

CENTRE FOR DEVELOPMENT STUDIES

Working Paper No. 37

Consumption of Cotton Textiles:
Certain Emerging Trends

Mridul Eapen

Centre for Development Studies
Ulloor Trivandrum-695011
August, 1976.

CONSUMPTION OF COTTON TEXTILES: CERTAIN EMERGING TRENDS

Introduction

The cotton textile industry in India is composed of the organised mill sector and the decentralised sector which includes handlooms¹ and non-factory powerlooms. Currently the mill sector is responsible for 57 per cent of the total production of cotton textiles and the rest is accounted for by the handlooms and powerlooms. After food the cotton textile industry is the most important consumer goods industry with a weight of 21.18 in the current series of index of industrial production.²

In a developing country like India at the per capita income levels prevailing, clothing, together with food, constitutes a basic necessity of the people. Moreover, cotton clothing dominates the pattern of cloth consumption, partly for natural reasons since India is a tropical country and mainly because of the low average levels of per capita incomes.³ With a growth in population and increase in per capita incomes over time, one would expect the production and consumption of cotton textiles to rise. Though increases in income levels would induce shifts to superior varieties of textiles like man made fibre clothing, these shifts would be confined mainly to the upper income groups in the economy, unless the rate of growth of per capita income is very high.

But trends in output of the textile industry in the post-Independence period reveal that not only has production of cotton textiles lagged behind the rate of growth of population, since the 1960's, but also the demand for cloth has failed to respond adequately to the rate of growth of per capita

* The author wishes to acknowledge the help and guidance received from Professor Y.N. Raj, Professor M. Krishnaji, Dr.V.B.Athreya and Professor T.N.Krishnan. Thanks are also due to Chandan Mukherjee for computational help.

income, howsoever marginal, during this period. The rate of growth of cotton textiles has been much lower than all industries taken together. In respect of aggregate domestic availability or (apparent) consumption of cotton cloth, the absolute quantity of cloth available has increased since the 1950's but, relative to the rate of growth in population, consumption of cloth has virtually stagnated and since 1965 the per capita consumption of cloth has declined. It is this decline in consumption of cotton cloth per person, and changes in the composition of cloth consumed, which are being examined in this paper.

The first section studies briefly the production trends in the cotton textile industry from the 1950's to 1973⁴; the second part deals with the total domestic and per capita availability of cloth and the whole pattern of consumption in terms of different types of cloth and by different groups of the population. Finally, in the third section, the factors responsible for these trends in the consumption of cloth per person are examined.

Production Trends

The index of production of cotton textiles records increases upto 1964, except for the late fifties, during which there was a 'crisis' and the industry accumulated large stocks; output declined in 1959.⁵ The rate of growth in output of cotton textiles upto the mid-sixties was only around 2-3 per cent per annum, whereas industrial production as a whole increased at the rate of 8-10 per cent during the same period.⁶ Since then the output in this industry has been fluctuating and its rate of growth was negative in certain years; there was again a 'crisis' in 1966-68 during the period of general recession.⁷ At its peak the production index for cotton

textiles reached 112.8 in 1964 and again 112.6 in 1972. The industry fared even worse when the rate of growth of the general index was itself declining except in 1972 (see Table 1).

Table I

Index of Industrial Production - Cotton Textiles and
All Commodities 1960 = 100

Year	Cotton tex- tiles	Rate of change	All Commo- ditics	Rate of change	Decentra- lised sector	Rate of change
	1	2	3	4	5	6
1951 ⁺	80.1		73.5		@	
1955	95.4	+ 3.8	91.9	+ 5.0	@	
1961	104.8	+ 4.0	109.2	+ 9.2	118.0	+ 18.0
1962	104.4	- 0.4	119.8	+ 9.7	120.0	+ 1.7
1963	105.5	+ 1.1	129.7	+ 8.3	143.0	+ 19.2
1964	112.8	+ 6.9	140.8	+ 8.6	152.0	+ 6.3
1965	111.7	- 0.9	153.8	+ 9.2	152.0	n.c.
1966	106.5	- 4.7	157.2	+ 2.2	154.0	+ 1.3
1967	104.9	- 1.5	152.6	- 3.2	158.0	+ 2.6
1968	111.7	+ 6.5	163.0	+ 6.8	175.0	+10.8
1969	109.2	- 2.8	175.3	+ 7.5	176.0	+ 0.1
1970	111.8	+ 2.4	180.8	+ 3.2	183.0	+ 4.0
1971	105.2	- 5.9	186.1	+ 2.9	169.0	- 7.7
1972	112.6	+ 7.0	199.4	+ 7.2	188.0	+11.2
1973	111.1	- 1.8	200.6	+ 0.6	179.0	- 4.8

Sources: Reserve Bank of India Bulletin and Indian Textile Bulletin, various issues.

Note: + Figures for 1951 and 1955 are based on the earlier 1956 series.

@ included under the first column

n.c. no change

In fact throughout this period the cotton textile industry has suffered from the problem of excess capacity, and this has been caused, except for one or two years, not by the shortage of raw materials as by lack of demand.⁸

~~But as we have already noted the index of production of cotton textiles do not include the output of the decentralised sector.~~ ^{But} If we consider output in the decentralised sector we find that its rate of growth was much higher than the mill sector⁹ (see Table 1). In fact production trends in the mill sector have been neutralised by the higher rate of growth in output of the decentralised sector (see Table 2). One is familiar with the serious setback which the handlooms suffered with the advent of the composite mills in the late 19th century. Cloth produced on handlooms which had accounted for 71 per cent of total cloth production in India towards the end of the 19th century, declined to 20 per cent by 1948-50.¹⁰ But since 1951, while output in the mill sector declined by 0.2 per cent, production in the decentralised sector was growing at an annual rate of 4.7 per cent; total output thus expanded at an annual rate of 1.6 percent during 1951-73. By 1973, the share of the handlooms and powerlooms in total output had risen to about 47 per cent.

Table 2
Rate of Growth of Output in Cotton Textile
Industry 1951-1973

	<u>Production in (million metres)</u>		Compound rate of change per annum (per cent)
	1951	1973	
Mill Sector	4131	4123	*
Decentralised	1245	3593	+ 4.7
Total Output	5376	7716	+ 1.6

Source: Indian Textile Bulletin, Various issues.

Note: Output figures are 3 year averages.

* There was a decline of 0.2 per cent over the whole period.

It may be mentioned here that the growth rate of the decentralised sector is based on production figures which are indirectly estimated on the basis of certain assumptions regarding 'free' yarn consumption. It is assumed that 90 per cent of the 'free' yarn delivered by the mills is consumed by the decentralised sector; of this 76 per cent is consumed by the handlooms. Approximately 1 kilogram of yarn is assumed to be equal to 10 metres of cloth.¹¹ Although the estimates of total output of the decentralised sector may not be open to doubt¹² there is reason to believe that the relative share of handloom production based on this formula would be overestimated. This is so, since 1958, there has been a substantial growth of 'unauthorised' powerlooms which have encroached on the yarn market of the decentralised sector.¹³ Year to year estimates of the output of these unauthorised units is not known but from some data available for a few years it appears that handloom production on the basis of the conventional formula may be overestimated to the extent of about 500-510 million metres.¹⁴ Hence and is growing although handloom output dominates production in the decentralised sector¹⁵ must be remembered that powerloom cloth production has also risen.

II

Consumption of Cotton Textiles

What do these production trends in the cotton textile industry imply in terms of consumption of cotton cloth? Domestic availability or apparent consumption of cloth can be estimated by taking production of cloth augmented by net imports and adjusted for stocks with mills and producers. In the absence of data on stocks with wholesale and retail dealers, adjustment is made only for stocks with mills. In respect of the decentralised

sector even information on stocks with the producers is not known; the adjustment made to production figures is therefore only with respect to exports. Consumption figures derived in the above manner may be biased for this reason both for the mill and handloom sector in certain years.

Another more direct estimate of consumption of cloth which focuses on the household consumption is available from consumer expenditure surveys of the National Sample Survey for most of the years during 1950-69. Such information is available for rural and urban sectors separately.¹⁶ However, only for the 17th round, July 1961 - June 1962, consumption of cotton clothing by type, i.e. mill made and handloom (but not powerlooms) is given in quantitative terms. For the other years, total clothing expenditure on cotton, woolen and rayon together with bedding and upholstery, in terms of value (Rs.) is available; ^{the} ~~latter~~ data are not of much use to us.

In general in the NSS surveys there is a tendency for underestimating consumption of non-food items and overestimation of expenditure on food.¹⁷ For instance if we derive the estimate for total consumption of cloth for 1961-62 from the 17th round, it is much lower than the figure derived from the data on aggregate production, stocks etc. The NSS figures is 5752 million metres in 1961-62 (4823 million metres of mill and 929 million metres of handloom cloth) whereas the other estimate is 6527 million metres (4161 million metres of mill cloth and 2376 million metres of cloth from the decentralised sector). Whereas total consumption of cloth is underestimated, mill made cloth is overestimated in the NSS figures and there is no data regarding powerloom cloth consumption. This is partly responsible for the relative underestimation of non-mill cloth consumption.

For an analysis of the pattern of consumption of cloth we use the 17th Round data of the NSS; to study trends in total and per capita domestic availability of cotton cloth we use the aggregate market statistics data.

II.1: Trends in Domestic Availability of Cloth

Figures for total domestic availability of cloth and separately for its constituents, the mill and decentralised sectors, are available from 1951 and even earlier.

Total domestic consumption of cloth was 3992 million metres in 1951, rose to 6527 million metres in 1961 and to 7356 million metres in 1971 (see Table 3)

Table 3

Total and Per Capita Availability of Cotton Cloth

Year	Mill-made (in million metres)	Handloom	Total	Per capita Availability (in metres)		
				Mill-made	Handloom	Total
1951	3096	896	3992	8.6	2.4	11.0
1961	4151	2376	6527	9.2	5.5	14.7
1971	3537	3367	7085	6.4	6.4	12.8
1973	3571	3598	7129	6.2	6.3	12.5

Source: Indian Textile Bulletin, Various issues

The decadal variation is +63.5 per cent during the 1950's and +12.7 per cent in the next decade. Thus domestic consumption of cloth rose at an annual rate of about 6.3 per cent in the first decade but fell sharply to 1.2 per cent per annum between 1961-71. During the early 1970's there was a marginal increase in aggregate consumption. With population growing at an annual average rate of 2.2 per cent during 1951-61 and 2.5 per cent between 1961-71, and thereafter, the per capita consumption of

rose substantially in the first decade but declined during 1961-71. In the early 1970s also it was declining. But we find that during the period 1951-61 most of the increase in per capita consumption took place between 1951-54 which raises certain doubts. The early '50's was a period of 'normalisation' after the Second World War and the partition which had affected the demand for cotton textiles as for many other commodities; control and rationing of textiles continued upto 1952-53. The pre war consumption of cotton cloth was around 13.2 metres after which due to the general scarcity conditions created during the war, consumption of cloth had declined.¹⁸ By the early fifties, consumption of cloth per capita appears to have merely regained its pre-war figure of around 13.2 (taking the average of per capita consumption of cloth for 1951-54); Table 4.

Table 4

Per Capita Consumption of Cotton Cloth in Certain Years

<u>Year</u>	<u>(in metres)</u>	<u>Year</u>	<u>(in metres)</u>
1938-39	13.2	1964	15.2
1951	11.0	1965	14.7
1952	13.6	1966	13.8
1953	14.1	1967	13.4
1954	13.8	1971	12.8
1955	14.4	1972	13.0
		1973	12.4

Source: Indian Textile Bulletin, Various Issues and S D Mehta op.cit.

The substantial increase in per capita consumption of cloth in the First Plan period therefore only meant that consumption was restored to the pre-war level by 1954, after which there was a gradual increase almost upto the end of the Third Plan period. Consumption of cloth reached a maximum of 15.2 metres per person in 1964 and thereafter it started declining. Taking the average of the three years 1971-73 we find that per capita consumption of cloth fell to 12.7 metres, that is, even below the pre World War II level.

Further not only has there been a decline in per capita availability of cotton cloth but as would be evident from production trends, there has been a shift within its composition in favour of handloom cloth. Mill cloth which accounted for about 75 per cent of total cloth consumed in the 1950's now constitutes just about half the quantity.

II.2: Exports of Cotton Textiles

It may be argued that since cotton textiles, in particular, mill cloth, are one of our traditional exports and India enjoyed the position of the world's largest exporter of cotton textiles in 1950-51, an increase in such exports in the post independence period may have been partly responsible for the decline in per capita availability of cloth. But at the very outset it may be stated that this is not so. Exports of cotton fabrics reached a maximum of 1155 million metres in 1950-51 and thereafter declined very sharply and have remained far below this level.¹⁹ As a proportion of total cotton cloth production, exports which accounted for about 10-15 per cent, in the 1950's, fell to around 5-7 per cent in the 1960's and have stagnated since then; in absolute terms too exports of cotton textiles declined. More than 80 per cent of the exports are of mill cloth the rest being an account of handlooms and powerlooms²⁰ (see Table 5).

As far as imports of cotton textiles are concerned which would add to the domestic availability of cloth, imports of cotton cloth had started declining since the 1940's and by 1950-51 had virtually ceased.

Table 5

Exports of Cotton Textiles - Mill made and Handloom Cloth

(In million Metres)

Year	Exports of Cotton Textiles			Exports as % of Production of Cotton textiles		
	Mill-made	Handloom	Total	Mill-made	Handloom	Total
1951			753			15.9
1955	622	55	677	13.4	3.4	10.1
1961	570	26	596	12.1	1.1	8.4
1965	541	40	581	11.8	1.3	7.6
1966	451	37	488	10.6	1.2	6.7
1967	409	29	438	10.0	0.9	6.0
1968	470	19	489	10.8	0.6	6.2
1969	371	27	398	8.9	0.8	5.2
1970	390	28	418	9.4	0.8	5.3
1971	374	29	403	9.4	0.9	5.5
1972	449	47	496	10.6	1.2	6.2
1973	594	56	650	14.3	1.5	8.4

Source: Indian Textile Bulletin, Various Issues.

Hence exports and imports of cotton cloth are not responsible for the decline in availability of cloth.

II.3: Shifts in Category-wise Availability of Cloth

Though the decline in domestic availability of cloth as observed is mainly account of mill cloth, not all categories of mill cloth have suffered a decline. Categories are defined in terms of fineness of cloth measured in counts; the higher the count, the finer is the quality of cloth.²¹ Availability figures for the various categories can be calculated in the same way as for total mill cloth and the data are analysed from 1961-73.

The bulk of mill cloth is concentrated in the medium varieties, both lower and higher; more so in the latter (see Table 6).

Table 6

Category wise Availability of Mill Cloth

Category	Availability in Million Metres		Compound rate of change per annum
	1961	1973	
Coarse	549 (13.6)	426 (11.1)	- 3.1
Lower medium	1197 (27.6)	996 (25.2)	- 1.7
Higher medium	1814 (43.3)	1348 (41.1)	- 1.4
Fine	170 (4.4)	225 (6.0)	+ 1.3
Superfine	174 (4.1)	223 (6.4)	+ 2.4
Total Mill cloth	4151	3571	- 1.0

Source: Indian Textile Bulletin, Various issues.

Note: *

Disaggregating mill cloth availability category-wise, we find that it is the coarse and medium varieties of cloth which show a decline in availability; fine and superfine categories on the other hand show a rising trend. Coarse varieties which accounted for a little more than 13 per cent of total domestic availability of mill cloth ^{in 1961} declined to 11.1 per cent by 1973; lower medium and higher medium too show a decline from 27.6 per cent to 25.2 per cent and 43.3 per cent to 41.1 per cent respectively.

Fine and superfine varieties of cloth though constituting a relatively small proportion of mill cloth have increased their share in total mill cloth consumption - from around 8% in 1961 to 12% in 1973.²² Since total mill production and availability was declining over the period, this rise must have taken place at the expense of the coarse and medium varieties of cloth which show not only a relative but also an absolute decline in availability.

* a) Availability figures are 3-year averages

b) Figures in brackets refer to proportionate share in total output

There is thus a clear shift in mill cloth production in favour of fine and superfine categories of cloth though the rate of growth in availability of such varieties is not much higher than the growth of population. (The availability of coarse and medium varieties declined substantially and at a rate higher than the rate of growth in population with the result that per capita consumption of such varieties fell sharply (Table 7).

Table 7

Per Capita Availability of Cotton Cloth - Mill-made
(Category wise) and Handloom.

(in metres)

Year	Coarse	Lower medium	Higher medium	Fine	Super-fine	Total mill cloth	Handloom cloth
1961	1.2	2.7	4.2	0.4	0.4	9.3	5.5
1962	1.2	2.5	3.9	0.4	0.4	9.0	5.8
1963	1.2	2.1	3.5	0.4	0.4	8.3	5.7
1964	1.2	2.4	3.3	0.3	0.4	8.5	6.9
1965	1.1	2.2	3.3	0.4	0.4	8.2	6.8
1966	1.0	1.8	3.4	0.3	0.4	7.7	6.0
1967	1.0	2.4	3.2	0.3	0.4	7.3	6.3
1968	1.0	1.9	3.1	0.3	0.4	7.5	6.8
1969	0.9	2.0	3.1	0.2	0.4	7.2	6.6
1970	0.8	1.7	3.0	0.3	0.4	7.0	6.5
1971	0.6	1.5	2.7	0.4	0.4	6.4	6.4
1972	0.7	1.6	2.8	0.3	0.4	6.7	6.6
1973	0.7	1.7	2.3	0.4	0.4	6.2	7.0

Source: Derived from data in Indian Textile Bulletin, various issues.

It is very clear then that though there was an overall decline in per capita consumption of cloth, consumption of such varieties of cloth which we can assume a priori, to be consumed by the relatively better off sections of the society show no such decline. If to this we add the fact that the

man made fibre fabrics industry has grown tremendously over the same period it becomes clearer that the consumption of superior varieties of clothing has not suffered a decline though average per capita consumption of cloth has fallen.

II.4: Availability of Man Made Fibre Fabrics

The rate of growth of output of man made fibre fabrics was around 5.0 per cent per annum during 1961-73. Rayon which appeared as a cheap substitute for silk in the 1920's has made rapid progress since then and now the whole range of synthetic fibre fabrics, offer as substitutes for cotton clothing.²³ In relation to total production of cotton cloth, these fabrics represent a small addition to total cloth supplies but it is growing; from about 8 per cent in 1961 the addition of synthetic fibre clothing to total cotton cloth has risen to 15 per cent in 1973. But its seriousness as a competitor of cotton cloth is appraised better vis-a-vis the finer varieties of cotton cloth since in terms of relative prices man made fibre fabrics compete mainly with these varieties.²⁴ Ofcourse in more recent years with the evolution of wider technical possibilities of substitution between fibres it is likely that the range of competitiveness has widened between cotton and synthetic fibre fabrics. Even if we add the quantity of man made fibre fabrics available for consumption to total cotton cloth consumed, per capita consumption of clothing still shows a decline (See Table 8).

Table 8

Total and Per capita Domestic Availability of Cotton and Non-Cotton Clothing

	Domestic availability (million metres)		Per capita Availability (in metres)	
	1961	1973	1961	1973
Cotton Textiles	6396	7240	14.5	12.8
Synthetic fibre textiles	527	919	1.1	1.6
Total Textiles	7123	8159	15.6	14.4

Source: Indian Textile Bulletin, Various Issues.

However, since substitution of cotton cloth by synthetic textiles is taking place and the latter are more durable, it may be argued that part of the explanation for the lack of growth in demand for cotton textiles lies in the process of this substitution itself.

If we were able to calculate the 'cotton equivalent' of these fabrics, overall per capita consumption of cotton clothing would in all probability show an increase during the period under study. To see if this could be true we assume for the sake of argument that 1 metre of synthetic fibre cloth = 2 metres of cotton cloth; and then even more liberally, 1 metre of synthetic fibre cloth = 3 metres of cotton cloth. Multiplying the actual quantity of man made fibre fabrics by first two and then three we calculate the total 'cotton cloth equivalent' available between 1961-73, and the corresponding per capita availabilities (See Table 9).

Table 9

Total 'Cotton Cloth Equivalent' Estimates

Assumption 1: 1 metre of synthetic cloth = 2 metres of cotton cloth

	Domestic Availability in (million metres)		Per Capita Availability (in metres)	
	1961	1973	1961	1973
Cotton Textiles	6596	7240	-	-
Cotton Equiv. of Synthetic fibre fabrics	1055	1838	-	-
Total Cotton Cloth equivalent	7651	9078	16.9	16.1

Assumption 2: 1 metre of synthetic cloth = 3 metres of cotton cloth

	Domestic Availability (in million metres)		Per Capita Availability (in metres)	
	1961	1973	1961	1973
Cotton Textiles	6596	7240	-	-
Cotton equiv. of Synthetic fibre fabrics	1582	2756	-	-
Total Cotton cloth equivalent	8178	9996	18.1	17.7

Even with the second liberal assumption we find that per capita availability of cloth has declined; the durability argument may, only in part, and not wholly be responsible for the fall in the consumption of cloth.

If for the moment we leave out 1973, in which year there was a decline in per capita consumption of all varieties of clothing, mill made, handloom and man made fibre fabrics, the analysis suggests that the overall decline in per capita consumption of cloth has been mainly due to a fall in consumption of the coarse and medium varieties of mill cloth since the mid sixties. That this decline was not entirely due to a shift towards better varieties of cloth resulting from a rising level of per capita income, is evident from the fact that consumption of handloom cloth which, as we will see, forms a larger proportion of total cloth consumed at low income levels, was rising. At the same time there was an increase in the consumption of superior varieties/consumed but the quantity of these varieties did not increase sufficiently to compensate for the decline in the consumption of the inferior varieties of cloth.

It may be pointed out that a part of the growth in handloom production may have been on account of the policy of reservation of certain popular items of production for the handloom sector,²⁵ as also the fact that the mill sector has failed to meet its statutory obligations in the production of controlled cloth varieties.²⁶

We argue in the next section that the overall decline is to be attributed not merely to the substitution between the varieties but also to changes in the distribution of income as between different population groups.

It becomes necessary now to examine the question of who consumes how much and what type of cloth in order to explain the behaviour of per capita consumption of cloth. This, clearly, is closely tied not only to income but its distribution, since the same amount of income distributed in different ways gives rise to different consumption patterns. Apart from these factors the prices of different types of cloth also play an important role in determining both the level of consumption and its pattern, over different income groups.

III.1: Income Distribution and the Pattern of Consumption

There are considerable disparities in the household incomes and the pattern of consumption that results is a highly skewed one. Data on the distribution of income is not available.²⁷ The only source which provides comprehensive data on consumption of cloth by economic classes in quantity and by type is the 17th Round of the NSS. But these data give the average per capita consumption of cloth by various expenditure and not income groups. In the absence of similar data according to income groups, we assess the structure of demand for cloth in relation to expenditure groups. The limitations involved in taking distribution of consumption expenditure as a proxy for distribution of income are well known²⁸ but it still provides a significant insight into the pattern of demand for cotton textiles. The 1961-62 data are in respect of average per capita consumption of clothing for 30 days by monthly per capita expenditure classes for the rural and urban sectors. Information regarding consumption of textiles in quantity is available only for cotton, but from the expenditure (in Rs)

on clothing it is known that cotton cloth accounts for more than 90 per cent of expenditure on clothing in both rural and urban areas and the average per capita expenditure on woollen and art silk fibre/ is very low (except in the upper expenditure groups). We analyse mainly the data on quantity of cotton cloth consumed by type and expenditure classes (See Table 10). Mill cloth accounts for more than 86 per cent of total cotton cloth consumed in both rural and urban sectors.

Table 10

Average Per Capita Consumption of Cotton Clothing by Mortality
per capita Expenditure Classes
 (in yards)

	0-13	13-21	21-34	34-75	75 and above	All Classes
RURAL						
1. Total cloth consumed	0.20	0.69	1.81	3.66	6.45	1.21
2. Mill cloth	0.17 (85.0)	0.58 (84.1)	1.54 (86.0)	3.34 (91.3)	5.89 (91.4)	1.05 (86.8)
3. Handloom Cloth	0.03 (15.0)	0.11 (15.9)	0.27 (14.0)	0.32 (8.7)	0.56 (8.6)	0.16 (13.2)
URBAN						
1. Total cloth consumed	0.06	0.40	0.94	2.15	3.67	1.06
2. Mill cloth consumed	0.07 (87.5)	0.34 (85.0)	0.80 (85.5)	1.89 (87.4)	3.27 (89.1)	0.93 (86.8)
3. Handloom cloth consumed	0.01 (12.5)	0.06 (15.0)	0.14 (14.5)	0.27 (12.6)	0.40 (10.9)	0.14 (13.2)

Source: NSS 17th Round 1961-62

Note: a) Figures in bracket are percentages to total cloth consumed.

b) 3 expenditure groups have been pooled together.

The percentage of mill cloth consumed is exaggerated since as earlier observed the NSS underestimates handloom cloth consumption and does not

give any information regarding consumption of powerloom cloth. In fact availability of mill cloth formed only about 65% of total cloth consumed in 1961-62 as estimated from the aggregate data on production, stocks etc. For our purpose we can only assume that the underestimation bias in respect of handloom cloth and consequent overestimation of mill cloth consumption is applicable uniformly to all expenditure groups and thus does not alter the pattern of consumption substantially.

Expenditure group wise too we find that mill cloth is the major type of clothing but as would be expected, the proportion of handloom cloth consumed is larger for the lower expenditure groups and it declines as the average per capita expenditure rises. This is true of both rural and urban sectors, though proportionate consumption of handloom cloth is higher among the lower groups in rural areas; it is persons whose per capita expenditure is lower than the average, Rs.21.7 for rural and Rs.30.9 for urban areas, (available from the 17th Round data) who consume a larger proportion of handloom cloth. This fact is brought out even more clearly if we consider similar data for those states (mostly in Southern India) in which the proportion of handloom cloth consumption is high; handloom cloth accounts for more than 43.7 per cent of the total expenditure on clothing in Southern India as compared to the all India average of 20.4 per cent.²⁹ This data is given by monthly household expenditure groups (see Table 11).

Table 11

Proportion of Expenditure on Handloom Clothing to Total Cotton Clothing Classified by Monthly Household Expenditure Classes

P

State	0-25	25-50	50-100	100-150	150-300	300 & above
<u>Madras</u>						
rural	91.7	58.3	55.7	59.2	26.7	23.2
urban	100.0	50.0	71.4	29.3	31.7	27.7
<u>Andhra Pradesh</u>						
rural	-	16.7	32.7	66.7	28.1	33.6
urban	79.3	-	29.7	20.8	39.0	21.5
<u>Mysore</u>						
rural	-	-	5.7	23.4	8.0	35.0
urban	-	35.7	9.1	16.4	11.7	20.0
<u>Kerala</u>						
rural	100.0	59.1	31.5	38.5	11.9	22.4
urban	-	67.3	29.2	16.4	26.5	9.3

Source: NSS, 17th Round, as given in J. James, op.cit.

As can be seen handloom cloth forms a large proportion of total cloth consumed by the low expenditure groups. It appears then that as expenditure rises consumers shift to mill cloth.

III.2: Expenditure Elasticities of Demand

Moreover, there exists a positive relationship between average total expenditure and quantity of cloth consumed and there are wide disparities in consumption levels between the different expenditure groups. / The elasticity of demand for cloth (in quantitative terms) with respect to expenditure can be estimated for each expenditure group. Some studies have been made on the expenditure

and income elasticity of demand for cloth,³⁰ but these elasticities are average elasticities used for the purpose of long term projections of demand for clothing. We are interested in elasticities of demand at different levels of expenditure (income) which would enable a more accurate analysis of demand behaviour since the elasticity coefficient of demand for cloth would be significantly different as between the different expenditure (income) groups. The quantity of cloth consumed, with a given change in expenditure (income) would therefore vary substantially according to the distribution of this change over the various income groups. ~~See~~ Table 12, gives (quantity) elasticities for different expenditure groups in the rural and urban sectors and the average coefficient.

Table 12

Elasticity Coefficient According to Expenditure Groups

	0-13	13-21	21-34	34-75	75 & above	Average
Rural	3.17	2.77	1.15	0.56		1.72
Urban	4.72	2.31	1.43	0.53		1.34

Source: Derived from the NSS 17th Round, 1961-62.

Note: The proportional difference in quantity of cloth consumed between two adjacent expenditure groups divided by the proportional difference in total expenditure between the same two groups is taken to be the estimated elasticity for the lower group.

The expenditure elasticity of demand for cloth is greater than unity for both the sectors. It is very high in the lower expenditure groups and falls very sharply as expenditure rises; average elasticity coefficient is higher in the rural sector. As expenditure (income) rises, the proportionate change in the demand for cloth diminishes.³¹

This implies that if incomes rise more rapidly in the higher income groups than in the lower, then the demand for cloth would respond at a lower rate than it would if income rises at a higher rate at the lower end.

How total consumption of cloth of each type behaves over time with changes in the levels of income and its distribution would then depend on the quantity and type of cloth consumed by each expenditure group; and the corresponding elasticity coefficient. It is necessary therefore to estimate total consumption level for each expenditure group.

III.3: Estimates of Total Consumption by Expenditure Groups

This can be done by using the percentage distribution of persons by expenditure groups in the sample for rural and urban regions and the population figure for 1961 (which coincides with the census year) to estimate the actual number of people in each group. Given the per capita consumption of cloth for each group, the total consumption of cloth for a month and its distribution over the expenditure groups is therefore known. From this, population decile wise consumption of cloth by type can be obtained (See Table 13).

That the consumption of cloth is highly skewed is evident from the data. The bottom 10 per cent of the population consumes just a little over one per cent of total cotton cloth whereas the top 10 per cent of the population consume about 30 per cent of the cloth. Even the bottom 50 per cent of the population (who spend on average less than Rs.21 per month per capita) consume only 18 per cent of total cloth. The inequality in cloth consumption is higher in urban areas; whereas the bottom 50 per cent of the rural population account for 20 per cent of cloth consumed, in the urban sector the corresponding figure is 8 per cent. The bulk of cotton cloth is consumed,

Table 13

Decile-wise Consumption of Cotton Cloth - Rural, Urban, All-India

Population Deciles	Proportion of total cloth consumed (in per cent) by type								
	Total Cloth			Mill-made			Handloom cloth		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Bottom 10 per cent	1.2	1.7	0.3	1.0	1.2	neg	2.0	2.2	0.6
20 per cent	3.4	3.9	1.9	3.1	3.6	0.5	4.4	4.9	1.3
30 per cent	6.9	7.6	3.2	6.5	7.2	2.2	8.6	9.3	4.7
40 per cent	12.0	13.3	5.5	11.5	12.5	4.6	16.6	18.3	7.6
50 per cent	17.0	20.0	8.3	17.0	18.5	8.0	27.0	27.5	10.2
60 per cent	25.3	27.7	12.8	24.4	26.7	12.4	33.8	33.8	14.1
70 per cent	37.1	39.8	23.1	36.5	39.1	22.6	44.1	43.9	25.5
80 per cent	52.2	56.2	32.7	51.1	54.6	32.1	53.6	58.0	32.3
90 per cent	69.3	73.7	52.6	70.3	73.8	44.6	80.4	82.6	59.2
Top 10 per cent	30.2	26.3	47.4	29.7	26.2	55.4	19.6	17.4	40.8

Note: The Table is derived by using the data on consumption of cloth from the 17th Round of the NSS. Population figure is taken from the 1961 Census and the decile wise figures are arrived at by simple interpolation.

as would be expected, in the rural sector. Demand behaviour in this sector would therefore be very relevant in analysing per capita consumption of cloth because of its large weightage. Only a very drastic decline in urban consumption would affect the average consumption of cloth.

There is no category wise break up of mill cloth but one would a priori assume that better varieties of cloth would be consumed as expenditure rises; it is not likely that persons in the lower expenditure groups whose proportionate expenditure on food is very high would be able to purchase superior varieties of cloth. Fine and super-fine varieties of cloth would be consumed by persons in the highest expenditure groups. Some data is available from socio-economic surveys of certain villages which confirm this a priori hypothesis. Shah and Shah find for a rural taluk in Gujarat that

superfine cloth is used rarely by non farm families, agricultural labourers and small cultivators except salary earners and those in miscellaneous occupations. Against this 26% of big farmers and 67% of medium size farmers with holdings of 10-25 acres used superfine cloth; a large number of families reported consumption of medium varieties of cloth. Use of coarse varieties was more pervasive among agricultural labourers, those in miscellaneous occupations and small farmers.³² Again S. Brahmé in a survey of cloth consumption in Poona finds that coarsest varieties of cloth are consumed by the Depressed Classes.³³

We can now link this information with the availability data on cotton cloth for the year 1961, (as given in Table 6). Taking mill cloth at the moment, it shows that 13.2 per cent of the cloth was of coarse variety, 28.8 per cent lower medium, 43.7 per cent higher medium, 4.1 per cent fine and 4.2 per cent superfine. These data are in broad conformity with the pattern of consumption as observed above.

Regarding man made fibre fabrics, the NSS does not give information in quantity terms but expenditure on art silk, in rupees, show that the expenditure for both rural and urban is very low.

Table 14
Average Per Capita Expenditure (in Rs) on Art Silk and Rayon
Fabrics by Monthly Per Capita Expenditure

		<u>Classes</u>					(Rs)
		0-13	13-21	21-34	34-75	75 and above	All
Rural	neg	neg	0.02	0.14	1.05	0.03	0.03
Urban	-	0.01	0.03	0.20	1.44	0.12	0.12

Source: NSS 17th Round 1961-62.

Consumption of such varieties is concentrated in the highest expenditure group and is higher in the urban than rural areas. Another source of data collected by the Market Research Division of the Textile Committee, gives information on consumer purchase of textiles - cotton and non cotton - per household. These data are given by annual income groups³⁴(see Table 15).

Table 15

Consumer Purchase of Textiles Per Household Per Month by Income Groups

<u>Annual Income</u>	<u>Monthly Average for 1971 (Rs)</u>	<u>Monthly Average for 1972 (Rs)</u>
1. Less than Rs. 1500		
a) Cotton	11.41	11.19
b) Non-cotton ^②	1.40	1.36
2. Rs. 1500-2999		
a) Cotton	15.94	16.61
b) Non-cotton	2.80	1.99
3. Rs. 3000-5999		
a) Cotton	21.67	24.76
b) Non-cotton	4.94	4.92
4. Rs. 6000-9999		
a) Cotton	24.70	26.55
b) Non-cotton	6.96	6.57
5. Rs. 10000-19999		
a) Cotton	29.37	33.91
b) Non-cotton	11.62	11.40
6. Rs. 20,000 and above		
a) Cotton	34.07	33.14*
b) Non-cotton	14.95	9.01*

Source: Monthly Bulletin of Consumer Purchases of Textiles, 1971 and 1972.

② Art silk and synthetic fibre textiles.

* 1972 figures after May 1972, do not give data for the last income group. The figures are averages for the 5 months January-May.

Clearly there is a very sharp rise in expenditure on synthetic fibre fabrics as we move up the income groups and the disparity in consumption is much higher in the case of synthetic fibre/as compared to cotton fabrics. The distance between the lowest and highest income group is about 1:3 in the case of cotton clothing but almost 1:14 with respect to man made fibre fabrics. The shift in quality of clothing as average expenditure (income) rises has therefore two aspects: one is the degree of fineness of cotton cloth (from handloom to mill cloth and within the mill varieties away from coarse to medium and finally superfine) and the other aspect is the shift towards man made fibre fabrics which appears to be significant only in the very high expenditure groups.

The cross sectional analysis thus reveals

- a) a highly skewed pattern of consumption of cotton cloth;
- b) a large weight of the rural sector in total consumption of clothing;
- c) preponderance of mill cloth in total consumption;
- d) large percentage share of handloom cloth in the expenditure groups below average;
- e) a positive relationship between fineness of cloth consumed and expenditure;
- f) concentration of consumption of man made fibre fabrics in the upper expenditure groups;
- g) an elasticity coefficient greater than unity for both rural and urban sectors; and
- h) wide variation in elasticities of demand for cloth, the coefficient falling very sharply as the average expenditure rises.

III.4: Trends in Per Capita Income

Given such a structure of demand it would be interesting to analyse the behaviour of cloth consumption as per capita incomes rise over time. Generally speaking with a rise in per capita income there would be a more than proportionate increase in the quantity of cloth demanded since elasticity of demand for cloth is greater than unity. One would expect (a) an increase in the quantity of cloth demanded and (b) a shift away from inferior to superior varieties of cloth.

But our data shows that there was an overall decline in per capita consumption (in quantity) of cloth. Per capita income over this entire period grew at an average rate of about one per cent per annum, (Table 16)³ whereas per capita consumption of cloth which was rising at a marginal rate of 0.4 per cent p r annum after 1954 and upto 1965, declined thereafter

Table 16

Index of Per Capita Income: All India

	<u>Per Capita Income (Rs)</u> (at Rs.1960-61 prices)
1955	279
1956	288
1957	279
1958	294
1959	293
1960	306
1961	310
1962	309
1963	320
1964	336
1965	310
1966	300
1967	329
1968	330
1969	339
1970	346
1971	344
1972	338
1973	341

Source: S.N. Kansal, Changes in the Per Capita Income and the Per Capita Availability of Essential Commodities in India since 1931, ESRF, August 1974, New Delhi.
See Footnote 37.

A break up of the period upto the year which per capita consumption of cloth was increasing however marginally, i.e. upto 1965 and later when per capita consumption declined shows that per capita income rose at a higher rate 1.4 per cent per annum in the initial period. In the later period, the rate of growth of income declined to 0.9 per cent per annum.

Given that the income elasticity of demand for cotton textiles appears to be higher than unity, these rates of increase of per capita income imply that, other things remaining the same, consumption of cloth should grow at rates higher than those in the two periods. But since the actual rate of growth at 0.4 per cent in the first period was far lower and that in the latter period was negative, it is clear that other factors such as changes in the distribution of income and the structure of prices have played an important role in determining the trends in consumption.

III.5: Shifts in Income Distribution

In particular it is possible that though average per capita income was rising, a shift was taking place within the distribution of income, in favour of the higher income groups. Since the bottom 50 per cent of the population (or even the bottom 70 per cent) consume mostly inferior

varieties of cloth, and since the corresponding expenditure elasticities for these varieties are very high, a rise in the levels of expenditure of these population groups would have resulted in very high rates of growth of consumption of these types of cloth. However, the data clearly shows a marked decline in the consumption of coarse and medium varieties of cloth. These facts indicate that though average per capita income rose during this period a change in income distribution has been taking place in favour of the higher income groups since the mid sixties. This inference is

also supported by the fact that the consumption of superior varieties of cloth, consumed mostly by the richer sections of the society, for which groups the elasticity of demand for cloth is low has been rising.

III.6: Prices of Cotton Textiles

But since the overall elasticity of demand for cloth is positive, changes in the distribution of income do not wholly explain the decline in the consumption of cloth. This may well have been brought about by the price factor, the rise in the prices of cotton textiles may have resulted in a sharp fall in the quantity of cloth consumed; the precise magnitude would depend on the price elasticity of demand for cloth. Also prices of different types of cloth may have changed at different rates over this period which may induce a substitution between the different varieties of cloth. The lack of data on absolute prices of comparable items of different types of cloth is very scanty which makes it difficult to compare meaningfully the changes in as well as the levels of the prices of mill cloth, handloom cloth and synthetic textiles.³⁷ We make use of the available data on index of wholesale prices of different types of cloth (see Table 16)

Table 16

Index of Wholesale Prices of Textiles - Cotton and Silk and Rayon
1961-62 = 100

	Index of wholesale Prices				Rate of change (per cent)			
	Cotton Textiles	Mill cloth	Handloom cloth	Silk and Rayon	Cotton textiles	Mill cloth	Handloom cloth	Silk Rayon
1962	103	100.7	103.8	111.0	+ 3.0	+ 0.7	+ 3.3	+11.0
1963	108	100.3	125.4	118.2	+ 4.9	+ 0.1	+20.8	+ 6.5
1964	110	104.3	119.6	105.6	+ 1.9	+ 3.3	- 4.6	-10.7
1965	114	107.7	125.2	103.3	+ 3.6	+ 2.3	+ 4.7	- 2.2
1966	122	113.9	136.2	113.1	+ 7.0	+ 5.8	+ 8.8	+ 9.5
1967	126	121.2	135.9	114.1	+ 3.3	+ 6.4	- 0.2	+ 0.9
1968	129	124.8	136.3	113.6	+ 2.4	+ 3.0	+ 0.3	- 0.4
1969	134	129.4	138.7	114.4	+ 3.9	+ 3.7	+ 1.8	+ 0.7
1970	146	135.0	154.3	116.7	+ 9.0	+ 4.3	+11.2	+ 2.0
1971	162	153.9	175.8	124.4	+11.0	+14.1	+13.9	+ 6.6
1972	166	161.3	172.9	129.5	+ 2.5	+ 4.8	- 1.6	+ 7.1
1973	184	175.8	172.9	146.5	+10.8	+ 9.6	0.0	+12.9

Source: Indian Textile Bulletin, Various Issues.

The table shows that prices of cotton textiles rose by about 64 per cent between 1961-73 i.e. at an annual rate of a little less than 5 per cent per annum. All varieties of textiles show an increase over this period. But the index of prices has moved in favour of silk and rayon relative to all cotton textiles and in particular to mill cloth. Similarly the index of mill cloth prices vis-a-vis handloom cloth has generally risen. Although this tendency is not so clear-cut for the period as a whole, after 1966 the rate of change in the index of prices of handloom cloth is much lower than the price factor must have induced of mill cloth. Thus to some extent substitution between mill cloth and handloom cloth is taking place at the lower end and between mill cloth and silk and rayon, at the upper end. In the case of the former, the absolute level of prices may also have induced a substitution since handloom cloth of the coarse and medium variety may be the cheapest available.³⁸

But we find that although price shifts within the different types of clothing has affected the consumption between varieties, prices of all cotton textiles relative to the ^{general} price/index have on average, risen at much lower rates, so that price shifts between cloth and other goods could not have been responsible for the decline in cloth consumption. However, since food and clothing are two basic necessities of large groups of the population, it may be that prices of foodgrains (which have a high weight in the consumption basket of these ^{people}) have also risen at high rates, (see table 17) and may have therefore affected the consumption of cloth.

Since the bulk of the cloth is consumed by the rural sections which are dependent on agriculture, movements in agricultural (foodgrain) prices would affect their demand for cotton cloth since agricultural prices and incomes would be highly correlated. Again these movements in agricultural

Table 17

Wholesale Price Indices - All Commodities; Foodgrains and Cotton
Textiles. (1961-62 = 100)

	All Commo- dities	Food grains	Cotton Textiles	All Commo- dities	Rate of change Foodgrains	(per cent) Cotton Textiles
1962	104	107	103	+ 4.0	+ 7.0	+ 3.0
1963	110	115	108	+ 5.8	+ 7.5	+ 4.9
1964	122	135	110	+10.9	+17.4	+ 1.9
1965	132	154	114	+ 8.2	+14.1	+ 3.6
1966	150	183	122	+13.6	+18.8	+ 7.0
1967	167	228	126	+11.3	+24.6	+ 3.3
1968	165	201	129	- 1.2	-11.8	+ 2.4
1969	172	208	134	+ 4.2	+ 3.5	+ 3.9
1970	181	207	146	+ 5.2	- 0.5	+ 9.0
1971	188	215	162	+ 3.9	+ 3.9	+11.0
1972	207	248	166	+10.1	+15.3	+ 2.5
1973	254	296	184	+22.7	+19.4	+10.6

Source: Indian Textile Bulletin and Report on Currency and Finance, Reserve Bank of India, Various Issues.

prices would produce a real income effect in the urban sector which would affect its consumption of cloth. Insofar as rising foodgrain prices indicate a worsening income distribution,³⁹ we have already covered this in our earlier discussion. But this impact of foodgrains output and prices on the consumption of cloth needs to be studied in depth and is not intended to be dealt with here. In this paper we have tried to argue mainly how shifts in income distribution have been responsible for the observed trend in the consumption of cloth.

Footnotes

1. Handloom cloth accounts for more than 60 per cent of the output of the decentralised sector.
2. The base for the index of industrial production was revised three times in the post planning period. ~~Unlike the 1956 based series, the current series with base 1960 = 100 does not include the decentralised sector (which had a weight of 6.25 in the old series).~~
3. For instance in 1959, nearly 95 per cent of the textiles consumed in India was cotton whereas cotton accounted for 69 per cent of world consumption of apparel fibres and the rest was woollen cloth and synthetic fibre textiles. (As stated in D.Kumar, et al Resource Allocation in the Cotton Textile Industry, Institute of Economic Growth, 1965.
4. Our study analyses mainly the trends in consumption of cotton textiles.
5. A Textile Enquiry Committee was set up in 1958 to enquire into the nature and causes of this 'crisis'. The chief reason given for the crisis was the increase in excise duty levied on mill cloth in the latter half of 1956. That this was not in fact the main cause was clear from the fact that (a) handloom industry was suffering from a similar 'crisis' though there was no increase in excise and (b) not all categories of mill cloth suffered from large accumulation of stocks. The explanation lay more on the side of consumption and lack of demand.
6. K.M.Raj, Growth and Stagnation in Indian Industrial Development, Economic and Political Weekly, Annual Number, February, 1976.
7. See A.N. Bagchi, Long term Constraints on India's Industrial Development 1951-68, in Economic Development in South Asia, (ed) M.Kidron and E A G Robinson, Macmillan 1970.
8. Ibid.
9. ~~However the rate of growth of even the combined index of production of cotton textiles (vide series with base 1956=100) is lower than all cotton textile industries taken together. Ibid.~~ *It appears that after 1968 the index of production of cotton textiles (vide series with base 1956=100) is lower than all cotton textile industries taken together. Ibid. is exclusive of the decentralised sector*
10. S.D. Mehta, The Indian Cotton Textile Industry: An Economic Analysis, The Textile Association, Bombay, 1953.
11. These proportions are based on the field data collected by the Textile Enquiry Committee, 1954. The conversion of yarn into yardage was assumed to be 1 lb. of yarn = 4.5 yds of cloth which was later revised to 1 lb. of yarn = 5 yds. of cloth. Presumably yarn in hanks is consumed by handlooms. (Report of the High Powered Study Team on the Problems of the Handloom Industry, Govt. of India, Ministry of Commerce, July 1974).

12. It is likely that 'free' yarn consumed by the remaining users - hosiery and jute mills, fishing nets, cotton rope, twine and niwar makers etc. has increased but it is felt that this is not substantial.
13. The textile policy of June 1956, after a raging controversy on the respective roles of handlooms and mills in cotton textile production, accepted the principle of a common production programme. One aspect of this was to strengthen technically the competitiveness of the handlooms by encouraging a gradual, phased out conversion of these looms into powerlooms organised in small units (of 4 looms and less). To promote this conversion total exemption from excise duty was given to units of 4 powerlooms and less. But though the progress of installing sanctioned powerlooms was very slow more because of malpractices than anything else (and the programme was even discontinued once in 1961) there was a large growth of 'unauthorised' powerlooms assisted largely by these excise concessions. By end of April 1972, the estimated number of such units is 2.9 lakhs of which 32,500 looms are out of the more than one lakh powerlooms sanctioned to State Governments and Union Territories in 1966. Some of these units have even installed mechanical contrivances for reeling hanked yarn suitably for powerloom use.

Report of the High Powered Team, 1974 op.cit.

14. See Report of Study Group on Handlooms, Ministry of Commerce, Government of India 1964. It estimates that on the basis of this formula, production of the decentralised sector would be 2372 million metres in 1961, 2412 million metres in 1962, and 2376 million metres in 1963 of which the share of handlooms accordingly works out to 2004, 2035 and 2430 million metres respectively. But a detailed study by the Powerloom Enquiry Committee of 1964 shows that at that time production by the handlooms was only around 1920 million metres that is about 510 million metres below the 1963 conventional estimate.
15. But since the pattern of production of the handlooms and powerlooms is not very different as also the type of yarn consumed, the distinction between the two is immaterial for an analysis of consumption by type and quantity of cloth.
16. For a detailed account of sampling procedure etc. see T.N. Prishman, Role of Agriculture in Economic Development, Chapter I, unpublished thesis, Massachusetts Institute of Technology April 1964.
17. See for instance, i) F.N. Radhakrishnan, Trends in Private Consumption Expenditure in India, 1954 - 55 to 1968-69, Paper presented at the 7th Conference on Research in National Income, 1970.
- ii. S.M. Kansal, Structural Changes in the Consumption Expenditure in India, 1950-51 to 1965-66, Indian Association for Research in National Income and Wealth.
- iii. Poverty, Unemployment and Development Policy, A Case Study of Kerala, Centre for Development Studies, Trivendrum 1975.

18. Mehta, *op.cit.*
19. In fact it was expected that by the end of the Second Plan period, exports would hit the 1000 million yds. target till now this target remains unfulfilled.
20. After the phenomenal fall in exports of Bleeding Madras in the late 1960's, exports of handloom have been low. Recently there is a large /cloth increase in handloom exports in value terms. This is chiefly on account of ready made garments which earned a mere Rs.5 crs.in foreign exchange in 1970-71 and now account for about Rs. 80 crores.
21. Classification of counts is as follows:
- Course - Average count yarn less than 17s
Lower-medium - Average count yarn between 17-25s
Higher medium - Average count yarn between 25-34s.
Fine - Average count yarn between 34-47s
Super-fine - Average count yarn above 47s.
- In the recent Budget, 1976-77, these categories have been revised, all categories being upgraded.
22. Percentages are based on 3 year averages.
23. S.D. Mehta, *op.cit.* and D. Kumar *op.cit.* Blended fabrics, i.e. cotton with viscose and others and polyester with cotton, viscose and others, too have recently appeared as substitutes for cotton clothing though their production yet is very small. In 1973 production of blended fabrics was 130 million metres.
24. *Ibid*
25. At present there are three items reserved exclusively for the handloom sector - piece dyed dhatis, lungis, sarongs and coloured cotton sarees - and eight items are reserved exclusively for the handlooms and powerlooms. See Report of the High Powered Study Team *op.cit.*
26. The Controlled Cloth Scheme was introduced in October-December 1967 to ensure that a part of total mill cloth production be sold to the 'weaker' sections of the society at controlled prices. It started with control over 50 per cent of total mill output; was reduced to 40 per cent in 1967 and again to 25 per cent in 1968. Till June, 1971 the obligation was statutory after which it was made voluntary and the proportion of controlled cloth was reduced to 10 per cent of total production. Again in March 1974 it was made statutory; the obligation was doubled and prices were raised by 30 per cent. Actual production has remained far below these levels; in the February-April 1971 quarter it was as low as 9 million sq.metres or less than 1 per cent of total production of cloth. See Note in Economic and Political Weekly, Sep.14, 1974.

27. Attempts have been made by individuals to estimate the distribution of income by "piecing together data from diverse, unrelated sources necessarily involving assumptions and adjustments at every step". See K.R. Manadive, Distribution of Income, Concept of Justice and Right to Property, Paper presented at the Golden Jubilee Seminar, 1972, Bombay.
28. Ibid
29. NSS First Round, Oct. 1950 - March 1951. General Report No.1.
30. See for instance,
- i. A Biswas and D.K. Bose, Consumption Projections of Selected items over the period of the Third Five Year Plan, in V.K.M.V. Das and others, Papers on National Income and Allied Topics, Vol.3, 1962.
 - ii. Barpujari and K. Chandra, Ibid.
 - iii. M C A E R, Long Term Projections of Demand for and Supply of Selected Agricultural Commodities 1960-61 to 1975-76.
31. The expenditure (income) elasticities estimated here are cross section estimates. It has been observed that cross section estimates of expenditure (income) elasticities are much larger than those obtainable from the time series data for the same commodities. But for our analysis, since we are interested in elasticities of demand for cloth at different expenditure levels, we make use of the cross section estimates. It is assumed that the elasticity of demand for cloth remains constant at the different expenditure levels.
32. V & G.H. Shah, Resurvey of Natar Taluka.
This report presents the results of a resurvey of the rural economy of Natar taluka in Kaira District of Gujarat undertaken in 1965. The first survey was carried out in 1930.
33. As given in J. James, Products, Processes and Incomes: Cotton Clothing in India, World Development, Feb.1976.
34. Market Research Division of the Textile Committee initiated an all-India Consumer Panel Project in 1969 for collecting information on a continuous basis for textile purchases by consumers every month. Ultimately, the Panel will consist of 5450 randomly selected households from urban and rural areas. The results are given in the Monthly Bulletin, Consumer Purchases of Textiles, Bombay.
36. Derived from Table 4.
37. The revised estimates of national income (at constant prices) are available only from 1960-61 but the Central Statistical Organisation, in some of their recent publications have also given the revised income figures (at 60-61 prices) for the earlier years 1954-55 to 1959-60. See Kansal, as in Table 15.

37. The wholesale prices of a few items of mill cloth, handloom and silk and rayon textiles as quoted in selected regions is available, but it is difficult from these to select similar products for comparison except in the case of one or two categories. See Index Numbers of Wholesale Prices in India: Revised Series 1961-62 = 100, Office of the Economic Adviser, Government of India.
38. ~~This index of wholesale prices of cotton textiles, it may be noted includes handloom cloth, unlike the production index.~~ *J. James op. cit*
39. This is so since small cultivators in any case do not have much marketable surplus and may to some extent even supplement their foodgrain requirements by purchases in the market, so that the benefit of high foodgrain prices would go mainly to the large farmers.