

Role of raw material in placing of textile industries. The Indian experience

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1. Introduction

India is endowed with huge stock of raw material and vast areas of raw material zones but the process of industrialisation has been very slow and it remained largely centered around port cities of India. Textile industry has been the major structural base upon which Indian industrialisation started. As a major consumer and export based industry it occupies the most crucial place in agriculture industry and rural urban frame of India. Its north western part suits for production of wool north eastern for Jute, south western for Cotton and south eastern for Silk. Studies on the industrial development of India have been carried out by Alagh (1973)⁽¹⁾ Chattopadhyaya and Raza (1975)⁽²⁾ Raza and Kundu (1978)⁽³⁾ Papola (1979)⁽⁴⁾ Chakrabarti (1982)⁽⁵⁾ Sundesra (1982)⁽⁶⁾ Kothawala (1982)⁽⁷⁾ Ghosal (1984)⁽⁸⁾ and Pathak (1984)⁽⁹⁾.

This paper is aimed at analysing (i) the extent of relationship between the location of raw materials and location of textile industry in India (ii) the patterns of production consumption and export of various commodities and (iii) the role of raw material in placing of textile industry. Data used in this exercise refers to the time series information from 1950 upto 1982. The information is largely based upon the two sources (i) India 1984 and (ii) Times of India year book 1984. In order to get a synoptic view of the spatial patterns of the development of textile industry and consequent organisation of space an attempt has been made to composite the relevant indicators. To articulate the phenomenon of the development of this industry four groups of indicators have been chosen.

2. Indicators and their analysis

1. Raw material group:

- (i) Proportion of area under Jute in a state to total jute area in India 1981-82.
- (ii) Proportion of area under cotton in a state to total cotton area in India 1981-82.
- (iii) Production of jute in an area to total jute production in India 1981-82.
- (iv) Production of cotton in an area to total cotton production in India 1981-82.
- (v) Proportionate share of woollen production in an area to total woollen production in India, 1982.
- (vi) Production of raw silk 1977-78 to 1982-83.
- (vii) Per capita availability of synthetic textiles 1965 to 1982.

2. Location of industries group:

- (i) Location and concentration of woollen mills in area to total woollen mills in India 1982.
- (ii) Concentration of jute mills 1982.
- (iii) Concentration of textile mills 1982.

3. Production and consumption group:

- (i) Production of cotton textile.
- (ii) Production of handlooms.
- (iii) Production of Jute Textile.
- (iv) Production of woollen goods.
- (v) Production and consumption of art silk fabrics.

4. Export group:

- (i) Export of cotton yarn in quantity and money terms.
- (ii) Export of cotton fabrics in quantity and money terms.
- (iii) Export of hosiery in money terms.
- (iv) Export of apparel in money terms.
- (v) Export of other cotton manufactures in money terms.
- (vi) Export of total cotton textile products, in money terms.
- (vii) Export of jute textile in money terms.
- (viii) Export of art silk fabrics in money terms.
- (ix) Export of Synthetic textile goods in money terms.

Thus study is explained with the help of above 24 indicators. Methods used for analysing results are correlation, regression, line and bar graphs and choropleth maps.

India experiences Charkha and textile mill simultaneously in the amorphous and fragmented system of development. Its disarticulation is revealed in the alarming lack of correspondence between spatially link clusters of textile industry materializing through the market mechanism, with technologically linked clustered. The conservation and development of traditional household (handloom) industries in villages needs to be distinguished from the location of modern industrial units in rural areas. The programmes of rural industrialisation can flourish only on economic viability of small and medium units in the villages at different levels of settlement hierarchy. Detail analysis of group of indicators is given as under:

1. Raw material group

Location of raw materials is of prime significance in determining the industrial location. Raw material for textile industry is cotton, jute, wool raw silk and synthetic goods. India being a vast country presents major variations in the availability of industrial raw material. Its north western part specialises in raw wool, eastern part in jute, south western part in cotton and southern eastern part in silk.

Cotton: India has the largest area in the world under cotton cultivation which is about one fourth of the total world area. 1981-82 recorded 7.82 million hectare area under cotton. Of the total area 34.53 percent lies in Maharashtra followed by Gujrat (19.57) and Karnataka (12.40). Thus more than two third of the cotton growing area lies in Gujrat-Maharashtra and Karnataka continuum. Small proportion of area (below 9 percent) lies in Rajasthan, Madhya Pradesh, Andhra Pradesh and Tamilnadu.

Despite largest area under cotton cultivation, the production accounts for about one tenth of the world cotton output. The production of cotton during 1978-79 was 7.92 tonnes 1979-80 was 7.698, 1980-81 was 7.800 and 1981-82 was 6.66 million tonnes. State of Gujrat ranks first in terms of production accounting for 27.0 percent of the cotton production followed by Maharashtra (18.77%) and Punjab (16.32%) Maximum per hectare yield of cotton was reported from Punjab and minimum from Haryana. (Fig. 1)

Jute: The area under jute cultivation was recorded as 0.81 million hectare during 1981-82. Of the total area under jute, 62.96% lies in West Bengal followed by Bihar (17.28%), Assam (13.58%) and Orissa (6.17%). The total production of jute during 1981-82 was of the order of 6.66 million tonnes. However, it was recorded maximum during 1960-61. West Bengal alone accounts for 67.71 percent of the total jute production. Remaining one third of the production is from Assam, Bihar and Orissa. The yield per hectare in bales (1 bale = 181.43 kgs) during 1980-81 was 6.92 and 1981-82 was 8.24. India is the largest producer of raw jute in the world followed closely by Bangladesh. (Table 1, Fig. 2).

Wool: India stands fifth in sheep population with 42 million sheep. Sheep rearing is practised in Kashmir and other parts of Himalayas, western parts of Rajasthan, areas near Hissar in Punjab and Haryana and Bellary, Kurnool and Coimbtore district of south India. The production of raw wool during 1981-82 was about 35 million kgs. The production of **Pasham** wool in Ladakh is 28000 kgs. Out of the total wool produce, 10 percent is of apparel type for fine clothing and the remaining for the production of superior carpets, inferior carpets, nandas and blankets. The total raw wool production, which was only 27.5 million kgs in 1961 has gone up to 36.0 million kgs in 1981-82.

Silk: Silk is produced in the districts of Murshidabad, Birbhum, Bankura and Malda of West Bengal, in the southern upland areas of Karnataka, Coimbtore region, in Chhota Nagpur of Bihar, Orissa, Andhra Pradesh, parts of Madhya Pradesh and Maharashtra. Silk is also produced in areas of Jammu and Kashmir, Assam and Parts of Punjab.

Production of mulberry silk in India amounts to about 12 lakh kgs. The non mulberry silk amounts to about 4 lacs. Karnataka is the leading producer of raw silk giving about half of the India's produce followed by Kashmir where silk worms thrive best in mulberry trees. The production of raw silk rose from 1.1 thousand metric tonnes in 1958 to 1.3 thousand metric tonnes in 1981-82.

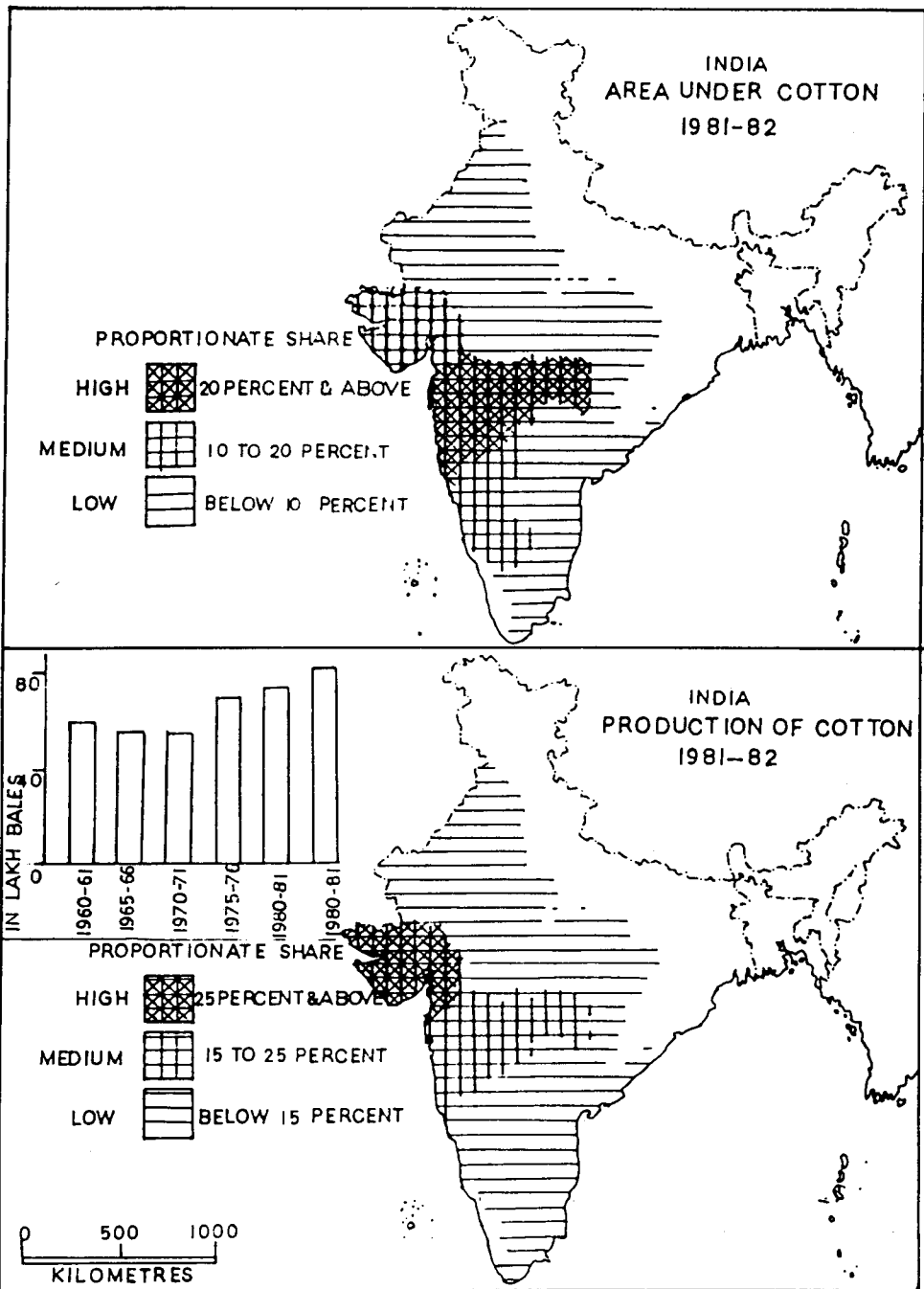


FIG-1 .

TABLE 1.
Area and production of cotton and jute 1981-82.
 (Production in million tonnes) (Area in million hectares)

States	Cotton				Jute			
	Area	Percentage	Production	Percentage	Area	Percentage	Production	Percentage
Andhra Pradesh	0.48	6.13	0.66	8.48	—	—	—	—
Assam	—	—	—	—	0.11	13.58	0.95	14.26
Bihar	—	—	—	—	0.14	17.28	0.83	12.46
Gujrat	1.53	19.56	2.10	26.99	—	—	—	—
Haryana	0.33	4.21	0.68	8.74	—	—	—	—
Karnataka	0.97	12.40	0.54	6.94	—	—	—	—
Madhya Pradesh	0.60	7.67	0.33	4.24	—	—	—	—
Maharashtra	2.70	34.52	1.46	18.76	—	—	—	—
Orissa	—	—	—	—	0.05	6.17	0.41	6.15
Punjab	0.68	8.69	1.27	16.32	—	—	—	—
Rajasthan	0.38	4.85	0.43	5.53	—	—	—	—
Tamilnadu	0.25	3.19	0.31	3.98	—	—	—	—
West Bengal	—	—	—	—	0.51	62.96	4.47	67.11
Total	7.82	100.00	7.78	100.00	0.81	100.00	6.66	100.00

2. Location of industries group

It is essential to analyse the location of various textile industries and their concentration in different parts of the country to get an idea of the degree of relationship with the location and amount of raw material. The five main types of textile mills are as under. (Table 2).

Cotton Textile Industries: The traditional handloom and modern textile industry is the largest single industry in India. Handloom industries rank in importance next only to agriculture in employment potential. There are about 38 lakh handloom of which 16.23 lakh are in cooperative sector. About one crore persons depend on this industry for livelihood. The first cotton mill was set up near Calcutta in A.D. 1818. The number of mills increased to 389 in 1937 with 202, 464 looms. At the end of September, 1982, there were 803 mills (522 spinning and 281 composite) with an installed capacity of 224.8 lakh spindles, the highest in the world and 2.09 lakh looms. Cotton mills are scattered over the whole of India. High concentration of cotton mills is in the states of Maharashtra and Gujrat near Bombay and Ahmedabad, medium in states of West Bengal and Tamilnadu and low in states of Uttar Pradesh and Punjab.

Jute Mills: The jute industry is one of the oldest in the country. As a major foreign exchange earner, it occupies an important place in country's economy. The first jute mill was set up at Rishra near Calcutta in 1859 and thereafter industry made rapid strides. The number of mills has remained almost constant i.e. 106 in 1950-51 to 110 in 1982. Out of these, 101 mills are located within a radius of 64 km of Calcutta along Hoogly river with an employment of 0.3 million people. Thus very high degree of concentration of mills is around Calcutta and medium concentration is in the states of Bihar and Assam and low in Orissa.

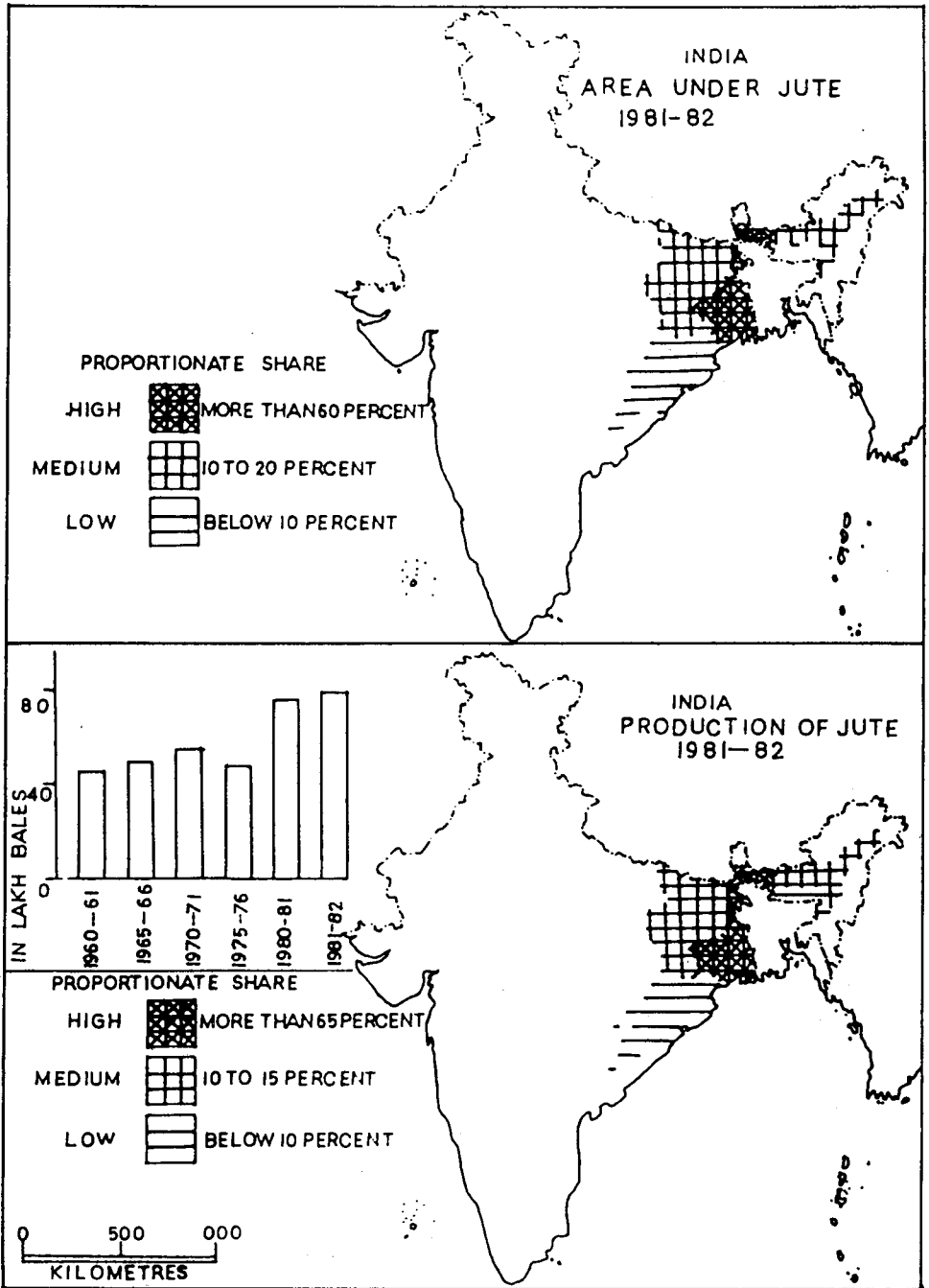


FIG - 2

TABLE 2.
Location of textile mills and their installed capacity 1982

States	Total Mills	Percentage	Installed capacity	Percentage
Andhra Pradesh	33	4.56	809	3.71
Assam	2	0.27	37	0.16
Bihar	6	0.82	98	0.44
Gujrat	114	15.76	4070	18.68
Haryana	13	1.79	268	1.23
Jammu & Kashmir	1	0.13	28	0.12
Karnataka	32	4.42	843	3.87
Kerala	27	3.73	603	2.76
Madhya Pradesh	24	3.31	766	3.51
Tamilnadu	237	32.78	5558	25.51
Maharashtra	105	14.52	4970	22.51
Orissa	5	0.69	128	0.58
Punjab	11	1.52	328	1.50
Rajasthan	21	2.90	518	2.37
Uttar Pradesh	41	5.67	1334	6.12
West Bengal	41	5.67	1056	4.84
Delhi	4	0.55	175	0.80
Pondichery	5	0.69	164	0.75
Goa	1	0.13	26	0.11
Total	723	100.00	21779	100.00

Woolen Mills: There are 224 woolen mills in the country according to 1982. Nearly half of the mills (105) are in Punjab, mostly in Amritsar-Guardaspur-Ludhiana region. Other important centres are Srinagar in Kashmir, Kanpur, Agra, Mirzapur in Uttar Pradesh, Jaipur in Rajasthan, Gwalior in Madhya Pradesh, Jamnagar in Gujrat, Bombay and Bangalore. Maharashtra (29 mills), Rajasthan (22) and Haryana (18) are in medium level of concentration. Low level of concentration is recorded in states of West Bengal, Karnataka, Gujrat, Himachal Pradesh and Jammu Kashmir. (Table 3, Fig. 3).

Silk Mills: The location of silk mills is at Kanchipuram Thanjavur in Tamilnadu, Mysore in Karnataka, Murshidabad in West Bengal, Varanasi in Uttar Pradesh, Amritsar in Punjab and Srinagar in Kashmir. Nearly half of the produce comes from Karnataka alone. The states of West Bengal, Jammu and Kashmir, Himachal Pradesh and Assam are also important producer of raw silk.

Synthetic Textile Mills: The important location of this type of textile mills are at Bombay, Ahmedabad, Surat, Calcutta, Amritsar, Gwalior, Kanpur, Modinagar and Delhi. It appears that this type of industry grows parallel to the earlier centres of textile industry. Because of the earlier start of the textile industry and capital accumulation in certain parts of the country, this industry is likely to get localised mostly in private sectors.

A composite picture of the location of textile mills (Fig. 4) reveals that there are 723 such mills in the country according to 1982 statistics. About one third of the total units (237) are concentrated in the state of Tamilnadu followed by Gujrat and Maharashtra with medium concentration. Low concentration of mills is found in the states of West Bengal and Uttar Pradesh. Remaining states have very low (less than 5 per cent) level of concentration.

TABLE 3.
Distribution of woolen mills and woolen products 1982

State/Union Territory	Total Mills	Percentage	Total Installed capacity	Worsted	Shoddy (in percent)	Woolen	Others	Total
Gujrat	3	1.33	16452	62.85	5.35	31.8	—	100
Himachal Pradesh	2	0.89	2980	—	100.00	—	—	100
Jammu & Kashmir	9	4.01	16024	76.87	7.49	15.64	—	100
Karnataka	3	1.33	14324	13.96	—	8.38	77.66	100
Maharashtra	29	12.94	87192	72.55	17.74	9.71	—	100
Delhi	13	5.80	7426	33.18	64.64	2.18	—	100
Punjab	105	46.87	161004	70.63	11.06	18.32	—	100
Haryana	18	8.03	17048	27.39	30.80	41.81	—	100
Rajasthan	22	9.82	15856	17.66	34.06	48.28	—	100
Uttar Pradesh	14	6.25	26844	40.74	13.81	45.45	—	100
West Bengal	6	2.76	10512	71.46	15.41	13.13	—	100
Total	224	100.00	375662	61.23	15.73	20.08	2.96	100

3. Production and consumption group

Production of various goods reflects the capacity of industrial units in making use of available raw material and its future use. Industrial out put must correspond with the stock of regional resources for balanced industrial growth and regional development. It is significant to analyse the surplus and deficit regions of raw material, dispersal and concentration of industries in various regions so that production may be explained quantitatively. (Table 4).

(i) Production of cotton textiles: 1981 registered a total production of 3147 million metres of cotton cloth. The total production has been declining since 1976 when production was 3880 million metres. This is true for all types of cotton cloth ranging from coarse a super-fine. Similar to it is the production of cotton yarn, it was 1058 million kilograms in 1981 which came down to 1015 million kilograms.

TABLE 4.
Progress of textile production

Products	1950-51	1960-61	1970-71	1980-81	1981-82
Jute textiles (000 tonnes)	83.7	109.7	106.0	139.2	133.4
Cotton yarn (crore kg)	53.4	80.1	101.6	129.8	125.0
Cotton cloth (crore metres)	421.5	637.8	777.2	963.7	951.8
(i) Mill Sector (crore metres)	340.1	436.9	416.2	416.3	380.0
(ii) Decentralised sector (")	81.4	208.9	361.0	547.4	571.8
Rayon yarn (000 tonnes)	2.1	43.8	100.0	126.0	127.0
Art silk fabrics (crore metres)	28.7	54.4	94.7	—	—
Woolen manufactures:					
Woolen & worsted yarn (Lakh kg.)		87	130	197	—
Woolen & worsted fabrics (Lakh metres)	61	133	143	—	—

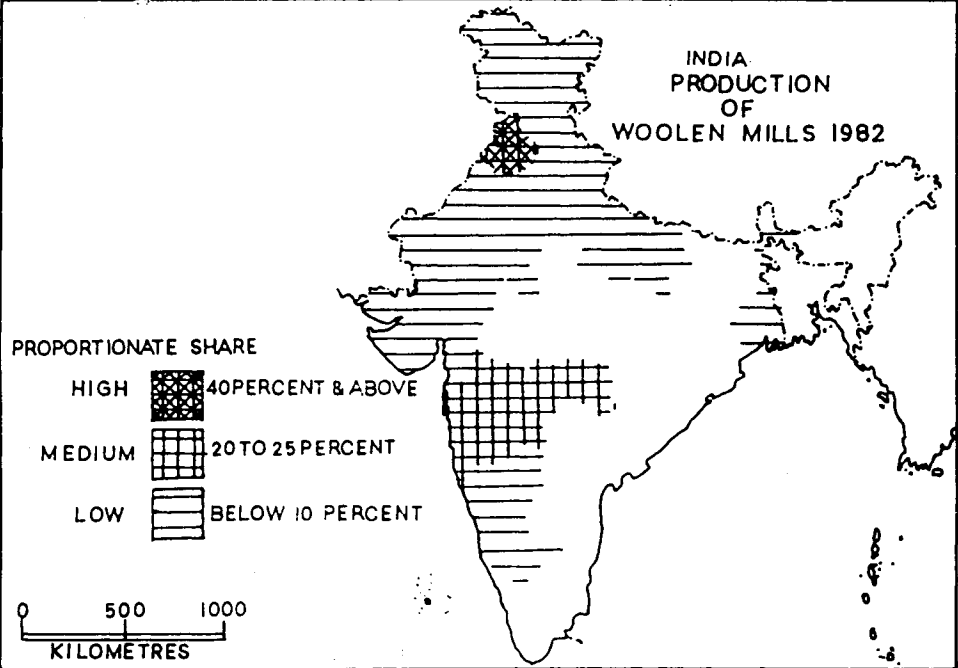
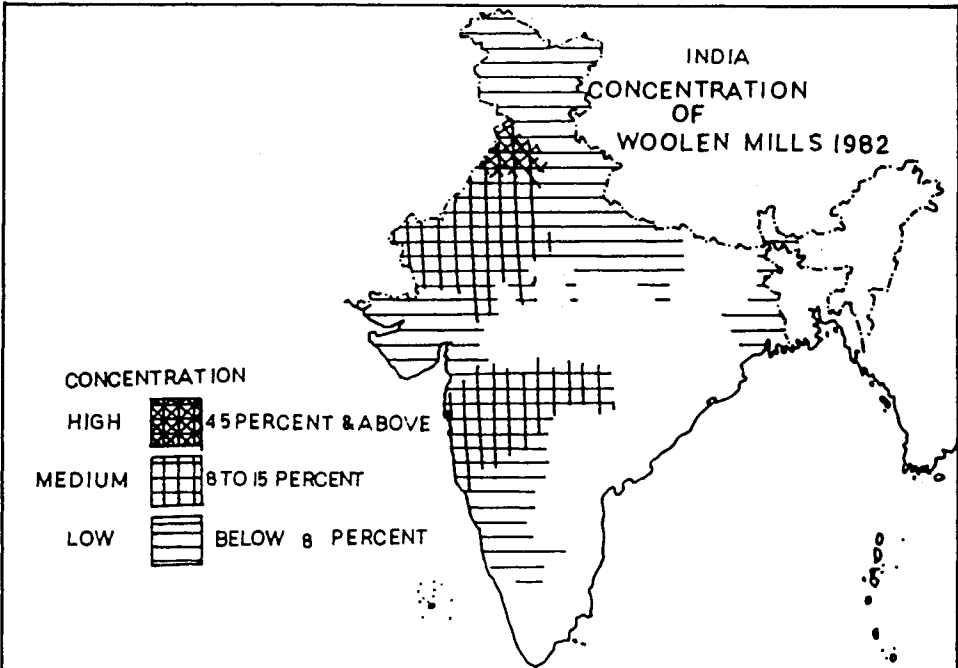


FIG - 3

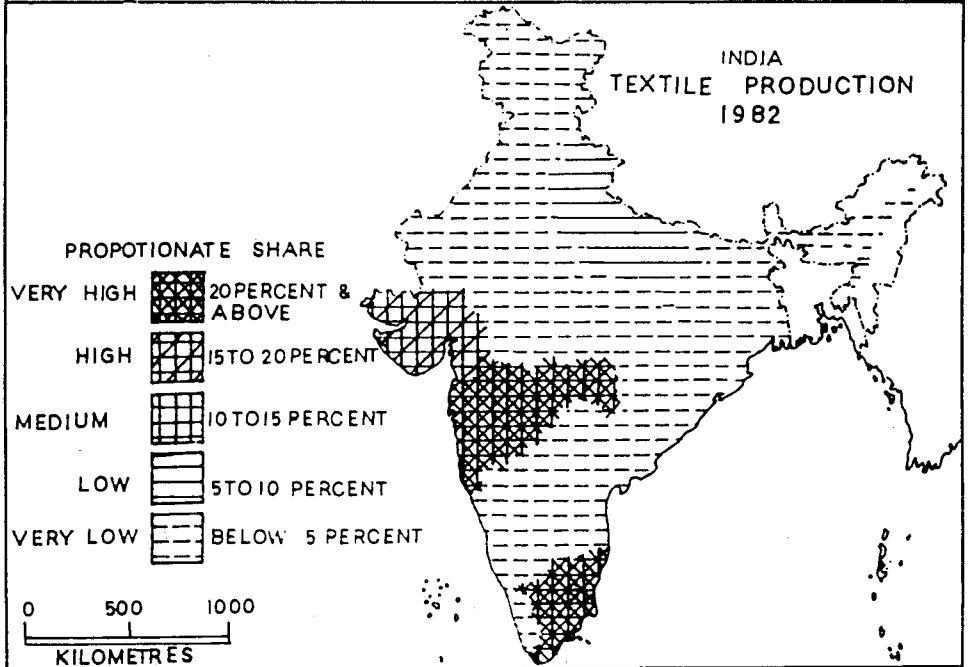
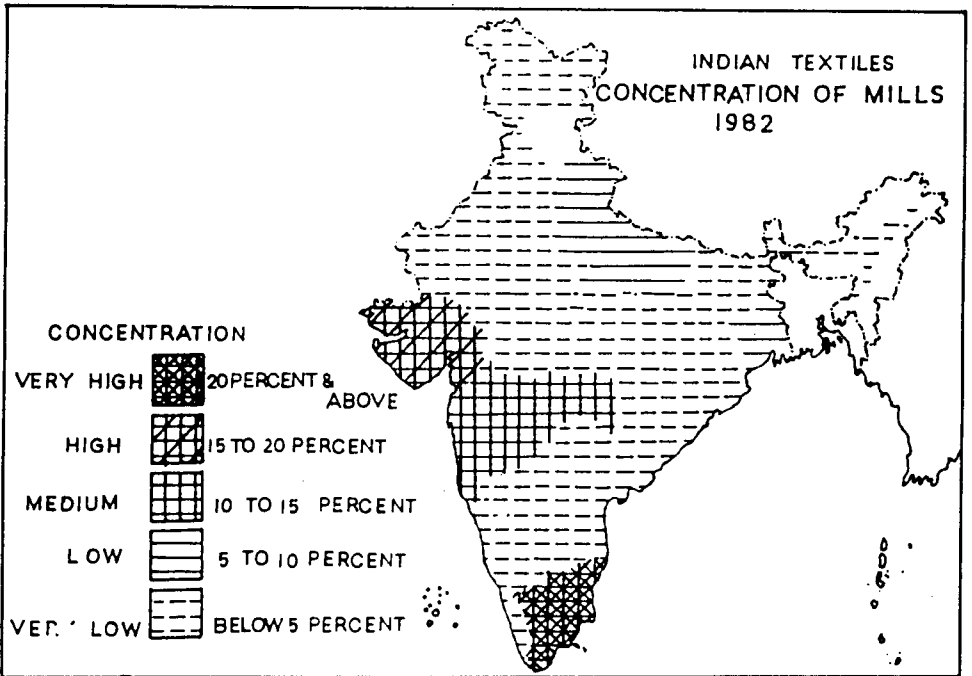


FIG-4

(ii) Production of powerlooms and handlooms: Handlooms and powerlooms of the country contribute more than two fifth of the country's textile production the total production in 1951 was below 600 million metres which has registered significant rise by 1982 (about 4500 million metres). During 1982 number of powerlooms were 2403 with a maximum of 860 in Punjab and minimum of 10 in Rajasthan.

(iii) Production of Jute Textiles: The production of jute textiles was 939 thousand tonnes during 1974-75 which rose to over 1400 thousand tonnes during 1980-81. However, it registered a fall during 1981-82 when production was about 1360 thousand tonnes.

(iv) Production of Woolen Textile: The production of woolen textile was 375662 during 1982. Of the total production 61.23 percent was worsted, 15.73 percent shoddy, 20.08% woolen and 2.96 percent others product. States of Punjab, Maharashtra and Jammu and Kashmir are important in the production of worsted shoddy and woolen goods.

(v) Production and consumption of art silk fabrics: With a production of 5488 tonnes of mulberry silk and 489 tonnes of wild silk in 1982-83, India ranked third among the silk producing countries of the world. India is the only producer of «Muga silk» and is also the second largest producer of Tasar Silk, next only to China. (Fig. 5).

(vi) Per capita availability of synthetic Textiles: India's share in the world production of cellulosic and non cellulosic fibres is barely two percent. India registered a production of 1.52 lakh tonnes in 1975 which rose to 1.95 lakh tonnes in 1978. According to 1983 figures India had total installed capacity of 43,385 tonnes. Of the total installed capacity

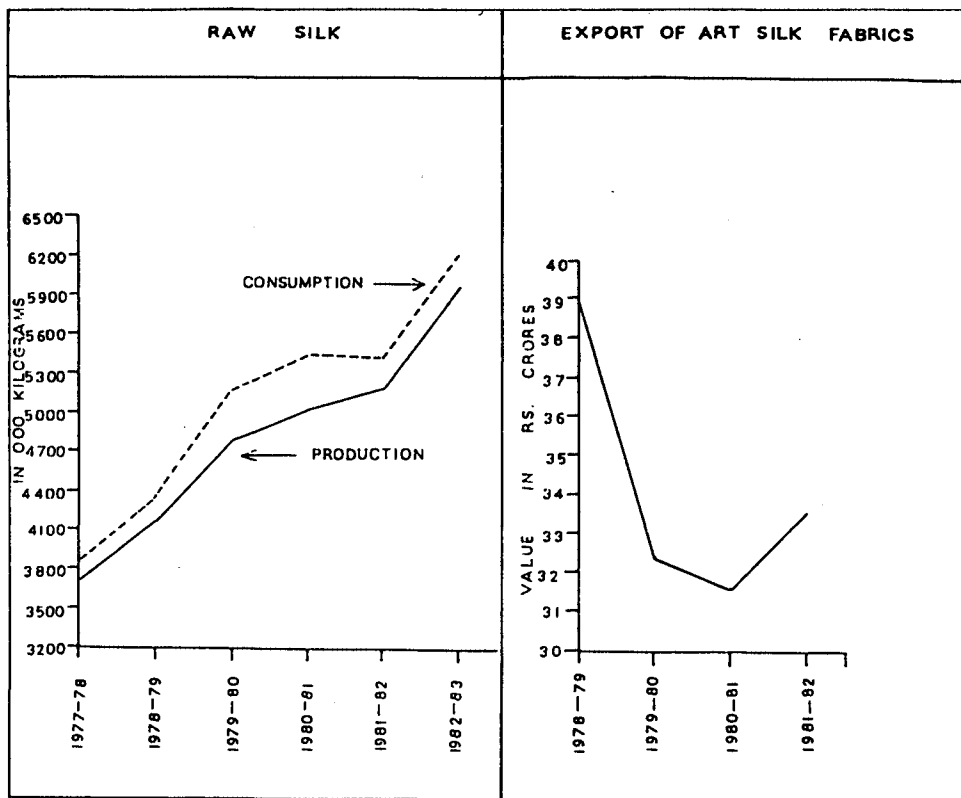


FIG- 5

Maharashtra alone accounted for 36.88 percent. The per capita availability of synthetic textiles is still very low by international standards. It registered a rise from 1.73 metres in 1965 to 4.16 metres in 1982. (Fig. 6).

4. Export group

Export of Indian Textiles: Export of industrial goods provides a cross section of production-consumption mechanism. It indicates proportionate share of a particular commodity in economic growth and regional development. The export of Indian textiles has been examined in this light under following groups of textile products. (Table 5).

(i) Cotton Textiles: India registered a total export of the value of Rs. 6863.30 million during 1981-82. While export of cotton yarn and cotton fabrics registered a decline both in terms of money value and quantity, it registered an increase in cotton apparel, hosiery

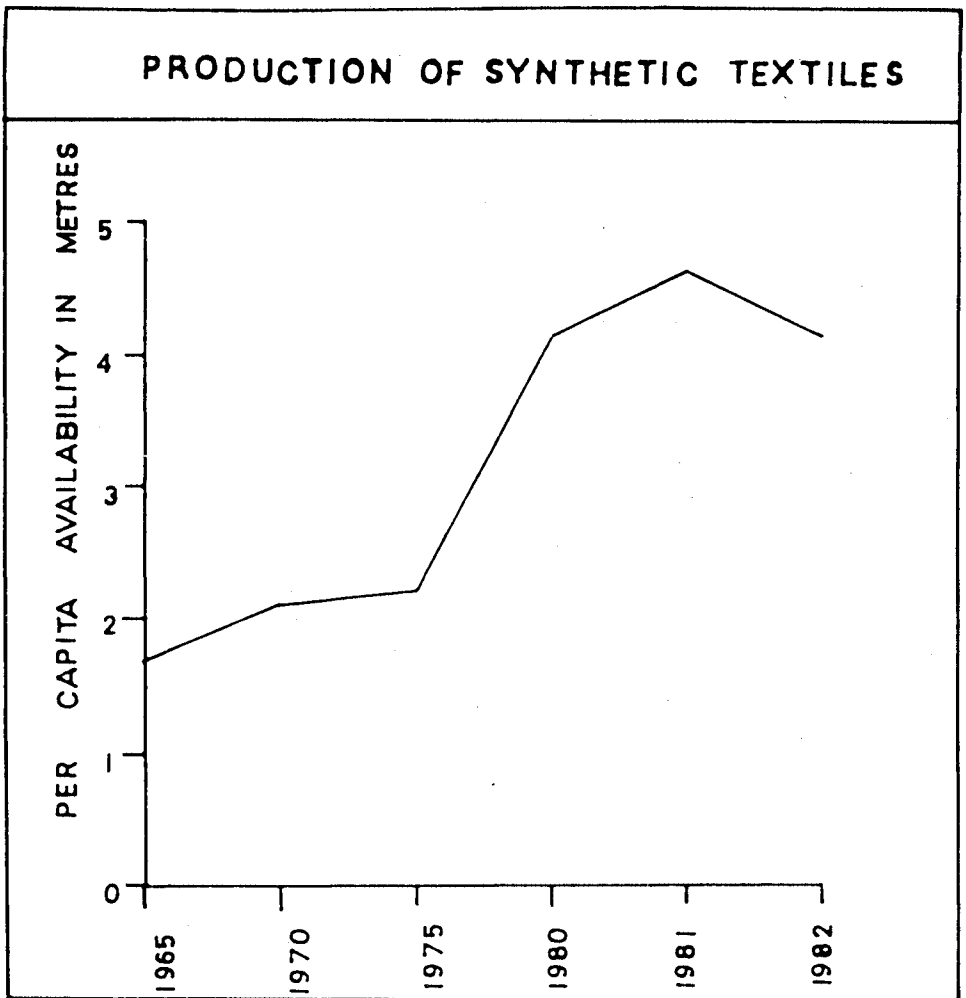


FIG-6

TABLE 5.
Trade of textiles

Products	(Value in Rs. Crore)			
	1978-79	1979-80	1980-81	1981-82
1. Export				
Cotton fabrics	224.3	287.4	276.5	272.5
Art silk fabrics	38.9	32.4	31.6	33.6
Readymade Garments	421.2	459.7	515.0	547.9
Coir yarn and manufacturers	26.9	36.6	26.2	25.8
Jute manufactures	166.9	336.1	330.0	250.0
Carpets (hand made)	100.6	139.8	163.9	173.1
Raw cotton	16.0	75.1	164.9	35.0
2. Imports				
(i) Raw wool	31.9	31.9	43.1	30.2
(ii) Raw cotton	26.4	0.1	Negligible	9.0
(iii) Raw jute	1.2	0.4	1.1	0.3

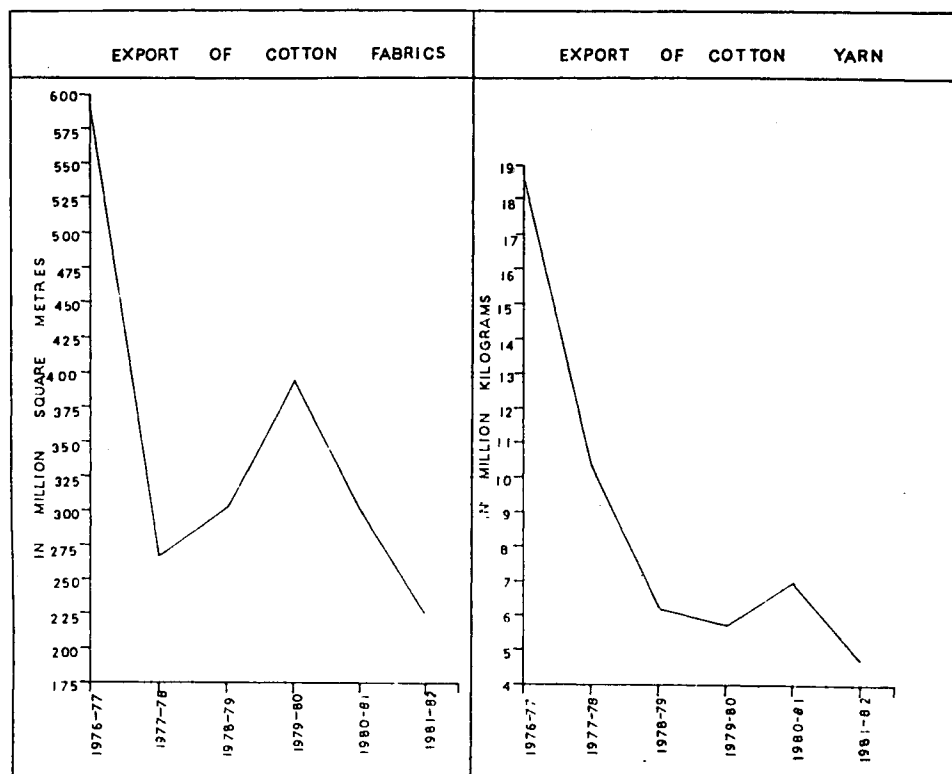


FIG - 7

and other manufactures. Increase in the value of export within a period of 5 years (from 1976-77 to 1981-82) was 135.71% in case of hosiery, 64.00% in case of apparel and 27% in case of other cotton manufactures. (Fig. 7 & 8).

EXPORT OF COTTON (IN MILLION RS)

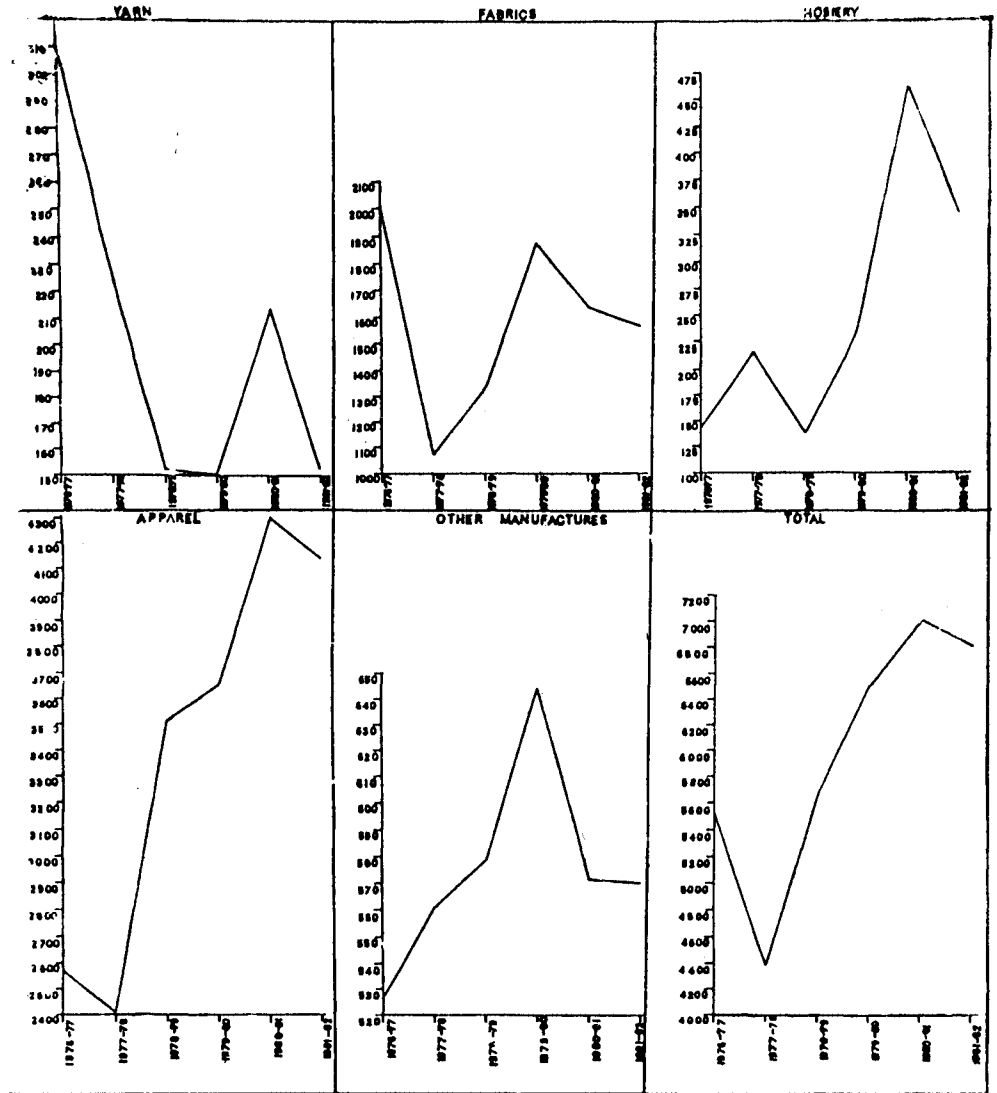


FIG. 8

(ii) **Woolen Textiles:** During 1982-83 India recorded total export of woolen goods worth Rs. 3650 million. Of the total export 60.27% was woolen carpets and druggets, 31.50% woolen hosiery, 3.28% blankets, 2.73% worsted fabrics, 1.00% ready made garments, 0.54% woolen shawls and remaining accounts for other woolen goods.

(iii) **Jute Goods:** Jute goods are country's largest foreign exchange earner. During 1978-79 India registered a net export of 317 thousand tonnes of jute goods worth Rs. 1701.8 million within a period of three years, India registered a net increase of 16.40% in quantity tonnes and 21.43% in money terms by 1981-82. (Fig. 9).

(iv) **Silk Textiles:** Foreign exchange earnings from silk industry (in million Rs.) for

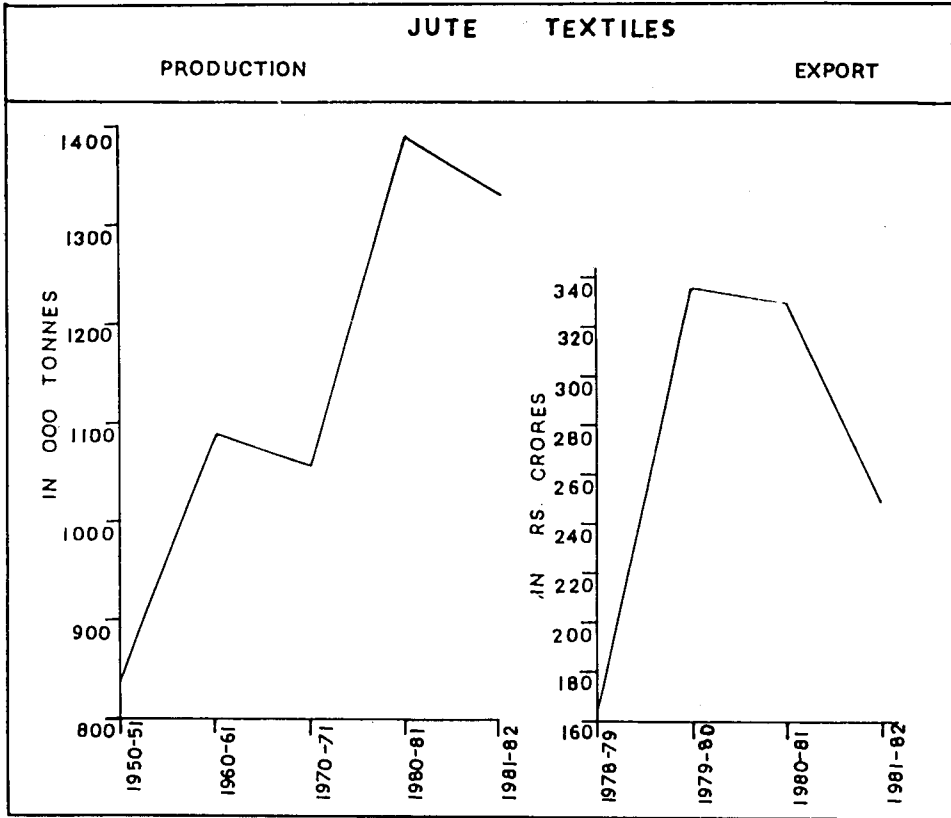


FIG - 9

the last five years was 1978-79 436.668; 1979-80 488.317, 1980-81 531.205, 1981-82 697.321, 1982-83 828.0.

(v) Synthetic textiles: Export of rayon and synthetic textiles rose from Rs. 186 million to only Rs. 399 million between 1975-76 and 1979-80. During 1980-81 the exports fell marginally to Rs. 390 million.

III. Raw materials and textiles industries

To assess the role of raw materials in placing of textile industry in India, correlation exercise has been worked out between raw materials with industrial concentration, raw material and industrial production and raw material and export of textile goods. This exercise is followed by the exercise of regression analysis where composite index of textile industry has been considered as dependent variable upon raw material, port location, price response, connectivity and time as independent variables.

The exercise of correlation coefficient explains that it is positive relationship in all the cases. However there are variations in the values of correlation for instance it is +0.78 in case of Jute, +0.53 in case of woolen, 0.58 in case of cotton and +0.49 in case of silk. It is important to note that all the correlations are invariably significant. It appears

from the result that Jute is location bound and process of footlooseness has been insignificant. Contrary to this silk wool and cotton are relatively less location bound. The value correlation coefficient for all commodities taken together is as high as +0.824. The coefficient of determination is greater than 0.50.

Results of the regression analysis reveal that role of raw material decreases with increasing distance from the port location, the correlation coefficient being -0.645 and coefficient of determination 0.41. It has significant positive relationship with export price and connectivity the r values being 0.53 and 0.726. Results explain effect of the per unit change of x on y , the per unit change in raw material changes 0.651 unit in the index of development. Per unit change in the distance changes 0.362 unit in industrial export, with price response 0.532 unit and with connectivity 0.379 and with time 0.057.

IV. Conclusion

The forgoing analysis leads to the following conclusions.

(i) Textile industry is one of the basic industries of India registered an export value of Rs. 13778.621 million during 1980-81. The share of various textile groups being 49.81 cotton textile, 26.50 woolen textile, 15.71 Jute textile, 5.06 silk textile and remaining 2.92% synthetic textiles.

(ii) Among various determinants of textile industry raw material is of prime importance as it alone explains the placing of textile industry to the extent of about 66 percent. With greater amount of raw material available, India occupies second place in terms of cotton spindles, third place in silk and is the largest producer of raw jute in the world followed closely by Bangladesh. Synthetic accounts for barely 2 percent of the world produce.

(iii) In terms of imports, India imports raw wool, silk and raw synthetic. In all, a net import of Rs. 1462.172 million was registered in 1980-81. Among all the textile imports, synthetic alone accounted for 52.39 percent followed by raw wool and woolen 42.13 percent and silk 4.50 percent.

(iv) There is a scope of the extension of cotton and jute textile as raw material is in surplus. In case of wool and silk, India, needs to put greater efforts to increase the production and quantity of raw material. It will enable the strengthening of rural industrialisation and increase in the export. Further, India needs to promote synthetic textiles because of its growing demand and greater dependence on foreign imports. Increased capital investment and improved technology will help in the growth of raw material and consequently to the Indian textile industry.

(v) Despite availability of raw material, textile industry could not be promoted in many parts of the country because of its competitive structure with decentralised small scale village industries. There has been efforts to decentralise textile industry to make full use of available raw material but desired results could not be achieved.

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El paper de les matèries primeres en la localització de les indústries tèxtils. L'experiència índia

Aquesta comunicació està orientada a l'anàlisi de:

- la disponibilitat de matèries primeres i el seu model de distribució;
- el model de concentració i producció industrial;
- el model d'exportació dels productes de la indústria tèxtil i
- el paper de les matèries primeres en la localització de les indústries tèxtils.

Les fonts de les dades del present estudi són el *TIMES of India Directory i Year Book 1984*, i Índia 1983 i 1984. Els mètodes per analitzar els resultats són la correlació, la regressió, gràfic de línies i barres i mapes de coropletes.

En ser un país tan gran, l'Índia presenta un gran nombre de variacions en la disponibilitat de matèries primeres. La zona Nord-oest està especialitzada en llana, la de l'Est en jute, la del Sud-oest en cotó i la del Sud-est en seda. La indústria tèxtil ha estat tradicionalment una activitat domèstica i localitzada als pobles. Els molins tèxtils començaren a l'Índia amb l'economia colonial. L'establiment de la moderna indústria no va canviar materialment l'estructura bàsica de l'economia colonial, que va continuar essent la de dependència de les matèries primeres i la d'un mercat per a les manufactures de la metròpoli. Així, la Charkha i els molins tèxtils existeixen simultàniament en un sistema amorf i fragmentat de desenvolupament modificat. La seva articulació es revela en la manca de correspondència entre la indústria i les zones de matèries primeres. La relació entre les dues presenta variacions en els diferents productes tèxtils. Els valors de correlació són 0,78 en el cas del jute, 0,53 en el de la llana, 0,58 en el del cotó, 0,49 en el de la seda. Els valors del coeficient de correlació per a totes les classes juntes arriba a 0,824. El coeficient de determinació és més gran de 0,50.

Els resultats de la regressió mostren que el paper de les matèries primeres disminueix com més gran és la distància dels ports. Té una relació positiva significativa amb el preu d'exportació i connexió dels transports amb uns valors de 0,53 i 0,726. El canvi per unitat en matèries primeres canvia 0,651 per unitat en l'índex de desenvolupament. El canvi per unitat en la distància afecta 0,362 per unitat, amb preu 0,362 i amb connexions 0,379.

L'Índia enregistra unes exportacions per valor de 13.778.621 milions de rúpies en producció tèxtil. Es pren cura de l'extensió dels tèxtils de cotó i jute, car la matèria primera hi és en excés. L'Índia necessita orientar els seus esforços cap a un augment de la producció i la qualitat de la llana i la seda. S'encoratjaria així la industrialització rural i augmentaria l'exportació. L'Índia ha de promoure els tèxtils sintètics a causa de la creixent demanda i de la creixent dependència de les importacions estrangeres. Unes majors inversions de capital i una millor tecnologia accelerarien el procés creixent de la indústria tèxtil índia.

Le rôle de matières premières dans la localisation des industries textiles. L'expérience indienne

Ce papier cherche d'analyser:

- la disponibilité des matières premières et son model de distribution;
- la model de production et concentration industriel;
- le model d'exportation des produits de l'industrie textile, et
- le papier des matières premières dans la localisation de l'industrie textile.

Les sources des données de cet étude sont la corrélation, la régression, les graphiques de lignes et barres et les cartes de choroplethes.

A cause de ses grandes dimensions, L'Inde présente un grand nombre de variations dans la disponibilité de matières premières. La zone Nord-Ouest est spécialisée en la laine, l'Est en la jute, le Sud-Ouest en le coton et le Sud-Est en la soie. L'industrie textile a été traditionnellement une activité domestique et localisée dans les villages. Les moulins textiles ont commencé dans l'Inde avec l'économie coloniale. L'établissement de l'industrie moderne n'a changé pas matériellement l'structure basique de l'économie coloniale, qui a continué sous la dépendance des matières premières, et comme un marché pour les manufactures de la métropole. La Charkha et les matières textiles existent simultanément dans un système amorphe et fragmenté de développement modifié. Son articulation peut être vue dans la manque de correspondance entre l'industrie et les zones des matières premières. La relation entre les deux présente variations selon les différents produits. Les valeurs de corrélation sont 0,78 dans le cas du jute, 0,53 pour la laine, 0,58 pour le coton et 0,49 pour la soie. Les valeurs du coefficient de corrélation pour toutes les classes ensemble est 0,824. Le coefficient de détermination est plus grand que 0,50.

Les résultats de la régression nous montrent que le rôle des matières premières diminue quand la distance des ports est plus grande. Il y a une relation positive très significative avec les prix d'exportation et connexions des transports, avec des valeurs de 0,53 et 0,726. Le change par unité en matières premières change 0,621 par unité dans l'index de développement. Le changement par unité dans la distance est 0,326 par unité. avec des prix 0,532 et avec des connexions 0,379.

L'Inde a enregistré par valeur de 13.778.621 rps. en production textile. On surveille spécialement l'extension des textiles du coton et du jute, car la matière première est excessive. L'Inde doit adresser ses efforts vers l'augmentation de la production et la qualité de la laine et de la soie. On encouragerait ainsi l'industrialisation rurale et augmenterait l'exportation. L'Inde doit promouvoir des textiles industriels à cause de la croissante demande et croissante dépendance des importations étrangères. Plus grandes inversions de capital et une meilleure technologie accéléreraient le processus industriel textile indien.