops the list both in popularity and membership. According to "the Hindu" March 14, 1954, it is reported that the Indian National Trade Union Congress has 587 registered trade unions affiliated to it with a total membership of 9,919,258. The Hindu Mazdoor Sabha has 220 unions with 373,459 members, the All India Trade Union Congress has 334 unions with 210,914 members and the United Trade Union Congress has 154 unions with 129,242 members.

Productivity

A study of rationalization would hardly be adequate if we did not consider the present day labor productivity and

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1 King Cotton, op. cit., p. 27.
its future possibilities. Productivity may be simply expressed at "output per man hour" which is determined by dividing the quantity of physical units to man hour inputs. It is observed that increasing productivity is translated into price declines, increase in profits and improvements in quality.

It is not possible to determine scientifically the productivity of industrial labor in India. Unfortunately there is not adequate "trained personnel, reliable industrial labour statistics and a scientific attitude on the part of organizations of employers and workers." The few scientific studies which have been made so far present wide variation. The planners in this connection set forth certain suggestions which are revealing.

"It is therefore suggested that a team of productivity experts should be invited under the Technical Assistance Programme and that this team should be charged with the responsibility of training of a sufficient number of officers from government industry and trade unions in developing methods of productivity. As a result of discussions between the Labour Ministry and the Planning Commission, and on request made by the Labour Ministry, the I. L. O. has formulated

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Investment in India, op. cit., p. 89.
proposals for technical assistance in the field of systems of payment by results and productivity. The experts to be sent out by the I. L. O. would undertake studies in the textile and engineering industries. After making a preliminary selection of the undertakings in which the studies are to be carried out, the experts would undertake a thorough analysis of the existing organization and methods of work, job classification and wage scale with a view to suggesting improvements designed to increase efficiency and productivity and to improve working conditions. The Planning Commission further points out the effects of the experiment in one of the textile mills in Ahmedabad. They maintain: "The Ahmedabad Textile Industry's Research Association with the assistance of the I. L. O's Asian field office on technical training has carried out some valuable suggestions in one of the textile mills of Ahmedabad. The supervisors and the heads of departments were trained in the technique of "Job Institution" by the I. L. O. experts on training-within-industry. The results of these experiments have shown an increase in production from 7 per cent to 18 per cent in different sections of the spinning department and 11 per cent to 30 per cent in different sections of the weaving department."

1 The First Five Year Plan, op. cit., p. 591.

2 Ibid., p. 592.
Two significant factors, namely, a tacit assurance of minimum wages for workers and higher labor costs for producers are noted in the present day unskilled textile workers in India. Prior to 1934, by and large, the wage pattern was determined by the individual employer. There was no proper legislation worth the name to rationalize the wages of the unskilled workers. "Thus, in 1914, the average earnings per worker in the Mofussil centres of the Bombay Presidency excluding Bombay, Ahmedabad and Sholapur was Rs 11-14-1; in Bombay city it was Rs 16-6-3; in Ahmedabad Rs 13-9-9; and in Sholapur, Rs 10-9-4. These wide margins persisted until 1939 and have resulted in internal competition between mills based on lower labor costs rather than efficiency." After 1944 some legislation concerning the wage pattern came into being. "By 1948, well over 80 percent of the mills in India had their wage patterns standardized as a result of the awards made by various industrial tribunals. The tribunals sought to fix the minimum wages for the lowest paid and the most unskilled job, usually that of a sweeper or a coolie." Nevertheless, the basic minimum wage for least skilled textile workers vary from

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1 The Indian Cotton Textile Industry An Economic Analysis, op. cit., p. 58.

2 Ibid., p. 61.
centre to centre but are of less magnitude. Thus "this minimum wages now vary from Rs 16 per month in Cochin to Rs 30 per month in Bombay city - a difference of less than 100 per cent as against the older difference ranging up to 800 per cent".

Secondly, the labor costs in Bombay mills have increased to more than 5 times the amount from 1937 to 1951. In 1937, the cost per man hour was between 18 to 23 pies and rose to 130 pies in 1951. In spite of the higher labour costs, the productivity of labour in all these years has remained "virtually stationary". To illustrate: It is observed that "as against an average of four to six ordinary looms handled by one operative in Britain, 32 to 78 automatic looms in the United States, and a minimum work load of 48 automatic looms in Japan, the Indian worker handles on an average not more than two ordinary looms. Similarly, the maximum number of ring frame spindles handled by an Indian operative is 380 as compared to an average of 800 in Britain, 1200 in the United States and 2,400 in Japan." The main reason for such low productivity is that over 75 per cent of the

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1 The Indian Cotton Textile Industry An Economic Analysis, op. cit., p. 62.

2 Ibid., p. 72

3 Facts About the Cotton Mill Industry (Millowners' Association), Commercial Printing Press, December, 1953, p. 16.
machinery in Indian mills is more than 25 years old. During the war, they have been overworked and the maintenance was neglected due to the difficulty in obtaining spare parts. Hence the pressing need of rationalization of mills cannot be overemphasized.

Rationalization

The growth of the Indian cotton textile industry has been stunted and its activities have been limited both at home and in the international sphere due to high prices and poor quality. Students of this problem recognize that they could overcome these difficulties by increase in production and reduction in costs. In other words, a policy of rationalization should be introduced to remedy the ills of the present day cotton textile industry. Countries like the U. S. A., U. K. and Japan are equipped with modern machinery in their textile mills and as a consequence they have reduced production costs, improved the quality of the fabric and maximized the productivity of labour. It is mentioned that more than 65 per cent of the cotton mill equipment in Japan is new and up to date. A large proportion of looms installed in the post war period is automatic. It is estimated that the average annual expenditure for new plant and equipment since 1947 in the American textile mill industry as a whole is more than $500 million which is probably 40 per cent of their total expenditure of the entire industry.

Mr. Mcisaac maintains that price agreements and the
assignment of production quotas, limitations on the introduction of new machinery, obstructions to the industry of new firms and provisions for the scrapping of existing plant are familiar techniques of industrial "rationalization". In this section, we will concentrate our attention to the scrapping of the existing uneconomic plant and giving place to up to date automatic looms which have solved the twin problems in other countries such as the U. S. A., U. K. and Japan.

There is a difference of opinion between the organized mill industry and the Committee (The Textile Enquiry Committee) as regards the uneconomic mills. The former mean that "unbalanced character in terms of a small number of looms than is warranted by spindleage is the reason for a mill being uneconomic". But the Committee feels that "old equipment, unsound financial structure and bad management are frequently the causes of a mill being unprofitable. Further the Committee argues that the existent 114 purely spinning mills in the country have been working for a number of years and their returns though not "phenomenal" earn a reasonable return. The indication of their survival is the sufficient proof that they can hardly be unprofitable. Now the question is how to transform the uneconomic units into economic ones. Unfortunately there are no uniform

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1 The Cotton Textile Industry, op. cit., p. 23.
standardized solutions to offer them. Each mill has its own problems. The remedy of the one may not be the solution for the other. The Committee feels that liquidations and amalgamations are possible remedies in some cases. If the unbalanced nature of looms and spindles is the only factor causing the unit to be uneconomic, then the Committee strongly advocates it should be either assisted to increase its spindleage and thereby reduce its overheads and unit costs amalgamated. The Committee is, however, against the increase in loomage in spite of the increase in demand for cloth expected. The production and sale of yarn produced by spindleage would be quite remunerative.

The Planning Commission's recent publication, entitled "Programmes of Industrial Development, 1951-56", points out that there are 150 uneconomic units in the cotton mill industry. About 60 of these are operating at a loss and the remaining 90 are reported to be working slightly above marginal efficiencies. It is believed that more than 75 percent of the machinery is more than 25 years old. They have been overworked during the war and the maintenance was neglected owing to the difficulty in obtaining spare parts. It is high time for the industry to change this situation. The replacement of old plants by new automatic looms is imperative. In the fitness of things, a plea for rationalization is logical. Rationalization and rehabilitation
bristles with problems such as mass unemployment and financial stringency and they will pale into insignificance when we consider the real over all picture of the economy in the long run. There is a fear that the new machinery leads to unemployment in the sense that the automatic looms replace men. No doubt large scale industrialization based on new machinery will lead to mass unemployment, but this situation will last only for a short period. Rationalization implies the production of goods and services on a mass scale at cheaper price. This turn over will in turn necessitate the demand of other goods, more machinery, more servicing and more subsidiary industries which in turn will generate more demand for labour. The profits of the industries will be invested in new enterprises calling for more men and machines. In the long run the result will be demand for more men as machines increase and thereby the standard of living of the people will rise. These are long term effects. The labor has every justification for frown upon this economic concept. This "long term" is a vague expression. It may mean 2 or 20 years and depends on variety of circumstances. India has all along faced unemployment, and adding to it this potential mass unemployment will be a serious problem. It

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1 "The Committee (Textile Enquiry Committee, September, 1954) has computed that this will result in the unemployment of nearly 4,000 weavers per year, assuming that one weaver would operate 16 automatic looms on an average." p. 41
may not be a wise proposition to plan for the welfare of the posterity at the expense and direct neglect of the present generation. It is, therefore, pertinent to take into account the valuable suggestions offered by the First Five Year Plan, before rationalization.

Rationalization has been unwelcomed both by labour and management on similar and different grounds at present in India. The former, as indicated earlier, fear that it leads to mass unemployment and the latter is hesitant to invest his capital on machinery which is approximately three times the prewar prices. Moreover, very few firms at present have adequate reserve or resources to pay for new equipment. Unfortunately, the industry has not been maintained on the basis of ploughed-back profits and therefore does not command adequate reserves for renovation.

At present, the India cotton mills in general are equipped with the ordinary "two looms" or "four-looms" system as opposed to high speed machines in general and automatic and "eight-looms" system in particular. The existing ordinary looms being old and outmoded, it is commonly believed that they entail poor quality of production and higher labor costs. But the British Cotton Working Party

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1 Five per cent of the total number of looms installed in the industry constitute automatics and the number of these looms increased from 7,430, to 11,099 during 1945-1953.

Report points out that the automatic looms are suitable for certain types of weaving and the use of the "eight looms" system or automatic looms raises the labor costs with other fabrics when they compare with the "four-looms" system. It further points out that these new looms are "best suited in the case of cloth with a somewhat coarse weft and low pick which is best produced by the repetitive process." India is interested in producing coarse and medium fabrics—a comparative cost advantage—to compete with foreign markets. So the need and importance of the "eight-looms" system or automatic looms to manufacture the above fabrics need not be overemphasized. It is possible for India to compete her coarse and medium plain cloths like sheetings manufactured on automatic looms with countries which manufacture plain cloths on automatic looms. It is conceivable that the coarse and medium plain cloths manufactured on automatic looms will ensure, according to the British Cotton Working Party Report, higher quality and reduction in costs. Whereas the countries which manufacture plain cloths (as opposed to coarse and medium) on the same loom, will naturally lose the above advantages. Hence India stands to gain in foreign markets with the introduction of the automatic looms. This proposition sounds better. We must consider the other alternative also. It is rather short-sighted to base India's economy on the possible expansion of export trade. International trade being fluctuating in nature, India should be
prepared to utilize her unsold cloth in foreign markets, to her domestic consumption. In this case, the unequal competition between the present existing looms and the proposed automatic looms can easily be discerned. The cotton textile industry is already facing conflicts between the handloom industry and the powerloom industry and the handloom cum powerloom industry and the organized mill industry. Adding to these conflicts, a new conflict which can be expected is due to fluctuations in internal trade. Nor is this all. As regards the domestic consumption, the role of automatic looms is rather circumscribed. "It is not convenient to produce dhoties and saries, comprising 25 per cent of the total output on automatic looms on account of their short lengths." Nevertheless the Textile Enquiry Committee recognizes the importance of the automatic looms and the recommendations are valuable both for labor and management and the economy of the industry as a whole. It may not be out of place to reproduce it here:

"The Committee is of the opinion that replacement of plain looms with automatic looms must be permitted at the rate of 5,000 looms a year so that one half of the existing loomage may be converted into automatic looms over a period of 20 years. The Committee has computed that this will

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1 Rationalization of Mills, op. cit.
result in the unemployment of nearly 4,000 weavers per year, assuming that one weaver would operate 16 automatic looms on an average. This would represent the elimination of approximately 1.5 per cent of weavers per year. In order that the mill production of cloth may be frozen round about 5,000 million yards, it is obvious that no addition to weaving machinery, whether in the form of plain looms or in the form of automatics, should be permitted during the plan period envisaged in this report. For obvious reasons, as far as possible, the conversion into automatic looms must be undertaken in consultation and agreement with labour, or at least according to principles which government after a full consideration of the matter may lay down."

The question of finance to rationalize the mills is the next consideration. During the World War II, the cotton mill industry was active and some of the industrialists had made fabulous profits. In fact some of the mills have already started the rehabilitation of their machinery although the process, however, is still in the beginning.

They have already placed orders with foreign firms in England, Switzerland and the U.S.A. for new textile machinery.

Problems such as foreign exchange, limited funds of the mills, scarcity of foreign machinery, import policy of the government are some of the main obstacles which have stood in the way of rehabilitation of new machinery.

The government of India is interested to protect and foster the indigenous machinery manufacturers on one hand and save the dollar resources on the other. The objective of the government is rather praiseworthy but the effects of the move at the present juncture according to the Millowners' Association are not appropriate or timely. They clamour that "the indigenous machinery manufacturers are entitled to every encouragement, but such protection should not be allowed to hamper the mills in obtaining the latest and most efficient machinery". No doubt, the indigenous machinery manufacturers at present are in an embryo stage. A news item about one of those companies appeared in the Hindu December 2, 1954, supports this view. "....the Textool Company was

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1 Cotton in Pakistan and The Indian Union, op. cit., p. 137.

2 "The Indian mills are relatively wealthy in their own currency, but the amounts of foreign exchange which can be allocated by the government to these mills for the purchase of machinery in foreign countries, especially in hard currencies, is definitely limited." Ibid.

3 Facts about the Cotton Mill Industry of India, op. cit., p. 16.
started in Coimbatore a decade ago and has made rapid progress. It manufactures ring spinning frames, revolving flat carding engines and drawing and fly frames which compare favourably with any foreign company. One can hope in years to come, the indigenous machinery manufacturer’s position would be strengthened and their products would be welcomed in India.

For various reasons, other foreign countries are unable to fulfill the present demand. "India has expressed a desire to get some 800,000 spindles from Japan, and Pakistan has asked for 250,000. The present capacity of the machine works in Japan, however, is still limited and current production is at the rate of only 250,000 spindles per year. At this rate, it would take over four years to supply India’s requirements alone." Hence the real difficulty for the expansion of cotton textile industry is the scarcity of capital goods. The exploratory missions of Sir Ardeshir Dalal and the other Indian industrialists to U. K. and the U. S. A. in this connection prove to be less optimistic. So the government had taken certain measures to overcome these difficulties.

1 Cotton in Pakistan and the Indian Union, op. cit., p. 160.

2 King Cotton, op. cit., p. 39.
Government (British) Policy of Import of Machinery

The Post-War Planning Committee (textiles) has classified the textile machinery industry into productive consisting of looms and all spinning machinery, including the ring frames and unproductive which includes the rest of the tools in a textile mill. The industrialists who desire to expand their mills were required by the committee to submit their applications prescribed by the chief controller of imports of capital goods to the textile commissioner by the 30, September, 1945.

The following main priorities were taken by the committee to grant the licences for import textile equipment.

The applications of the small spinning mills for expansion up to 25,000 spindles started before March 31, 1941 would be sanctioned. They would be entitled to import not more than 10,000 new spindles.

Imports of looms would be granted to mills which have not exceeded in ratio of 45 spindles fine and 32 spindles coarse for every loom in a mill. As regards the installation of looms in new mills, it is left to the discretion of the provincial or state governments "subject to the reservation of 25 per cent or the new spindles for free yarn required by handloom and other users". As regards replacements, "the committee had recommended in scrapping of an equivalent quantity of old plant as a condition for sanction." The committee had also recommended to remove all the restrictions
on the import of productive machinery from the non sterling areas. The government accepted the suggestion of the committee as regards the priority for expansion and new projects over replacements.

In order to expedite the placing of orders of sanctioned productive machinery, the government ruled that the license holder should produce a letter stating that he had registered an order from the importer with complete details regarding the plant in question. Failing which, his license would be forfeited and it would be given to some other applicant.

The government has imposed some restrictions on import of certain foreign textile machinery. The justification for this move was to encourage the indigenous machinery and save the foreign exchange. It is a moot question to argue how for government is justified to arrest the initiativeness of the private enterprise. The British government encourages the industrialists to import machinery duty free which cannot be purchased in Britain. Similarly France and Italy import textile equipment without imposition of a special order. At present, only a small beginning has been made by domestic textile machine industry. The machinery and the equipment

1 Facts About the Cotton Textile Industry, op. cit., p. 16.
2 Ibid.
3 The First Five Year Plan, op. cit., p. 422.
are inadequate to meet in demand for the cotton textile mill industry, and hence the government should liberalize and reconsider their import policy.

As regards the cases of the mills which have limited funds, the government of India has recognized the problem and efforts were made in that direction. With the recommendation of the Post-War Planning Committee (textiles), the government permitted them to import goods from non-sterling areas "if the delivery of the plant will be quicker, price cheaper, and machinery better". India was allocated 20 million dollars annually during 1944-45 for the import of capital goods. As regards long term finance for purchasing machinery and other equipment, the Planning Commission considered the Industrial Finance Corporation. It has already granted loans to textile mills for rehabilitation. Attempts have been made to organize a corporation with the assistance from the World Bank for facilitating industrialization in the private sector. The government of India is

1 King Cotton, op. cit., p. 40.
2 The First Five Year Plan, op. cit., p. 247.
4 Ibid.
setting up an Industrial Development corporation to extend loans to the cotton textile and jute industries for purposes of rehabilitation. These financial institutions are in the making. It is predicated that they will soon assume their importance and guide the process of rehabilitation in the right direction.

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CHAPTER III

PUBLIC POLICY IN COTTON TEXTILE INDUSTRY

Objectives of the Government

The objectives of the government towards industries are based on the Industrial Policy Resolution of April 6, 1948. According to it, the industrial sphere is divided into four sectors. The first sector comprises those industries which include "the manufacture of arms and ammunition, production and control of atomic energy, ownership and management of railway transport and (in emergencies) any industry vital for national defense," owned and operated by Union Government. The second sector embraces the industries in which "the state has decided to reserve initiative for future development in each of them and will be exclusively responsible for the establishment of new undertakings, but it may invite the cooperation of private enterprise where necessary". They are "coal, iron and steel, aircraft manufacture, ship building, manufacture of telephone, telegraph and wireless apparatus, excluding radio receiving sets and mineral oils..." "The existing undertakings in this field will be given all facilities for efficient working and reasonable expansion.

2 Ibid.
for a period of ten years, at the end of which the state will decide in the light of circumstances, obtaining at the time whether these undertakings should be nationalized. This period of ten years is, therefore, not something fixed and unalterable and the state has undertaken no firm obligation to take over the industries at the end of ten years. It has only reserved its right to do so if, on review of the then existing position, it finds it necessary, and then even if it decides to acquire any unit, it will award compensation on a fair and equitable basis." The third sector includes some eighteen industries of importance such as "salt, automobiles and tractors, prime movers, electric engineering, other heavy machinery, machine tools, heavy chemicals, fertilizers and pharmaceuticals and drugs, electro-chemical industries, nonferrous metals, rubber manufacturers, power and industrial alcohol, cotton and woolen textiles, cement, sugar, paper and newsprint, air and sea transport, minerals and industries related to defense" which will be subject to governmental regulation and control. The last sector - the industries are not enumerated - will be exclusively under private initiative and enterprise. They will be extended the fullest

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1 Governmental Measures Affecting Investment in India, op. cit., p. 2.

2 Ibid., p. 2.
scope to develop without governmental regulation and control.

More than seven years have passed; the government has slowly adhered to the Industrial Policy Resolution of 1948. Mr. Nehru's adoption of resolutions at Avadi Session favoring a socialist pattern of society and a socialist economy created a stir both at home and abroad. It is too early to visualize the nature of the economy. It is a combination of all three economies of America, Russia and China put together. Nehru reiterated and observed at the Congress Parliamentary Meeting on December 2, 1954 that, "I can fit in just something from America, something from China and something from Russia". Nehru and his colleague, Maulana Azad, pointed out times without number the objectives of the proposed socialist pattern of society, both at public meetings and on the floor of the Congress Parliamentary Party meetings and yet there is a lot of confusion among the Congressmen.

The press has criticized the ill-defined and ambiguous objectives of the socialist pattern of society. There is a fear that the proposed pattern will lead to nationalization with or without compensation. This section is by no means devoted to all the probable intricacies of the problem. None the less, it must be pointed out that Nehru is against all-round nationali-

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The 60th session of the Indian National Congress which met at Satyormurti Nagar, Avadi, near Madras, on January 21, 1955.
zation and his statement on December 2, 1954 at the Congress Parliamentary Party meeting testifies to this. It is interesting to note Mr. U. N. Dhebar, the All India Congress President, defined more clearly the objectives of the socialist pattern of society as conceived by the Congress Avadi Session in his recent letter circulated to the Presidents of the Pradesh Congress Committees. He disclosed that the objective could only mean:

A. "Social ownership or social control of means of production in the interest of society as a whole as distinguished from that of the interest of the individual or a section of society. That meant in a conflict between the interest of the individual and that of society, the latter must prevail.

B. Equitable distribution of the nation's wealth, resources and income.

C. Equality of opportunity to all sections of society."¹

A socialist society according to Professor Schumpeter is an institutional pattern in which the control over means of production and over production itself is vested with a central authority. In other words, the economic affairs of society belong to the public and not to the private sector of the society. According to the Avadi resolution, the pro-


posed socialist pattern of society will embrace the three-fold objective, namely, social ownership or control of the principal means of production, progressive speeding up of production and equitable distribution of the national wealth. Maulana Abul Kalam Azaz, then stressing the importance of these objectives pointed out that increased production should precede equitable distribution. The equitable distribution of national wealth, according to the framers of the resolution is taken to mean the lessening of inequality in the distribution of the national dividend than of equalitarian schemes of redistribution of all wealth. The other countries who are in favor of welfare state adopted the instrument of taxation (Estate Duty) as one of the means of redistribution of accumulated wealth. To achieve this end, a country need not adopt socialism. The distinction between socialism and the proposed pattern of socialistic society, according to Azaz, is that the latter is no doctrinaire approach to nationalization. He pointed out that so long as private ownership adjusts itself to the basic policy of government of increasing production and minimizing unemployment, private initiative need not fear. In a word, the objective of the socialistic pattern of society, according to the framers of the resolution, is "not to exalt doctrinaire theories but to find a workable media between capitalism and socialism which would be free from the defects of either, would be in accord with the genius
of the people and would promote harmony and cohesion, not hatred and strife."

As indicated earlier, the cotton textile industry comes under the third sector of the industrial sphere. It will be in the hands of private enterprisers which will be regulated and controlled by the public. Let us present some of the regulations and control of the government before Independence, particularly, during the World War II and the proposed regulation of the present government.

**Government Control and Regulation**

The cotton textile industry is in the hands of private enterprise. Yet, government may intervene whenever the industry, according to the 1948 Industrial Policy Resolution, may be found unsatisfactory. The principal object of the Industries Act 1951 is to enable the government to implement its policy for the development and regulation of industries. Cotton and woolen textiles come under the Act.

The British government passed certain stringent measures, particularly during the last war, in order to arrest the so-called "Textile Famine". In 1943, the government tried to curb certain privileges in order to arrest the increasing

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1 "Socialistic Pattern or Democratic Equality", The Hindu, January 24, 1955, p. 5.

2 In October, 1951, the Industries (Development and Regulation) Act was passed for the purpose of regulating the basic industries.
prices of cotton cloth. Standardized clothes were introduced and made available to the poor and middle classes of the people. The prices were made almost uniform, and they were never allowed to exceed more than 6\% per cent of the sale price of the mills. The Department of Industries and Civil Supplies was set up in May, 1943 to regulate exhorbitant prices, to check hoarding and to step up production. The manufacturers and the dealers were required to furnish the stock of cloth and yarn held in July 31, 1943 by August 15, 1943 in order to detect the concealed stocks. The move was rather an encouraging one but the returns were not complete, but they did reveal an approximate stock of 2,700 million yards of cloth and 215 million pounds of yarn. The clothes and yarn produced after July 31, 1943 were stamped with the date of packing and required to be disposed of within six months. To implement this provision, the Textile Control Board was set up and as a result the prices were reduced 30 per cent and the consumers were benefited by nearly 40 million rupee (about 8.4 million dollars) a year. The Pro-

1 King Cotton, op. cit., p. 17.
2 Ibid.
3 Ibid.
4 Ibid.
5 Ibid., p. 18.
visional governments were asked to introduce quota systems and pass stringent measures to curb mal practices such as black marketing and stock hoarding. The effects of these controls did not attain the desired results but did keep price spiral under control.

The second consideration after price control was production control. It was not too difficult to step up production on the handloom side. The workers who required for spinning were not as highly skilled as those for weaving. Weaving does not command high cost on handlooms. Hence, production of cloth was increased on the handloom side. In the case of mills, the production of yarn and cloth declined due to labor strikes and shortage of coal. The government directed the mills to adopt the three shift system and made a special allocation of coal for the mills.

The third feature was distribution control. It was rather a complex problem. The cloth famine, particularly in Bengal, and the general prevalence of the black market in the country led the Textile Control Board to introduce a new scheme in 1945 to make the cloth available to all people at reasonable prices. The scheme worked out successfully with the close collaboration of both the central and the Provincial authorities. According to the scheme, the country was divided into 12 distributive zones and cloth was supplied to each zone according to the pre-war per capita consumption of cloth. The quota holders formed small groups, each under a
leader in the producing centres. The leaders and their deputies were held responsible to the Textile Commissioner for all the transactions that they made in delivering the cloth to the authorized wholesale dealers. Transportation of goods was passed under permits. The price of the cloth was fixed not more than 3 per cent above the mill price, to the receiving centres. Finally, the distribution of cloth was facilitated to the consumers by issuing ration cards to them. In the beginning of the war, fifty per cent of the textile capacity was made available to the poor people at reasonable prices; ten per cent of them was devoted to defense requirements and the remaining forty per cent of the cloth, the government could not account for. In order to remedy this situation, the government introduced a control system in 1943, imposed ceilings on cloth prices in 1944 and increased production and set up proper machinery for the distribution of cloth in 1945. The three aspects, namely, price control, production control and distribution control which took a long time for the government to set in motion and took a long time to be decontrolled. During 1946 and 1947, the production of yarn declined. The reason for the decline was not only labor strikes and shortages of labor but also, according to the Mill Owners' Association, the low ceiling price for yarn fixed by the government. As a consequence, many mills sustained losses and closed down. In 1948, price control was partially lifted
and signs of improvement in production were noticed. After 1948, the prices of yarn began to rise so exorbitant that they were not in the reach of handlooms to buy. So the government reimposed price ceilings not only on yarns but also on new cotton. Due to the controls, the production once again slowed down. Many mills were forced to close down. Later the government relaxed the cloth distribution and control. The liberalization by no means eased the situation.

If we review the general pattern of production in cotton, yarn and cloth from 1946-50, it can be described as one of fluctuating and on the whole declining in character. In 1952-53, the entire total pattern of the mill industry was changed, and this gave rise to record production in cotton, yarn and cloth. As a result, the government of India abolished the price and distribution controls as of July 10, 1953. She still retains control over production. If the industry shows further signs of progress, these may soon be abolished.

Methods to Promote Exports

The government of India, at present, is interested in promoting and stimulating the export of cotton textiles, "not in the negative sense of removing restrictions and reducing duties but in a positive way by raising quality and improving
services". It has been observed that the Indian sharp trade practices are undesirable, and the goods produced from the Indian mills are of "substandard quality". One of the objectives of the Indian Standards Institution (I.S.I.) is to improve and implement the export quality of the goods. In order to popularize this, a mark denoting the Indian textiles of quality must be registered under the I.S.I. A provisional committee was appointed. It is hoped that the method of export quality will push the Indian products in foreign markets, and they will be able to withstand the strain of other competitors.

Cotton Textiles Fund

The Cotton Textiles Fund was created by the government under the Cotton Textiles Fund Ordinance of 1944. It came into being by the levy of customs duty of 30 per cent of the maximum ex-factory price on cloth and yarn exported from India. The levy was made for over three years from October, 1944 to November, 1947. The accumulated fund amounted to Rs 23,350,000 (about $4,917,788). This fund is utilized for


2 The Indian Standards Institution (I.S.I.) is almost a self supporting and semi-private organization which was introduced in 1947. The Institution is governed by four councils at present. The Textile Division Council is one of them.

the sole purpose of textile research and export promotion. In 1947, the committee offered financial support to set up a technical research centre under the Ahmedabad Textile Research Association.

Research Centres For Bombay and Corinbatore

Research centres at Bombay and Corinbatore were started by the initiative of the industries in question. They got some financial aid from the Cotton Textiles Fund. Beside these two research institutions, there are other institutions at Bombay which are both analogous and complementary to the above research centres. The government has no power to interfere with those institutions except as it may give financial aid for them. But the government supervises to see whether there is waste of national resources in these institutions. For instance, there are not many textile scientists in India to carry on the research which the Textiles Research Institutes envisage. If it is necessary, foreign scientists may be invited in the beginning stages. It means a drain on the Research Institutes. Care should be exercised to see that the foreign scientists' research should be new and not to duplicate the work which has already been conducted. The government may have to exert its influence to see that there may not be any "material conflict in the programme of work between two or three institutions" of the same kind.
Research For Handloom Industry

There are at present research centres engaged in studies on fibre, yarn strength, dying and finishing, etc. in Madras, West Bengal, Uttar Pradesh, and Bihar. These receive monetary aid from the All India Handloom Board. It is a quasi governmental organization. Some of the institutions have already made provisions for expansion of their research facilities. In addition to the Government Central Weaving Institute at Banaras, the All India Handloom Board proposes to appoint a Research Committee and a Director of Research for the handloom industry. Since fashion, pattern, weave, etc. are different from region to region in India, the proposed research institute is interested in securing better coordination of the fabrics woven in all regional institutions.

To sum up, the government of India is interested in promoting and improving the quality of all varieties of cloth (both handloom industry and mill made) on one hand and in fostering and reviving the handloom industry on the other. The government has extended all possible assistance to the handloom industry for the last two years. According to the Union Minister for Commerce and Industry, "the production has increased in many parts of India and the off-take has been reasonably good". The All India Handloom Board has recommended schemes worth about nine crores of rupees (about $18 million) for this industry. The Union government has al-
ready extended more than six crores of rupees (about $12 million) for the last one and a half years and more than one crore of rupee (about $2 million) is about to be sanctioned during this year. The government of India is not hesitant to spend for this industry. The rebate on handloom cloth prices is another step to accelerate sales. The assistance of the external marketing scheme at Singapore, Rangoon, Colombo and Baghdad and the continuance of the indications of the revival of the handloom industry.

According to the Industries (Development and Regulations) Act of 1951, permission or license is required from the government either to make additional substantial units to an existing industry or to set up a new industry. Though this control (license) may prevent the less desirable uses of the resources available, it does not insure that the resources will be utilized for more preferred lines. In order to obtain better results, the planning commission presents certain recommendations which can be summarized as follows.

In the case of projects which involve heavy capital investment and the use of new techniques, it might be desirable for the government, with the consultation of the Tariff Commission, to extend an advance assurance of protection. "For the development of industries consuming minerals or of industries based on forest produce, long-term leases might be granted." Meriting the case of the industry, capital goods and
certain raw materials might be allowed to be imported duty free.

The Licensing Committee which as been set up under the Industries (Development and Regulation) Act of 1951 announced its grant of licenses to manufacture recently. During October, 1953 to November, 1954, the committee received 503 applications, out of which 422 cases were granted license, 54 cases were refused and 26 cases were sent back for further particulars. The interests of the committee merit heavily in favor of small manufacturers rather than big ones. During the period under review, the committee has not allowed the large cotton textile mills to expand their loomage capacity lest they should affect the interests of the handloom weavers.

The forthcoming All India Industrial Exhibition in the month of October at New Delhi will be a healthy sign. It has been announced (Hindu Weekly Review, January 24, 1955) that the exhibition sponsored by the Federation of Indian Chambers of Commerce and Industry will be the biggest one ever held in India and the Far East. The estimated expense is Rs 40 to 50 crores ($84 to $105 million). Many foreign countries - the U. S. A., U. S. S. R., Czechoslovakia - are expected to participate. The exhibition would provide all the facilities to the Indian manufacturers to display their products. The organi-

1 "Grant of Licenses", The Hindu Weekly Review (January 24, 1955, p. 12.)
zation enjoys the patronage of the government of India.

**Taxation**

The cotton textile industry is a source of revenue to municipal, state and central governments. It contributes on an average more than 31 crores (about $65 million) annually by means of income tax, surtax, excise duty, state and municipal taxes to the national exchequer at home. The entire tax constitutes 2.57 per cent of the gross income of the industry.

Of late, the trend of taxation on the cotton mill industry has been consistently upward. Much criticism has been levelled against the present fiscal policy of the government. The government, with the fond hope of helping the poor, has taxed the rich to attain the desired objective. If the present policy of taxation on cloth persists, Mr. E. P. A. Da-costa predicates that the per capita consumption of cloth will remain "obstinately stationary". He draws his conclusion for arresting additional consumption from family budgets in the Delhi area. He observes that the middle class families maintain their expenditures heavily on miscellaneous things, particularly entertainments, rather than expenditure on cloth. Adding to this tendency, additional imposts on cloth would tend to weigh adversely upon the consumer.

The question is who should bear the incidence of taxation - the producer or consumer. The government imposes the imposts
on the producer who consequently shifts the burden to the consumer. The government has chosen to levy assesses an excise duty with the assumption perhaps that the demand for cloth is inelastic in the direction of price increase. In other words, an increase in price of cloth will not lead to a proportionate decrease in demand, since clothing is supposed to be a necessity. But the facts are otherwise in India.

It is mentioned that a pair of fine variety of bleached "dhoti" of eight yards whose ex-mill price is about Rs 9-4-0 attracts an excise duty of Rs 0-14-0, plus the sales tax of Bombay State which accounts to Rs 0-9-3. So the consumer is called upon to pay an extra Rs 1-7-3 for his pair of "dhoties". Similarly, a pair of superfine bleached "dhoti" of nine yards whose ex-mill price is Rs 12 carries an additional load of Rs 2-4-9 as a result of these imposts.

The imposts affect the industry as well as the consumer. The former is at a loss to withstand the strain of foreign competition with the materials which are produced and manufactured at a cheaper rate. If we recall the volume of export trade of cloth for the years 1950-53, it has been one of di-

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1 Mr. E. P. A. Dacosta observes that at present level there are quite a elasticity in one or two markets. After certain minimum requirements are bought, the demand tends to stay out and not to rise.

2 Krishnaraj M. D. Thackersey, op. cit.
minishing trend. In 1950, the volume of export was 1120 million yards. The succeeding years 1952 and 1953, it came down to 776 and 538 million yards respectively. This shrinkage was partly due to the fact of "the emergence of a buyer's market and the flow of goods from Japan into world markets". This competition could be overcome by reducing the prices of the product. It is obvious that it cannot be done so long as taxes and wages are high.

As regards the domestic position, it is by no means stable. Some of the imposts have almost doubled during these few years. Some of the major imposts levied on this industry ever since 1949 are the following:

# By an ordinance promulgated on January 1, 1949 in the Amendment of the Central Excises Act of 1944, an excise duty of 25 per cent advalorem of the ex-mill price was levied with immediate effect on superfine cloth."

The Indian Finance Act of 1949 attracted excises at the rate of 6\(\frac{1}{2}\) per cent advalorem in respect of fine cloth and 3 pies per yard with reference to coarse and medium cloth.

#In this section, the denomination of the Indian unit of account (rupee) is kept as it is. The conversion to dollar figures gives an infinitesimal fraction which apparently does not drive the effects of the imposts. For example, a sales tax of Rs 0-0-3 on the rupee is 1/64 of a rupee which is supposed to be an amount of importance in India. The conversion figure comes around 21/64 of a cent for every 21 cents. This fraction is not only confusing but appears vague.

There are 12 pies to an anna; 16 os = 1 Re; 1 Re\(^2\) approximately 21 cents.
The excises were modified from February 1, 1950 as follows:
Superfine cloth - 20 per cent of the ex-mill price; Fine cloth - 5 per cent of the ex-mill price; Medium - 3 pias a yard.

On February 28, 1953, the advalorem was changed into specific duty of Rs 0-3-3 in respect of superfine cloth and Rs 0-1-3 in the case of fine cloth. The other varieties such as medium and coarse were left unchanged.

Under the Khadi and other Handloom Industries Development Act of 1953, an additional excise duty of Rs 0-0-3 a yard was levied on all mill made cloth. This excise duty was not applicable on exported cloth. By February 27, 1954, the excise duty was increased to Rs 0-0-6 per yard on superfine cloth and Rs 0-0-3 per yard on other varieties. These are union government taxes. In addition to these taxes, there are state taxes which vary from state to state. Let us consider some of the state taxes on mill cloth, for instance Madras state.

Sales tax is levied as Rs 0-0-6 in the rupee on all varieties (coarse, medium, fine and superfine) of cloth sold in Madras state. In addition to it, an interstate sales tax

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1 "Under the Indian constitution, state governments are prohibited from levying sales taxes on foreign or interstate commerce or on goods declared to be essential for the life of the community. An act recently passed defines as "essential" such commodities as food stuffs, cotton and woolen textiles, raw cotton, petroleum and coal. Other questions as to the limits of state governments' sales tax jurisdiction are still in dispute. Three Part B states have been permitted, under agreements with the central government, to continue levying certain taxes on interstate trade until 1955 while they develop alternative sources of revenue."
is levied Rs 0-0-3 in the rupee on all varieties which are produced outside the Madras state. On February 26, 1954, Madras state legislature introduced a fresh sales tax Rs 0-1-3 in the rupee on all varieties except the coarse cloth. This piece of taxation is justified on the ground that the sales tax does not affect the poor who are supposed to wear the coarse cloth. Further, the state government may expect much revenue from the medium and fine variety rather than coarse and superfine ones.

The aggregate tax increase on all varieties show altogether a different picture. The following statistics show the anomaly of the situation.

### TABLE I

<table>
<thead>
<tr>
<th>Variety</th>
<th>Total Mill Production</th>
<th>Total Tax Increase</th>
<th>Increase In Ex-mill Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coarse</td>
<td>10%</td>
<td>20%</td>
<td>32%</td>
</tr>
<tr>
<td>Medium</td>
<td>60%</td>
<td>120%</td>
<td>46%</td>
</tr>
<tr>
<td>Fine</td>
<td>25%</td>
<td>66 2/3%</td>
<td>43%</td>
</tr>
<tr>
<td>Superfine</td>
<td>5%</td>
<td>58 1/4%</td>
<td>36%</td>
</tr>
</tbody>
</table>

As the above statistics indicate, the coarse cloth is taxed lightly compared to other varieties. It is assumed that the coarse variety, which is 16 counts and less, is used by the poor. No doubt it is true. But the overall
situation presents us a different picture. The coarse variety after all constitutes 10 per cent of the total production of the mill industry. It does not mean, however, that 60 per cent of the medium variety is used by the rich. The poor constitute the majority of the India population, and the distinction between the poor and the middle class people is not very much pronounced at present. As such, the medium variety is also consumed by the poor. It is the most used variety. It is doubtful whether the fiscal policy of the government is justified by taxing 120 per cent on the medium variety which is used by the majority of the people.

The government maintains that "in an industrially underdeveloped country like India it is inevitable, if every section of the community has to be laid under equitable contribution to the exchequer, that a substantial portion of taxation must be raised through indirect taxes. But even so, the proportion of direct to indirect taxation in this country does not compare unfavourably with that of such industrially advanced countries as the United Kingdom. In 1951-52, direct taxes will account for 42 per cent of the centre's tax revenue while in the United Kingdom the proportion of direct taxes in 1951-52 was 54 per cent". ¹

¹ Government of India, *Building a Sound Economy* (Delhi, 1951), pp. 35-36.
To sum up, the industrial sphere of the Indian economy is divided into four sectors. The first sector is exclusively owned and operated by the public. The second sector is at present looked after by private and at a later date, say after 10 years, the Union government would review the industries and if possible they would be nationalized with compensation. The third sector will be in the hands of the private enterprise. These objectives are based on the Industrial Policy Resolution of 1948. As early as January, 1955, the Congress Party which is in power at present adopted a resolution at the 60th session of the Indian National Congress to introduce a new economy - Socialistic Pattern of Society. However, it would be a non-doctrinaire socialistic economy in which social ownership or control of the principal means of production, stepping up production and equitable distribution of the national wealth would be emphasized.

During the war, the British government adopted certain measures, such as price control, production control and distribution control to arrest black marketing, textile famine and the accumulation of stock. The national government continued these controls till July, 1953. In 1952, there was a record production of cotton, yarn and cloth, and consequently, the government has abolished price and distribution controls. The government still retains the control over production. The government is at present interested in promoting and stimulating the export of cotton textiles. To support this objective,
the Indian Standards Institution was started in 1947. The purpose of this institution is to improve the export quality of goods. In order to popularize this, a mark denoting the Indian textiles of quality must be registered under the I.S.I. Cotton textile research centres were set up. They are all private by nature, but partially financed by the government. These research centres are mainly engaged in studies on the nature of fibre, yarn strength, dying and finishing, etc.

The recent licensing committee for expanding industrial facility has not allowed the large mills to expand their loomage in order that status quo might be maintained for handloom weavers.

The trend of taxation on the cotton mill industry has been consistently upward. The medium variety of material which is taxed 120 per cent is used by the majority of the population of India. The government has chosen to levy imposts on the assumption perhaps that the demand for cloth is inelastic in the direction of price increase, but the facts may be otherwise in India.
CHAPTER IV

SUMMARY AND CONCLUSIONS

The present day Indian economy is based on a socialistic pattern of society. It is by no means the doctrinaire socialism where, according to Professor Schumpeter, "the economic affairs of society belong to the public and not to the private sphere". It is a planned economy in which there is scope for both the private and public initiative to function without hatred and strife. Among other things, the economy strives for more production, more employment and improvement of the material welfare of the population.

It is pertinent to observe how this economy in question came into being soon after independence. It is observed for the last few decades that the per capita income and the standard of living of the people remained more or less stationary. Productivity per person declined due to the increased pressure of population which mainly depended upon agriculture. An increase of underemployment and the growth of an attitude of "pathetic contentment" among the people prevailed in the country. After World War I, it was recognized that the arrested progress of the economy was mainly due to lack of rapid and large scale industrialization. During the interwar period, many industries were established.

The government extended all the possible help for those industries. Thirty years have claspred and the economy and the living standards of the people remained almost unchanged. The backwardness of the Indian economy accounted for the unbalanced occupational structure. About 68 per cent of the working population is engaged in agriculture, about 14 per cent in large and small scale industries, some 8 per cent in trade and transport and the other 10 per cent in professions and services including domestic service. In spite of 68 per cent of the working population engaged in agriculture, the country is self sufficient neither in food nor raw materials. The productivity per worker in organized industry, commerce and transport is about three times that of the agricultural worker and yet that part of the industry is not expanding fast enough to absorb the surplus rural population. It appears that in order to make the Indian economy better and workable, it is better to change it to some pattern of economy which assures more employment and a better standard of living for the people. The plan points out that "the problem is not merely one of making the existing economic institutions work more efficiently, or making small adjustments in them. What is needed is a transformation of the system so as to secure greater efficiency as well as equality and justice. The central objective of planning is to create conditions in which living standards are reasonably high and all citizens, men
and women have full and equal opportunity for growth and service". Again the question is which economy can better transform the present unbalanced economy. Judging the various pros and cons of the free economy and the controlled economy and particularly considering the Indian conditions, the planners are inclined to weigh heavily on an economy in which "a progressive widening of the public sector and a re-orientation of the private sector to the needs of a planned economy is established.

Cotton Textile Industry Under the Present Economy

Although the textile mill industry has been from the beginning private enterprise, it has been subjected to certain controls and regulations. The early textile mill industry was established by the British, the early pattern and equipment of the industry was after British, the topmen who engaged in the industry were mostly trained by British and as a result the industry economically depended upon the British. In the later twenties and during the depression the industry had a large number of controls. The government removed the domestic excise duty of 1896 and offered protection against foreign competition. Since the difficulty

1 The First Five Year Plan, op. cit., p. 29.

2 Ibid, p. 31.
of the international trade-foreign exchange, foreign markets and transport facilities - the industry has had to rely upon governmental aid and control. During World War II, the industry was subject to price, production and distribution controls. Under the present economy, the controls and regulations are more stringent than the previous one. Controls, the Plan maintains, "are the means by which government maintains a balance between various sectional interests".  

The control and regulation of exports and imports of certain select commodities are not only necessary "from the point of view of utilizing to the best advantage the limited foreign exchange resources available but also for securing an allocation of the productive resources of the country..." Why has this industry been subjected to control and regulation one might ask.

The present government's attitude towards industries is based on the Industrial Policy Statement of 1948. The cotton textile industry comes under the third sector of the industrial sphere whereby it is subject to governmental controls and regulations. Secondly, the industry is the fulcrum of the Indian economy. It is a source of income

1 The First Five Year Plan, op. cit., p. 43.

2 Ibid, p. 42.
and revenue by means of taxes and levies and foreign exchange to the government. So the government does not like to leave this industry exclusively under private initiative without control and regulation. Thirdly, the objective of the economy is not to encourage competition as that of the free competing industries such as handloom cum powerloom and organized mill industry and the mill industry and the synthetic fiber industry.

Although the government may not be in favor of unnecessary controls, it cannot disband the entire control pattern which it has from the past. In 1953, however, it did abolish certain price and distribution controls.

To sum up, the present pattern of the Indian cotton textile mill industry like U. S. A. and Japan, is towards vertical integration where spinning, weaving and in many cases weaving are done in the same mill! This transformation from horizontal to vertical integration was started due to competition from the domestic industries and external competition from the world markets. The progress of the industry has been accentuated by two interwar periods. After World War II the condition of the cotton textile industry changed from import to export position for their finished products. There is a conflict of interests between the handloom industry and the small scale powerloom industry, the handloom cum powerloom industry and the medium sized powerloom industry and the three industries on one side and the composite
mill industry on the other and finally the four industries and the synthetic fibre industry. The competition of these competing industries are not well pronounced in India at present time except the handloom cum powerloom and the organized mill industry. The government has extended all the palliatives to save the handloom industry at the expense of the cotton mill industry. The attitude of the government is ethical rather than economical. The recommendations of the Textile Enquiry Committee such as converting handlooms either into powerloom wherever power is available or semi-automatic looms, the integration of spinning mill with the handloom industry, formation of the cooperations among the weavers and disfavor of any expansion of the weaving part of the organized mill industry, are some of the salient features worth considering.

The target of the First Five Year Plan for both at handloom production 1700 million yards and the mill production 1000 million yards has already been attained. The Plan tacitly assumes that the quantity available for consumption is the quantity actually consumed. In the year 1953, about Rs 71 crores (about $150 million) worth of cotton cloth was unsold and as a consequence two of the cotton mills closed down. Lewis L. Lorwin, Economic Adviser to the International Labor Office, said that "the textile industry may be described as suffering from over production in the sense that
the effective demand for textiles falls behind potential productive capacity; from a social point of view it is an industry of underconsumption."

Similarly the real trouble of the Indian cotton textile industry lies not in over production but for lack of purchasing power resulting in underconsumption of textiles by the people. The per capita consumption of cloth is 14.77 yards as against 15-16 yards in 1937-38. The per capita consumption of cloth in India has never exceeded 18 yards. It is hoped considering the various favorable factors such as monsoon, completion of irrigation projects etc. that the per capita consumption of cloth by 1960 will be 18 yards. The target for export, according to the First Five Year Plan is 1,000 million yards which has also been endorsed by Shri Kasturbhai Lalbhai, the Indian textile delegate at Buxton conference in 1952. One of the reasons for such a large export is to earn foreign exchange. India has cultivated mostly short and medium staple cotton and manufactured coarse and medium variety of grey cloth. No doubt she profited in her export markets particularly during the post interwar periods. The present export cotton textile is larger in volume but smaller in money value. It is high time for her to change her pattern

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of varieties of export trade such as fine, superfine, dyed, printed finished goods to her export markets in order to enrich the economy of the industry and the country as a whole. The Textile Enquiry Committee recognized the importance and recommended thusly: "As the manufacturing changes are a considerably larger fraction of the final cost in superfine and fine goods as contrasted with coarse and medium goods (where raw material costs are the larger element in costs) it is obvious that we would earn a great deal more by exporting fine and superfine varieties (after allowing for payments for imports of cotton). Again in all categories, we would earn a good deal more by exporting dyed, printed and finished goods rather than gray goods." India is an underdeveloped country and she has to depend upon other foreign countries for her economic development. She has to import in the initial stages a large scale of machinery, capital equipment and other producer goods as well as consumer goods like food grain. In order to import these requirements, the need and importance of foreign exchange need not be overstressed.

The growth of the industry has been stunted due to lack of rationalization process whereby the production will be improved and maximized with a minimum of cost. Rationalization will improve the productivity of labor which in turn will give rise to higher standard of living and material welfare of the

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1 The Textile Enquiry Committee, op. cit., p. 23.
people. The cotton textile industry is undoubtedly the mainstay of India's economy although it has not stimulated many subsidiary industries. The mill industry has over the last hundred years devoted its time and improvement of its own defects rather than multiplication of other subsidiary industries. The cotton mill industry has manufactured almost the same type of material, during this entire period. All the cotton that the mills need is either produced domestically or imported from abroad. If there is more demand for cloth, these are only two possibilities - either to adopt extensive and/or intensive cultivation of cotton acreage or import a large volume of cotton from abroad. There is no other method at present to make the variable factor (raw material) better and more economical. It is hoped that the recent textile institutes in India will evolve a process where they create more employment. In the case of fixed factors (the machineries and equipment) it is equally discouraging. The machinery and the equipment which the mills have at present are mostly foreign. The indigenous textile machinery industries are in the embryonic stage. They have neither sound capital nor technological skill available to push the industry ahead. They, too, depend mostly upon the foreign technological know how. The equipment that they manufacture are unable to satisfy the mill owners standards and requirements.

The cotton mill industry supplies yarn to the handloom
and powerloom industries. In spite of this relationship their position has not improved. All the so-called subsidiary industries which depend upon the mill industry are not very significant. Though they are termed as industries, they are almost deprived of all the requisites (such as sound capital, organized labor, wide market, proper entrepreneurship and equipment) of an industry. In a word, the cotton textile mill industry has not stimulated subsidiary industries worth the name relative to its magnitude both on the demand and supply side. There are many contributing factors. Although the main problem is that India is an underdeveloped country, the material resources have not been fully tapped or assessed so far. Since India is predominantly an agricultural country, industrial and organizational ability are in the initial stages. In addition, there are other social factors such as illiteracy of the people, the social set up (simple living and high thinking), religious attitude (austerity and contentment of the present life ensures better life in the future) which have arrested the progress of the economy of the country. India is striving, however, to move in the direction which is economically better for the majority of the people. The Five Year Plans indicate such moves. We

1 "Most significant of all (subsidiary industries) is the establishment of the Tata Chemicals Ltd. at Mithapur, near Port Okha in Kathiwar, for the manufacture of heavy chemicals like soda ash, bleaching powder, etc to be used in textile and other industries." Tulsi Ram Sharma, op. cit., p. 56.
can only hope that the cotton textile industry will have a better future in the new economy.
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