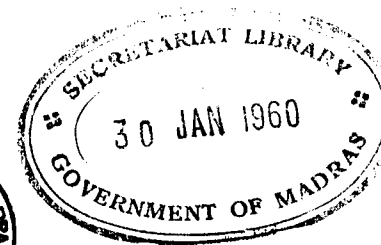
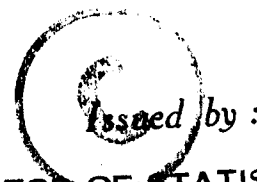


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REPORT ON THE SURVEY OF THE
HANDLOOM INDUSTRY
IN MADRAS STATE
1954



THE DIRECTOR OF STATISTICS, MADRAS.



GOVERNMENT OF MADRAS
1959

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P R E F A C E

In contrast to the fortunes of most of the industries, the handloom industry in Madras suffered adversely by the conditions which came in the wake of the Second World War. The impetus which it received in common with other industries due to the great demand for commodities during the years of war died down rapidly, and an acute depression overtook it. By 1952 a large number of workers were thrown out of employment and finding themselves in great distress, they began hunger marches. Government had to take speedy measures to relieve their distress. The All India Handloom Board was reconstituted in 1952 and entrusted with the task of relieving the distress of the handloom weavers. The Board found that the progress of the formulation of schemes for the resuscitation of the industry was impeded due to the lack of sufficient data relating to the handloom industry. At the instance of this Board, the Government of Madras undertook to collect essential statistics relating to the handloom industry in the Madras State. Accordingly sanction was accorded in G. O. Ms. No. 2737, Department of Industries, Labour and Co-operation dated 4th October 1954 for a scheme for the conduct of a survey by the Director of Statistics. The Board required information in respect of fortyone questions framed by it. A copy of the G. O. and the questions of the All India Handloom Board are given in Appendix I. The answers to the questions are furnished separately to fulfil the terms of reference. This opportunity of conducting a survey was availed of to write a connected narrative account of all the important aspects of the Handloom Industry in this State. The report relates to the Madras State as it was constituted at the time of the enquiry in 1954—'55.

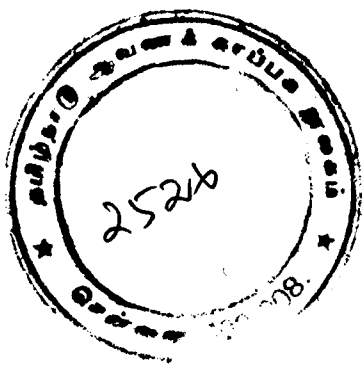
A staff of one Statistical Officer, one Office Superintendent, 9 Economic Investigators, 30 Supervisors and four Clerks was sanctioned for the work. Sri G. D. Nandagopal was appointed as the Statistical Officer for the Survey. He was assisted at Headquarters by three Economic Investigators viz., Sri P. V. Bhupalakrishnan, Kumari R. Sakuntala and Kumari N. Nagalakshmi and in the field work by six Economic Investigators viz., Sri M. Kothandaraman,

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Sri R. Krishnaswamy, Sri W. F. Thanaraj David, Sri P. K. Ramakrishna Nair, Sri D. Simon, Sri S. Jayaraman (for six months) besides 30 Supervisors. Sri M. Thirunavakarasu was the Office Superintendent assisted by 4 clerks viz., Sri C. C. Damodara Nambiar, Sri C. Umapathy Sri K. Ramachandan and Sri P. E. Gopalakrishnan.

Madras,
Dated 29th April 1957 }

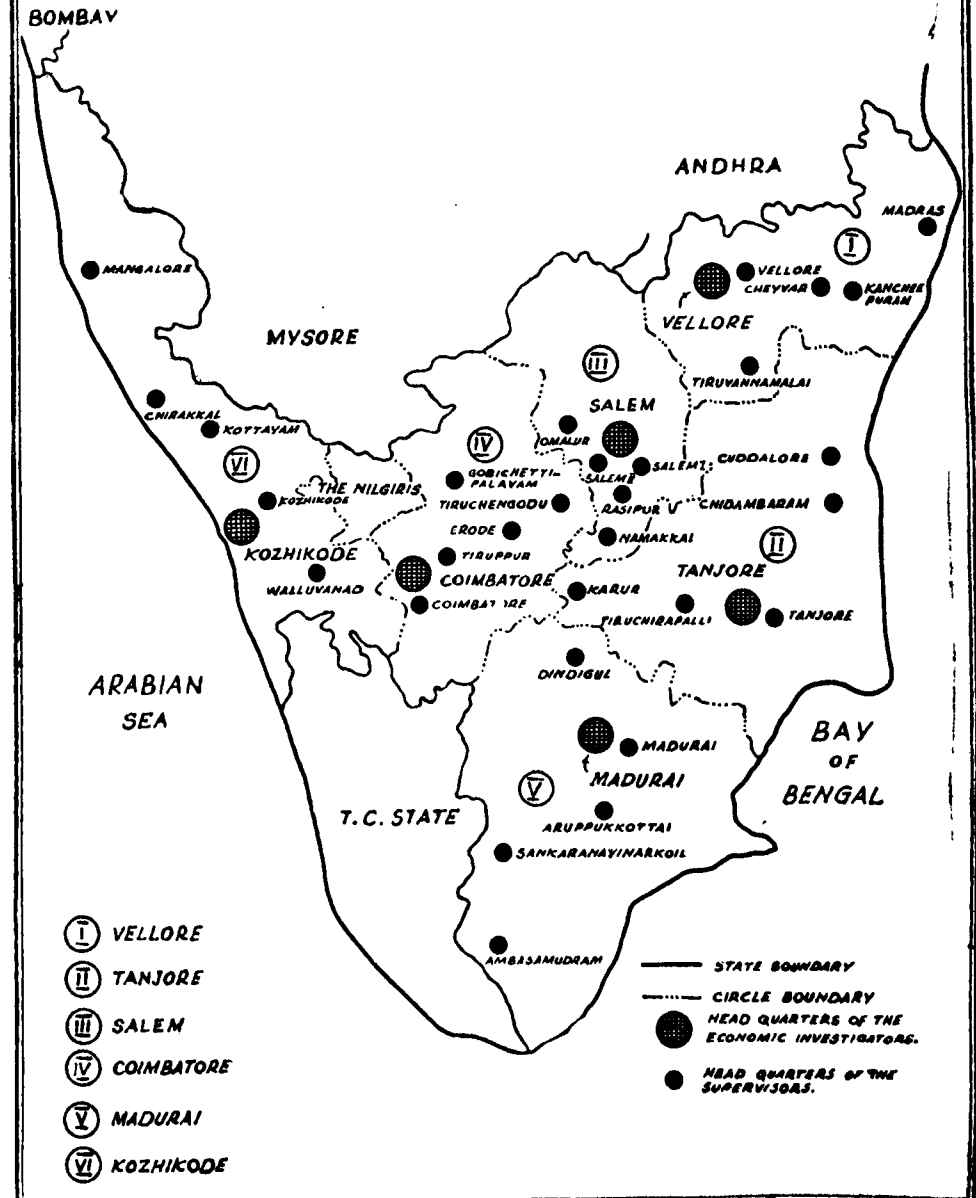
(Sd.) D. S. RAJABUSHANAM
Director of Statistics

REPORT ON THE SURVEY OF THE HANDLOOM INDUSTRY IN MADRAS STATE.

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SURVEY ON HANDLOOM INDUSTRY IN MADRAS STATE (1954)



CHAPTER—I.

The significance of the Handloom Industry in the Economy of Madras State :

1.0. Importance of the Industry in Madras :

The handloom industry holds a very high place in the economy of the Madras State. Madras is unique for its silk sarees like Koranadu, Conjeevaram and Kollegal sarees, Hand-kerchiefs, Lungies, Angavastrams and Dhoties. It provides livelihood for nearly two millions of persons and it ranks in importance in the economy of the State next only to Agriculture. Whatever happens to this industry, therefore becomes a vital concern of the Government.

1.1. History of the Industry :

The industry is ancient and has passed through many vicissitudes. Its modern history can be said to have begun when in 1640, a year after the Fort St. George was built by the East India Company, 400 families of weavers had immigrated to the village, then called Madras Patnam, north of the Fort. The Company encouraged the weavers. During the early years steps were taken to direct their labour to the manufacture of such cloth as was promising for export. Cotton cultivation was also encouraged to procure cheap raw materials for the Company's weaving establishments. When the Company assumed administrative functions, encouragement to the weavers continued for some time. The 'Moturpha,' a tax on weavers, was abolished. When the tax was reimposed for revenue reasons, the Company's weavers were exempted from it. Cultivation in weavers' lands was rent free. To direct and improve the industry, commercial residents were appointed in all districts. The other measures adopted to encourage the weavers were division of the windfall profits among them and supply of grain allowances during the periods of famine.

Then came another phase of the industry when, towards the end of the 17th Century, with the growth of British Cotton Textile Industry, the use of Indian Textiles declined in England either by complete prohibition or by the imposition of heavy import duties. British goods began to flood world markets. The reaction in Madras was the closure of the entire commercial establishment of the East India Company in 1835, causing great distress to the weavers. A large

number of weavers were forced to seek their livelihood in Agriculture or emigrated as coolies to Ceylon, Burma and Mauritius. During the second half of the 19th Century, there was a revival of the industry when high priced hand-spun yarn yielded place to cheap machine spun yarn and with the consequent reduction in prices, foreign markets for handloom fabrics once more expanded. Even so, the prosperity did not last long, as the price differential between handloom and mill clothes was adverse to handloom clothes. The powerlooms made inroads into the range of goods formerly produced by the handlooms. Once more there was a decline in the handloom industry.

1.2. The Great Depression :

The two World Wars in this Century gave brief spells of prosperity. At the close of the Second World War, the handloom industry was found to be really rallying, but it was short lived. During the years following the War, the indigenous mills began to cater to the domestic needs by producing bordered dhoties and coloured sarees, until then exclusively woven by handlooms. The price of handloom cloth was left aloft when compared with prices of mill cloth and purchases practically disappeared. At the same time the industry lost its foreign markets in Indonesia and other Far Eastern Countries. These factors led to the great depression of 1952 calling for urgent measures to resuscitate the weavers as they were on the verge of ruin.

1.3. Origin of the Survey :

When an occupation, next in importance only to Agriculture in Madras State was in the grip of this depression, it devolved on the All India Handloom Board to come to its aid. This Board found it essential to collect Statistics relating to the Handloom Industry in the Madras State. For formulating plans for the development of the Handloom Industry it required essential information relating to the number of looms, their type, the extent and structure of the industry, supply of raw materials, production of handloom cloth, types of handloom cloth produced, methods of marketing, supply of designs, cost of production and the preparatory and finishing processes. The present survey was conducted to obtain this essential information.

CHAPTER—II.

2.0. Plan of the Survey ;

To obtain essential information relating to the Handloom Industry, an economic survey was carried out.

The number of looms which had been registered in the records of the Textile Control Branch of the Collector's Offices was over 5 lakhs and even allowing for possible over enumeration it was too large to attempt a complete survey within a limited period of time and with limited staff. Resort was therefore had to sampling technique. The available list of looms already registered in the Textile Control Branch of the Collector's Offices with its limitations, formed the basis for selecting the sample. The survey was essentially a plan to estimate the correct number of looms and all details pertaining to them, taking as the basis, the already existing list of looms, but treating them at the same time, as one requiring correction.

2.1. The Sampling Technique :

The Survey was conducted on a 5 percent sample basis. A list of villages and towns with number of looms in each was prepared in this Office. The number of looms in each village or town varies from 1 to 25,532. A sample was selected on the principle of optimum allocation. The towns and villages in the list constituted the universe for the sampling. The villages and towns were grouped according to class intervals of looms, 1 to 100, 101 to 200, 201 to 300.....901 to 1,000 and above 1,000.

If 'T' denotes the total number of looms in the Universe then

$$T = \sum_i N_i \mu_i$$

for all the groups,

where μ_i is the average number of looms in the villages in group i, consisting of N_i villages. The sampling technique aimed at securing an unbiased estimate of μ_i . $\bar{x}_i$ is the unbiased sample estimate of μ_i where

$$\mu_i = \frac{1}{N_i} \sum_j x_{ij}$$

for all N_i villages in class i and

$$\bar{x}_i = \frac{1}{n_i} \sum_j x_{ij}$$

for all the n_i sample villages in class i

x_{ij} being the number of looms in the j th village in the i th class. If $\bar{x}_i$ is an unbiased estimate of μ_i then,

$$\hat{T} = N_1 \bar{x}_1 + N_2 \bar{x}_2 + \dots$$

for all villages of the sample, is the unbiased estimate of T the total number of looms. The sample was designed so that the sample error for the survey was the lowest for specified conditions in regard to the cost of the survey. According to the principle of optimum allocation,

$$\frac{n_i}{N_i} = \frac{\sigma_i}{K} \text{ and } \sigma_i^2 = \frac{1}{N_i} \sum_{j=1}^{N_i} (x_{ij} - \mu_i)^2$$

'K' will be required where a specified precision is aimed at, irrespective of the cost, but since here the cost has been fixed, 'K' was eliminated since it was

$$\frac{\sum_i N_i \sigma_i}{n}$$

Substituting this value for 'K', the sample n_i for class i was

$$n_i = \frac{n N_i \sigma_i}{\sum N_i \sigma_i}$$

The n_i villages from class i was selected systematically by starting at a random point in the list of villages and selecting villages at constant intervals.

2.2. Centres surveyed :

A total number of 178 villages and towns were selected from groups 1 to 10 on the principle described above. All the handlooms in each of the 178 villages thus selected, having less than 1,000 looms were enumerated. The survey was also conducted in 76 important centres which had more than 1,000 looms on a 5 percent sample basis. On the whole 38,381 looms in the State were surveyed.

In order to verify whether there were any looms in the villages which are shown as having no looms, a sample verification was conducted in 974 villages.

The distribution of the villages sampled is shown below :—

STATEMENT No. 1.

Group of looms.	Number of villages selected.	Percentage to total.
1.	2.	3.
1. 1—100	130	51.2
2. 101—200	16	6.3
3. 201—300	8	3.1
4. 301—400	9	3.5
5. 401—500	5	2.0
6. 501—600	6	2.4
7. 601—700	1	0.4
8. 701—800	1	0.4
9. 801—900	1	0.4
10. 901—1000	1	0.4
Over 1000	76	29.9
Total	254	100.0

The names of villages surveyed under the complete survey and 5 percent survey and the number of looms surveyed in them are given in Appendix II. The method adopted for estimating the number of looms in each district is shown in Appendix III. A map showing the centres where the survey was conducted is given in the frontispiece.

2.3. Schedules used :

Two schedules were drawn up to cover all the 41 questions on which the All India Handloom Board required particulars. The two schedules are shown in Appendix IV. Schedule I was used for collecting information on the individual weavers or establishments. Schedule II was designed for the purpose of collecting general particulars for the selected centre or the village as a whole.

CHAPTER—III.

Number of Handlooms.

3.0. Estimated number of handlooms in the State:

Working on the method described in the previous chapter, the total estimated number of looms in the Madras State in 1954 worked out as a result of the present survey is 5,21,598. Out of this, 4,79,292 looms or 91.9 percent are active looms and 42,306 looms or 8.1 percent of the total number of looms are idle looms consisting of 6.3 percent idle for the whole year and 1.8 percent idle for part of the year.

3.1. Types of looms :

The following statement shows the various types of looms in the State.

STATEMENT No. 2.

Types of loom in the State	Number of looms.	Percentage to the total.
1. Throw shuttle	27,622	5.3
2. Fly shuttle	4,93,806	94.6
3. Semi automatic	118	0.1
4. Others	52	—
	5,21,598	100.0

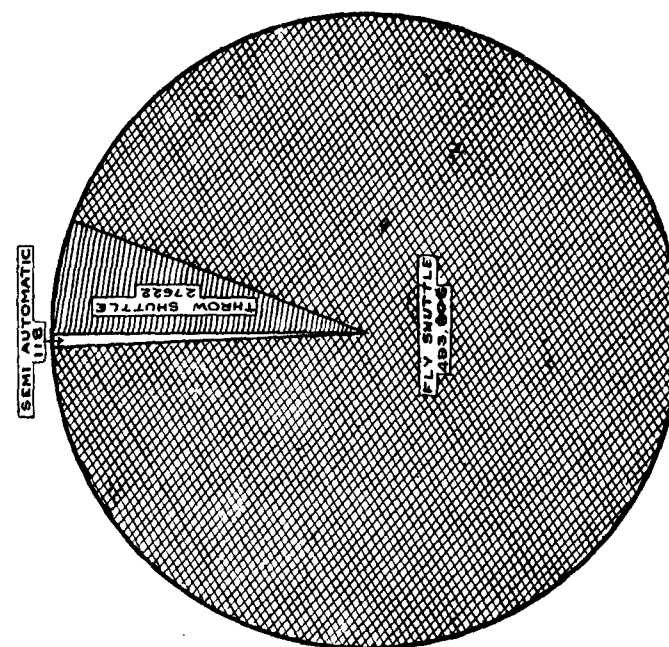
The 52 "Others" mentioned above are improved types of looms found in factory establishments. District-wise particulars regarding the above classifications are given in the Statement below :

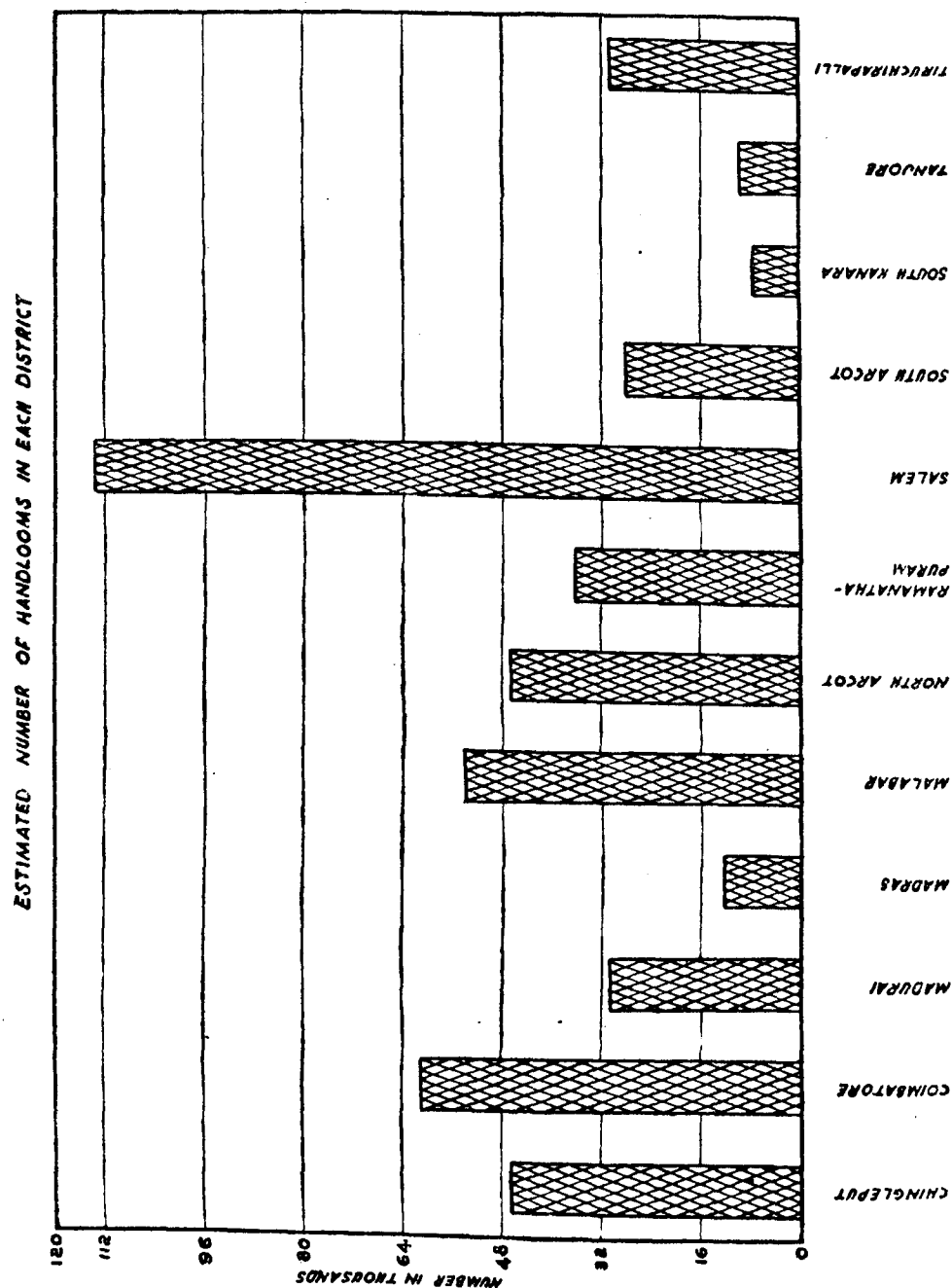
STATEMENT No. 3.

ESTIMATED NUMBER OF HANDLOOMS IN EACH DISTRICT ACCORDING TO VARIETY OF LOOMS (1954)

Sl. No.	Name of Districts.	Throw Shuttle.	Fly shuttle.	Semi automatic.	Other types.	Total number.	Percentage to total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Chingleput.	1,159	45,041	—	—	46,200	8.9
2.	Coimbatore.	4,530	56,306	—	—	60,836	11.6
3.	Madurai.	—	29,726	—	—	29,726	5.7
4.	Madras.	24	11,942	—	—	11,966	2.2
5.	Malabar.	3,763	49,172	118	15	53,068	10.1
6.	North Arcot.	6,196	39,711	—	—	45,907	8.8
7.	Ramanathapuram.	3,298	32,574	—	—	35,872	6.9
8.	Salem.	5,818	1,07,845	—	—	1,13,663	21.8
9.	South Arcot.	1,377	26,686	—	—	28,063	5.4
10.	South Kanara.	832	5,939	—	37	6,808	1.3
11.	Tanjore.	625	9,113	—	—	9,738	2.0
12.	Tiruchirapalli.	—	29,609	—	—	29,609	5.7
13.	Tirunelveli.	—	50,142	—	—	50,142	9.6
	Total.	27,622	4,93,806	118	52	5,21,598	100.0

ESTIMATED NUMBER OF HANDLOOMS ACCORDING TO VARIETY OF LOOMS IN THE MADRAS STATE





3.2. Looms classified according to yarn used :

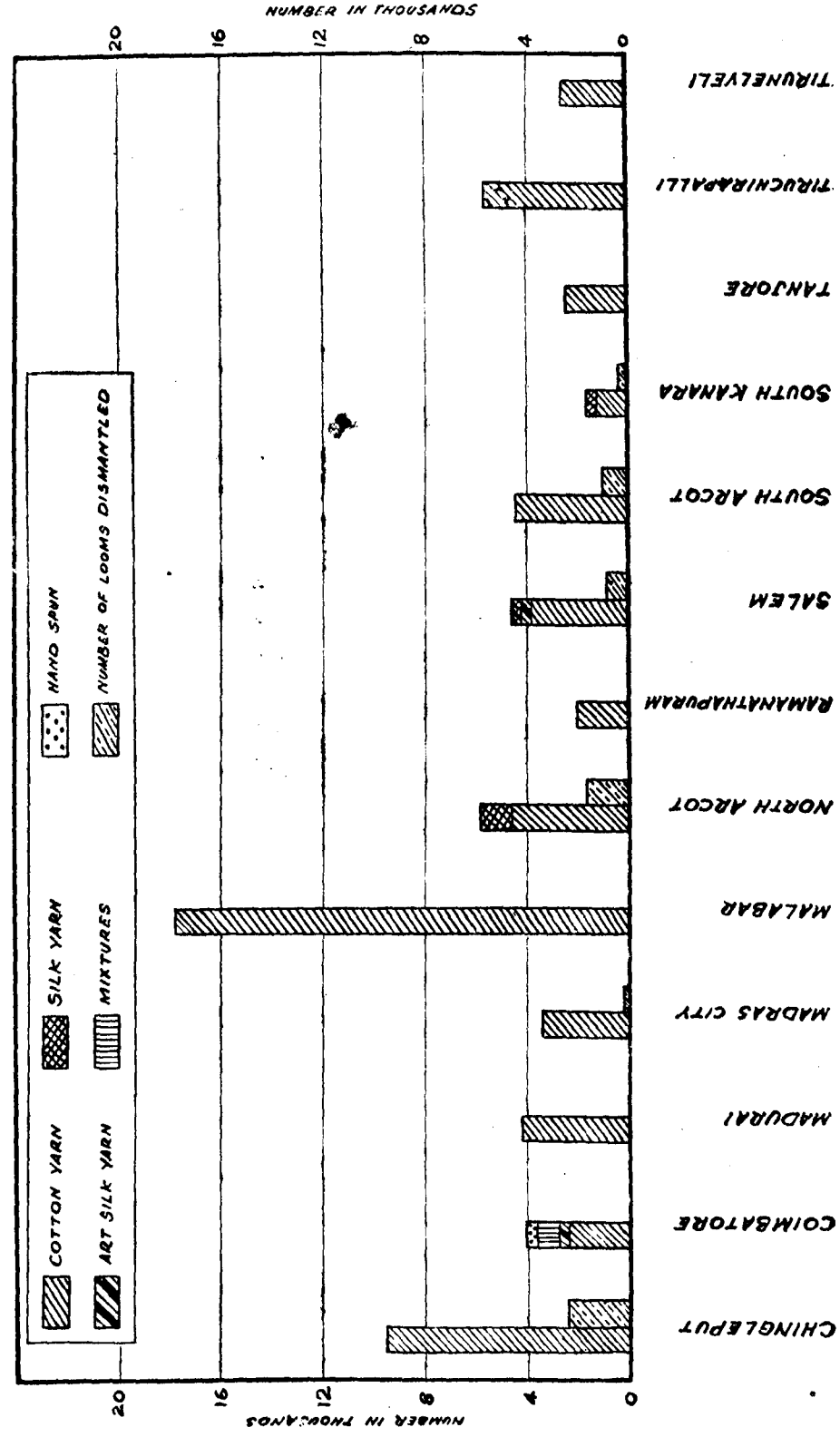
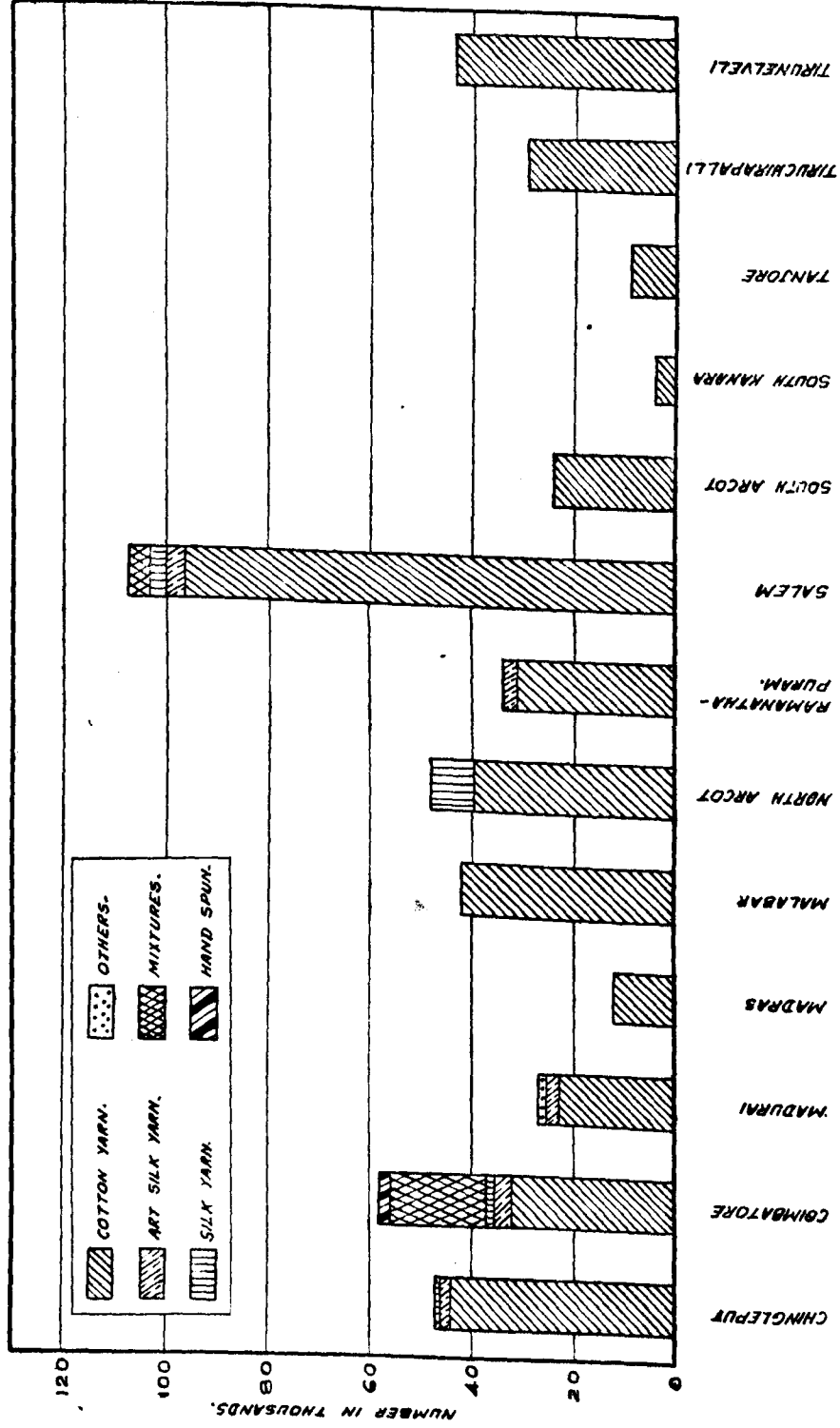
Looms could be classified according to the textiles in which they are engaged in weaving. Most of the looms in this State are used to weave cloth from cotton yarn. Next comes looms which weave cloth from mixtures of cotton and silk yarn and looms which weave cloth from Art Silk yarn come third in importance. Looms which weave cloth from silk yarn form only 2.3 percent of the total number of looms. The looms which weave cloth from handspun cotton yarn and other fibres form 0.6 percent of the total number of looms in the State.

The following statement shows the classification of looms in the State according to type of yarn used.

STATEMENT No. 4.

Looms engaged in weaving cloth from (1)	Number of looms in the State. (2)	Percentage to the total. (3)
1. Cotton yarn	4,64,365	89.0
2. Art Silk yarn	16,250	3.1
3. Silk yarn	12,224	2.3
4. Mixtures of any two yarns	26,291	5.0
5. Handspun cotton yarn	1,569	0.4
6. Jute and other fibres	899	0.2
7. Woollen yarn	—	—
	5,21,598	100.0

CLASSIFICATION OF ACTIVE LOOMS IN EACH DISTRICT ENGAGED IN WEAVING CLOTH DIFFERENT VARIETIES OF YARN



The classification of active looms, district-wise, engaged in weaving cloth from different varieties of yarn is shown in Statement below :

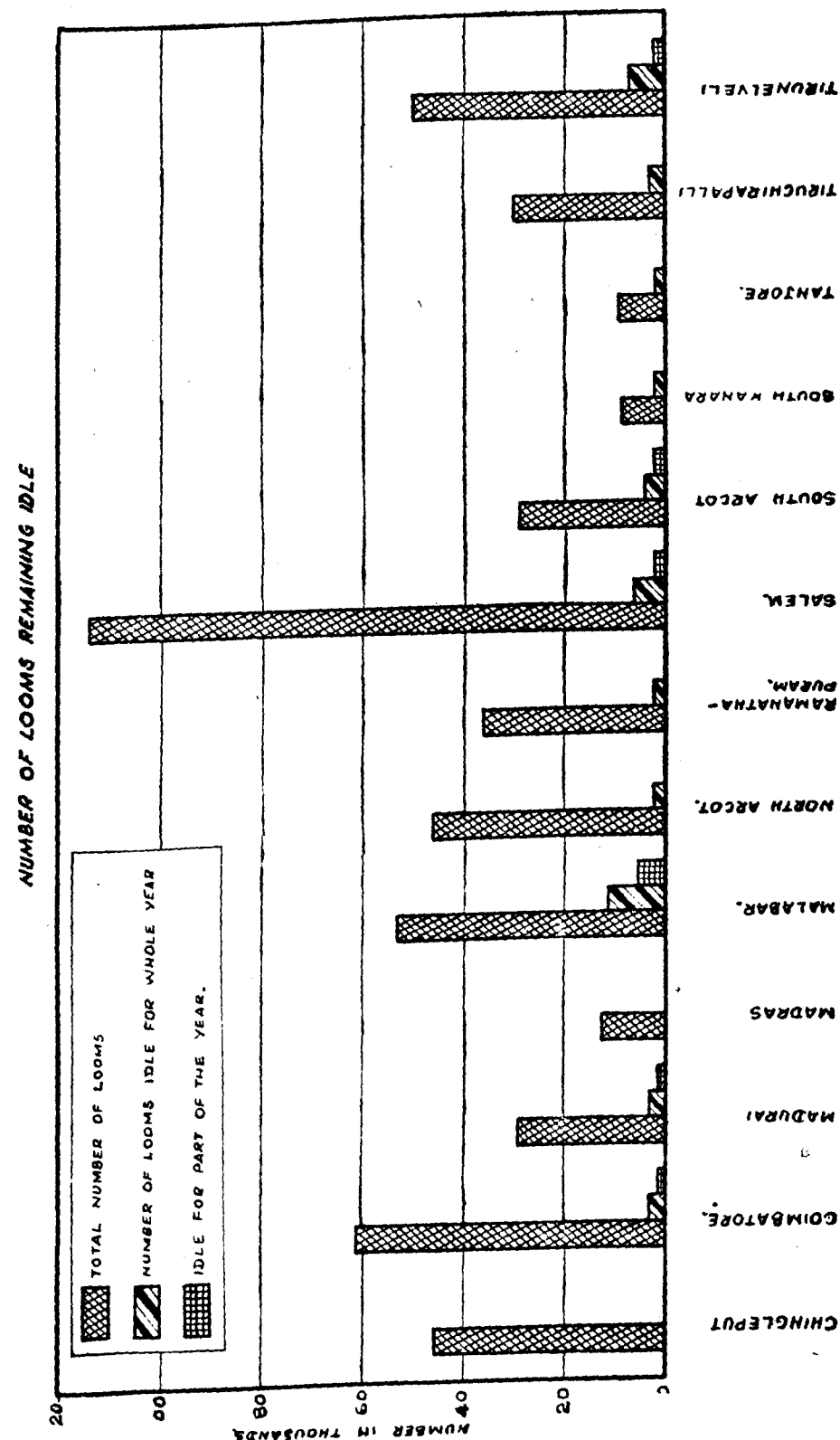
STATEMENT No. 5.

Classification of Active looms in each district engaged in weaving cloth from different varieties of yarn (1954)

Sl. No.	Name of Districts.	Cotton yarn.	Art Silk yarn.	Silk yarn.	Woollen yarn.	Jute yarn.	Yarn from other fibres.	Mixtures.	Handspun cotton yarn.	Total.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1.	Chingleput	44,746	25	1,159	...	...	...	...	...	45,930
2.	Coimbatore	32,678	3,311	716	...	...	...	19,763	1,331	57,799
3.	Madurai	23,100	2,460	...	...	...	899	...	...	26,459
4.	Madras	11,962	2	...	...	...	...	...	...	11,964
5.	Malabar	41,676	...	...	...	...	...	...	15	41,691
6.	North Arcot	35,696	...	8,388	...	...	...	...	...	44,084
7.	Ramanathapuram	31,133	3,034	...	...	...	...	285	...	34,452
8.	Salem	94,157	6,472	1,565	...	...	...	4,653	75	1,06,922
9.	South Arcot	23,904	...	...	...	...	...	...	...	23,904
10.	South Kanara	4,268	6	...	...	...	...	192	19	4,485
11.	Tanjore	9,095	...	120	...	...	...	...	...	9,215
12.	Tiruchirapalli	27,882	...	...	...	...	...	...	...	27,882
13.	Tirunelveli	44,487	...	...	...	...	...	...	18	44,505
Total:		4,24,784	15,310	11,948	...	...	899	24,893	1,458	4,79,292
Percentage to total number of looms in the State.		88.6	3.2	2.4	...	...	0.3	5.2	0.3	100.0

3.3. Active and idle looms :

The idle looms in the State may also be classified according to the textiles in which they were engaged in weaving. The following Statement gives particulars regarding the number of active looms and idle looms under each category and the number of looms added and dismantled since the year 1942.



STATEMENT No. 6.

Number of Looms added and dismantled.

Type of yarn used.	Number of active looms.	Percentage to the total.	Number of idle looms.	Percentage to the total.	Since 1942 number of looms.	
1.	2.	3.	4.	5.	Added.	Dismantled.
1. Cotton yarn	4,24,784	88.6	39,581	93.6	64,392	6,647
2. Art Silk yarn	15,310	3.2	940	2.2	696	...
3. Silk yarn	11,948	2.4	276	0.7	1,368	...
4. Mixtures of yarn	24,893	5.2	1,398	3.3	1,361	...
5. Handspun cotton yarn	1,458	0.3	111	0.2	137	...
6. Jute and other fibres	899	0.3	...	...	...	...
7. Woollen yarn	...	...	...	...	...	...
Total	4,79,292	100.0	42,306	100.0	67,954	6,647

Detailed particulars of the number of active and idle looms for each district are given below :

STATEMENT No. 7.

Number of looms remaining idle.

Sl. No.	Name of Districts.	Total number of looms.	No. of looms Idle	Idle for part of the year.
1.	Chingleput	46,200	270	...
2.	Coimbatore	60,836	3,037	323
3.	Madurai	29,726	3,267	424
4.	Madras	11,966	2	...
5.	Malabar	53,068	11,377	6,258
6.	North Arcot	45,907	1,823	107
7.	Ramanathapuram	35,872	1,420	100
8.	Salem	1,13,663	6,741	412
9.	South Arcot	28,063	4,159	241
10.	South Kanara	6,808	2,323	758
11.	Tanjore	9,738	523	142
12.	Tiruchirapalli	29,609	1,727	31
13.	Tirunelveli	50,142	5,637	777
TOTAL		5,21,598	42,306	9,573

3.4. Reasons for idleness of looms :

Among the idle looms 82 percent are idle for the whole year and 18 percent are idle for part of the year. All looms are however idle for sometime or other in the year. The main reason for the looms remaining idle is the irregular supply of yarn. Another reason is the

seasonal factor. During the rainy season weaving is rendered impossible as the preparatory processes which have to be performed in the open space cannot be performed. Apart from these the more common reason for the idleness of the looms in the State is the financial limitations of the weavers and want of incentive due to low income from the weaving industry. Inspite of all these obstacles in the development of the industry, 67,954 looms are found to have been added since the year 1942. The number of looms dismantled is very few being 6,647 when compared with the total number of looms in the State. Detailed particulars regarding number of looms added and dismantled in each district since the year 1942 are given in the Statement below.

STATEMENT No. 8

Number of looms added and dismantled according to varieties of yarn since 1942.

Sl. No.	Name of Districts.	Added								Total.	Number of looms weaving cloth from cotton yarn (dismantled.)
		Cotton yarn.	Art Silk yarn.	Silk yarn.	Woollen yarn.	Jute yarn.	Yarn from other fibres.	Mixtures.	Handspun cotton yarn.		
1	2	3	4	5	6	7	8	9	10	11	12
1.	Chingleput	9,427	...	...	...	...	...	...	...	9,427	2,465
2.	Coimbatore	2,271	291	...	...	...	...	1,231	137	3,930	...
3.	Madurai	4,206	...	...	...	...	...	...	...	4,206	...
4.	Madras	3,400	...	...	...	...	...	...	...	3,400	249
5.	Malabar	17,956	...	...	...	...	...	...	...	17,956	...
6.	North Arcot	4,641	...	1,210	...	...	...	...	...	5,851	1,419
7.	Ramanathapuram	1,979	...	...	...	...	...	...	...	1,979	...
8.	Salem	3,931	405	158	...	...	...	...	...	4,494	923
9.	South Arcot	4,370	...	...	...	...	...	...	...	4,370	1,145
10.	South Kanara	1,429	...	...	...	...	...	130	...	1,559	410
11.	Tanjore	2,362	...	...	...	...	...	...	...	2,362	...
12.	Tiruchirapalli	5,716	...	...	...	...	...	...	...	5,716	...
13.	Tirunelveli	2,704	...	...	...	...	...	...	...	2,704	36
Total:		64,392	696	1,368	...	...	...	1,361	137	67,954	6,647

3.5. Fly and Throw Shuttle Looms :

The bulk of the looms in the Madras State are Fly Shuttle looms and account for 94.6 percent of the total number of looms in the State. Throw Shuttle looms form only 5.3 percent of the total

number and the number of Semi-automatic and other improved types of looms are 0.1 percent of the total. Looms in pits have established themselves in certain areas owing to their comparatively lower cost and also because of the weavers belief that the propinquity of the warp to the ground helps to retain humidity. While the frame loom is estimated to cost about Rs. 100, the pit loom costs only half this amount. The dwelling place of the weaver, especially in the villages is more often a hut with a low roof. The pit looms easily fit in the central part of the hut where there is space to spread the warp yarn over the surface. The weaver finds no need to shift his loom and therefore fixes his loom in a pit. The loom fixed in a pit is thus commonly found among the weavers in this State. The pit-loom is however not ideal for the reason that dirt settles down in the pit and the warp laid out close to the ground is soiled quickly.

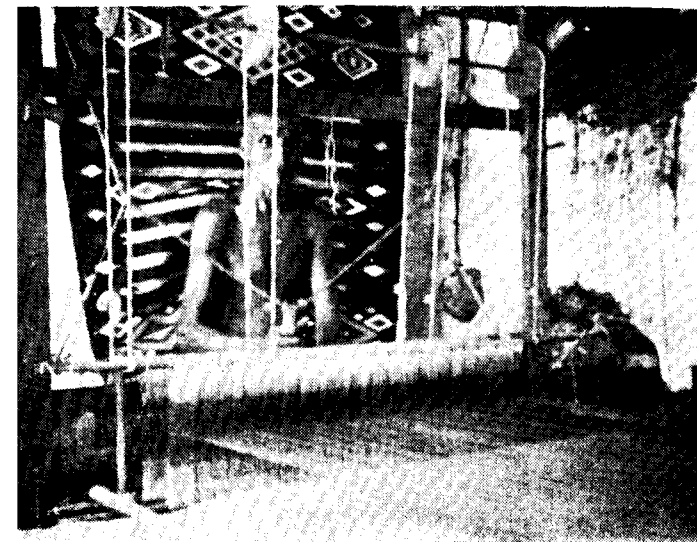
Both the throw shuttle and fly shuttle looms could be operated in a pit. The choice of the shuttle however depends on the type of fabric to be woven. Mixed weaving i.e. weaving with separate border is possible only with throw shuttle. Solid bordered cloth is produced on throw shuttle loom. In operation however, throw shuttle is slow compared to that of a fly shuttle resulting in a smaller out-put.

The fly shuttle could be worked with ease on both the pit loom and frame loom. The double movement both ways across the warp for one operation of the pulley accounts for greater speed in the production of cloth with a fly shuttle compared to the single movement across the warp possible with a throw shuttle.

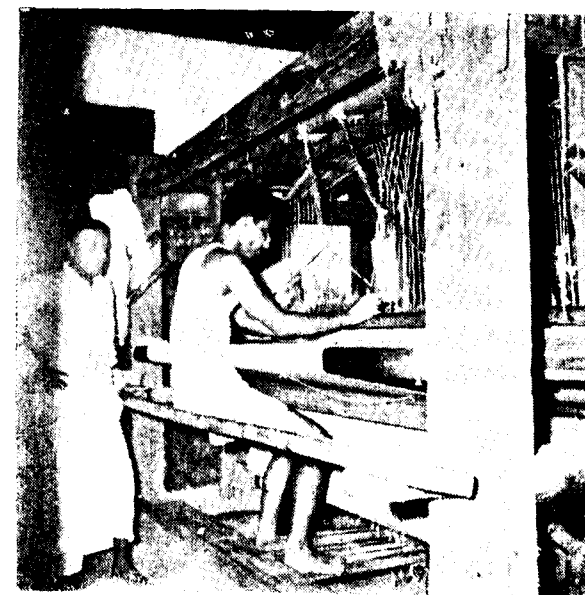
3.6. Semi-automatic looms :

While the take up and lot of motions in the throw shuttle and fly shuttle looms are hand operated, the operations are automatic in improved types of looms like the semi-automatic and automatic looms. The improved types of looms bring about some of the advantages of the powerloom. The throw shuttle and fly shuttle looms however could not be supplanted due mainly to economic reasons. The weaver of ordinary means could ill-afford the costly equipment of semi-automatic and automatic looms. Semi-automatic looms in the State are estimated at 118 and the other improved looms are 52. All the 118 semi-automatic looms are in Malabar District.

TYPE OF LOOMS

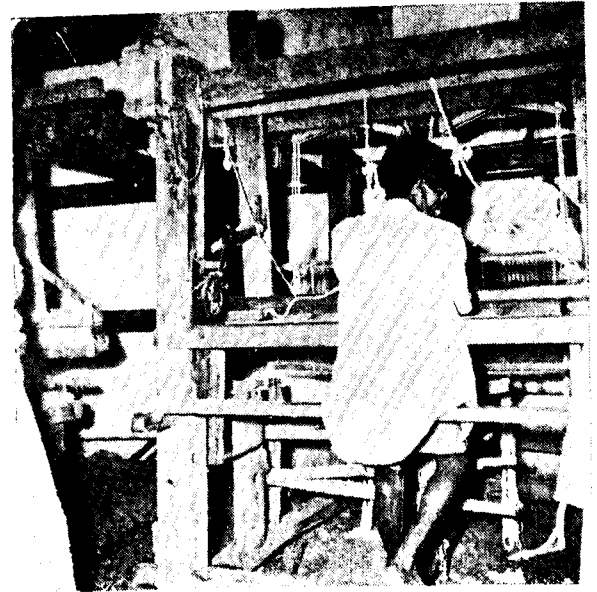


Pit-loom



Frame-loom

TYPE OF LOOMS



Semiautomatic-loom

37 looms of other improved types are in South Kanara District and 15 in the Malabar District. These improved types of looms are found in factory establishments.

The survey shows that 89 percent of the looms are engaged in weaving cloth from cotton yarn, 3.1 percent are engaged in weaving cloth from Art Silk yarn, 2.3 percent are engaged in weaving cloth from silk yarn, 5.0 percent are engaged in weaving cloth from mixtures of cotton and art-silk yarn, 0.4 weave cloth from hand-spun cotton yarn and 0.2 percent of the looms weave cloth from yarn from jute and other fibres.

3.7. Looms in the Districts :

From an analysis of the distribution of looms in each district it is found that 71 percent of the looms are in the districts of Salem, Coimbatore, Malabar, Tirunelveli, Chingleput and North Arcot. Almost all the looms in each district weave cotton cloth. Out of the 4,24,784 looms engaged in weaving cotton textiles in the State 94,157 looms or 22 percent are in Salem Dt., 44,487 looms or 11 percent in Tirunelveli district, 44,746 looms or 10 percent in Chingleput District, 41,676 looms or 10 percent in Malabar District and 32,678 looms or 8 percent in Coimbatore District. The estimated number of looms engaged in weaving silk cloth is 11,948 of which North Arcot accounts for 8,388 looms, Salem for 1,565 looms, Chingleput for 1,159 looms, Coimbatore for 716 looms and Tanjore for 120 looms. The important silk weaving centres are Arni in North Arcot district, Ponnampet in Salem district, Conjeevaram in Chingleput district, Kollegal in Coimbatore district and Koranadu in Tanjore district. There are 15,310 looms engaged in weaving cloth out of art silk yarn. Salem district has 6,472 looms engaged in weaving cloth from art silk yarn, Coimbatore district has 3,311 looms, Ramanathapuram district has 3,034 looms and Madurai district has 2,460 looms. Coimbatore district has 19,763 looms engaged in weaving cloth from mixture of cotton and art silk yarn out of the estimated State total of 24,893 looms engaged in the weaving of cloth from mixtures of yarn. Next in importance in weaving mixtures of yarn comes Salem district with 4,653 looms. There are 1,458 looms in the State engaged in the weaving of cloth from handspun yarn out of which Coimbatore district alone accounts for 1,331 looms. The important centre for weaving cloth from handspun cotton yarn is Tiruppur.

CHAPTER IV.

The Handloom Weavers in the Madras State,

4.0. Weaving a caste specialization :

In the Madras State the handloom industry was mainly a caste specialization, carried on by a community of weavers. The caste specialization broke down considerably with the advent of cheap mill made goods. Many of the traditional weavers could not withstand the powerful competition of the mills and had therefore to resort to other occupations such as trade or agriculture for their livelihood. The more prosperous among the weavers also left their traditional occupations as they were able to find employment in certain professions, by virtue of their educational qualifications. The result was that a number of weaving castes had left their traditional occupation during the first half of the 20th century. However, in certain centres such as Madras, where the handloom weaving was on a sound economic footing, there was a rush of new persons entering this occupation. With the expansion of markets within India and outside during and after the World Wars, the migration of weavers to towns is marked. Such a drift is mainly due to the fact that there was steady employment in these centres which had established contacts with distant foreign markets.

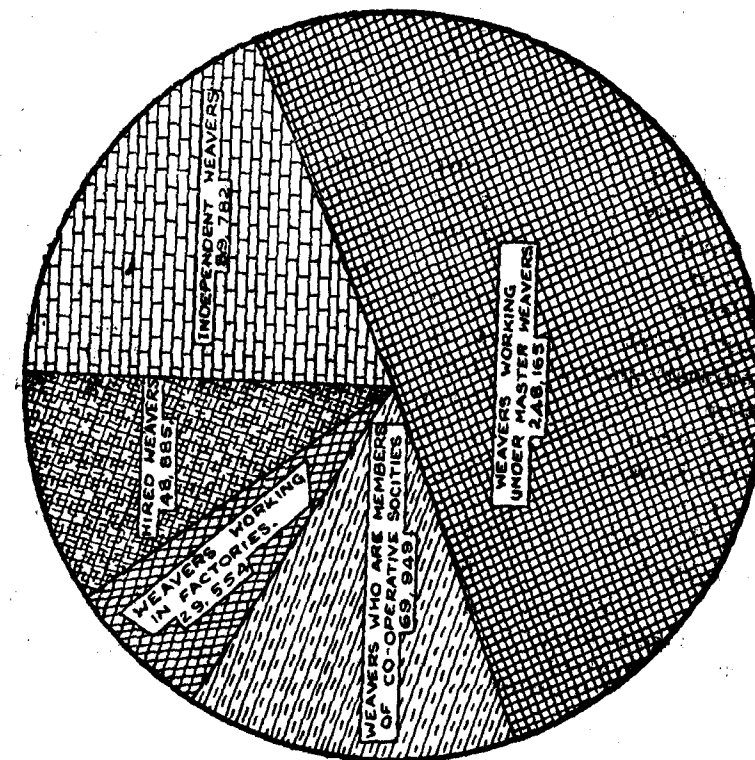
4.1. Classification of Weavers :

The handloom weavers in the State could be classified into five categories. The Statement below gives the distribution of the number of weavers under each category in the State.

STATEMENT No. 9
Classification of Weavers.

Classification. (1)	Number of weavers. (2)	Percentage to total. (3)
1. Weavers working independently	89,782	18.46
2. Weavers working under master weavers or Mahajans	2,48,165	51.03
3. Weavers working under Co-operative Societies	69,949	14.38
4. Weavers working in factories	29,554	6.08
5. Hired weavers	48,885	10.05
TOTAL	4,86,335	100.00

NUMBER OF WEAVERS ACCORDING TO DIFFERENT CATEGORIES IN MADRAS STATE



Detailed district-wise particulars regarding different classes of weavers are given in the Statement below :

STATEMENT No. 10

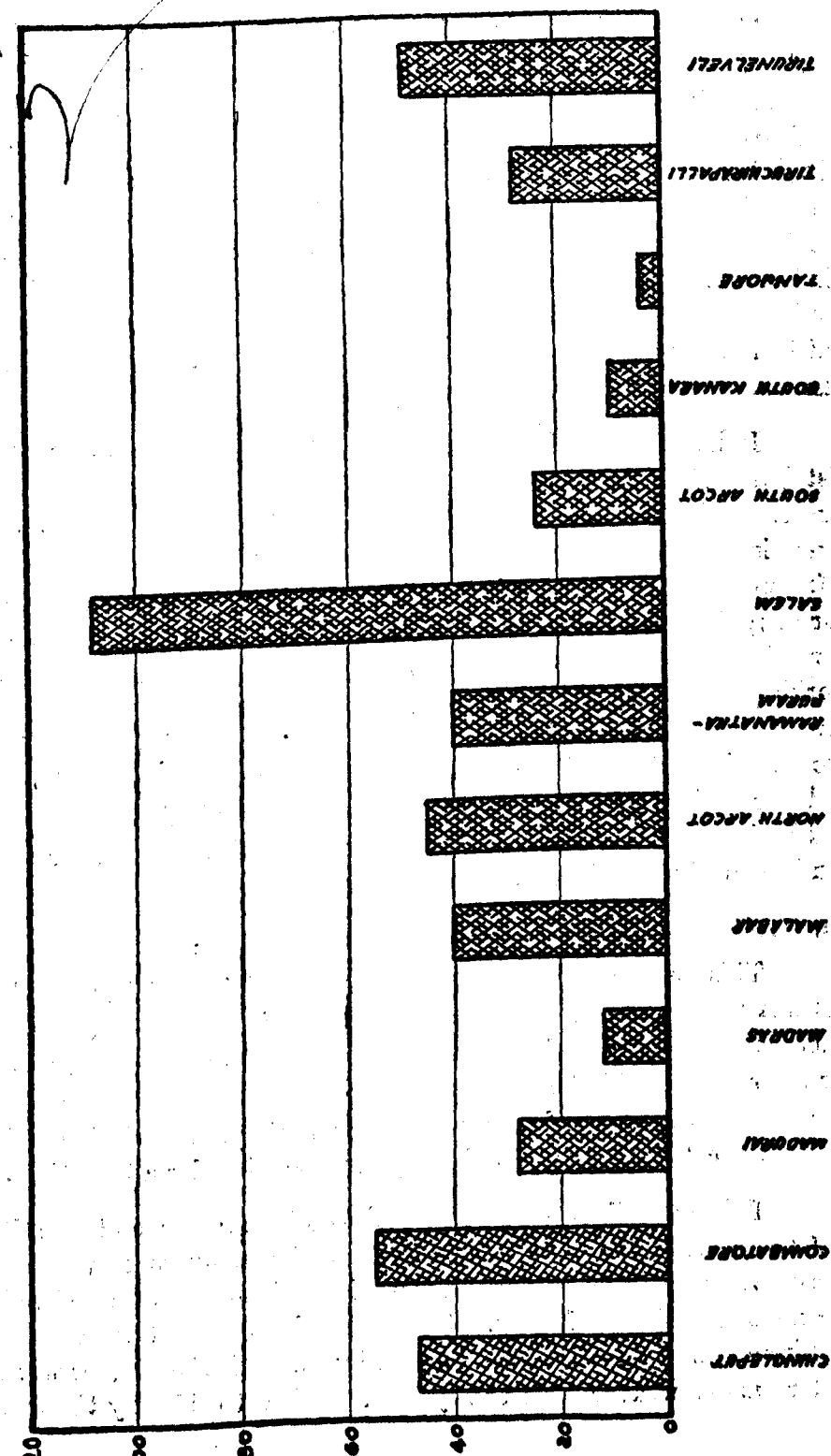
Number of weavers in each District according to different categories.

Sl. No.	Name of Districts.	Independent weavers.	Weavers working under Master weavers.	Weavers who are members of Co-operative Societies.	Weavers working in Factories.	Hired weavers.	Total.
1.	2.	3.	4.	5.	6.	7.	8.
1.	Chingleput	7,594	24,899	1,360	...	12,107	45,960
2.	Coimbatore	7,936	32,116	7,414	2,183	5,246	54,895
3.	Madurai	4,990	10,205	8,700	3,138	...	27,033
4.	Madras	...	4,300	857	...	7,019	12,176
5.	Malabar	22,051	...	7,394	11,297	...	40,742
6.	North Arcot	4,721	37,915	660	...	1,036	44,332
7.	Ramanathapuram	4,501	21,993	10,225	2,250	...	38,969
8.	Salem	23,174	53,219	20,951	2,446	8,426	1,08,216
9.	South Arcot	2,788	10,227	2,724	...	8,344	24,083
10.	South Kanara	1,578	...	528	584	1,677	4,367
11.	Tanjore	2,819	2,021	1,469	...	3,099	9,408
12.	Tiruchirappalli	1,815	13,393	4,203	7,656	1,225	28,292
13.	Tirunelveli	5,815	37,877	3,464	...	706	47,862
Total :		89,782	2,48,165	69,949	29,554	48,885	4,86,335
Percentage to total number of weavers.		18.46	51.03	14.38	6.08	10.05	100.00

4.8. Independent Weavers :

There are 89,782 independent weavers constituting 18.46 percent of the total number of weavers in the State. This class of independent weavers which was predominant during the early days of the industry when production was for the local market has been progressively diminishing in number due to the operation of various economic forces. The independent weaver owns his loom and works in his own home in the village. He is assisted in the preparatory processes by the members of his family. In rare cases he is found to employ paid assistants. He buys the yarn and other raw materials out of his own resources and sells the finished product in the local market. His earnings represent the return for his labour as well as on the capital invested.

ESTIMATED NUMBER OF WEAVERS IN EACH DISTRICT IN THE MADRAS STATE



The economic position of this class of weavers is theoretically ideal. He is independent of the middlemen. The market for his product is free. However his position in practice is not satisfactory as his earnings are meagre and not in proportion to the amount of labour involved, the period of employment is irregular and uncertain, fluctuations in the price of yarn and cloth are too much for his slender means and the demand for his product is extremely unsteady. He has no staying power and is therefore compelled to part with his products more often for uneconomic price. He has to convert the finished products into cash each day to buy the requirements for sustenance of himself and his family.

Independent weaver is found mainly in Salem and Malabar districts. They are a common sight hawking their products in the street. This class of weavers is fast disappearing in the other areas. Even in the areas where they exist as independent weavers not infrequently they are in effect under an obligation to the creditor or yarn supplier who helps them to get the yarn on credit. The line of demarcation between this class of independent weavers and weavers working under the master weavers is in many cases not distinct and often fades into insignificance. Forced by pressure of economic forces such as high prices of necessities of life and raw materials like yarn and uncertain markets, the independent weaver is fast disappearing and he is not likely to hold his own under the present economic conditions of the industry.

4.3. Weavers working under Master Weavers or Mahajans :

This system obtains due to the lack of financial strength for the weaver to undertake the responsibility of production and risk of fluctuations in prices, their indebtedness which obliges them to work for the creditors till the debt is liquidated, no access to the consumer due to the distance of the market and the seasonal demand for product necessitating the locking up of the capital for a long time.

This class of weavers are 2,48,165 in number and constitute 51.03 percent of the total population of the weavers in the State. They have their own looms and work in their own homes assisted by the members of their family. Unlike the independent weaver whose requirements of yarn is to be bought by himself, the weaver working under master weaver gets the yarn supplied to him by the master

weaver. He converts the yarn into cloth according to the specifications given by the master weaver and returns the finished product to the master weaver. He gets an advance wage at the time of receiving the yarn for the purposes of buying the raw materials for preparing the warp. When the finished product is returned to the master weaver he gets his wages on the turnover after adjusting wholly or partly the advance received by him. Most workers under this system are those who are indebted. The master weaver is in some cases merely a money lender or a cloth dealer. In certain other cases he is himself engaged in weaving.

The reasons why more than half the number of weavers in this State belong to this category are not far to seek. The weaver is assured regular supply of yarn; he gets periodical advances of cash to meet urgent domestic requirements. He is relieved of the problem of marketing and he could expect a normal income by way of wages. The greatest defect under this arrangement is the exploitation of the weavers as they are not in direct touch with the cloth market and the perpetuation of their indebtedness and reversion to the position of a wage earner getting only a subsistence wage.

4.4. Weavers working under Co-operative Societies :

The system under which the weavers are member of weavers' Co-operative Production and Sale Societies is of recent origin. The weaver enrolls himself as a member of the society on payment of membership fee and share capital. In this arrangement, the weavers retain their independence in so far as they are the owners of the looms and work in their own homes assisted by members of their families. The supply of yarn is made by the society. The weaver produces cloth according to the specification given by the society and returns the finished product to the society. They are paid wages calculated at prescribed rates on the turnover. In addition to wages, the weaver also gets a share of the profits of the society. In spite of these advantages, the progress of membership of weavers Co-operative Production and Sale Societies has been rather slow. Weavers who are members of Co-operative Societies are 69,049 or 14.38 percent of the total weaver population in the State.

Particulars of the district-wise distribution of the total number of weavers in the district, number of weavers who are members of societies and the number of societies are shown below :

STATEMENT No. 11

Statement showing the district-wise distribution of weavers Co-operative Societies and number of weavers working under them as on 31st December 1954.

Sl. No.	District.	Total Number of Weavers.	Weavers who are members of co-operative Societies.	Percentage to total.	Number of Societies.
(1)	(2)	(3)	(4)	(5)	
1.	Chingleput	45,960	1,360	2.96	57
2.	Coimbatore	54,895	7,414	13.51	110
3.	Madurai	27,033	8,700	32.18	70
4.	Madras	12,176	857	7.04	98
5.	Malabar	40,742	7,394	18.15	51
6.	North Arcot	44,332	660	1.49	81
7.	Ramanathapuram	38,969	10,225	26.24	62
8.	Salem	1,08,216	20,951	19.36	100
9.	South Arcot	24,083	2,724	11.31	59
10.	South Kanara	4,367	528	12.09	20
11.	Tanjore	9,408	1,469	15.61	43
12.	Tiruchirappalli	28,292	4,203	14.86	60
13.	Tirunelveli	47,862	3,464	7.24	84
	Total	4,86,335	69,949	14.38	895
Total number of looms under the Co-operative fold—1,17,458.					

It is seen that the percentage of weavers who are members of Co-operative Societies is highest in Madurai district where 32.18 percent of the weavers are members of Weavers Co-operative Societies. Ramanathapuram district stands next in importance where 26.24 percent of the weavers in the district are members of Co-operative Societies. Membership is least in North Arcot where only 1.49 percent of the weavers work under Co-operative Societies.

There is however no uniform organisation of the handloom weavers in the Madras State. The weavers who are members of Co-operative Societies are also found to work under orders of the Master weaver or yarn suppliers. With the decline in markets, lack of

finance and high cost of living, the independent weaver is steadily losing ground. He has, in most cases, reverted to the status of a subordinate to a retailer who supplies yarn to him on credit and takes back the finished fabric or cash on sale of the materials by the weaver himself. Being a person of ordinary means he is an easy victim to violent market fluctuations. He pays a high price for yarn, high rate of interest for the money borrowed and often times has to sell his finished product to the lender at the price fixed by the latter. In these circumstances the weavers are naturally becoming increasingly conscious of the benefits of Co-operation. The twin advantages of financial and marketing facilities are available to the weavers under Co-operative fold. The weaver is relieved of the problem of finding the finance for purchase of the yarn as well as, what to day is a more difficult problem, the problem of marketing. Under employment occasioned by scarcity of yarn in the years of restricted yarn supply is now the result of lack of financial facilities to ensure plentiful supply of yarn to keep the weaver fully engaged. Lack of finance and marketing facilities thus force the independent weaver to go to the master weaver for help, handicapped as he is by no satisfactory security to give to the Bank and Societies. Another circumstance when he is driven to have recourse to the master weaver is when there is heavy accumulation of stocks. These two are the inevitable handicaps of the independent and dependent weavers.

4.5. Industrial Co-operatives :

There are good prospects for the handloom industry if its organisation is on the basis of industrial co-operatives. Industrial co-operative will help the weaver not only to earn wages but also to share the profits and contribute to a reserve fund which will provide for further development. It will help to get workers selfemployed and lead a corporate life. It could serve as a model not only for handloom but also for other small scale industries. The weavers become the owners of looms and the institution will be a voluntary organisation of self-employed persons. It would tend to raise the wage level by improved production. The industrial Co-operatives are simple to set up and fulfil production requirements in a direct fashion without requiring large amounts of capital. Such an organisation, has the merit of combining some of the economies of large scale production, as well as ownership of the

looms and social activities of small scale organisations. Also there is the guarantee that funds provided by the Government will effectively help the weavers to achieve self-employment.

4.6. Weavers working in Factories :

The cottage workshop system is an arrangement under which the master weaver sets up the looms, buys the yarn gets the yarn warped and sized and employs weavers in his home and pays them wages on the basis of turnover. The weaver has no guarantee of employment and no regular hours of work. The fluctuations in the price of yarn and cloth, lack of finance, uncertainty of finding a market, production for distant markets involving locking up of capital for long and growing dependence on mill yarn brought about this system of weavers working under a master weaver in the latter's home on looms supplied by him. The cottage workshop system is the forerunner of the handloom factory. In the Handloom Factory all operations from winding to finishing and packing are done by the adoption of labour saving appliance such as hand-driven bobbin, winding machine, the warping mill, the beaming machine etc. There is division of labour. The workers have to work during specified hours and are paid piece wages. This class of weavers account for 29,554 or 6.08 percent of the total number of weavers in the State.

4.7. Hired Weavers :

This class of weavers do not own their looms but work under either independent weavers or weavers working under Co-operative Societies or weavers working under master weavers. These weavers account for 48,885 which is 10.5 percent of the total number of weavers in the State. The vast increase in the number of hired weavers is due to reasons such as severe competition of mill made cloth, loss of foreign and domestic markets, high price of yarn and inadequate supply of yarn and generally the adversity that overtook the industry.

4.8. Assistants to Weavers :

The weaver is assisted in the preparatory processes such as winding, sizing, warping and beaming normally by members of his own family. There are two classes of assistants, paid and un-paid. In a few cases only it has been noticed that these preparatory

processes are got done by the weaver with paid assistants. The women-folk, young and old alike, specialise in the winding process and assist the weaver in the preparatory processes such as winding, sizing, warping and beaming.

The estimated total number of paid and unpaid assistants working under the different types of weavers in the State is shown below :

STATEMENT No. 12

Assistants to Weavers.

Assistants under weavers.		Paid	Unpaid.
S. No.	(1)	(2)	(3)
1.	Working independently	15,679	60,145
2.	Working Under co-operative Societies	6,831	73,972
3.	Working under Mahajans or Master Weavers	22,974	2,09,498
4.	Working in factories	11,216	—
5.	Hired weavers	31	4,128
TOTAL		56,731	3,47,743

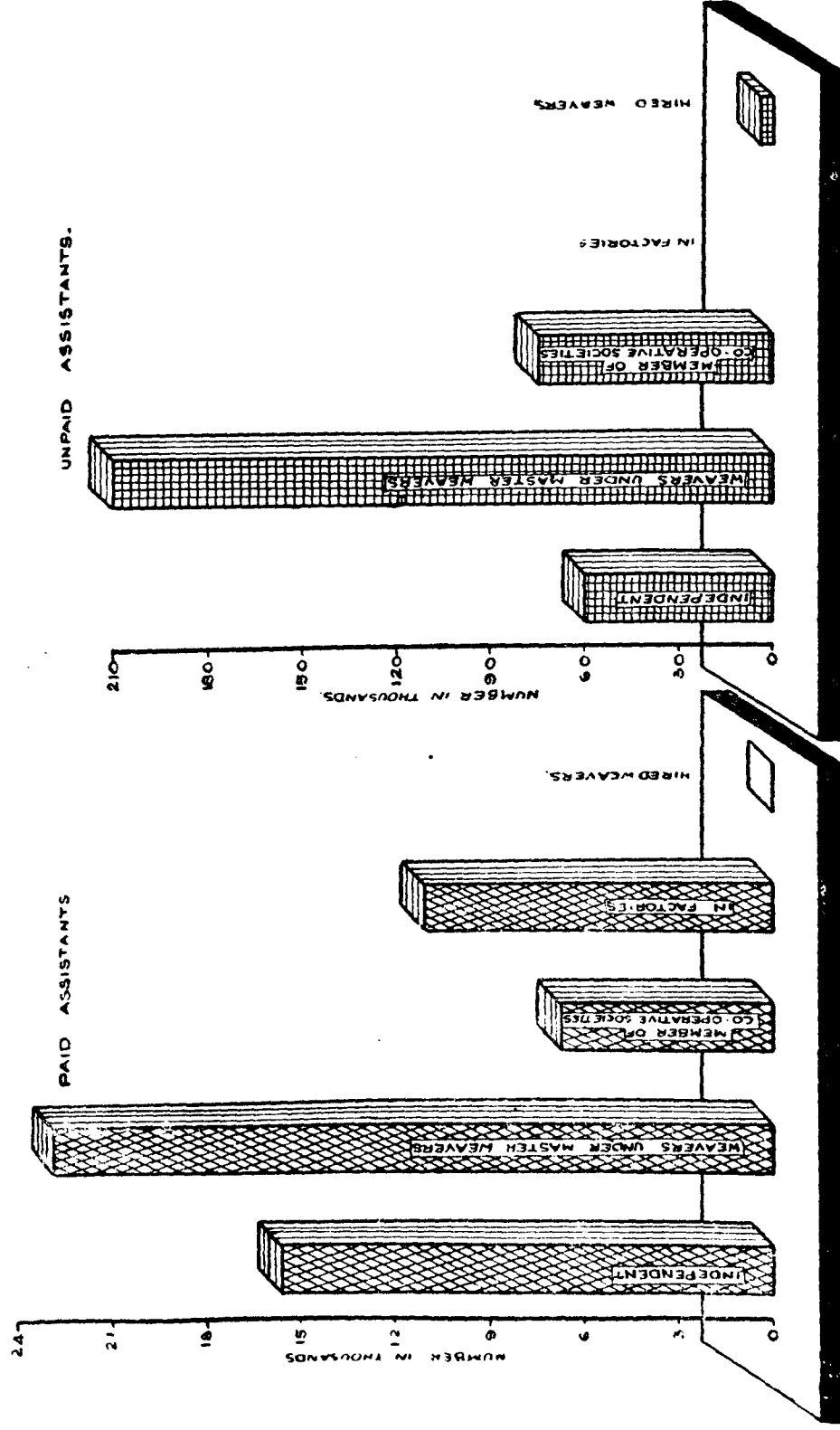
The paid and unpaid assistants are estimated to be 4,04,474. The estimated total population of weavers is 4,86,335. Roughly there is one assistant to each weaver. The number of assistants, paid and unpaid, for each weaver working independently is 0.84, for weavers working under co-operative societies it is 1.16, for each weaver working under Mahajans or Master weavers it is 0.94, for each weaver working in a factory it is 0.38 and for each hired weaver it is 0.08. Detailed district-wise particulars regarding number of paid and unpaid assistants are given in the statement below :

STATEMENT No. 13

Number of Assistant to weavers in each district according to different categories of weavers.

Sl. No.	Name of District.	PAID ASSISTANTS.					UNPAID ASSISTANTS.						
		Independent.	Weavers under Master weavers.	Number of co-operative societies.	In factories.	Hired weavers.	Total.	Independent.	Working under Master weavers.	In co-operative societies.	In factories.	Hired weavers.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Chingleput	1,350	913	324	...	...	2,587	9,204	20,852	962	...	...	31,01
2.	Coimbatore	1,510	4,413	1,648	966	...	8,537	8,166	30,708	9,303	...	3,113	51,290
3.	Madurai	730	119	475	1,459	...	2,783	2,598	7,002	3,359	...	...	12,959
4.	Madras	...	1,591	391	...	...	1,982	...	5,155	636	...	...	5,791
5.	Malabar	5,682	...	1,573	4,774	...	12,029	2,557	...	10,657	...	...	13,214
6.	North Arcot	100	8,051	84	...	...	8,235	4,639	35,170	924	...	...	40,733
7.	Ramanathapuram	399	731	442	1,185	...	2,757	1,761	10,498	5,605	...	...	17,864
8.	Salem	3,488	3,181	1,078	...	...	7,747	18,017	43,180	15,187	...	571	76,955
9.	South Arcot	100	60	...	...	...	160	4,377	20,396	7,498	...	...	32,271
10.	South Kanara	770	...	93	236	...	1,099	1,472	...	733	...	...	2,255
11.	Tanjore	571	160	147	...	...	878	4,107	3,170	2,000	...	371	9,648
12.	Tiruchirapalli	856	3,507	588	2,596	31	7,578	923	5,088	14,757	...	73	20,841
13.	Tirunelveli	123	248	18	...	...	389	2,324	28,279	2,351	...	...	32,954
Total		15,679	22,974	6,861	11,216	31	56,731	60,145	209,498	73,972	...	4,128	347,743

NUMBER OF ASSISTANTS TO WEAVERS ACCORDING TO DIFFERENT CATEGORIES OF WEAVERS IN THE MADRAS STATE



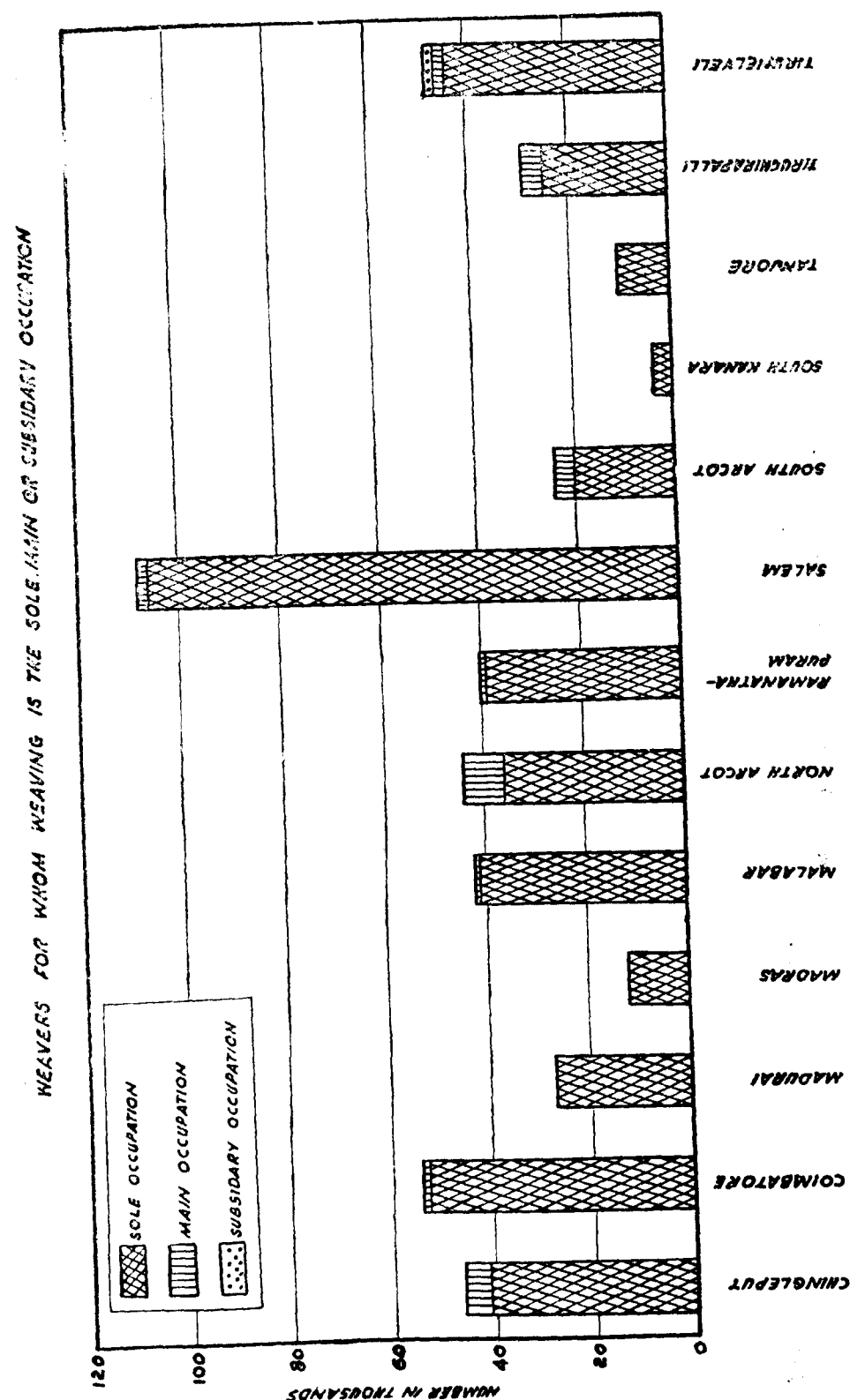
4.9. Weaving as sole, main or subsidiary occupation :

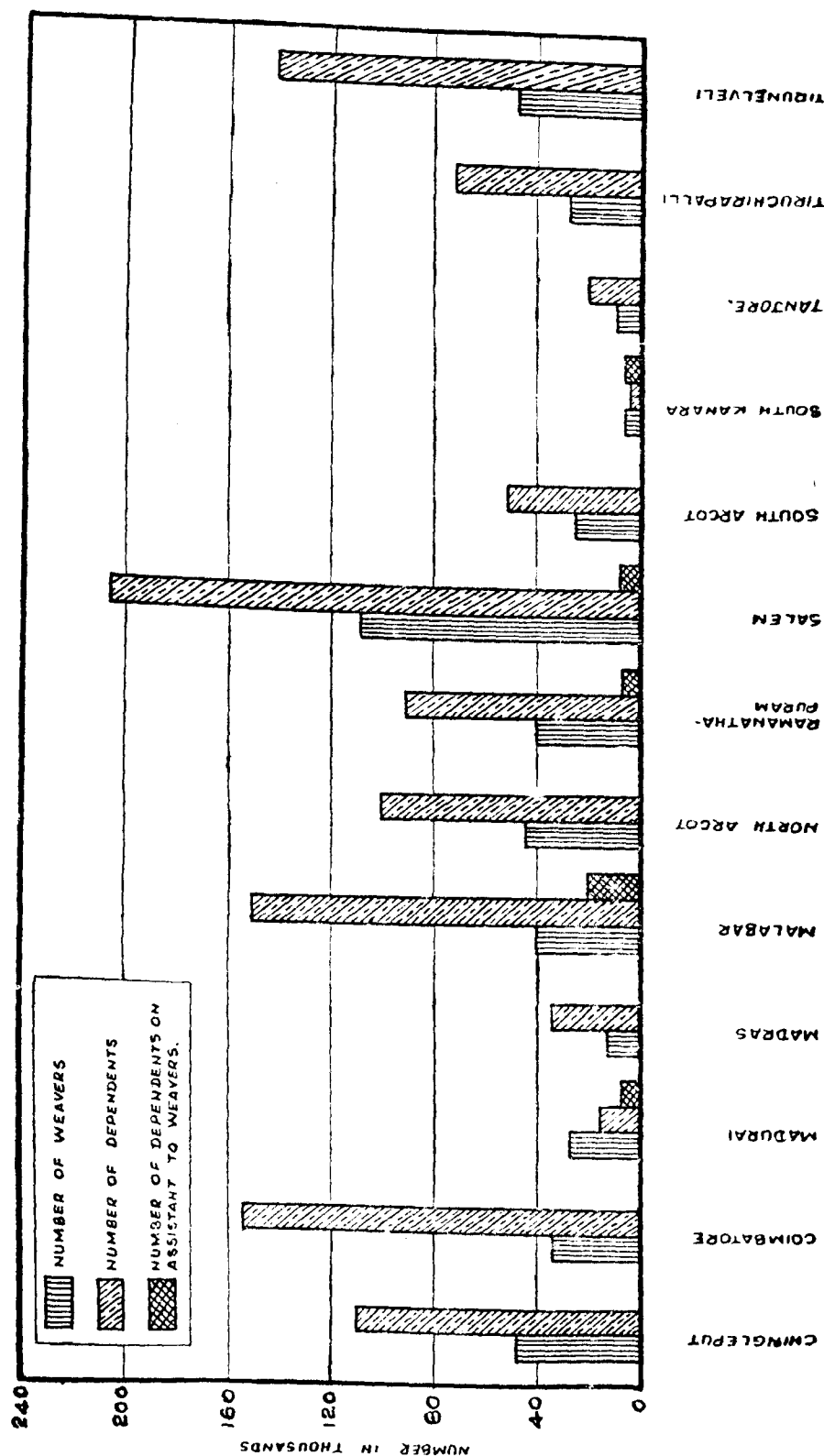
Considering the total number of looms in the State (521,598) and total number of weavers in the State (486,355), the average number of weavers per loom works out to 0.93 and the number of looms per weaver is 1.09. Weavers are also classified into three groups i.e. (1) Weavers solely occupied in weaving (2) mainly occupied in weaving and (3) those whom weaving is subsidiary occupation. There are 4,57,376 weavers or 94.05 percent solely occupied in weaving, 27,236 weavers or 5.60 percent have other occupations also and for 1,723 weavers or 0.35 percent weaving is a subsidiary occupation. The subsidiary occupations of weavers for whom weaving is the main occupation are Agriculture, Teaching, Cooly work, Knitting fishermen nets, Running small shops, Tea stalls etc. It is found that the primary occupations of weavers for whom weaving is a subsidiary occupation are agriculture, shop-keeping, teaching and clerical work. The district-wise statement of the number of weavers for whom weaving is also occupation, the main occupation and subsidiary occupation is given in the statement below :

STATEMENT No. 14

Weavers for whom weaving in the sole, main or subsidiary occupation.

Sl. No.	Name of District.	Number of weavers for whom weaving is			Total.
		Sole Occupation.	Main Occupation.	Subsidiary Occupation.	
1	2	3	4	5	6
1.	Chingleput	41,062	4,898	...	45,960
2.	Coimbatore	53,841	1,054	...	54,895
3.	Madurai	26,948	85	...	27,033
4.	Madras	12,176	...	...	12,176
5.	Malabar	39,992	662	88	40,742
6.	North Arcot	36,926	7,346	60	44,332
7.	Ramanathapuram	38,587	241	141	38,969
8.	Salem	106,524	1,692	...	108,216
9.	South Arcot	20,082	4,001	...	24,083
10.	South Kanara	4,230	137	...	4,367
11.	Tanjore	8,703	705	...	9,408
12.	Tiruchirapalli	24,117	4,154	21	28,292
13.	Tirunelveli	44,188	2,261	1,413	47,862
Total		457,376	27,236	1,723	486,335
(Percentage)		(94.0)	(5.6)	(0.4)	(100.0)





4.10. Addition to weaving population:

Since 1942, 9,557 persons have taken to the weaving profession because during the period of World War II and the years following it there was some increase in demand for handloom products due to diversion of mill production to meet the requirements of clothing of the army personnel. They were attracted by the increased profits of the independent weavers and the wages of the weavers working under Master weavers and Co-operative Societies.

4.11. Dependents on Weavers:

The total number of dependents on the weavers is estimated at 11,44,769 and those dependent on assistants to weavers at 40,086. The number of dependents on each weaver is 2.35 while the number of dependents on each paid assistant to the weaver is 0.71. Detailed districtwise particulars regarding number of dependents on weavers are given below:

STATEMENT No. 15

Number of dependents on weavers and on Assistants to weavers.

Sl. No.	Name of District.	Number of weavers.	Number of dependents.	Average number of dependents per weaver.	Percentage total.	Number of dependents on Assistants to weavers.
1	2	3	4	5	6	7
1.	Chingleput	45,960	1,11,894	2.4	9.8	...
2.	Coimbatore	54,895	1,53,905	2.1	13.3	...
3.	Madurai	27,033	15,755	0.6	1.4	7,823
4.	Madras	12,176	33,519	2.8	2.9	...
5.	Malabar	40,742	1,48,839	3.7	13.0	19,146
6.	North Arcot	44,332	1,01,886	2.3	8.9	...
7.	Ramanathapuram	38,969	88,663	2.3	7.7	5,505
8.	Salem	1,08,216	2,02,225	1.9	17.8	4,434
9.	South Arcot	24,083	49,792	2.1	4.3	...
10.	South Kanara	4,367	1,784	0.4	0.2	2,806
11.	Tanjore	9,408	21,556	2.3	1.9	...
12.	Tiruchirapalli	28,292	72,976	2.6	6.4	...
13.	Tirunelveli	47,862	1,41,975	3.0	12.4	372
STATE:		4,86,335	11,44,769	2.4	100.0	40,086

4.12. Weavers that left weaving:

The estimated number of weavers who had left the weaving industry since 1942 is 71,208. They left because of the difficulty in getting regular and necessary supplies of yarn and consequent lack of

steady employment, the unprofitable nature of the industry, lack of markets and financial difficulties. Detailed district-wise particulars of weavers who took to weaving and left weaving since 1942 are furnished in the statement below :

STATEMENT No. 16

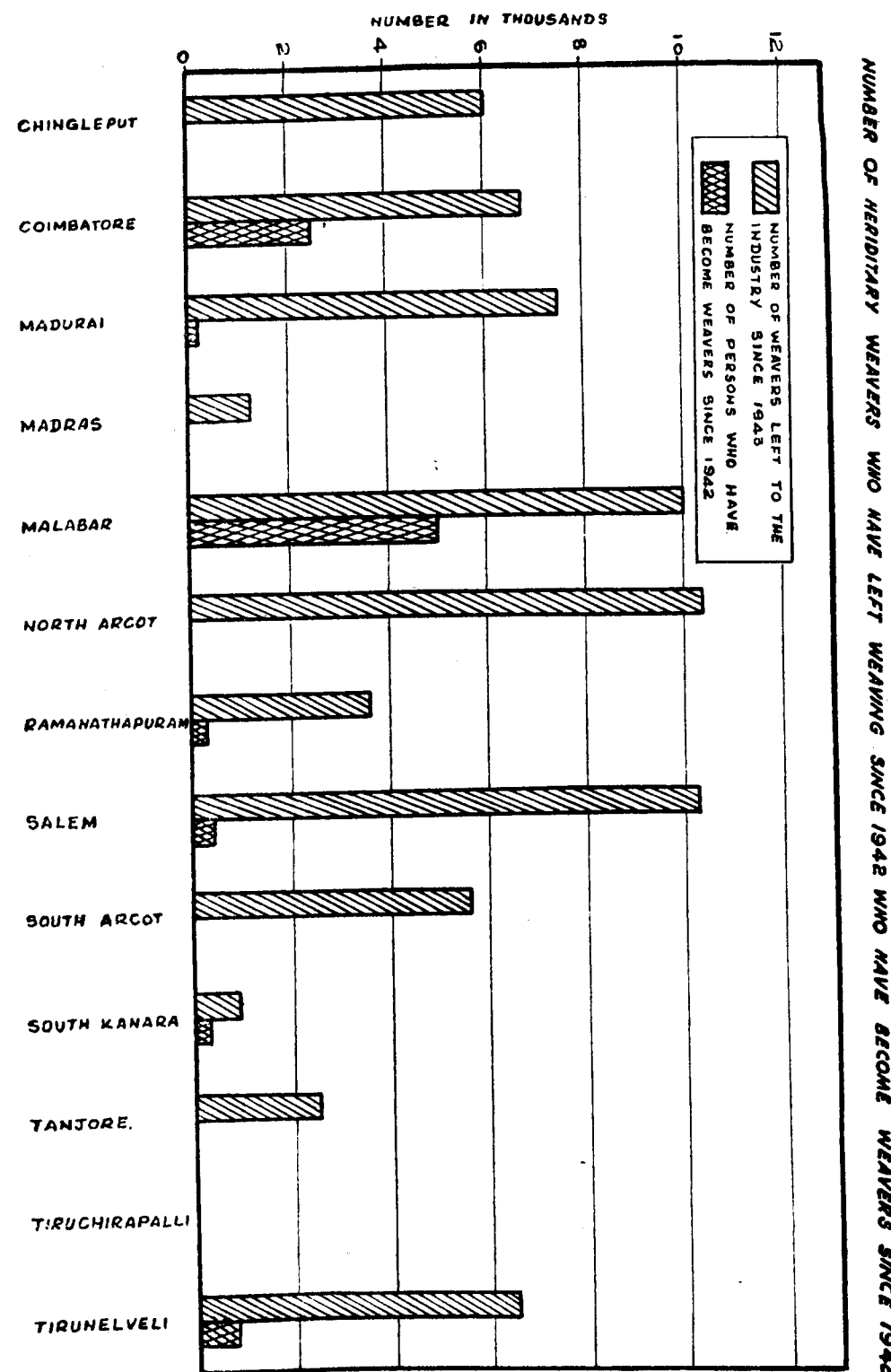
Number of hereditary weavers who have left weaving since 1942 and those who have become weavers since 1942.

Sl. No.	Name of District.	Number of weavers left the Industry since 1942.	Percentage to total.	Number of persons who have become weavers since 1942.
1	2	3	4	5
1.	Chingleput	5,963	8.3	...
2.	Coimbatore	6,891	9.8	2,611
3.	Madurai	7,494	10.5	136
4.	Madras	1,185	1.7	...
5.	Malabar	10,052	14.1	5,159
6.	North Arcot	10,325	14.5	...
7.	Ramanathapuram	3,618	5.1	164
8.	Salem	10,324	14.5	451
9.	South Arcot	5,543	7.8	...
10.	South Kanara	801	1.1	329
11.	Tanjore	2,516	3.5	...
12.	Tiruchirapalli	...	...	...
13.	Tirunelveli	6,496	9.1	707
Total		71,208	100.0	9,557

4.13. General :

Compared with the estimated population for Madras State in 1954 (37,301,000) the persons who are dependent on the industry for their livelihood according to the present survey is 2,075,654 or 5.6 percent of the total estimated population of the state.

The maximum number of weavers in the State work under Master Weavers. They form 51.03 percent of the total number of weavers. Weavers working in factories are very low. They form 6.08 percent. Independent weavers are more in Salem district (23,174) than in other districts; there are no independent weavers in Madras. Weavers working under Master Weavers are more in North Arcot district (37,915) while there are no such weavers in South Kanara and Malabar districts. Weavers working in Co-operative Societies are more in Salem district (20,951) whereas they



are low in South Kanara district. The maximum number of weavers working in factories is found in Malabar (11,297); there are no factory weavers in Chingleput, Madras, North Arcot, South Arcot, Tanjore and Tirunelveli. Hired weavers are more in Salem district (8,426) than in other districts. There are no hired weavers in Madurai, Malabar and Ramanathapuram districts. There are no paid assistants to the hired weavers in the State except for a few persons in Tiruchirapalli district. Paid assistants are more to the weavers working under Master Weavers than for other classes of weavers. There are no unpaid assistants to hired weavers and factory weavers in the State and unpaid assistants are more to the weavers working under Master Weavers than for other classes of weavers. Dependents on weavers are greater in Salem district than in other districts, and the number of dependents on Assistants to weavers is 40,086 persons. Districtwise particulars regarding the average number of weavers per loom, and average number of weavers including dependents per loom are given below :

STATEMENT No. 17

Average Number of weavers and dependents per loom in each district.

Districts.	Estimated number of looms in the District.	Estimated number of weavers in the districts.	Number of weavers per loom.	Number of dependents or weavers.	Average number of weavers and dependent per loom.
(1)	(2)	(3)	(4)	(5)	(6)
Chingleput	46,200	45,960	0.99	111,884	3.41
Coimbatore	60,836	54,895	0.90	153,905	3.43
Madurai	29,726	27,033	0.91	15,755	1.44
Madras	11,966	12,176	1.02	33,519	3.82
Malabar	53,068	40,742	0.77	148,839	3.57
North Arcot	45,907	44,332	0.97	101,886	3.18
Ramanathapuram	55,872	38,969	1.09	88,663	2.28
Salem	113,663	108,216	0.95	202,225	2.73
South Arcot	28,063	24,083	0.86	49,792	2.64
Tanjore	9,738	9,408	0.97	21,556	3.18
South Kanara	6,808	4,367	0.64	1,784	0.90
Tiruchirapalli	29,609	28,292	0.95	72,976	3.42
Tirunelveli	50,142	47,862	0.95	141,975	3.79
STATE:	521,598	486,335	0.93	1,144,759	3.12

The average number of weavers per loom is highest in Ramanathapuram district which is the highest in the State while it is least in South Kanara.

CHAPTER V.

Cost of production of Handloom Fabrics and Net Earnings of Weavers :

A. Cost of production.

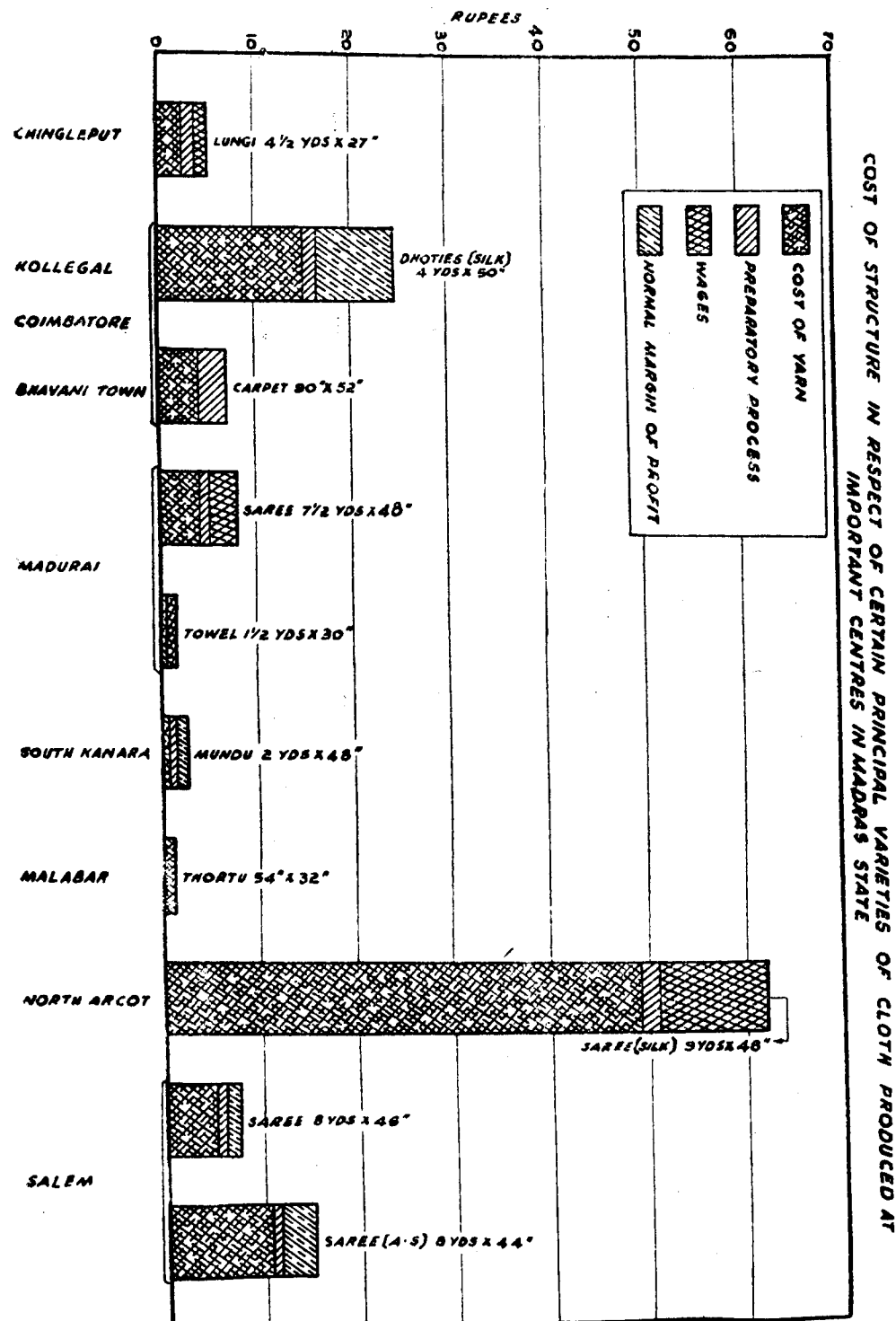
5.0. Weavers working for wages not concerned with cost structure :

The handloom industry presents a wide variety of systems. There are the independent weavers buying the yarn and other raw materials, weaving the fabric and selling the finished product and at the other end, the hired weavers and factory workers toiling for the daily wage. In between these extremes are the weavers who work under a co-operative society. By the nature of the organisation of production and marketing under the master weaver, Co-operative Society and the factory, it is obvious that the weaver under Co-operative Society is not at all concerned with the cost of production of the fabric or the component items of the cost structure, even as a worker in a factory is not concerned. The weaver gets his supply of yarn and hence he is not interested in the supply price of yarn. His interest is only in the remuneration he gets for his labour and the regular supply of yarn to keep him continuously employed. The independent weaver buys the yarn and is therefore in a position to give the exact price he pays for each unit of yarn that he gets. He generally gets dyed yarn. The cost of dyeing or bleaching the yarn does not therefore arise. In the case of weavers working under a Co-operative Society or under master weavers, an approximate idea of the cost of yarn per unit of fabric was furnished by them. The cost of production of handloom cloth varies from centre to centre even in respect of identical varieties for the reason, that there is no standardization of the quality of handloom materials and the fact that yarn prices are not uniform in all the centres. The cost of production of certain important varieties of handloom cloth produced by the independent weavers and in factories is given in the statement below :

STATEMENT No. 18.

Cost structure of principal varieties of fabrics produced.

Fabric.	Yarn.	Dyes.	Chemicals.	Preparatory processes.	Finishing processes.	Wages paid received.	Depreciation if any.	Normal margin.	Total Cost.	Selling price.	Remarks.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1. Coimbatore.											
1. Dhoti 20 s 50" 8 Yds.	4 3 0	...	...	0 5 0	...	...	0 1 0	0 12 0	4 9 0	5 5 0	I. W 1
2. Sarees 80 S 45" 5 Yds.	3 4 0	...	...	0 2 0	...	...	...	2 0 0	3 6 0	5 6 0	I. W 2
3. Turban Cloth 100 S silk & Zari Cotton Yarn	1 2 0	...	...	...	...	...	...	...	...	...	...
100" Yads silk yarn	1 2 0	...	...	...	...	...	...	...	...	...	...
Zari	6 0 0	...	...	...	...	...	...	...	...	...	...
	8 4 0	...	...	...	...	...	...	...	...	...	...
1 0 0	2 0 0	...	...	...	...	...	...	...	...	...	...
2 0 0	2 0 0	...	...	...	...	...	...	...	...	...	...
4 12 0	4 8 0	...	...	...	...	...	...	...	...	...	...
5 2' X 4 Yds.	...	...	...	...	...	...	...	...	...	...	...
2. Salem.											
1. Saree 40 S 46" X 8 Yds.	5 14 6	...	...	0 8 0	...	...	...	1 1 0	7 7 6	8 8 6	I W 1
2. Sarees 80 A & S 45" X 8 Yds.	7 4 9 1 6 3	...	...	0 8 0	...	...	...	2 1 0	11 4 0	13 5 0	I W 2
3. Dhoties 100 S 52' X 4 Yds.	3 12 0 0 10 0	...	...	0 8 0	...	...	...	2 8 0	11 14 0	14 6 0	I W 3
4. Dhoties 40 S 52" X 4 Yds.	2 0 0 0 0 6	...	...	0 4 0	...	...	...	0 8 0	2 12 6	3 4 6	I W 4
5. Sarees 100 S 42" X 9 Yds.	9 4 0	...	...	0 8 0	...	...	...	...	12 2 0	...	U.M.W 1
(dyed yarn)	...	...	...	...	...	...	...	...	...	...	...
3. Madurai											
1. Saree 40 S 46" X 8 Yds.	5 14 6	...	...	0 8 0	...	...	...	1 1 0	7 7 6	8 8 6	I W 1
2. Sarees 80 A & S 45" X 8 Yds.	7 4 9 1 6 3	...	...	0 8 0	...	...	...	2 1 0	11 4 0	13 5 0	I W 2
3. Dhoties 100 S 52' X 4 Yds.	3 12 0 0 10 0	...	...	0 8 0	...	...	...	2 8 0	11 14 0	14 6 0	I W 3
4. Dhoties 40 S 52" X 4 Yds.	2 0 0 0 0 6	...	...	0 4 0	...	...	...	0 8 0	2 12 6	3 4 6	I W 4
5. Sarees 100 S 42" X 9 Yds.	9 4 0	...	...	0 8 0	...	...	...	...	12 2 0	...	U.M.W 1
(dyed yarn)	...	...	...	...	...	...	...	...	...	...	...
4. Malabar.											
2. Dhoties 80 S 50" X 4 Yds.	3-13-0	...	...	0-8-0	...	...	...	...	...	...	...
(Bleached)	...	...	...	...	...	...	...	...	...	...	...
1. Shirting 26 S 30" X 24 Yds.	10-0-0	2-8-0	...	1-3-6	...	...	...	...	...	...	...
2. Coating 26 S 28" X 24 Yds.	12-0-0	2-8-0	...	1-11-6	...	...	...	...	...	...	...
3. Bedspread 26 S 90" X 32"	1-13-0	...	...	0-2-0	...	...	...	...	...	...	...
4. Thortu 20 S 54" X 32"	0-7-0	...	...	0-0-9	...	...	...	...	...	...	...
5. Chingleput.											
1. Handkerchief 40 S, 60 S 36" X 8 Yds.	6-0-0	...	...	1-0-0	...	...	...	...	...	...	...
(dyed)	...	...	...	...	...	...	...	...	...	...	...
2. Handkerchief 40 S, 60 S A.S. 36" X 8 Yds.	11-0-0	...	...	...	...	...	...	...	...	...	...
3. Lungie 40 S X 60 S 27" X 4 1/2 Yds.	3-8-0	...	...	0-4-0	...	...	...	...	...	...	...
1. Mundu 26 S X 40 S 45" X 2 Yds.	1-5-0	...	...	0-3-0	...	...	...	...	...	...	...
2. Bedspread 26 S 44" X 2 1/2 Yds.	1-12-0	...	...	0-4-6	...	...	...	...	...	...	...
6. South Kanara.											
1. W. Independent weaver.	...	...	...	...	...	...	...	...	...	...	...
U. M. W. Under Master weaver.	...	...	...	...	...	...	...	...	...	...	...
F. Factory.	...	...	...	...	...	...	...	...	...	...	...



5.1. Cost structure :

The statement of cost of production of certain principal varieties of handloom cloth produced in each district by the weaver working in his house and in factories is given in Appendix V. From an analysis of the cost structure it is seen that the cost of yarn accounts for between 61 percent and 83 percent of the total cost. Wages come next in importance ranging from 22 percent to 27 percent of the total cost. Earnings of independent weavers range from 17 percent to 38 percent of the selling price. In computing wages, the cost of wages in preparatory processes has also been included for these processes are normally attended to by the members of the weavers' family whose earnings together with the wages constitute the family income.

5.2. Price differential :

A comparison of the cost structure of comparable varieties of cloth produced by the handlooms and in mills and in handloom factories has been attempted.

STATEMENT No. 19

Cost of Production of one yard of cloth.

Items of cost per yard of cloth. 1.	In Mill. Madurai. 2.	By handloom in factory. Malabar. 3.	By handloom as cottage Industry. Madurai. 4.
	Rs.	Rs.	Rs.
1. Cost of yarn	0-6-9	0-6-9	0-8-8
2. Labour	0-1-3	0-3-0	0-2-6
3. Fuels	0-0-3	...	...
4. Chemicals	0-0-3	0-1-6	...
5. Preparatory processes	...	0-1-0	0-1-6
6. Finishing processes	...	...	...
7. Depreciation	...	0-0-4	0-0-2
8. Others	0-0-3	...	...
Total	0-8-9	0-12-7	0-12-10

The cost of yarn for one yard of cloth paid by the mills and handloom factories is Rs. 0-6-9 while the price paid by handloom is Rs. 0-8-8. The cost of one yard of mill cloth is Rs. 0-8-9 whereas the cost per yard of handloom cloth is Re. 0-12-10. The cost per yard of handloom cloth produced in a handloom factory is Rs. 0-12-7. It is thus seen that for comparable varieties of fabrics produced on the handlooms and mills, the differential is as much as Re. 0-4-1 per yard,

while the differential between cloth produced in mills and handloom cloth produced in factories is slightly lower being Re 0-3-10. The cost of production of handloom cloth is 46.7 percent more than in the case of mill cloth. The differential is even more striking in the case of fine cloth. It is this large differential that has made it difficult for the handloom industry to forge ahead.

5.3. Problem of high cost :

In the context of increasing competition of mill goods, a glut of handloom goods in the market and the low earnings of the handloom weaver, it would appear that there are two ways of tackling the problem. They are (i) to help the industry to reduce its cost of production and (ii) to concentrate on superfine varieties and find alternative employment to the bulk of the displaced weavers. The first course is fraught with least dislocation to the industry and therefore deserves consideration. The only feasible way of reducing the cost of production is to bring down the price at which yarn is made available to the weaver. Specialisation in the finer varieties will no doubt assist in the revitalisation of the handloom industry as the special fabrics should meet a ready demand not only at home but abroad in spite of the high tariff barriers. However the problem of finding alternative employment to the vast body of displaced weavers is a stupendous task not possible of easy solution. Therefore the only possible way to reduce cost is to bring about a reduction in the cost of yarn.

5.4. Adequate supplies of yarn :

In the context of increasing competition of mill goods, a glut of handloom goods in the markets and the need to capture new markets, it is essential to bring down the cost of production. There is therefore urgent need to improve the supply position of yarn at cheaper rates, i.e., at rates at which they are available to the composite mills. To this end, Government have plans for starting a spinning mill at Tirunelveli and Srivilliputhur in Ramanathapuram district on a Co-operative basis. The spinning mills in Tirunelveli and Srivilliputtur will have 16,000 and 12,000 spindles initially. A special feature of the spinning mill at Srivilliputtur is that it proposes to bring together the consumers and producers, the weavers' co-operative societies who consume the yarn and the cotton growers

who supply the raw material in an organisation beneficial to both. The object is to ensure adequate supplies of yarn at cost price to the handloom weavers. It is estimated that handloom cloth is costlier than mill cloth by 46.7 percent. Ten percent of this extra cost is due to buying yarn through retailers. This ten percent could be saved if the yarn is supplied to the weavers directly at ex-mill price i.e., at actual cost price plus 3-1/8 percent return to the mill. The Co-operative Spinning Mills could supply the yarn to the Co-operative Production Societies or weavers' societies at cost price thereby eliminating the 'pyramiding of prices' due to intervention of a host of middlemen. The weavers consider that the reduction in the price of yarn will help the industry more effectively than the present system of rebate on sale of handloom cloth.

5.5. Improved technique in weaving :

Introduction of improved methods and technical appliances in weaving by the introduction of the improved winding charkas and swift, self-leasing vertical warping machines, combined warping and beaming machine, fitting up of the take-up attachment to the fly shuttle looms and the semi-automatic and pedal looms to help the industry to standardise quality and bring down cost of production and increase efficiency.

B. Net earnings of the handloom weavers :

5.6. Earnings of different types of weavers :

The earnings of the weaver working in the co-operative society and under Master Weavers comprise the wages received by them for the cloth produced and the wages for the preparatory processes which are generally done by the members of their families who form their un-paid assistants. These weavers have their own looms. In the case of independent weavers who own their looms, they buy their requirements of yarn, weave the cloth and market the finished product themselves, the margin between the cost of production of the fabrics and the selling price represents the profit. The weaver himself arranges for the preparatory process with the help of the members of the family and does the weaving and marketing himself. The differences between cost price and selling price is his net earning which is the return for capital as well as cost of labour. Weavers working in factories are paid piece wages on the basis of the turnover. They do not own looms as in the case of independent weavers or

weavers in Co-operative societies. The hired weaver is paid wages by the weaver who loans his loom to him, supplies him the warp and takes back the finished product after deducting a small portion representing hire charges for the loom.

5.7. Average monthly earnings of weavers :

The Survey has revealed that the average monthly earning of the independent weaver was Rs. 26.9, of a weaver working under Master Weaver was Rs. 26.6, of a weaver working under Co-operative Societies was Rs. 27.2, of a factory weaver was Rs. 39.6 and of a hired weaver was Rs. 31.2. Thus for the State as a whole the average monthly earnings of a factory weaver is higher than other classes of weavers. Particulars regarding the average monthly income of the different classes of weavers in each district is given in statement below :

STATEMENT No. 20
Monthly income of weavers.

Sl. No.	Name of District.	Average monthly income of a weaver working				
		Independently.	Under Master weavers.	Under Co-operative societies.	In Factories.	As hired weavers.
1.	2.	3.	4.	5.	6.	7.
		Rs.	Rs.	Rs.	Rs.	Rs.
1.	Salem	29.5	26.5	21.5	38.0	23.5
2.	Coimbatore	36.0	32.8	40.8	55.0	28.0
3.	Malabar	21.0	...	20.0	29.5	...
4.	Tirunelveli	18.3	18.7	17.3	...	17.5
5.	Chingleput	29.6	24.8	26.3	...	20.1
6.	North Arcot	19.4	19.6	17.0	...	25.7
7.	Ramanathapuram	39.5	22.5	25.0	24.0	...
8.	Madurai	26.0	29.0	32.5	52.0	...
9.	Tiruchirapalli	29.1	27.2	30.3	49.1	35.6
10.	South Arcot	21.4	25.9	25.3	...	13.7
11.	Tanjore	34.8	24.5	21.8	...	20.7
12.	Madras	...	37.1	46.0	...	25.7
13.	South Kanara	21.0	...	30.0	54.0	31.0
STATE.		26.9	26.6	27.2	39.6	31.2

It may be seen from the statement above that the weaver working in a factory gets the highest average monthly income viz., Rs. 39.6 while weavers working independently, under master weavers and co-operative societies get lower wages. The higher earnings of

the weavers working in factories is attributed to the continuous employment which enables them to earn more per month than the other classes of weavers who have no such continuity of work. It was noticed in the survey that due to the bottle-neck of marketing, the co-operative societies and master weavers do not find it possible to provide the weavers continuous employment. These weavers have work normally for half the month. The hired weaver gets slightly less than the weaver working in a factory but his earning is higher than that of the weavers working independently, under master weavers and under Co-operative societies. This is due to the fact that the hired weaver goes in search of work and takes work where available to get a wage. He thus finds more continuous employment and thereby earns more. It therefore appears to be a pointer that the best type of organisation of the handloom industry is the Co-operative factory establishment as such an arrangement would ensure continuous employment and a higher average monthly earning to the weavers.

5.8. Earnings from other occupations :

That the earnings of the weaver is low will be seen by a comparison with the monthly earnings of those who are engaged in other occupations in the centres covered by the survey as shown below :

STATEMENT No. 21
Earnings from other occupation.

Sl. No.	Type of occupation.	Monthly earnings in 1954.
1.	2.	3.
		Rs.
1.	Handloom weavers	28
Other occupation :		
2.	Woodcutter	50
3.	Running maligai store	49
4.	Stone-breaking	42
5.	Basket-making	41
6.	Goldsmith	41
7.	Barber	40
8.	Tailor	34
9.	Agriculture and other cooly works	32
10.	Ploughman	30
11.	Dhobi	29
12.	Potmaking	28
13.	Rope-making	25
14.	Sanar	25
15.	Bee-keeping	25
16.	Cobbler	23

Detailed district-wise particulars relating to the average monthly earnings of Handloom weavers and persons engaged in other occupations are given below.

District-wise comparison of average monthly earnings of weavers and the earnings of those engaged in other occupations.

STATEMENT No. 22

Sl. No.	Districts.	Average monthly earnings of weavers.	Average monthly earnings of those who are engaged in other occupations.
		Rs.	Rs.
1.	Madras	31	...
2.	Chingleput	27	27
3.	South Arcot	25	22
4.	North Arcot	21	14
5.	Tanjore	25	30
6.	Tiruchirappalli	39	30
7.	Coimbatore	38	38
8.	Salem	28	31
9.	Madurai	35	39
10.	Ramanathapuram	26	33
11.	Tirunelveli	19	27
12.	Malabar	21	42
13.	South Kanara	30	44
STATE:		28	33

The average monthly earnings of 1,723 weavers for whom weaving is only a subsidiary occupation is Rs. 84,427 or Rs. 49 per weaver, of which the earning from weaving is Rs. 21 and the earnings from other occupations which constitute the main occupation is Rs. 28.

5.9. Traditional weavers averse to taking up other occupations :

Despite the low monthly earnings from weaving and the fluctuations in fortune for the industry, compared to other occupations, 4,57,376 weavers who account for 94.0 percent of the total number of weavers in the State cling to the profession. These are the traditional weavers. Though unemployed not infrequently and under-employed almost all through the year, these weavers are temperamentally averse to and physically not fit for taking up any form of manual labour to supplement their meagre earnings from weaving.

CHAPTER VI.

Indebtedness of the weavers and source of credit :

6.0. Economic condition of weavers :

The economic condition of the weavers in most of the centres is such that it is practically impossible to balance their budgets due to the soaring prices of essential food articles on the one hand and the progressively dwindling earnings due to breaks in employment resulting from irregular supplies of yarn. Most of the weavers meet the deficit in their budgets by resorting to taking loans from some agency. The impoverished condition of the weaver does not permit him to resort to a bank or society as he has not got the security to satisfy the requirements of Banks and societies to decide on credit worthiness. Added to the regular deficit in the monthly budget, the weaver has to get loans for social and religious ceremonies which is incumbent on him to perform. His low earnings, rising prices of essential requirements and obligation to meet the family responsibilities like wedding and other ceremonies plunge him deeper in debt.

6.1. Reasons for debt :

The independent weaver has to borrow to find the working capital to purchase the yarn and the other raw materials and to provide him the staying power during the stages of preparation of cloth till the finished product is marketed. The other classes of weavers also borrow to meet the deficit between income and expenditure.

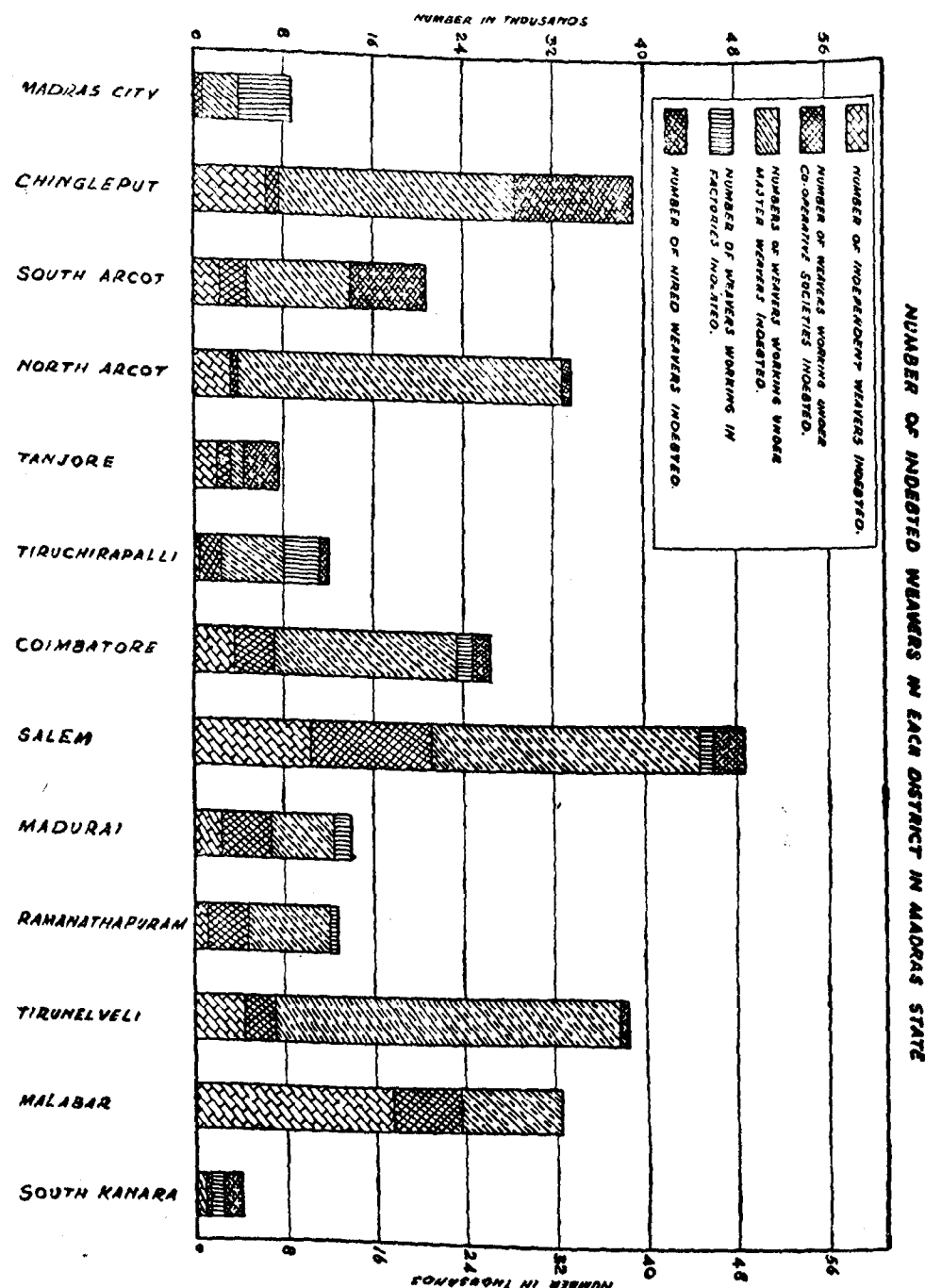
Weavers working under Master Weavers, in factories, under Co-operative societies and as hired weavers have no need to borrow for working capital. While there is this difference between these weavers and the independent weavers in the matter of meeting family requirements caused by the deficit in the family budget of excess of expenditure over income and the demands of obligatory functions like wedding, funeral and social and religious functions, all the weavers are under necessity to borrow from time to time. Where the independent weaver does not borrow cash but gets his requirements of yarn on credit from the local yarn dealer, he has to pay a higher price for the yarn than the market rate which is higher by about one rupee for 10 lb of yarn. Sometimes the adjustment of this credit is effected by handing over the finished product to the yarn

dealer. In this transaction of return of the finished product also the weaver is at a position of disadvantage as the yarn dealer takes back the finished cloth at a rate about 4 annas less than the prevailing market rate for each unit of the finished fabric. It is no wonder that these forces lead the weaver deeper and deeper into debt and it becomes difficult for him to retrace his steps.

When there was great demand for handloom cloth due to scarcity of mill made cloth which was diverted to meet war requirements, some of the handloom weavers were able to take advantage and clear off their debts to a certain extent with the profits that they were able to make during that period. The master weavers gladly helped the weavers with loans as it is an advantage to them in that the weavers get obliged to work under them and also they are able to profit by the high interest charged on these advances.

6.2. Extent of indebtedness :

Out of a total population of 4,86,335 weavers in the Madras State 2,98,351 weavers or 61.33 percent are indebted, the amount of indebtedness being of the order of Rs. 7.7 crores or Rs. 159/- per weaver. The indebtedness of 4,57,376 weavers for whom weaving is the sole occupation is Rs. 168.8. Out of the 298,351 indebted weavers, 152,061 are weavers working under master weavers, 57,397 are independent weavers, 38,897 are weavers working in Co-operative Societies, 27,418 are hired weavers and 22,588 are factory weavers. The average indebtedness of weavers in each district is shown in the statement below.



STATEMENT No. 23

Indebtedness of weavers.

Sl. No.	District.	No. of independent weavers indebted.	No. of weavers working under co-operative societies indebted.	No. of weavers working under master weavers indebted.	No. of weavers working in factories indebted.	No. of hired weavers indebted.	Total No. of weavers indebted.	Amount of indebtedness per weaver.
1.	2.	3.	4.	5.	6.	7.	8.	9.
1.	Madras	...	612	3,154	5,166	...	8,932	158
2.	Chingleput	6,495	1,164	21,296	...	10,355	39,310	177
3.	South Arcot	2,417	2,361	8,865	...	7,223	20,866	142
4.	North Arcot	3,576	496	28,890	...	618	33,580	173
5.	Tanjore	2,128	1,109	1,313	...	2,551	7,101	179
6.	Tiruchirappalli	767	1,775	5,657	3,234	518	11,951	197
7.	Coimbatore	3,813	3,563	16,289	1,049	1,664	26,378	211
8.	Salem	10,438	10,788	23,969	1,102	2,451	48,748	179
9.	Madurai	2,567	4,476	5,253	1,712	...	14,008	127
10.	Ramanathapuram	1,501	3,412	7,339	751	...	13,003	112
11.	Tirunelveli	4,609	2,746	30,036	...	547	37,938	111
12.	Malabar	17,673	5,926	...	9,055	...	32,654	118
13.	South Kanara	1,403	469	...	519	1,491	3,882	201
STATE:		57,387	38,897	152,061	22,588	27,418	298,351	159

Note: The average indebtedness of weavers for whom weaving is sole occupation is Rs. 168·8.

6.3. Source of credit :

The principal sources of credit for the weavers in the State are local money lenders or sowcars, master weavers, merchants and retail dealers and Banks and Co-operative societies. When these sources fail they approach friends and relatives. The local money lender or sowcar appears to be the most common and important source of credit, 47 percent of the weavers are dependent on them for credit facilities. The next important source is the master weaver who makes advances to 19 percent of the total number of weavers in the State. The loans while helping the weaver for the time being, ensure the master weaver that the indebted weaver will stick to him and continue to work under him. The other sources of credit are friends and relatives who give loans to 18 percent of the weavers. Merchants and retail dealers constitute the source of credit for

12 percent of the weavers. Banks and co-operative societies come last in the order of importance as only 4 percent of the weavers avail themselves of the credit facilities from these sources. The reasons for such a small proportion of weavers availing themselves of bank and co-operative society credit are not far to seek. In most cases the weavers are not able to satisfy the condition of credit-worthiness or deposit of security insisted upon by these agencies. Not being in a position to meet the requirements of the Banks and Societies as conditions precedent for sanction of loans and advance, most of the weavers resort to agencies like the local money lenders, Master Weavers, merchants and retailers who do not insist on all the formalities of deposit of security etc. These agencies are therefore most popular with the weavers as they advance loans on the basis of personal security.

6.4. Rate of interest.

The rate of interest varies with reference to the credit-worthiness of the weaver and the circumstances under which the loan is advanced. It is therefore not uncommon to find widely ranging rates of interest prevailing in the main centres. In certain centres it has been found that a rate of interest as high as 37½ percent is charged by the local money lenders. The rate of interest charged by Master Weaver varies from 0 to 18½ percent while the rate charged by friends, relatives and merchants ranges from 0 to 12½ percent. No interest is charged in certain cases where loans are taken from friends and relatives. The lowest rate of interest is charged by the Banks and Societies ranging from 6½ to 9 percent.

The particulars regarding normal source of credit and the rate of interest charged by the various agencies who supply credit to the weavers are shown below.

STATEMENT No. 24
Source of Credit and Rate of Interest.

Sl. No.	Source of credit.	Proportion of weavers availing of credit.	Rate of interest per annum.
		Percent	
1.	Local money lenders	47	6 to 37·6 percent
2.	Master weavers	19	0 to 18·8 "
3.	Banks and Societies	4	6·3 to 9 "
4.	Friends and relatives	18	0 to 12·0 "
5.	Merchants and retail dealers.	12	0 to 12·5 "

A statement showing the district-wise particulars of the extent to which the weavers avail themselves of the different sources of credit is given below.

STATEMENT No. 25

Extent to which the different sources of credit are availed of by the weavers.

Sl. No.	Districts.	Money lenders and private Bankers.	Master weavers.	Retail dealers.	Friends and relatives.	Banks.	Co-operative Societies.
1.	2.	3.	4.	5.	6.	7.	8.
		Per-cent.	Per-cent.	Per-cent.	Per-cent.	Per-cent.	Per-cent.
1.	North Arcot	68.87	30.33	0.54	0.13	0.13	...
2.	Tiruchirapalli	92.84	3.68	0.64	1.05	1.79	...
3.	Salem	75.00	21.00	...	2.00	2.00	...
4.	South Arcot	48.07	46.06	0.48	2.43	2.96	...
5.	Chingleput	51.85	29.06	8.90	7.25	2.87	0.07
6.	Madras	37.39	35.61	...	15.19	10.63	1.18
7.	Tanjore	46.29	41.73	1.96	8.93	0.87	0.22
8.	Tirunelveli	17.00	11.00	11.00	56.00	...	5.00
9.	Coimbatore	53.40	13.00	4.40	13.60	15.60	...
10.	Madurai	12.00	16.00	21.00	40.00	10.00	1.00
11.	Malabar	20.60	22.50	15.50	17.50	21.90	2.00
12.	South Kanara	63.00	...	24.00	6.00	5.00	2.00
13.	Ramanathapuram	12.00	7.00	14.00	59.00	4.00	4.00

The rate of interest per annum ranges from 0 to 37.6 percent.

6.5. Master weavers common agency for credit :

For the State as a whole it is noticed that 152,061 out of a total of 298,351 indebted weavers in the State are those working under Master weavers. This phenomenon of greater proportion of indebted weavers working under master weavers is found in the areas such as Salem, Coimbatore, Tirunelveli and Chingleput where there is heavy concentration of looms. In Madras, Tanjore and South Kanara, however, the greater proportion of indebted weavers belong to the category of hired weavers. In Malabar district the independent weavers account for 54.1 percent of the indebted weavers in the district. The average indebtedness per weaver ranges from Rs. 111/-

in Tirunelveli district to Rs. 211/- in Coimbatore district. Forty seven percent of the weavers avail of the credit from the local money lenders though the rate of interest is exorbitant. The weavers are familiar with them and could obtain the loan on personal security while the Banks and Societies insist on deposit of adequate security which the weavers find it not possible to satisfy.

CHAPTER VII

Manufacturing Processes.

7.0. Weaving :

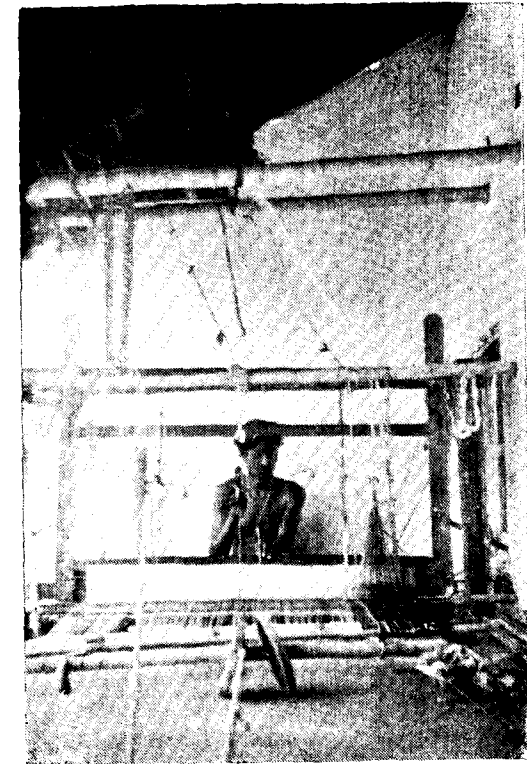
Woven fabrics are composed of longitudinal or warp threads and transverse or weft threads which are interlaced with one another according to the class of structure and form of design desired. Warp threads and weft threads are otherwise described as "Ends" and "Picks".

Weaving consists in interlacing two sets of threads, one set placed longitudinally and the other transversely in a fabric. The longitudinal or warp thread having been arranged and evenly wound upon a beam is separated into two lines and a transverse or weft thread is passed through the division. Healds are employed to divide the warp technically known as "shedding". Healds consists of a series of twine loops each passing round a warp thread and fastened to a wooden rod. The number of loops on a rod and the number of rods employed depend upon the breadth and closeness of the warp threads and the order of interlacing them.

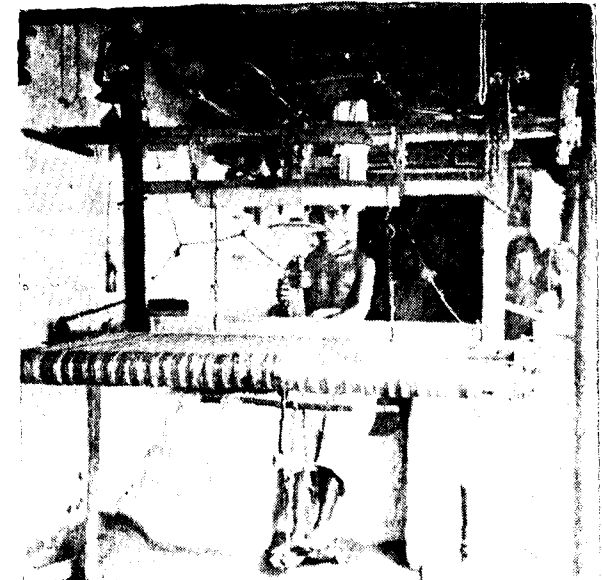
7.1. Supply of yarn :

Supply of yarn is generally made to the weavers in bundles and knots which are found to be the most convenient form of supplying it. Most of the yarn used by the handloom weavers is either sized in hank form or after the warp has been laid out. Similarly yarn is also dyed before using. Supply of yarn in the hank form is cheaper and more convenient to handle. Ready made warp will no doubt save a considerable amount of preparatory labour. Supply of ready made warp will however prove a disadvantage to the weaver as the preparatory processes such as winding, warping and sizing provide employment to the members of the weavers family. The small additional earnings to the weavers' family will be wiped out if supply of yarn is in the form of ready made warp.

Several processes such as winding, warping, sizing, warp-joining and beaming, described as "preparatory processes" as distinct from "finishing processes" are done before the actual process of weaving is commenced. Broadly speaking, the manufacturing processes are essentially the same in the various centres of production in this State.



Weaving in a Pit-loom



Weaving in a Frame-loom

PREPARATORY PROCESSES



Winding.



Winding.

7.2. Winding :

Winding is done usually by women and children of the weaver castes. Weft yarn is wound on shuttle pirns and the process is called pirns winding. Yarn for making warp is wound on cones or bobbins known as bobbin winding. A spinning wheel locally called "rattu" fitted with a bamboo or wooden frame is employed for the process of winding in both the cases. This practice is almost universal in that it is used in all districts of the State. The "rattu" is operated with the help of a wooden handle fitted to it.

Except in large institutes like the Madras Textile Institute and a few factories where hand driven bobbin winding has been introduced with a fair amount of success, a change over to machine winding is not helpful with the present method of street sizing and short warps. Therefore the introduction of bobbin-winding machines depends on the system of sizing and length of the warp.

It is interesting to note how winding is done on the hand-driven bobbin winding machine. The principal parts of the machine are the creel, the heck and the mill. The mill is a gigantic reel mounted on a vertical axis and reaching from 15 to 20 yards in circumference. The mill is rotated by hand first in one direction and then the other. The creel is a vertical curved frame work arranged to hold the bobbins in a horizontal position. The heck consists of a frame containing a number of steel pins between which the threads pass through.

The threads from the creel bobbins are passed through the heck frame and gathered together in a loose rope and attached to the top of the mill. The mill is revolved so as to wind the rope of yarn round the mill at a definitely regulated speed. When the yarn has been wound sufficiently low down on the mill, the latter is reversed and a second layer of threads wound over the first one. The process is repeated a sufficient number of times to give the required number of threads for the warp.

7.3. Warping.

Efficiency of weaving depends on the process of warping. Warping is the operation by which a number of threads equal in length and arranged lengthwise and in parallel order. The number of threads depend on the width of the cloth to be woven.

Warping also, like winding, is done by women assisted by children. Two forms of warping are common in the Madras State viz., peg warping and wheel warping. In wheel warping, two kinds of wheels are used (1) the vertical wheel and (2) the horizontal wheel. The length wound on the wheel during one up or down motion will represent the length of the warp. This length will depend upon the circumference of the wheel and the number of revolutions during the lift. The warp length varies with the type of fabric to be produced. It varies from 16 yards to warp lengths over 16 yards. The finished warp is then wound off and formed into a large ball and is then sized.

An even more primitive method of warping is to fix a number of sticks on the ground, the distance between each set of sticks being 3 to 4 feet, the distance between the sticks on either extremes representing the length of the warp. Yarn from the cone is fastened to the first sticks and is reeled off and wound round the sticks till the last one is reached; this process is repeated, but this time backwards. This is not the proper method as it is not possible to secure uniform tension of all warp threads, besides its being a tedious process.

Peg warping involves the same process, but has the advantage of being done indoors. This is popular in the West Coast. Where warping mills are introduced it has led to a growth of a class of artisans called warpers who specialise in that function. They are paid piece rates.

The warping mill enables more than one thread to be reeled off at a time besides producing warps of any length with any number of ends. This saves the weaver much labour. This is becoming increasingly popular with the weavers.

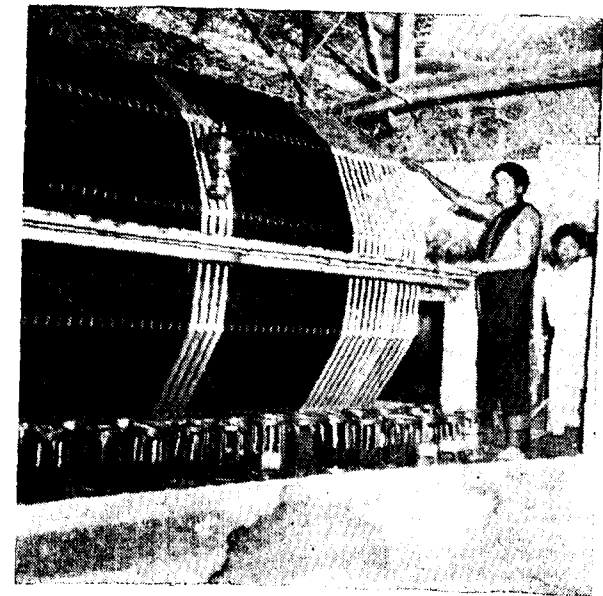
7.4. Sizing

Sizing and warping are done simultaneously in many parts. Sizing is the process by which the tensile strength of the higher counts of yarn is increased. The warp is dressed with kanji prepared from either broken rice or ragi flour mixed with oil. Gingelly or groundnut oil is commonly used. In Madras, yarn is hand sized after the warp is stretched so that it could retain its strength during the process of weaving and resist the strain and friction involved in the

PREPARATORY PROCESSES



Warping.



Warping.

PREPARATORY PROCESSES



Sizing.



weaving operation. Sizing practices adopted are the same in all districts of the State except in South Kanara where the warp is sized with brush on the weavers beam

The practice of sizing yarn in hanks before warping is not popular in Madras.

7.5. Street Sizing:

Generally the warp is stretched supported by bamboo sticks at intervals in the streets. The sizing mixture is applied to the surface of the warp by rolling a cloth bag containing the "sizing mixtures" throughout the length of the warp and is then carefully brushed over and over again. The threads are prevented from sticking to one another by constantly manipulating the lease rods. Sized yarn is then allowed to dry in the air. Usually in the process of sizing, a weaver is helped by other weavers, who in turn help them. Street sizing becomes impossible during the rainy season.

This is for the warp. Weft yarn is sized after being wound on the pirns.

Street sizing is found throughout the State. Where there is no facility for street sizing, yarn in hanks is sized after the preliminary process of cleaning and softening. In the factories of the West Coast, yarn is sized on the loom itself with the help of a hand brush.

Yarn of lower counts is not usually sized; for example in the factories of the West Coast where coarse yarn is used for weaving thicker fabrics like bed spreads; twisted yarn used for weaving thicker fabrics is also not sized in places like Karur in Tiruchirapalli district. The finer the yarn, the greater the number of times the warp is brushed. Quality depends upon the various processes connected with sizing such as wetting, boiling, oiling etc.

Sizing plant operated by hand which enables the sizer to make a long warp and possible to work even during the rainy season is not popular with the weavers for the following reasons. The cost involved is beyond the means of the weavers; it is contended that hand sized warp is superior to machine sized warp; and the advantage to the weaver and his family by way of economy by doing the sizing himself

is lost to him. The street sizing method obtaining in Madras is found to be satisfactory, but tedious and wasteful.

In certain big centres, there are men who specialise in sizing and they undertake sizing for the weavers and master-weavers on piece rate basis.

7.6. Drawing-in and Warp Joining :

After the sized warp is prepared, the warp is passed through the eyes of healds and dents in the reeds and this operation is called 'Drawing-in'.

After the first warp is woven, the warp ends are not removed from the heald. The cut ends of the old warp are joined to the ends of the new warp to be woven. This is known as warp-joining and is a tedious process involving length of time and patience.

7.7. Beaming :

After the sized yarn is dried, the one end of the warp is fixed to a woven wooden beam and rotated while the continuous length of the warp is held at tension by another attender until the rear end is firmly wound on to the beam.

The beam with the warp is fixed at the back of the loom, thereby bringing the warp in level with the loom and tension required to operate in the process of weaving.

When the above processes are completed, weaving is commenced. Before the invention of the fly shuttle the weavers at work threw the shuttle across the sley by hand and it was brought to a stand still by the other hand and this operation was repeated again and again. This method is very slow.

Fly shuttle is an improvement over the throw shuttle. By this method, weavers attach the shuttle to a handle with cords fitted to it. At the ends of the cords two pieces of stout leather run on two spindles attached to either end of the sley. A pull of the cord drives the shuttle to the other end of the sley. The weaver is able to weave nearly 6 yards on the fly shuttle loom per day whereas it is possible to weave only 4 yards on the throw-shuttle loom.



Bleaching.



Dyeing.

7.8. Finishing processes.:

Bleaching, dyeing, printing and calendering constitute the finishing processes. These processes are not performed by the weavers except in the factories of the West Coast.

7.9. Bleaching:

Bleaching is the process of converting the coarse or grey yarn into white soft yarn. Grey yarn is soaked in water for a period of one night. The next day the yarn is removed and boiled for about ten hours in a solution of caustic soda and ash. The yarn is washed in water the following day and then dipped in a solution of bleaching powder for one hour. Then yarn is squeezed and dipped into the diluted solution of hydrochloric acid or sulphuric acid for about fifteen minutes. It is then washed with soap and dried. Caustic soda is not used in certain cases when boiling the yarn.

7.10. Dyeing:

In Malabar and South Kanara districts two methods of dyeing are adopted generally viz., vat dyeing and sulphur dyeing. In the case of vat dyeing, the required dye is converted into a thin paste by adding Turkey red oil or any other oil. The paste is then mixed with a solution of caustic soda and stirred well. Hydrosulphate is slowly added while stirring goes on. The solution is then kept undisturbed for about half an hour. This is the stock solution of dyes. Meanwhile a dye-bath is prepared and caustic soda is added. The stock solution of dyes is added to the dye-bath and stirred well. While the stirring goes on, additional quantity of hydrosulphate is added. The bath is then kept undisturbed for fifteen minutes. The yarn is then squeezed and placed on the dye-sticks and introduced into the dye-bath, proper care being taken to see that the dye reaches all the threads. The process of dyeing lasts for about an hour. The yarn is then taken out, squeezed and exposed to the air for fifteen minutes. It is then soaked in sulphuric acid solution and washed in soap water, cleaned several times, squeezed and then dried.

In sulphur dyeing, the dye-bath is prepared with the following dyes and chemicals - sulphur colours, sodium sulphate, soda ash and common salt. These dyes and chemicals are mixed in water and heated to the boiling point. The processed yarn is introduced into

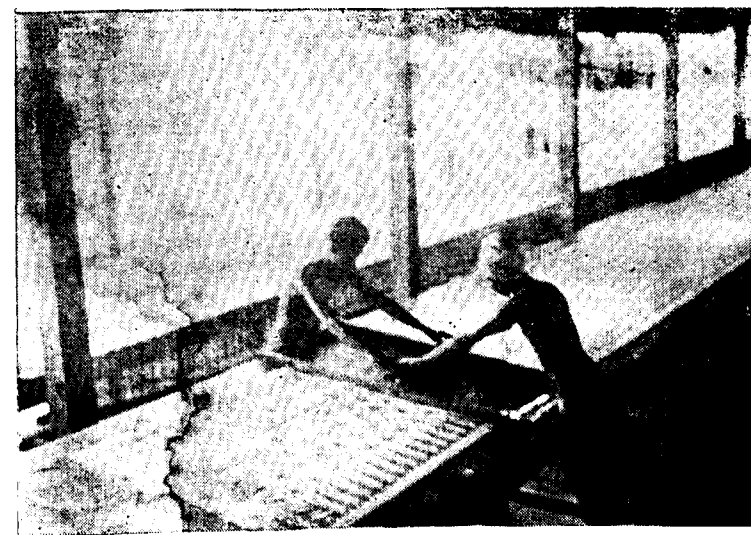
the dye-bath and kept there for about an hour. After dyeing, the yarn is rinsed well in water, washed in the diluted ash solution and then washed in clean water. The yarn is then squeezed and dried.

7.11. Printing and calendering :

Printing of floral or other designs is done by hand for the handloom fabrics in small establishments. Calendering is the process of ironing or hot pressing of cloth. These operations are performed in factories.

Except in Malabar and South Kanara districts, none of the finishing processes are done by the weavers themselves. As 65.41 percent of the weavers are working under the Master-weavers and Co-operative societies, the vast majority of the weavers are only concerned with converting the yarn supplied to them into finished fabrics. Out of the total quantity of yarn consumed in the State, 54.1 per cent of yarn is dyed yarn. Printing and calendering are done in large establishments only.

FINISHING PROCESSES



Printing.

CHAPTER VIII

Consumption of yarn

8.0. Yarn - the core of the Industry :

The survival of the weaving depends upon the regular supply of the right quantity and quality of yarn to the weavers. But in this respect, the experience of the Industry has been far from satisfactory. While the supply of yarn is assured to a certain extent to the weavers who are members of co-operative societies and the weavers working under master weavers, it has been the greatest hurdle to the independent weaver. The independent weaver has to find ready cash to pay the price which is inflated due to intervention of a number of middleman whose commission swells the market price of yarn. "From the wholesale stage to that of final retailing, each dealer adds his own quota of commission to the price of yarn so that by the time the yarn reaches the hands of the weavers the prices become considerably inflated". The number of intermediaries and the distance of the market to the yarn-producing centres determine the proportion of these additions to the retail price of yarn when it reaches the weaver. The position in regard to supply of yarn by the yarn dealer on credit is still worse. He normally adds between 4 to 25 percent of the cost price as his commission for sale on credit. There is therefore urgent need for a net work of organisation to supply yarn at reasonable prices to the weavers if the cost of handloom fabrics is to be brought down.

8.1. Consumption data :

The estimated consumption of cotton yarn of different counts varying from 10s to 120s and art silk yarn, silk yarn, zari, yarn from other fibres and handspun yarn in 1954 is 155 million lb. for the State. The maximum quantity of yarn consumed is cotton yarn 20s, which is estimated at 57.6 million lb. or 37.2 percent of the total consumption of yarn in the State. Cotton yarn 40s comes next in importance from the point of view of quantity consumed, the estimated consumption being 24.8 million lb. or 16 percent of the total consumption. Next in importance from the point of view of consumption is cotton yarn of counts 10s, 30s, and 26s, the quantity consumed being 17.5 million lb., 16.9 million lb. and 10 million lb.

respectly. The consumption of cotton yarn counts 20s, 40s, 10s, 30s and 26s account for 126 million lb. or 81.8 percent of the total consumption of yarn in the State. District-wise particulars of total consumption of yarn of different varieties in 1954 are shown in the statement below :

STATEMENT No. 26

Consumption of Yarn (1954)

S. No.	District	Consumption of yarn in lb.
1.	Chingleput	7,480,000
2.	Coimbatore	2,628,000
3.	Madras	1,363,000
4.	Madurai	10,933,000
5.	Malabar	13,550,000
6.	North Arcot	9,461,000
7.	Ramanathapuram	10,558,00
8.	Salem	42,406,000
9.	South Arcot	2,741,000
10.	South Kanara	1,416,000
11.	Tanjore	1,463,000
12.	Tiruchirapalli	18,563,000
13.	Tirunelveli	9,454,000
Total		155,016,000

8.2. Types of yarn consumed in districts :

A statement showing the figures of consumption of different varieties of yarn in each district for the year 1954 is shown below :

Consumption of different varieties of yarn in Madras State in 1954.

District	Cotton yarn lb. 2	Art Silk lb. 3	Silk lb. 4	Zari lb. 5	Others lb. 6	Handspun lb. 7	Total lb. 8
1. Salem	40,031,956	2,221,701	114,524	1,336	...	30,407	42,405,924
2. Madras	1,288,704	62,763	11,957	...	...	...	1,363,424
3. Chingleput	6,823,390	576,258	80,198	...	...	...	7,479,846
4. South Arcot	2,740,682	214	...	...	...	...	2,740,896
5. North Arcot	9,160,085	...	300,811	...	...	...	9,460,896
6. Tanjore	1,439,529	19,880	2,887	649	...	...	1,462,945
7. Tiruchirapalli.	18,557,114	6,203	...	...	...	...	18,563,317
8. Coimbatore	23,027,461	1,805,442	300,839	147,043	17,083	330,416	25,628,284
9. Madurai	10,261,989	606,542	197	577	63,311	...	10,932,616
10. Ramanathapuram.	9,961,847	587,971	8,017	...	...	...	10,557,835
11. Tirunelveli	9,438,137	...	14,371	...	...	1,122	9,453,630
12. Malabar	13,487,949	61,800	...	...	...	...	13,549,749
13. South Kanara.	1,306,898	101,363	2,833	...	...	5,291	1,416,385
Total ...	147,525,741	6,050,137	836,634	149,605	80,394	373,236	155,015,747

It is seen from the above statement that the consumption of the maximum quantity of yarn of all counts is in Salem district with Coimbatore coming next in the order of importance. The two districts between themselves consume 43.9 percent of the total consumption of yarn in the State. Salem and Coimbatore districts are also the largest consumers of Art Silk yarn in the State, the estimated consumption in 1954 in both the districts was 4 million lbs or 66.5 percent of the total consumption in the State. Kollegal in Coimbatore district is an important centre for weaving of cloth from Art silk yarn. Silk yarn is also consumed in large quantities in the districts of Coimbatore, North Arcot, Salem and Chingleput, and the total consumption in the State during the year 1954 was 836,634 lb. Zari consumed in the State is used for borders of sarees, dhoties and angavastrams. Handspun cotton yarn is mainly consumed in Coimbatore and Salem districts. Tiruppur is an important centre in Coimbatore district consuming 88 percent of the total quantity of handspun cotton yarn consumed in the State.

On a comparison of the quantity of yarn of each group consumed by the Handloom Industry in this State during the years 1950 to 1954 it is found that there has been an increase in the consumption of yarn during the 1954 compared with the earlier years when consumption was low due to the slump in the year 1952 and the effect of the slump that continued in 1953. The following statement gives detailed particulars regarding consumption of yarn and different counts and varieties in Madras State from the years 1950 to 1954.

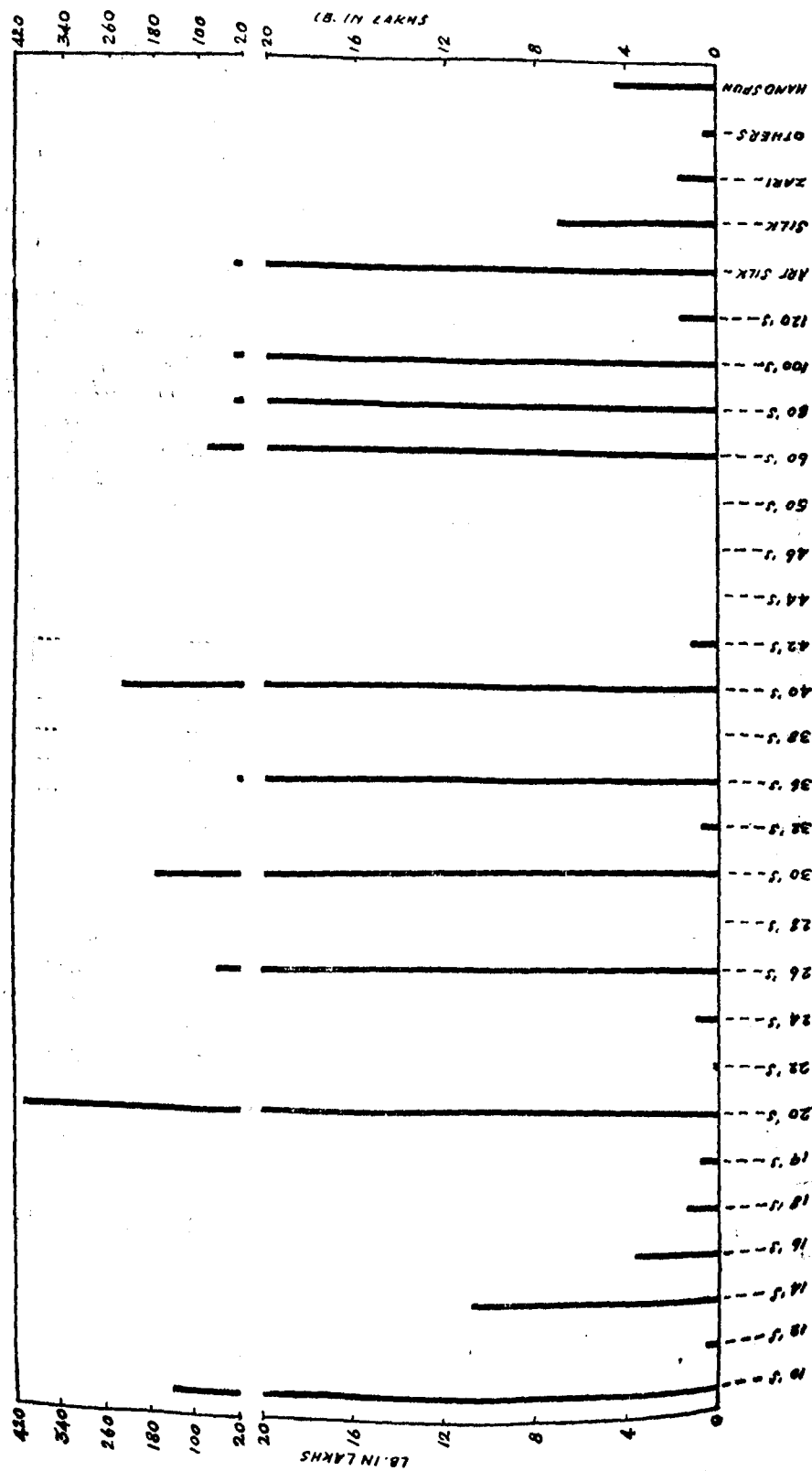
STATEMENT No. 28

Consumption of yarn by Handlooms in Madras States in 1b.

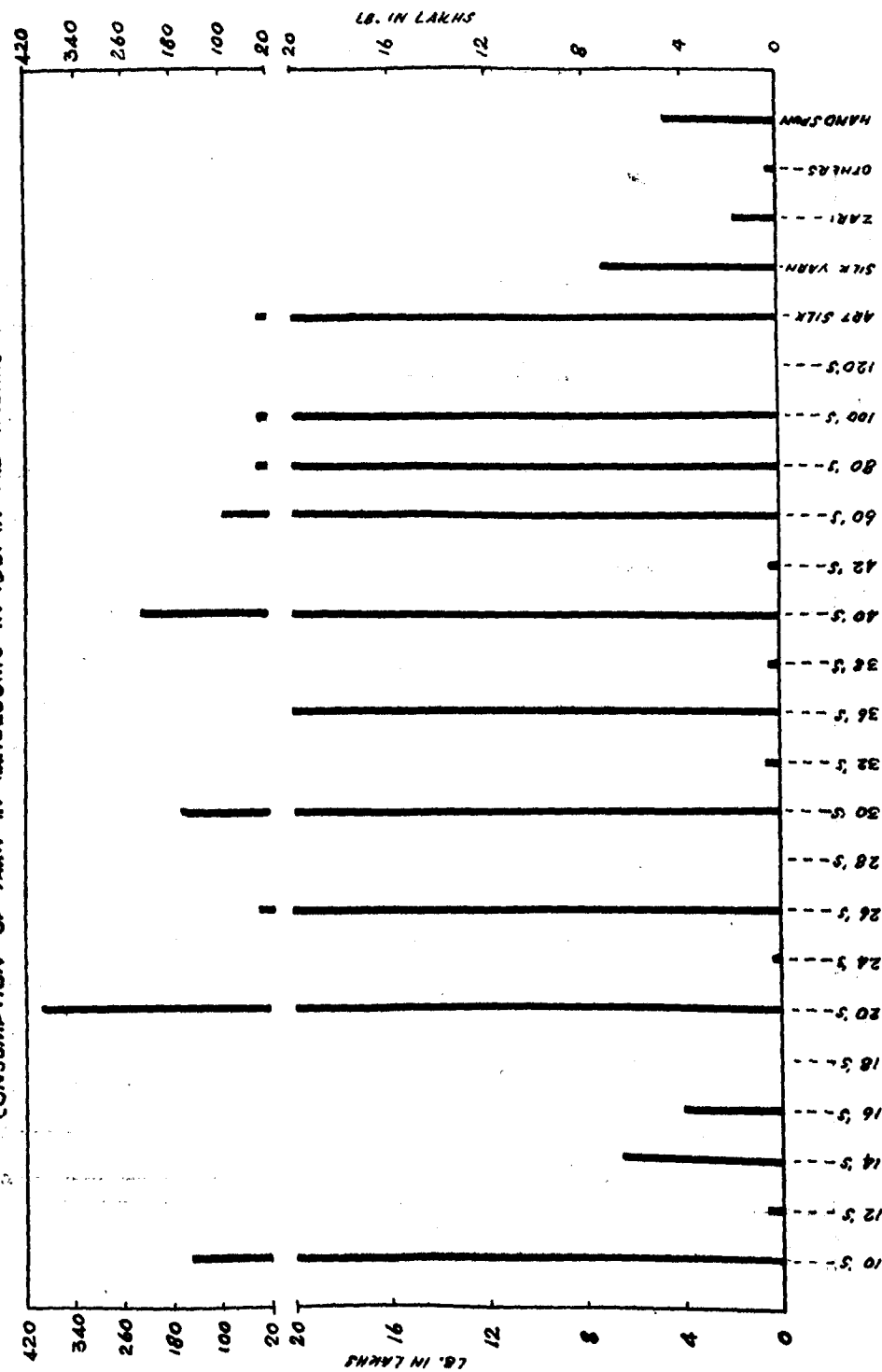
Counts (1)	1950 (2)	1951 (3)	1952 (4)	1953 (5)	1954 (6)
10s	14,098,036	14,825,511	11,743,254	15,323,427	17,482,415
12s	54,813	59,223	18,852	54,813	32,714
14s	1,075,891	650,287	484,463	649,111	149,532
16s	361,315	406,462	282,645	406,756	534,520
18s	120,988	...	202	...	1,475
19s	79,091	441	...	1,029	...
20s	38,365,421	39,236,183	46,363,573	46,706,856	57,645,357
22s	12,202	...	...	...	572,752
24s	127,666	18,365	103,899	29,905	72,109
26s	5,242,824	3,321,859	10,784,538	6,730,379	9,995,255
28s	3,696	1,491	4,554	4,431	6,199
30s	16,099,227	16,220,132	12,192,854	15,906,730	16,852,973
32s	79,917	57,330	51,859	62,503	631,730
36s	2,235,702	2,009,972	1,584,022	94,220	2,257,829
38s	441	25,950	...	...	...
40s	23,346,137	23,211,614	20,155,809	21,443,756	24,853,662
42s	116,137	12,607	...	...	...
44s	5,880	...	...	...	...
46s	1,176	...	...	...	...
50s	4,410	...	...	2,940	...
60s	9,100,038	9,112,215	7,272,820	9,186,557	8,527,852
80s	3,644,648	3,614,955	2,630,929	3,562,682	4,651,982
100s	3,456,336	3,357,598	2,344,252	3,394,149	3,252,630
120s	171,105	745	512	745	755
Art Silk	3,633,081	3,296,509	3,685,322	3,540,769	6,050,137
Silk	2,700,467	699,083	422,202	744,356	842,634
Zari	171,105	171,763	89,758	171,744	149,605
Others	26,669	26,261	61,814	40,880	80,394
Handspun	455,613	464,180	337,867	415,062	372,236
Total	124,790,032	120,800,736	120,616,000	128,473,800	155,015,747

It will be seen that the cotton yarn of counts 20s, 40s, 10s and 30s are largely consumed in the State.

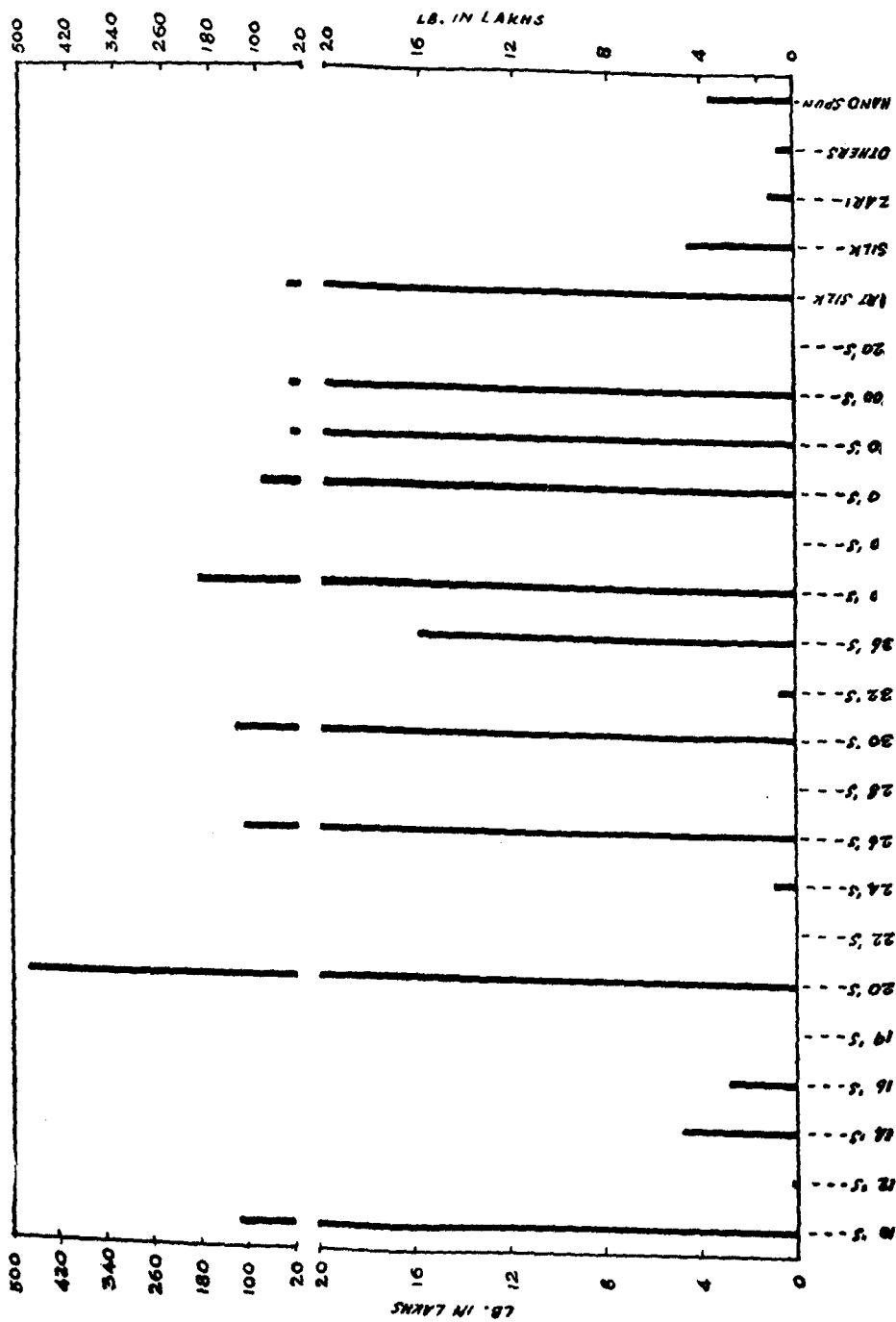
CONSUMPTION OF YARN IN HANDLOOMS IN 1950 IN THE MADRAS STATE



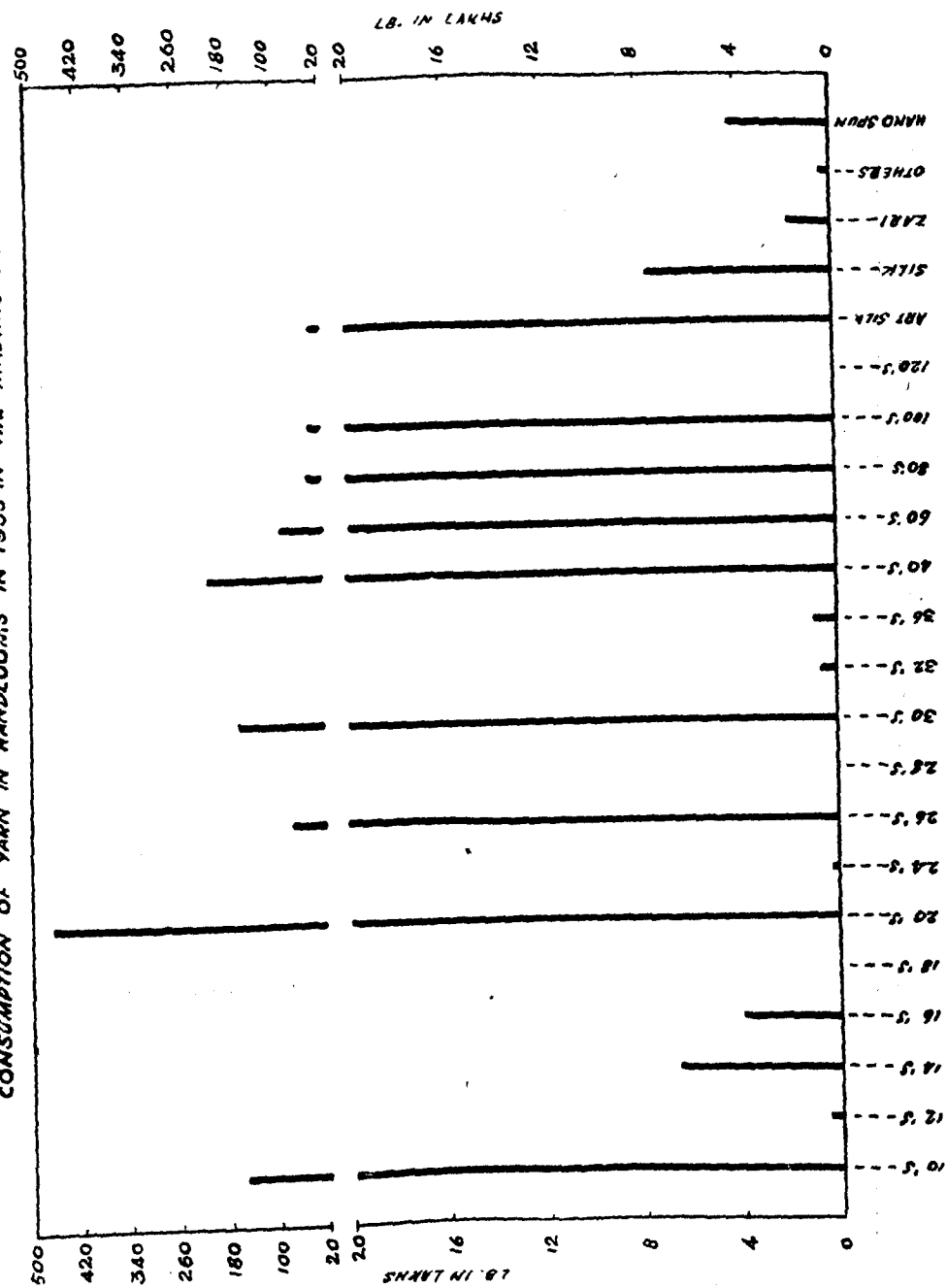
CONSUMPTION OF YARN IN HANDLOOMS IN 1951 IN THE MADRAS STATE



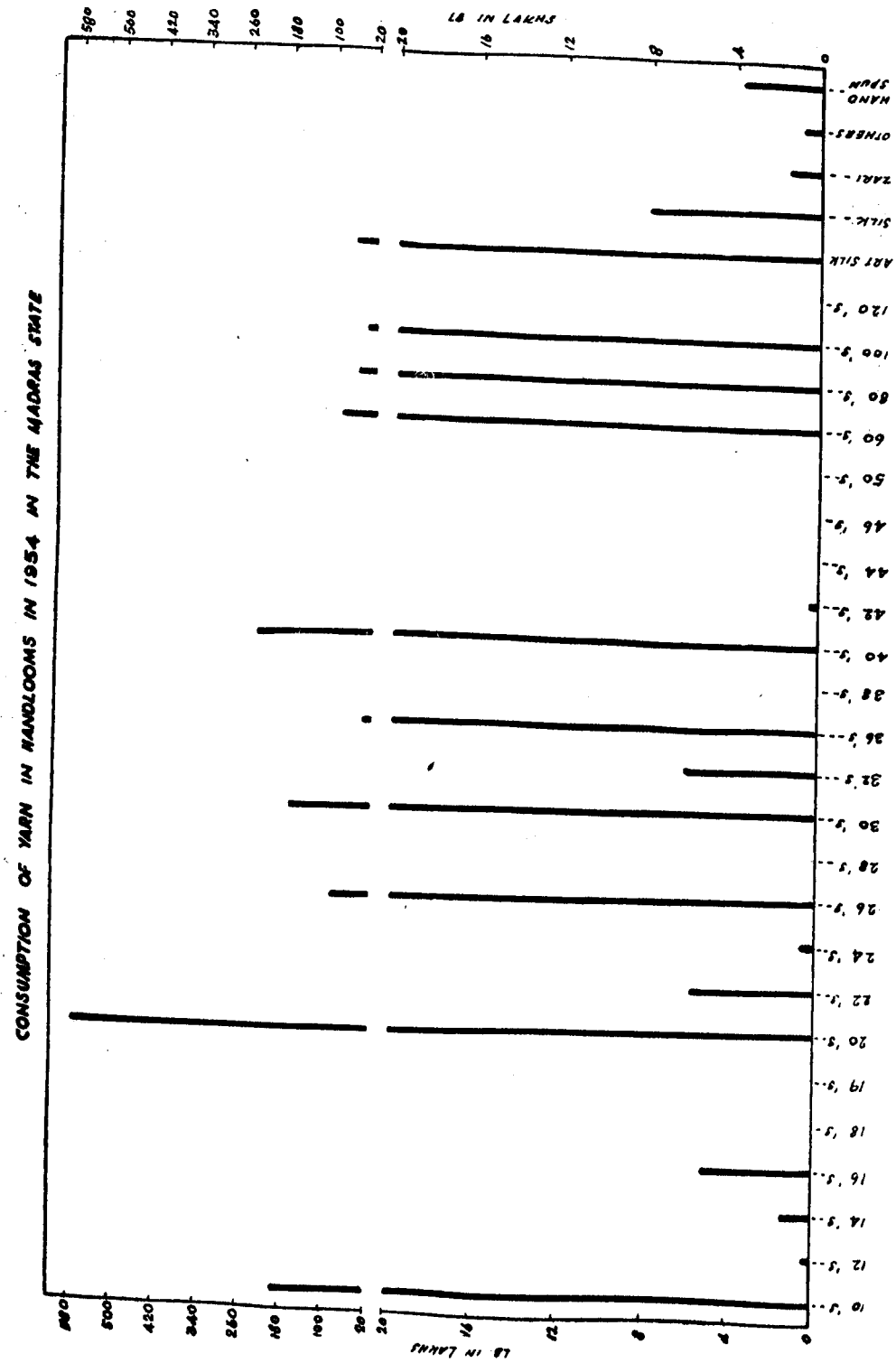
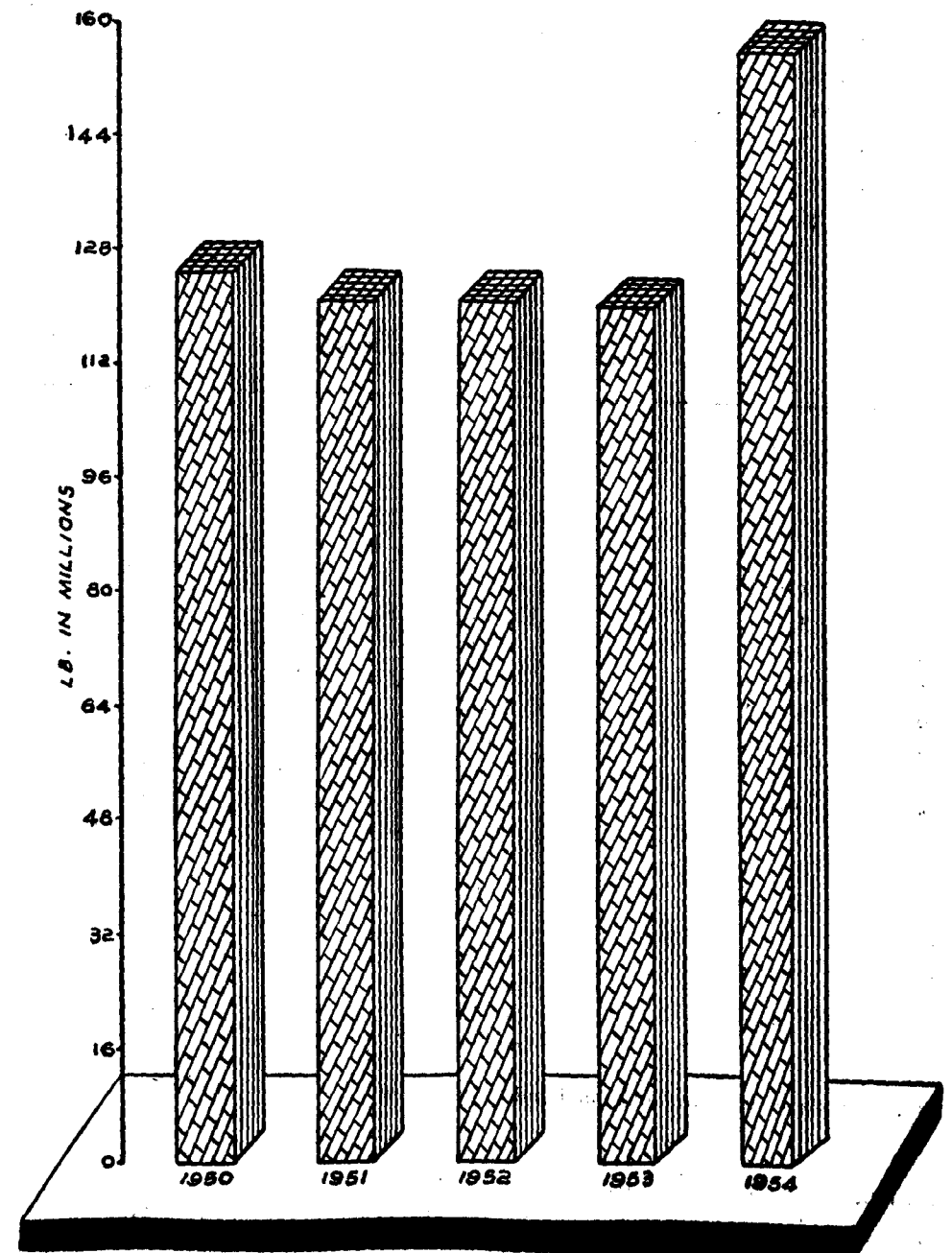
CONSUMPTION OF YARN IN HANDLOOMS IN 1952 IN THE MADRAS STATE



CONSUMPTION OF YARN IN HANDLOOMS IN 1953 IN THE MADRAS STATE



CONSUMPTION OF YARN IN HANDLOOMS IN THE MADRAS STATE



8.3. Dyed-bleached and grey-yarn :

Generally dyed yarn is supplied to or bought by the weavers in knots. Consumption of dyed yarn accounts for 82,113,000 lb. or 54.1 percent of the total estimated quantity of yarn consumed ; bleached yarn accounts for 51,210,000 lb. or 32.8 percent of the total consumption of yarn and the consumption of unbleached yarn was 20,706,000 lb. or 13.1 percent of the total consumption of yarn in the State. Salem and Malabar districts consume more than 50% of unbleached yarn consumed in the State. The following statement gives particulars regarding bleached unbleached and dyed yarn consumed in each district of the State.

STATEMENT No. 29

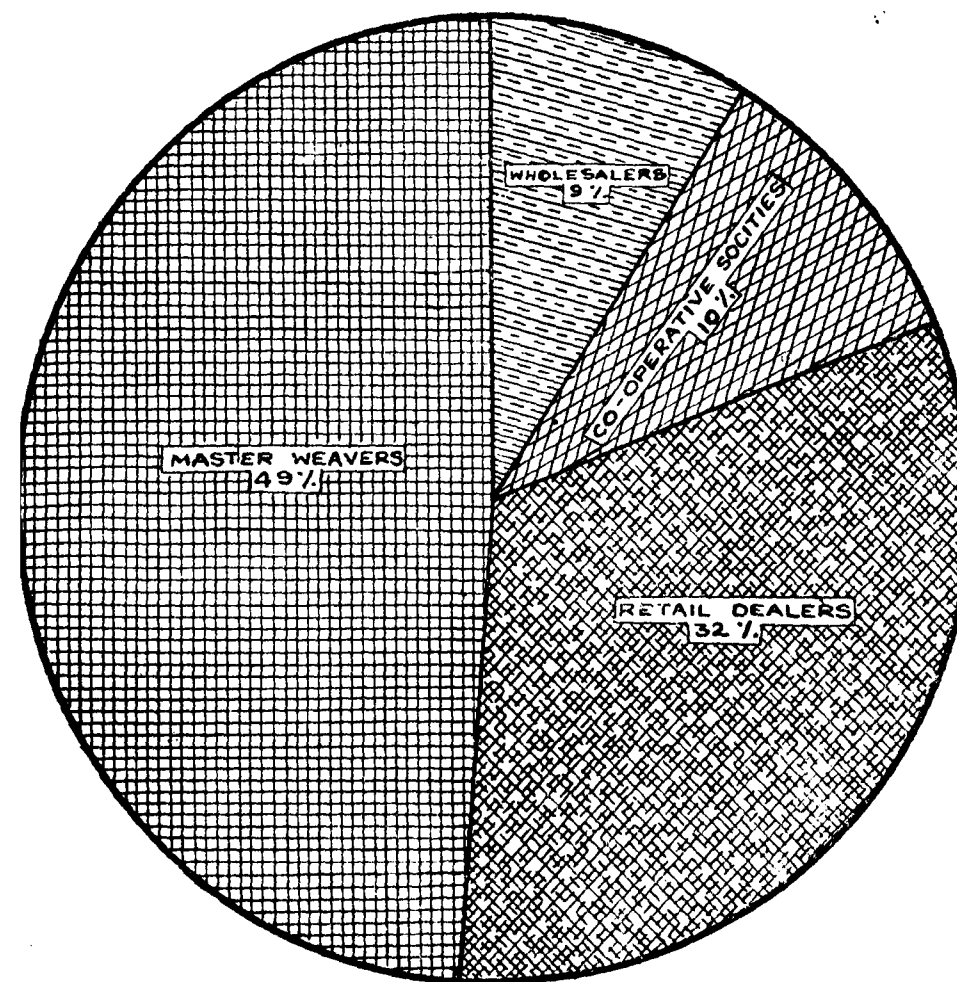
Consumption of yarn in 1954

Sl. No.	District	Bleached yarn	Unbleached yarn	Dyed yarn
(1)	(2)	(3)	(4)	(5)
(in thousands of lb)				
1.	Chingleput	3,089	7	4,304
2.	Coimbatore	15,141	...	10,039
3.	Madras	614	...	737
4.	Madurai	4,600	449	5,883
5.	Malabar	2,653	6,542	4,355
6.	North Arcot	1,404	63	7,693
7.	Ramanathapuram	1,348	1,981	7,221
8.	Salem	17,593	7,286	17,411
9.	South Arcot	887	740	1,114
10.	South Kanar	82	240	1,091
11.	Tanjore	370	186	903
12.	Tiruchirapalli	1,145	2,537	14,881
13.	Tirunelveli	2,284	675	6,481
Total		51,210	20,706	82,113

8.4. Supply of yarn in hanks or bundles preferred.

The weaver prefer yarn to them supplied in the form of bundles and hanks. The bulk of the yarn used by handloom weavers is sized either in hank form or after the warp has been laid out. Supply of ready made warp no doubt saves the labour involved, in the

NORMAL CHANNEL OF SUPPLY OF YARN TO THE WEAVERS



preparatory process. However this will affect the weavers adversely as the subsidiary earnings of the weavers family in doing preparatory processes will be wiped out.

8.5 Yarn not made by weaver.

The survey has revealed that in no case does the weaver himself make the yarn. Out of 521,598 looms in the State 520,029 looms use yarn produced in mills while only 1,569 looms use handspun cotton yarn supplied by the khadi spinning centres.

8.6 Agency for supply of yarn :

The weavers do not get their supplies of yarn directly from the mills. Supply of yarn is made to the weavers by the master weavers, retail dealers, co-operative societies and the wholesalers. Master weavers alone supplied 49% of the total quantity of yarn consumed by the Handlooms. The co-operative societies supply 10 percent of the total consumption of yarn in the State by the Handlooms.

8.7 Consumption data per loom :

The 424,784 looms engaged in weaving cloth from cotton yarn in the State consumed 147,526,000 or 347 lb. per loom per annum or 28 lb. per loom per month. The consumption of art silk yarn by 15,310 looms engaged in weaving cloth from art silk yarn was 6,050,000 lb. or 395 lb. per loom per annum or 33 lb. per loom per month. The silk yarn consumed by 11,948 looms was 837,000 lb. or 70 lb. per loom per annum 6.7 lb. per loom per month. The consumption of handspun cotton yarn by 1,458 looms is 373,000 lb. or 258 lb. per loom per annum or 21.5 lb. per loom per month.

8.8 Requirements of yarn :

It has been found as a result of the survey that idleness of looms has been a common feature. This is mainly due to the fact that the supply of yarn is inadequate to keep the looms and weavers fully employed. The average monthly consumption of yarn by looms in 1954 as revealed by the survey was 12,918,000 lb. In order to keep all the 5,21,598 looms in the State fully employed for 300 days in the year, the average monthly requirement of yarn as found in the survey is 14,495,000 lb. per month or 173,964,000 lb.

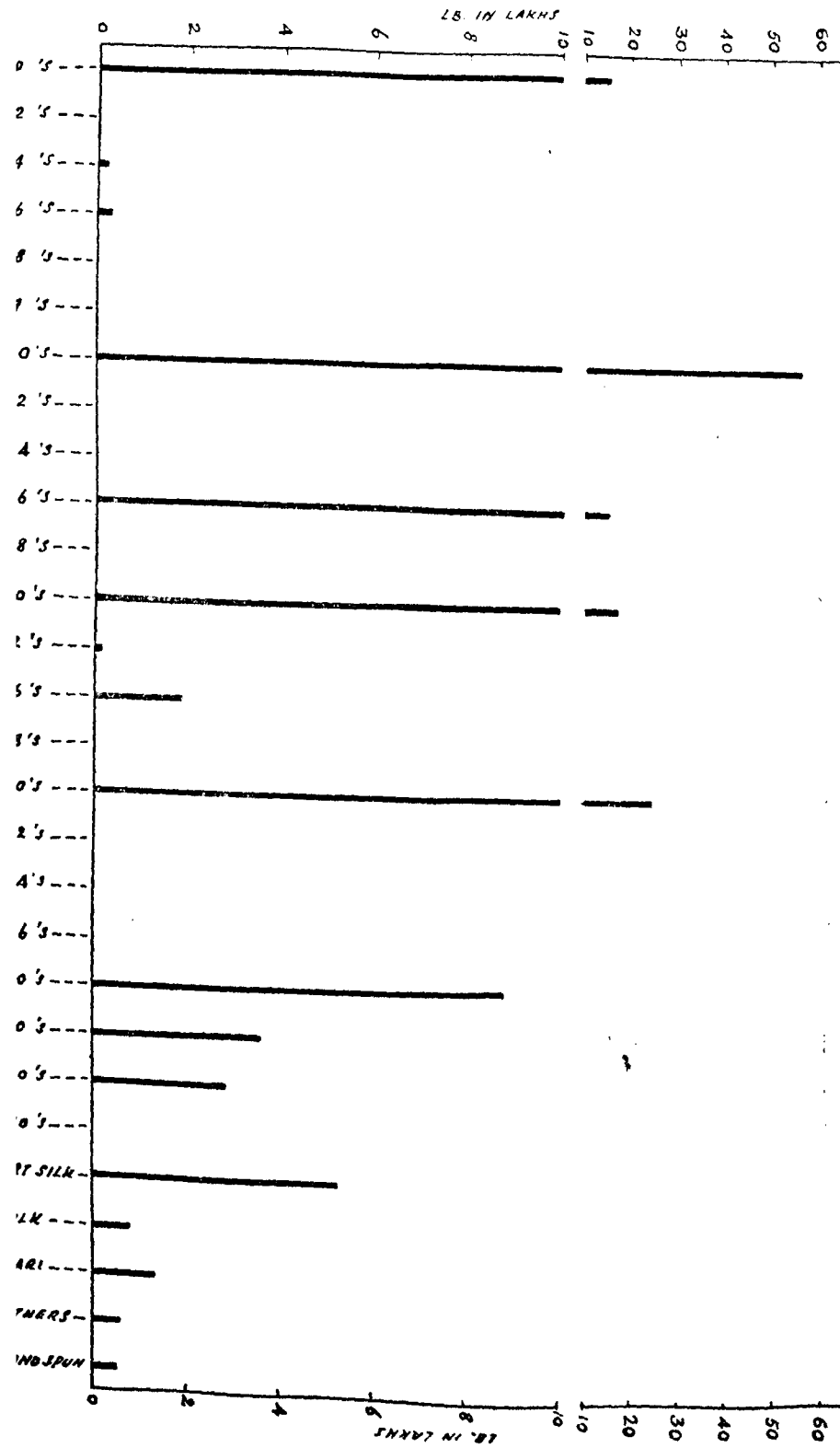
per annum. A statement showing particulars of yarn of different counts and varieties required for the handlooms in the State is given below :

STATEMENT No. 30

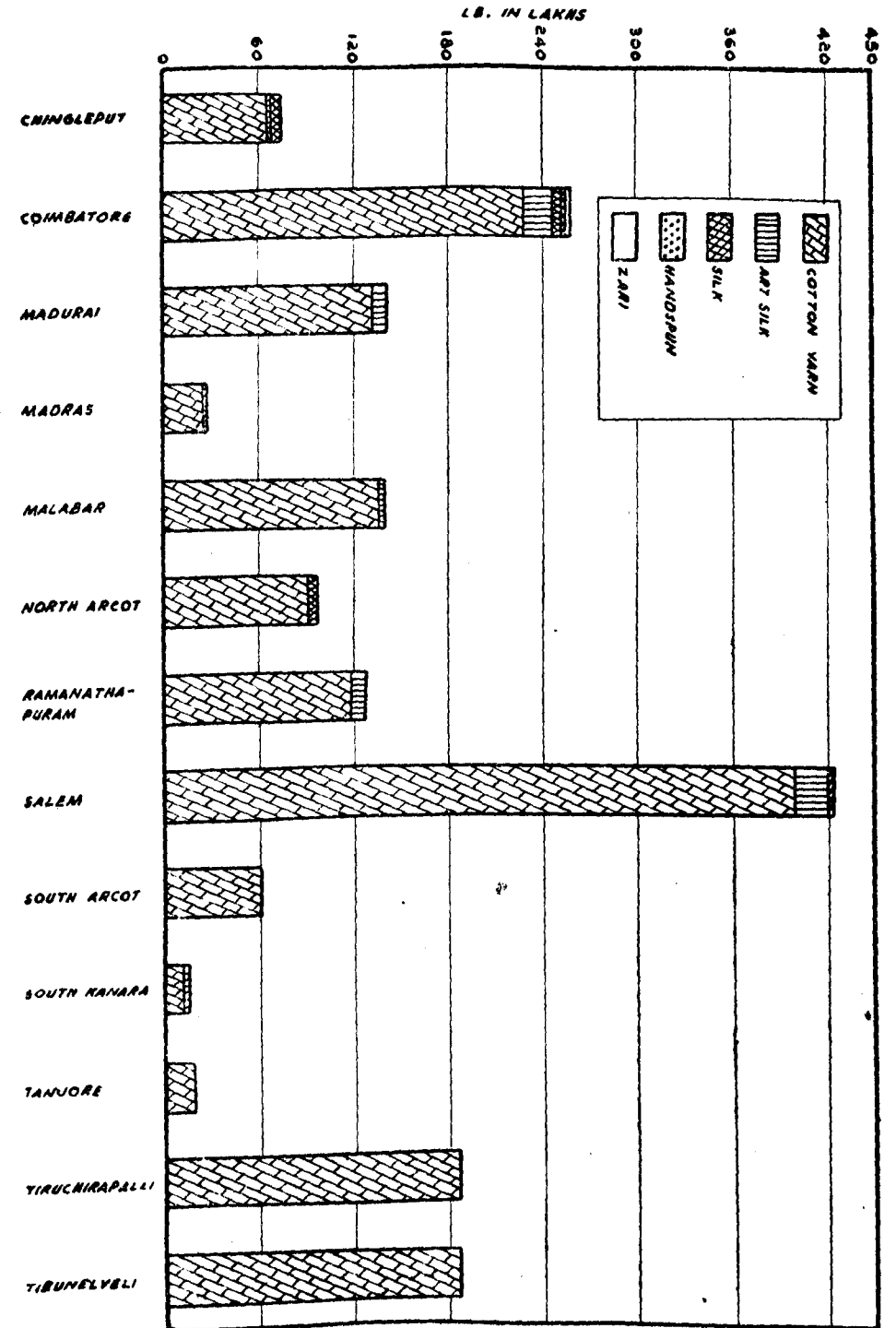
Monthly requirements for the State of different varieties of yarn

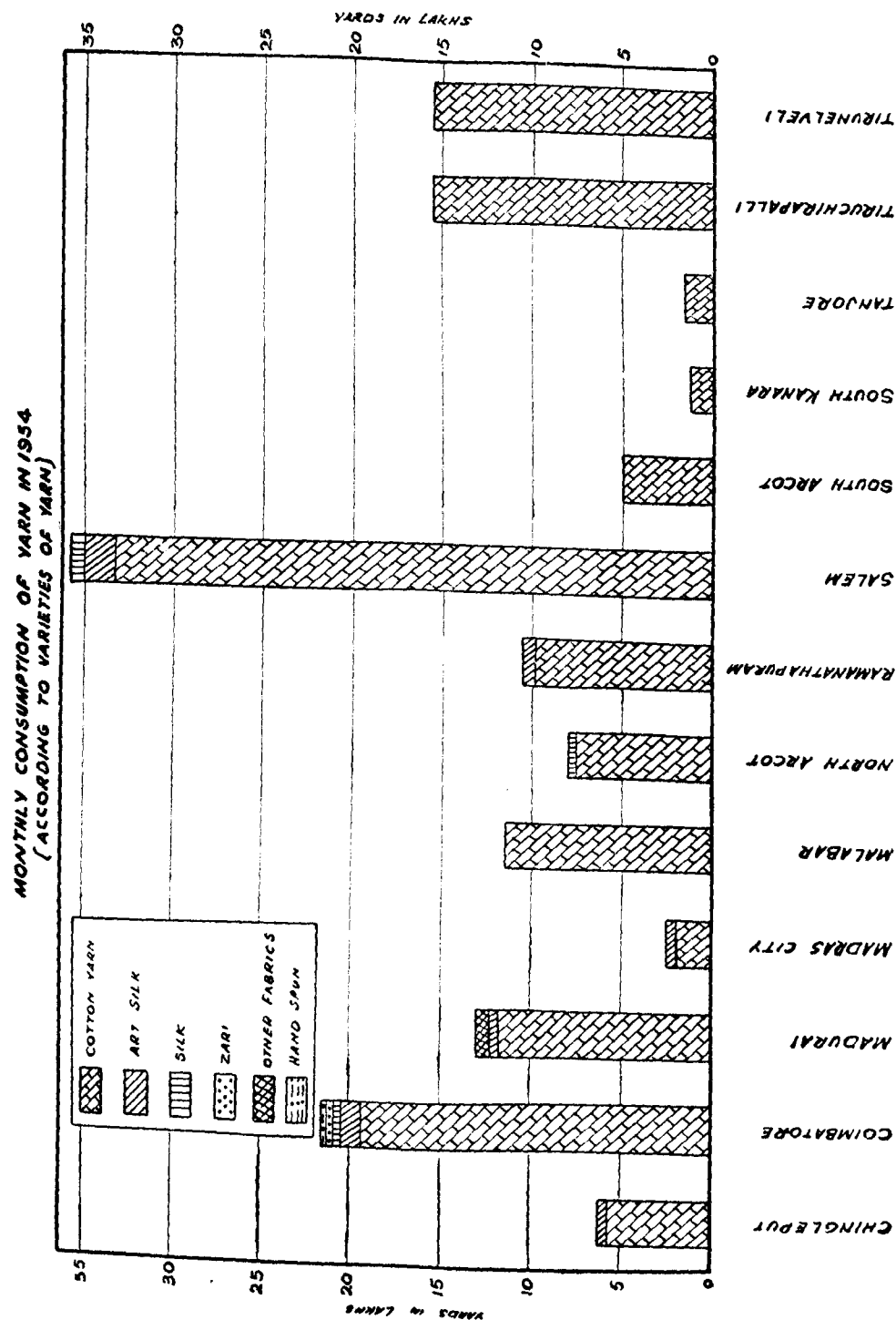
Cotton yarn of counts		Yarn in lb.
(1)		(2)
Cotton Yarn	10's	1,467,000
"	12's	2,000
"	14's	12,000
"	16's	33,000
"	18's	...
"	20's	5,500,000
"	22's	...
"	24's	4,000
"	26's	1,162,000
"	28's	...
"	30's	1,466,000
"	32's	5,000
"	36's	192,000
"	38's	...
"	40's	2,348,000
"	42's	...
"	44's	...
"	46's	...
"	60's	877,000
"	80's	352,000
"	100's	293,000
"	120's	...
Art Silk yarn		529,000
Silk yarn		69,000
Yarn from other Fibres. }		29,000
Zari		124,000
Handspun cotton yarn		31,000
Total		14,495,000

MONTHLY REQUIREMENTS OF YARN ACCORDING TO COUNTS IN MADRAS STATE FOR 1951



DISTRICT-WISE ANNUAL REQUIREMENTS OF YARN IN MADRAS STATE





Districtwise particulars of the average monthly consumption of yarn per loom and per weaver are shown in the statement below :

STATEMENT No. 31

Statement showing the average monthly consumption of
Yarn per loom and per weaver in each district

Sl. No.	District	Average consumption of yarn per loom	Average consumption of yarn per weaver	Average requirements of yarn per loom
(1)	(2)	(3)	(4)	(5)
		Lb.	Lb.	Lb.
1.	Madras	9.5	9.3	36
2.	Chingleput	13.5	13.6	14
3.	South Arcot	8.1	9.5	20
4.	North Arcot	17.2	17.8	18
5.	Tanjore	12.5	13.0	13
6.	Tiruchirapalli	52.3	54.7	56
7.	Coimbatore	35.1	39.3	35
8.	Salem	31.1	32.7	33
9.	Madurai	30.6	33.7	45
10.	Ramanathapuram	24.5	22.6	30
11.	Tirunelveli	15.7	16.5	35
12.	Malabar	21.3	27.7	27
13.	South Kanara	17.3	27.0	26
	State :	24.8	26.6	27.8

It is seen that the averages of monthly consumption of yarn per loom and per weaver and the average monthly requirement of yarn are highest in Tiruchirapalli District while in South Arcot District the corresponding figures are the lowest in the State.

STATEMENT No. 32—Contd.

CHAPTER IX

Production and Potential capacity of the Handloom

9.0. Types of handloom fabrics produced :

The industry though mainly concentrated in a few important centres, is however spread all over the State. The principal types of fabrics produced range from the coarse gauze and bandage cloth, kailies, sarees, mundus, towels, bedsheets, curtain cloth and table cloth of cotton yarn of 20's and below to the fine varieties of sarees and dhoties, shirtings, turban cloth of 80's and 100's, besides the art silk and silk sarees, dhoties, angavastrams and lungies. However, there is a distinct specialization in the types of fabrics produced in particular areas. Madras specializes in production of handkerchiefs, Cannanore, Calicut and certain other places in the Malabar district specialise in the manufacture of coatings, shirtings and furnishing fabrics, Coimbatore and Madurai produce fine sarees of 80's and 100's with gold laced borders, Arni in North Arcot district, Conjeevaram in Chingleput district and Koranadu in Tanjore district produce fine varieties of silk sarees, Salem is famous for the production of "Gundanchu dhoties" Bhavani in Coimbatore district specialises in carpets, and certain areas in North Arcot and Chingleput district produce lungies and Madras handkerchiefs. The specifications of the principal types of handloom fabrics produced in each type in the districts of the State is shown below :—

STATEMENT No. 32

Name of district	Principal varieties of handloom fabrics produced with dimension
1. Chingleput	1. Cotton saree — 40s × 40s, 60s × 60s, 48" × 6 to 9 yards. 2. Silk saree — 54" × 9 yards. 3. Lungi — 40s × 60s, 54" × 9 to 10 yards 27" × 9 to 10 yards. 4. Handkerchief : 40s and art silk ; 36" × 8 yards

Name of the Districts	Principal varieties of handloom fabrics produced with dimension.
2. Coimbatore	1. Cotton saree ; 80s and art silk ; 45" × 5 to 8 yards. 2. Art silk saree — 45" × 5 to 8 yards. 3. Silk saree — 45" × 5 to 8 yards. 4. Mixture saree — 45" × 5 to 8 yards. 5. Dhotie — 20s × 20s ; 50" × 3 to 8 yards. 6. Dhotie (Silk) — 50" × 4 to 8 yards. 7. Turban — 100s × 100s and silk ; 100" × 3 yards. 8. White and coloured pieces 40s × 40s ; 60s × 60s and silk ; 50 × 10 to 12 yards. 9. Ghada 50" × 10 yards. 10. Caperts Japanese silk 10s × 10s ; 20s × 20s 28" × 72" ; 52" × 90".
3. Madras	1. Cotton saree 40s × 40s ; 60s × 60s ; 46" × 8 yards. 2. Art silk 45" × 8 yards. 3. Lungi 40s × 60s ; 50" × 8 to 9 yards. 4. Handkerchief 40s × 60s ; 40s × 60s ; Art silk 36" × 8 yards.
4. Madurai	1. Saree 60s ; 80s ; Art silk for border and 36" × 5 to 9 yards ; 54" × 5 to 9 yards. 2. Dhoti 20s × 26s, 48" × 2 yards. 50" × 2 yards. 3. Towel 20s, 36" × 2 yards. 4. Bedspread 10s ; 50" × 50" × 2½ yards. 50 × 3 yards, 50" × 3½ yards. 5. Handkerchief 26s ; 15" and 90" 6. Shirting 36s ; 40s ; 36" × 8 yards.

STATEMENT No. 32—*Contd.*

Name of the Districts	Principal varieties of handloom fabrics produced with dimension.
5. Malabar	1. Thortu 20s × 20s; 27" × 54" 2. Dhotie 20s × 20s; 40 × 40s; 20s 48" × 1 yards. 3. Second cloth 20s; 30s; 40s, 36" × 56" 4. Pudava 20s; 26s; 42" × 16 yards. 5. Bedspread 10s; 20s; 40" × 54"; 48" × 90" 60" × 90".
6. North Arcot	1. Cotton saree — 60s; 36s; 40s; 45" × 8 yards 2. Silk saree — 45" × 9 yards. 3. Dhottie — 40s; 48" × 2½ yards. 4. Lungi — 40s × 60s; 40s × 40s; 50" × 80 44" × 2 yards.
7. Ramanathapuram	1. Saree — 20s; 40" × 5 yards; 43" × 7 8 yards. 80s × 100s; 30s, 20s, 45" × 6 to yards; 50" × 6 to 9 yards. 2. Shirting — 20s; 44" × 12 yards; 26"; 45" × yards. 3. Coating — 20s; 32" × 12 yards. 4. Dhotie — 26s; 50" × 2 yards.

STATEMENT No. 32—*Contd.*

Name of the Districts	Principal varieties of handloom fabrics produced with dimension.
8. Salem	1. Saree — 30s; 40s; 30 × Art silk; 60s; 30s; 80s × art silk; 100s. 42" × 6 to 8 yards. 46" × 6 to 9 yards; 50" × 6 to 9 yards. 48" × 6 yards. 2. Dhottij — 30s; 40s; 60s; 80s; 100s; 50" × 4 yards, 8 yards and 12 yards. 52" × 4 and 8 yards. 3. Lungi — 60s; 50" × 8 yards; 40, 1 × 60s, 29"; × 50" × 18 yards. 4. White pieces — 30s; 40s; 33" × 10 yards and 12 yards; 46" × 10 yards and 12 yards; 50" × 10 yards and 12 yards. 5. Towel — 30s; 36" × 2 to 3 yards. 6. Coating — 30s; 27" × 2 yards.
9. South Arcot	1. Lungi — 40s; × 60s; 29" × 18 yards; 50" × 18 ya ds. 2. Dhotie — 20s; 50" × 8 yards. 3. Shirting — 40s; 44" × 18 yards. 4. Sarees — 20s; 44" × 9 yards.
10. South Kanara	1. Mundu — 26s; 40s; 48" × 2 yards. 2. Thortu — 20s; 30" × 54" 3. Lungi — 26s; 50" × 2 yards. 4. Towel — 20s; 24" × 2½ yards. 5. Bedspread — 26s; 50" × 2½ yards. 6. Saree — 40s; 60s; 80s; 45" × 6 yards. 7. Shirting — 26s; 36" × 12 yards. 8. Loin cloth — 20s; 24" × 6 yards. 9. Pudava — 26s; 45" × 8 yards. 10. Dhotie — 30s; 52" × 8 yards. 11. Canvas — 26s; 18" × 24 yards. 12. Casement cloth — 20s; 4, " × 24 yards. 13. Kailie — 10s, 48" × 4 yards. 14. Gauze and Bandage — 10s; 28" × 18 yards.

STATEMENT No. 32—Contd.

Name of the Districts	Principal varieties of handloom fabrics produced with dimension.
11. Tanjore	1. Saree — 40s; 60s; 80s; 100s; 45" × 6, 7, 8 and 9 yards; 46" × 6, 7, 8 and 9 yards. 47" × 6, 7, 8 and 9 yards. 48" × 6, 7, 8 and 9 yards. 50" × 6, 7, 8 and 9 yards. 2. Silk saree — 50" × 6, 7, 8 and 9 yards. 52" × 6, 7, 8 and 9 yards. 3. Dhotie — 40s; 52" × 8 yards; 53" × 8 yards. 4. Towel — 20s; 36" × 7 yards; 36" × 8 yards; 42" × 7 yards; 46" × 8 yards. 5. Lungi — 30s; 32" × 7 yards. 6. Kambayam — 20s; 40½ × 9 yards; 47" × 12 yards.
12. Tiruchirapalli	1. Dhotie — 100s; 60s; 60s × 40s, 40s, 48" × 8 yards, 52" × 8 yards. 2. Saree — 100s; 60" × 6 to 9 yards. 3. Towel — 10s × 2/20s; 30" × 6 yards. 4. Bedspread — 10s × 2/20s; 50" × 5 yards.
13. Tirunelveli	1. Saree — 20s; 24s; 30s; 42" × 7 to 7½ yards 44" × 7 to 7½ yards. 2. Dhotie — 20s; 26s; 44" × 2 to 2½ yards. 3. Towel — 20s, 32" × 2 yards. 4. Lungi — 20s; 26s; 20s × 26s, 44" × 2 yards. 5. Shirting — 20s; 40s; 30" × 24 yards. 6. Coating — 20s; 26s; 28" × 24 yards. 7. Lungi — 26s; 48" × 2 yards.

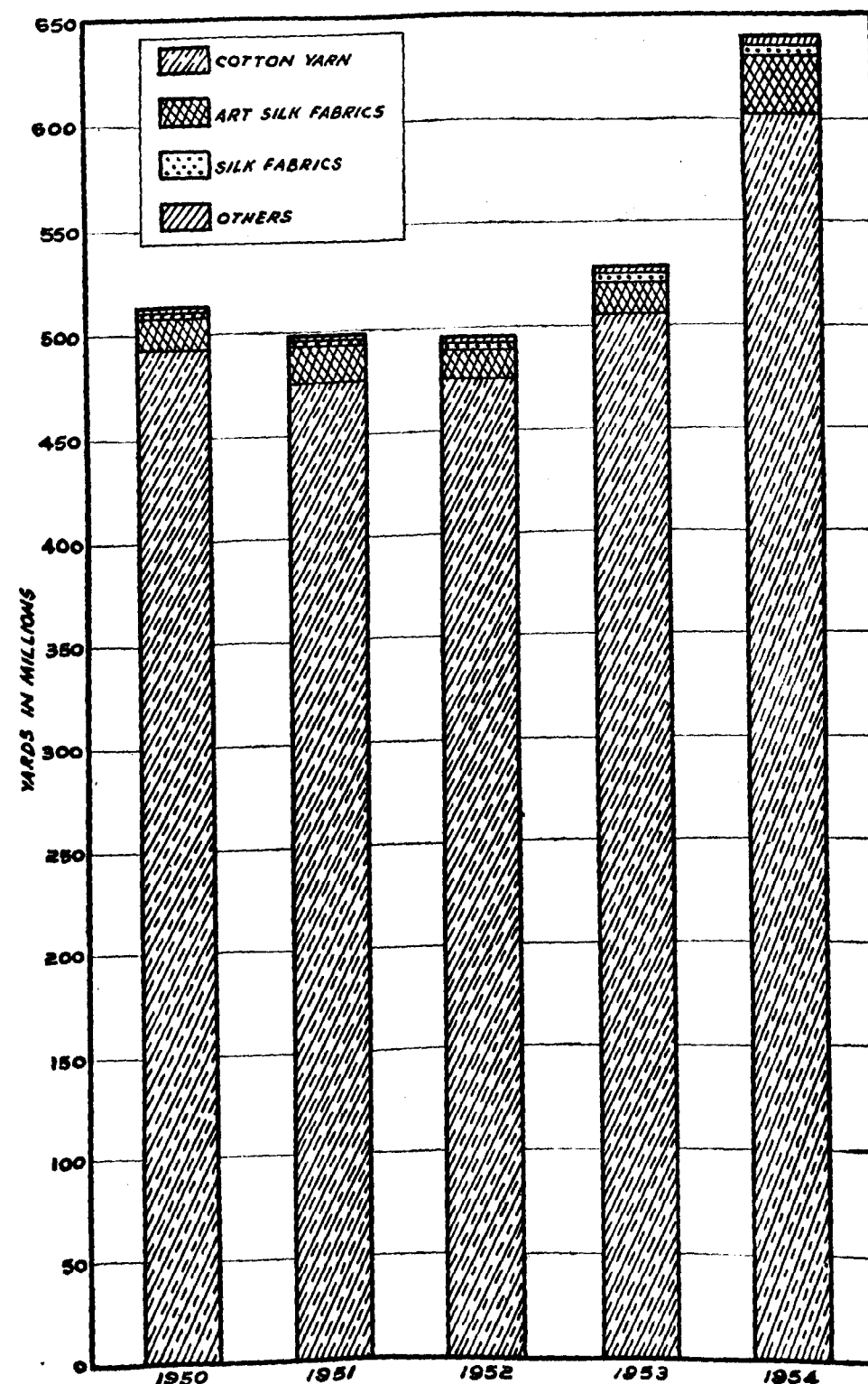
9.1. Production of types of fabrics:

The estimated production of the handloom industry in the State, classified under cotton textiles, art silk fabrics, silk fabrics and others during the years 1950 to 1954 is shown below:

STATEMENT No. 33

Types of fabrics produced in yards		1950	1951	1952	1953	1954
Sl. No.	Type of fabrics	(3)	(4)	(5)	(6)	(7)
1.	Cotton fabrics	493,470,000	476,652,000	476,418,000	505,721,000	579,105,000
2.	Artsilk fabrics	15,919,000	16,421,000	15,967,000	17,763,000	25,998,000
3.	Silk fabrics	2,489,000	2,585,000	2,494,000	3,268,000	18,989,000
4.	Others	1,338,000	1,167,000	1,181,000	1,681,000	13,435,000
Total		513,216,000	496,825,000	496,060,000	528,433,000	637,527,000

PRODUCTION OF CLOTH OF DIFFERENT KINDS IN THE YEAR 1950-54



9.2. Mill Competition :

Faced with severe competition with still made goods, the handloom weaver was often unable to hold his own and had to give up his traditional occupation. There was indirect competition of change in sartorial habits of the people, namely the changing fashion leading to preference of the light mill made fabrics to the heavy handwoven fabrics. Secondly he had to face the more direct competition of one fabric replacing another of similar kind by being cheaper. The competition has been most serious in the case of sarees and dhoties of counts 90s and 40s. The mills were able to produce almost the same types of sarees as those produced by the handlooms in regard to counts of yarn used, designs and colour. There was slight modification in the border as the mills introduced some special design on the border. The comparatively better finish of the mill made saree at a cheaper price brought about the consumer preference for the mill made fabrics. The consumer gets the fabric he is to use with a better finish and what is more important at a lower price. The consumption of mill sarees of high counts is likewise undermining the position of the handloom industry. The competing mill saree is slightly of lower counts, lighter in weight, and the elegant artificial silk design of its border along with its lower price gives it an advantage over the handloom saree.

Direct competition in the case of dhoties as in the case of sarees, has been in respect of medium counts ranging from 20s to 40s. The margin of differences in price between the dhoties produced by the handloom and mills which is 46 percent has been a powerful factor in influencing the consumer preference, as the consumers of this type of dhoties are normally persons with small incomes.

9.3. Competition from power-looms :

In addition to the competition of the mill made goods, there has been a similar encroachment by the small scale power loom factories producing precisely the same varieties of fabrics, but at a lower cost. By their organisation, they combine the advantages of both the mills and handlooms as they do not come under the Factories Act while they utilise the cheap electrical power and the modern appliances in weaving.

9.4. Field of reservation :

The handloom industry was finding it impossible to face competition of the mills and small scale power loom factories. In order to afford relief to handloom industry, the following items of cotton textiles were reserved for production by the handloom in 1950.

- (a) Dhoties with borders (exceeding the 14th inch in width) any those in which zari or muga or art silk yarn has been used in the border.
- (b) Lungi, sarong or gamcha with a check pattern or any cloth with check pattern having a width between 42" and 48" which can be made into lungies, sarongs, gamchas.
- (c) Checked or striped chaddar.
- (d) Bed sheets with coloured woven border length-wise or breadth-wise and shirtings of similar description in running lengths.
- (e) Counterpanes other than the one having over all dobby or jacquard design and bed covers.
- (f) Gauze, bandage and jaconet cloth.
- (g) Table cloth and napkins other than demask bleached cloth.
- (h) Duster or duster cloth or wiper cloth or glass cloth.
- (i) Coarse cloth of plain weave warp or weft counts of 8s and below.
- (j) Sarees with borders exceeding 2½" in width or saree with heading exceeding 9" in width or saree with gold coloured art silk yarn or real or imitation zari in border or saree with coloured yarn in the body.
- (k) Towels or towelling cloth in honey-comb weave.

9.5. Extent of benefit to the industry :

This reservation does not appear to have been taken advantage of in Chingleput, Coimbatore, Madras Malabar, North Arcot, South Arcot, Tanjore and Tiruchirapalli districts. In Salem district almost all the weavers appear to have taken advantage of the reservation

but with no appreciable increase in production. Forty percent of the weavers in Madurai and Tirunelveli districts are estimated to have taken advantage of the field of reservation accounting for an increase their production by 15 percent over the production of the pre-reservation period. There was thus no substantial benefit to the handloom weavers resulting from the reservation of certain types of fabrics exclusively by the handloom industry. The possible benefit was vitiated by the small scale power-looms which were to produce the reserved varieties along with the handlooms. The power-loom factories were also free to produce coloured sarees in counts of 36s and above. The white sarees produced in mills were processed and dyed either by the mill owners themselves or by others. There were the forces that operated against the accrual of much benefit to the handloom industry as a result of the reservation.

In 1952 there was the reservation of 40 percent dhoties to be produced by handlooms. The peak production during the year 1951-52 was taken as the base period when mills were compelled to produce 40 percent of their production on wide width looms in sarees and dhoties. The production therefore shot up to 50,000 bales of dhoties per month. Mills were permitted to produce 60 percent of this viz., 30,000 bales which is a high figure compared with their annual production of 25,000 bales and 16,000 bales during 1949-50 and 1950-51 respectively. There was therefore no real benefit to the handloom industry as a result of this reservation.

9.6. Production of fabrics :

The estimated figures of production of cotton, art silk, silk, and other types of handloom fabrics in the district in 1954 are given in the statement below :—

STATEMENT No. 34

Types of Fabrics produced in Yard (1954).

Sl. No.	District	Cotton	Art silk	Silk	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Chingleput	30,827,000	16,000	27,000	...	30,870,100
2.	Coimbatore	87,084,000	9,404,000	309,000	1,018,000	97,815,000
3.	Madras	9,899,000	3,000	...	...	9,902,000
4.	Madurai	22,706,000	5,500,000	...	...	28,206,000
5.	Malabar	50,575,000	281,000	...	7,149,000	58,005,000
6.	North Arcot	48,103,000	...	2,235,000	...	50,338,000
7.	Ramanathapuram	28,567,000	954,000	898,000	988,000	31,407,000
8.	Salem	147,753,000	7,773,000	15,443,000	3,981,000	174,950,000
9.	South Arcot	21,198,000	...	...	...	21,198,000
10.	South Kanara	3,098,000	2,067,000	...	257,000	5,422,000
11.	Tanjore	7,331,000	...	77,000	42,000	7,450,000
12.	Tiruchirapalli	49,748,000	...	...	...	49,748,000
13.	Tirunelveli	72,216,000	...	...	...	72,216,000
Total		579,105,000	25,998,000	18,989,000	13,435,000	637,527,000

The estimated production of cloth of various types in Madras State in 1954 was 637,527,000 yards, of which cloth from cotton yarn was 579,105,000 yards or 91% of the total production. The production of other varieties of cloth viz., silk cloth, art silk cloth and cloth from mixtures of yarn form only 9% of the total production. District-wise particulars of the quantity of cloth of different varieties produced by the handlooms in 1954 are given below in the statement No. 35.

STATEMENT

Production of principal varieties of handloom

Varieties of cloth.	Madras	Chingleput	South Arcot	North Arcot	Salem	Coimbatore
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Cotton Sarees	630,000	2,868,000	4,783,000	23,496,000	65,108,000	29,791,000
2. Lungies	8,215,000	19,354,000	9,081,000	17,780,000	76,000	...
3. Thoratu	...	...	...	...	...	...
4. Handkerchiefs	1,054,000	7,069,000	...	...	...	...
5. Mundu	...	...	...	...	...	...
6. Dhoties	...	1,418,000	4,894,000	3,701,000	57,438,000	48,440,000
7. Upper cloth	...	19,000	...	...	...	...
8. Bed Spread	...	...	...	...	401,000	1,842,000
9. Table cloth	...	99,000	...	...	...	...
10. Pudava	...	...	...	...	...	...
11. Towels	...	...	1,836,000	584,000	16,220,000	1,661,000
12. Khadder	...	...	...	...	...	1,513,000
13. Shirtings	...	...	573,000	157,000	1,769,000	415,000
14. Ghada	...	...	31,000	...	...	1,865,000
15. Coatings	...	...	...	...	850,000	...
16. Bandage cloth	...	...	...	2,278,000	...	...
17. Kulpithan	...	...	...	107,000	...	...
18. Thuppetta	...	...	...	...	2,074,000	...
19. Carpet	...	...	...	...	3,817,000	1,557,000
20. Art Silk Sarees	3,000	...	...	...	7,773,000	9,290,000
21. Art Silk Mundu	...	...	...	...	...	...
22. Art Silk Dawani and Pavadai	...	16,000	...	...	...	...
23. Art Silk Shirtings	...	...	...	...	...	114,000
24. Silk Sarees	...	27,000	...	2,041,000	15,443,000	309,000
25. Silk Towels	...	...	...	194,000	...	...
26. Silk Dhoties	...	...	...	...	...	...
27. Silk Shirtings	...	...	...	...	...	...
28. Others	...	...	...	...	3,981,000	1,018,000
Total	9,902,000	30,870,000	21,198,000	50,338,000	174,950,000	97,815,000

No. 35

cloth in Madras (Residuary) State in 1954

Tanjore	Tiruchirappalli	Madurai	Ramanathapuram.	Tirunelveli	Malabar	South Kanara	State
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
5,261,000	11,749,000	15,767,000	14,565,000	16,834,000	23,000	802,000	191,677,000
209,000	...	...	230,000	27,876,000	34,000	265,000	83,120,000
...	...	...	...	...	24,754,000	296,000	25,050,000
...	...	151,000	...	...	...	...	8,274,000
...	...	...	...	...	...	857,000	857,000
1,747,000	10,780,000	1,057,000	7,454,000	10,222,000	6,795,000	...	153,946,000
...	...	...	...	...	...	...	19,000
...	20,418,000	3,172,000	...	14,000	223,000	206,000	26,276,000
...	...	...	...	...	...	...	99,000
...	...	...	...	...	280,000	458,000	738,000
114,000	6,798,000	2,304,000	534,000	17,033,000	40,000	165,000	47,289,000
...	...	...	...	...	9,000	...	1,522,000
...	...	255,000	3,115,000	237,000	18,417,000	49,000	24,987,000
...	3,000	...	...	...	...	...	1,899,000
...	...	...	694,000	...	...	...	1,544,000
...	...	...	1,975,000	...	...	...	4,253,000
...	...	...	...	...	...	...	107,000
...	...	...	...	...	...	...	2,074,000
...	...	...	...	...	...	...	5,374,000
...	...	5,500,000	954,000	...	...	1,083,000	24,603,000
...	...	...	...	...	...	984,000	984,000
...	...	...	...	...	...	...	16,000
...	...	...	...	...	281,000	...	395,000
14,000	...	...	898,000	...	...	...	18,732,060
...	...	...	...	...	...	...	194,000
12,000	...	...	...	...	...	...	12,000
51,000	...	...	...	...	...	...	51,000
42,000	...	...	988,000	...	7,149,000	257,000	13,435,000
7,450,000	49,748,000	28,206,000	31,407,000	72,216,000	58,005,000	5,422,000	637,527,000

It may be seen from the statement that cotton sarees are produced in all the districts of the State and production is of the order of 191,677,000 yards. Dhoties come next in importance, the quantity produced being 153,946,000 yards. Lungies are produced to the extent of 83,120,000 yards and towels produced to the extent of 47,289,000 yards. Detailed particulars of production of different varieties of cloth during the years 1950 to 1954 are given in Appendices VI—X. The Madras State is an important centre for the production of cotton cloth in India.

9-7. Important centres of production :

Salem is the most important producing centre of handloom cloth in the State accounting for about one third of the entire production of cloth in the State, the production being 174,950,000 yards in 1954. The next important district is Coimbatore which produces 97,815,000 yards. Cloth from art silk yarn is produced in large quantities in the districts of Coimbatore, Salem, Madurai and South Kanara and cloth from silk yarn is produced in the districts of Chingleput Coimbatore, North Arcot, Tanjore, Ramanathapuram and Salem. The production of cloth in this State shows an upward trend, the production in 1954 was 24.2% higher than the production in the year 1950.

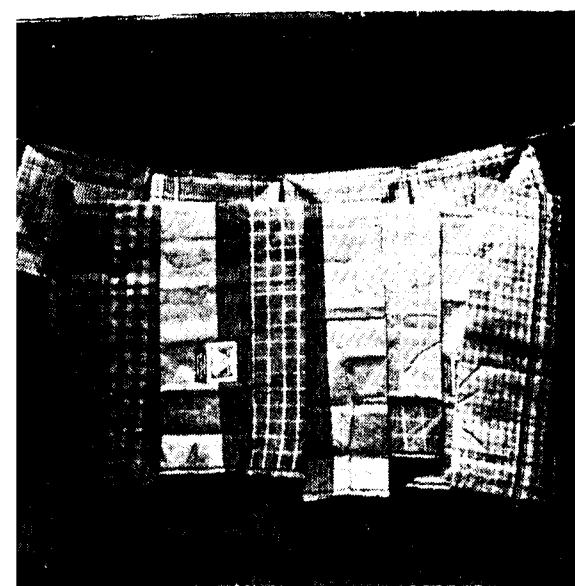
9-8. Production of cloth per lb of yarn :

The total quantity of yarn consumed in the State was 155,016,000 lbs and the total quantity of handloom cloth of all varieties produced in the year was 637,527,000 yards. The production of cloth per lb. of yarn used is thus 4.1 yards. District-wise statement

FINISHED HANDLOOM FABRICS



Cotton Sarees.

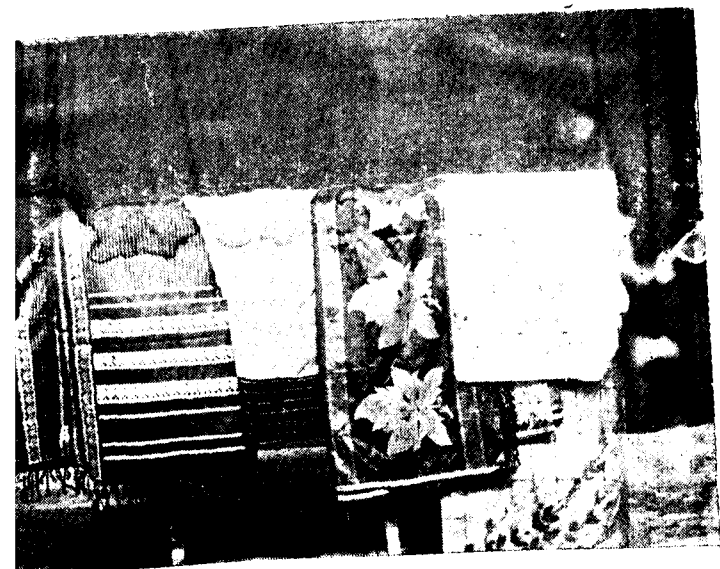


Lungies and Kailies.

FINISHED HANDLOOM FABRICS



Bed Spreads



Silk Printed Sarees

showing the average production of cloth per lb of cotton yarn is given below :—

STATEMENT No. 36

Average output of cloth per lb of yarn.

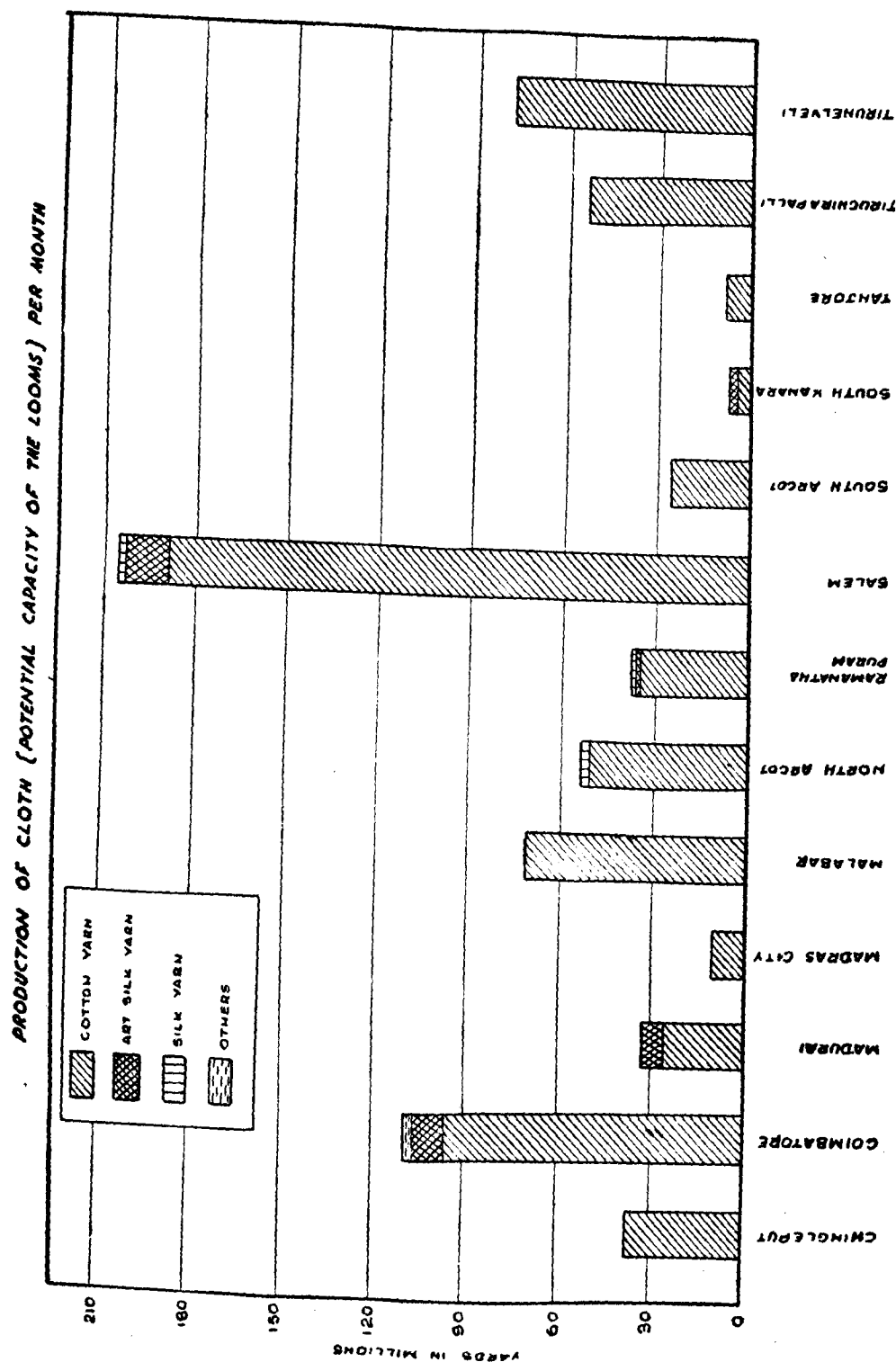
Sl. No.	District	Yarn consumed (lbs)	Cloth produced (Yards)	Average production of cloth per pound of cotton yarn (yards)
(1)	(2)	(3)	(4)	(5)
1.	Madras	1,363,000	9,902,000	7.3
2.	Chingleput	7,480,000	30,870,000	4.1
3.	South Arcot	2,741,000	21,198,000	7.7
4.	North Arcot	9,461,000	50,338,000	5.3
5.	Tanjore	42,406,000	174,950,000	4.1
6.	Tiruchirapalli	18,563,000	49,748,000	2.7
7.	Coimbatore	1,463,000	7,450,000	5.1
8.	Salem	25,628,000	97,815,000	3.8
9.	Madurai	10,933,000	28,206,000	2.6
10.	Ramanathapuram	10,558,000	31,407,000	3.0
11.	Tirunelveli	9,454,000	72,216,000	7.6
12.	Malabar	13,550,000	58,005,000	4.3
13.	South Kanara	1,416,000	5,422,000	3.8
	State :	155,016,000	637,527,000	4.1

The average production of cloth per loom for the State as a whole works out to 1,222 yards per annum or 101.8 yards per loom per month.

The output of cloth from 1 lb. of yarn varies according to the different counts of yarn used. In the case of yarn of finer counts such as 80s and above and silk yarn, the output is 6 to 8 yards. The production of cloth per lb of yarn of higher counts such 40s to 80s is 4 to 6 yards, while the output of cloth for 1 lb. of cotton yarn of medium counts such as 20s to 40s is 2 to 4 yards.

9-9. Potential capacity :

It was found as a result of the survey that most of the looms and weavers are under-employed due to lack of adequate supplies of yarn or financial difficulties in working the loom.



Assuming that all the looms are fully employed for 300 days in the year and the supply of the requirement of 173,964,000 lb of yarn is assured, the potential capacity of production of cloth is estimated to be 725,098,000 yards of which cloth from cotton yarn is 655,286,000 yards, art silk cloth 33,517,000 yards, silk fabrics 21,005,000 yards and cloth from mixtures of cotton and art silk yarn is 15 290,000 yards. The average potential capacity for production of cloth per annum is 1,390 yards or 116 yards per loom per month. The potential capacity for production of cloth in each district is given in the statement below :

STATEMENT NO. 37

Potential capacity of looms (Production in yards)

Sl. No.	Name of the District.	Cotton yarn.	Art silk yarn.	Silk yarn.	Others.
(1)	(2)	(3)	(4)	(5)	(6)
1.	Chingleput	36,187,000	19,000	317,000	—
2.	Coimbatore	96,720,000	10,630,000	419,000	1,713,000
3.	Madras	10,703,000	3,000	—	—
4.	Madurai	26,147,000	6,313,000	—	—
5.	Malabar	60,954,000	332,000	—	8,146,000
6.	Noeth Arcot	51,729,000	—	2,405,000	—
7.	Ramanathapuram	33,327,000	1,074,000	1,012,000	1,010,000
1.	Salem	170,199,000	12,528,000	16,727,000	4,012,000
9.	South Arcot	25,514,000	—	—	—
10.	South Kanara	3,897,000	2,618,000	—	357,000
11.	Tanjore	9,351,000	—	125,000	52,000
12.	Tiruchirapalli	52,032,000	—	—	—
13.	Tirunelveli	78,526,000	—	—	—
State :		655,286,000	33,517,000	21,005,000	15,290,000

9-10. Production against specific orders :

The weavers working under master weavers, co-operative societies and in factories who give specific instructions as to the type, design and constructional particulars of the cloth to be produced. The independent weavers do not get any such instructions. It is thus found that 80 percent of the weavers in the State manufacture cloth against specific orders.

9-11. Handloom production is standardised :

There is a general feeling that the cloth produced by the handlooms does not conform to the specifications. Such a complaint is due to the fact that in certain cases there is no standardization of the process of production in the handloom sector. Adherence to quality in the production of cloth is insisted upon by the co-operative societies in respect of the weavers who are their members. There is a special staff who check up the finished product at the time the weaver returns it to the society. If any flaw is detected in the constructional make up of the fabrics it is summarily rejected. The weaver will lose heavily as he will lose not only his wage but also the yarn if he produces cloth that will not stand scrutiny. Adherence to specifications is also noticed in the case of fabrics produced by weavers working under master weavers. The cloth produced in handloom factories conform to uniform quality.

9-12. Where production is not standardised :

The independent weaver is the most common offender in regard to maintaining specified standard in quality. This is however not a moral lapse but is due to pressure of economic forces. The fluctuations in the price of yarn and cloth are too much for his slender means. The demand for his product is extremely unsteady. His earnings are meagre and not in proportion to the amount of labour put in. His period of employment is irregular. He buys yarn in the dearest market and compelled by economic necessity he sells his products in the cheapest market. With the proceeds he has to buy not only the requirements of food but also the necessary yarn to weave cloth the next day. When the selling price, the weaver has no alternative but to resort to methods to keep down his cost to the level of price at which he could sell. Naturally, there is deterioration in the quality of the cloth produced by him. Thus the independent weavers of small means are the persons who do not adhere to uniform qualities in their production.

As 80 percent of the weavers work under Master Weavers, co-operative societies and in factories or on a hired basis, there is adherence to uniform quality in their production of cloth. The non-adherence to uniform quality is found in the case of 20 percent of weavers who work independently.

9-13. Market trends and supply of design :

The survey has revealed that different methods are adopted by the handloom weavers to ascertain the market trends in fashion and regular production according to changing fashions.

In the case of weavers working under Master Weavers and Co-operative Societies, the designs are supplied by the Master Weaver or society. There is no question of studying the market to ascertain the trends of changing fashions in the case of these weavers. The co-operative production Societies engage the services of expert designers for the purpose of supplying the design. The weavers who work independently, in most cases, copy the designs of the mill made goods and in certain cases get the patterns from the local market. Weavers in handloom factories and hired weavers produce the cloth according to the designs supplied to them.

CHAPTER X

Marketing of Handloom fabrics

10.0. Handloom production is for market :

A common belief is that handloom production in India is primarily intended for domestic consumption in the rural areas. That is not so. Consumption of handloom products by the weavers themselves that produce the fabrics for the requirements of themselves and their family members is found to be about 1 percent of the total production. The reason is not far to seek. The present day organisation of the handloom industry is such that the vast majority of handloom weavers work under Master Weavers, dealers in yarn or cloth, or Co-operative Societies. All these agencies supply yarn to the weavers who work under them on condition that the finished fabric is returned to them. The weaver is bound by a contractual relationship with these agencies. The class of independent weavers, in the sense, that the weaver himself buys the yarn and sells the finished fabric is very small. Out of the total estimated number of 486,335 weavers for the State, only 89,782 weavers or 18.46 percent belong to the category of independent weavers. It is therefore obvious that domestic consumption is generally to be ruled out in the case of weavers who get the supply of yarn on credit, be it from the master weaver or dealer in yarn or cloth or co-operative society or weavers working in handloom factories. The supply of yarn is made in terms of pounds and the finished product has to be returned to these agencies without any loss in weight except a small margin of about 2 percent allowed for waste of yarn in the preparatory process. A statement showing the quantity of handloom cloth consumed by weavers, sold locally, sold to other States in the Union and sold abroad is given below :

STATEMENT NO. 38

Disposal of Handloom cloth

Sl. No.	Method of disposal	Quantity in yards	Percent to total production
(1)	(2)	(3)	(4)
i.	Domestic consumption	5,738,000	0.9
ii.	Sold locally within the State	536,160,000	84.1
iii.	Sold in other States within the Indian Union	53,552,000	8.4
iv.	Sold abroad	42,077,000	6.6
	Total	637,527,000	100.0

It is found that 631,789,000 yards or 99.1 percent of the handloom cloth produced in the State for purpose of being marketed and only 0.9 percent of cloth goes for domestic consumption which is accounted for by the Independent weavers. It is therefore clear that production of handloom fabrics is mainly, if not solely, intended for sale be it locally within the State, or to other States in the Indian Union or for export to foreign countries. Particulars of the disposal of the handloom cloth produced in each District are shown in Appendix XI.

10.1. Marketing methods :

Out of 486,335 weavers in the State, 103,924 or 21.4 percent of weavers sell 136,431,000 yards of handloom cloth themselves, 312,462 weavers or 64.2 percent market 409,292,000 yards of handloom cloth through master weavers, and 69,949 weavers or 14.4 percent sell 91,804,000 yards of cloth through co-operative societies. A district-wise statement showing the proportion of the handloom production marketed through different agencies is given below :

(See page No. 100—statement No. 39)

It is seen from the statement that the handloom cloth produced in Malabar and South Kanara districts is marketed to the tune of 90 percent and 87 percent of their total production through independent local sales. In Tanjore and Tiruchirapalli the proportion of cloth produced marketed through independent sales is 53 percent and 39 percent respectively. Handloom cloth produced in Madras to the extent of 97 percent, in North Arcot to the extent of 91 percent and in Tirunelveli to the extent of 85 percent is marketed through master-weavers. The proportion of handloom cloth marketed through co-operative societies is higher in Madurai than in other districts. It is noticed that there are no independent local sales in Madras while in Malabar and South Kanara there are no sales through master weavers.

10.2. Diversity of the marketing agencies :

An important fact on the marketing side of the handloom industry is the vast diversity of the marketing agencies. The marketing system in the rural and urban areas are to a certain extent, similar. The medium for transmission of the cloth is street hawking and petty shops. In the rural areas, however, in addition to these systems, the more popular practice is sales in shandies. In urban areas the small

Statement showing the method of marketing of handloom cloth in Madras State in 1954.

Sl. No.	Method of disposal	DISTRICTS.														State
		Chingleput	Coimbatore	Madras	Madurai	Malabar	North Arcot	Ramanathapuram	Salem	South Arcot	South Kanara	Tanjore	Tiruchirappalli	Tirunelveli		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
1.	Independent Local Sales	21.8	8.2	...	13.8	89.6	8.1	15.1	15.4	10.4	86.9	53.3	38.5	9.4	21.4	
2.	Through Master Weavers	75.2	65.4	97.0	59.4	...	90.5	72.3	69.2	72.2	...	28.8	48.9	85.1	64.2	
3.	Through Co-operative Societies	3.0	26.4	3.0	26.8	10.4	1.4	12.6	15.4	17.4	13.1	17.9	12.6	5.5	14.4	

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shops and huge shops exist side by side. The consumers could be broadly classified under urban and rural. The requirements of the rural population despite the greater numbers is considerably less than the off-take in the urban sector. It is estimated that the urban population which is about a fourth of the total Indian population consume a little over half the quantity of cloth available. The rural population by tradition is frugal and simple while the urban population consume not only more cloth but also cloth of greater variety. The comparatively better economic condition of the urban population and the more efficient marketing organisation in the urban areas account for this heavier consumption in the urban sector.

10.3. Organisation of production :

The Organisation on the production side in the early days of the industry was such that it was essentially a village industry with the weavers carrying on production in their rural homes without the intervention of the middlemen. Production then was confined to the local market, namely the limits of the village. The weaver either spun his requirements of yarn or got it from his neighbours often in return for cloth. There was in such a case no need for the intervention of middlemen to supply the raw material and arrange for the disposal of the finished goods.

However the organisation of the industry under went a distinct change with the development of long distance communications and the consequent extension of the market. Soon trade outstepped the bounds of the village and certain special fabrics found a favoured market in distant lands as well. With such inducement, the small rural weaver found it unprofitable for him to continue production in his rural home without the aid of financiers or middlemen. Hence the drift of the weavers to urban centres which offered facilities of supply of yarn on credit from yarn dealers and elimination of the risk and responsibility of marketing. The hand weaving industry by the operation of these tendencies from the fifties of the last century became metamorphosed into an urban industry. The result is the present phenomenon of concentration of handloom weavers in towns particularly in such areas where the production is for distant markets.

10.4. Plight of the independent weaver :

The most common form of marketing adopted by the independent weaver who buys the yarn and other raw materials and produces

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the cloth for local consumption is hawking of the cloth, produced. This is because he has absolutely no staying power. He is constrained to convert the cloth produced by him during the day into cash by the end of the day. Unless he gets the cash, he cannot buy the raw material to carry on production the next day. Such a system exists not only in certain remote villages but also in the urban centres like Salem and Kozhikode. It is clear that the weaver in such a situation is in an unenviable position. When street hawking proves unavailing to dispose of the cloth, the weaver resorts to the bazaar place late in the evening. He has to sell in the buyers' market and at buyers' price. If he is lucky he is able to find a buyer and get a small margin of profit. Invariably he is not successful and has perforce to part with his product to the middleman at prices dictated by the latter. In the higgling to fix the price and the ruthless operation of the forces of supply and demand, least consideration is given to the cost of production. The vantage position in the bargain is with the middlemen and hence the phenomenon of uneconomical price for the cloth sold in such circumstances. The weaver has to content himself often if he gets back the cost of yarn that goes into the cloth. He will have no work the next day if he does not get even this. To keep going in his traditional occupation, he continues production in such unfavourable circumstances. Naturally there is deterioration in the quality of the cloth produced by him as he has to resort to methods to keep down his cost to level of price that the middle-men dictate to him in the bazaar. The case for urgent organisation of such weavers in the co-operative fold is manifest.

In a different category are the weavers who are slightly better off than the weaver who has to convert the cloth produced by him into cash at the end of each day. To this category belong the weavers who visit the weekly markets or shandy held in convenient places to serve a group of villages. These weavers who have staying power for about a week visit the Shandy with their product, sell the cloth produced during the week and with the money realised purchase the yarn and other materials that are necessary to carry on production during the next week.

10-5. Shandies and Fairs :

During special seasons such as marriage season, Deepavali, Pongal etc., prices are usually higher. Not only are shandy prices

slightly higher but they are also more steady than the hawkers' price. The transaction in these shandies is for cash. Normally coarse handwoven cloth form nearly 75 per cent of the textiles taken to the shandies in the rural areas. Apart from these rural shandies, special Fairs and Exhibitions conducted during the festivals in centres like Madurai for the Chitrai Festival, in Kumbakonam for the Mahamakham Festival, Park Fair Exhibition, All India Khadi and Swadeshi Exhibition etc., afford an opportunity for marketing the products of the weavers by hawking.

10-6. Sale of cloth on credit :

Sale of old and new cloth and ready made dress is combined with their main business of money lending by Marwari money lenders in many centres where there is a concentration of wage earners. The impecunious wage-earners avail themselves of the facility of getting their clothing requirements on credit though the prices are much higher than those prevailing in the neighbourhood. The Sowcars advance loans on valuable articles pledged and also sell cloth for credit.

The customer is hit hard in two ways. He pays usurious rate of interest on the loan taken by him and pays a much higher price for the cloth obtained on credit. Co-operative sale depots in such centres will help to eliminate the profits of middlemen and reduce the price of cloth to the consumers.

10-7. Marketing Agencies :

In almost in every town the street hawker and small shop are found. In addition to these marketing agencies the big shops dealing in handloom cloth have now grown in number side by side with the Sales Emporia of the Co-operative Department. The modern marketing techniques of advertisement, salesmanship, fixed prices and standard qualities are followed in the Sales Emporia.

There are many middlemen participating in the trade. The share of the profits of the industry taken by the middlemen is generally higher than the share that goes to the weaver. The handloom fabrics therefore become dear and the middlemen are largely

responsible for this. The number of dealers and retailers of cloth in U.S.A. is 46,250 for a population of 105-7 millions, while the number of these in India is 335,000 for a population of 352 millions. The average area per retailer in the U.S.A. is 65 sq. miles while the corresponding figure is 5.4 sq. miles in India. The average population served by each retailer in U.S.A. is 2,284 while it is 938 in India. The daily sales per retailer in the U.S.A. is 464 yards while it is only 50 yards in India.

10-8. Problems on the marketing side:

The principal problems of the handloom industry are (i) to expand markets and (ii) to reduce the marketing costs.

The Co-operative Department has taken steps to organise a net work of Sales Emporia for handloom cloth within India and abroad as well as to expand the foreign markets.

10-9. Foreign markets:

Indian silk and cotton cloth, hand printed and hand-spun cloth from South India appear to have attracted more customers in the U. S. A. lately. Following the exhibition of Indian Handloom Fabrics at the Trade Centre attached to the Indian Consulate General in New York, there have been indications that Handloom Fabrics will prove popular with the American consumer. Production of types of cloth for which demand is noticed in the American Market will have to be undertaken so that supplies may be maintained in adequate quantity. The main varieties of cloth demanded by the American markets at present are Madras Handkerchiefs, Lungi cloth, prints, silks and carpets.

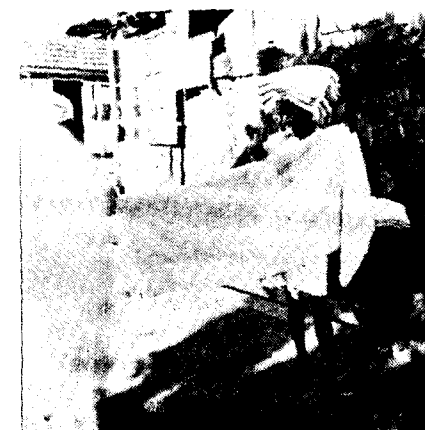
The consensus of opinion among the Apex Weavers' Co-operative Societies is that there would be no difficulty in meeting the American requirements if they could be assured of continuous business.

Bhavani carpets are renowned for their attractive designs and superb finish. These are likely to be in great demand in foreign

MARKETING



Street Hawking



Street Hawking



Hand-loom Shop

countries like the U. S. A., U. K. and Australia. It is necessary for Indian exporters to quote competitive prices if the market in the West is to be retained. Lungies, Sarongs, Towels, Carpets and Blankets, Grey Gada and Curtain cloth are likely to flourish in foreign markets if the prices are competitive.

10-10. Quality control and competitive price essential :

Indian handloom goods can survive abroad only if they conform to standards and prices are kept reasonably low to face competition successfully. Indian Handloom fabrics are yet to find their markets in the U. K. and the European countries. If the industry could bring new designs, improve its quality and finish, and adapt itself to the changing popular trends and tastes, it is possible to popularise these varieties among the consumers through trade delegations abroad.

CHAPTER XI

A summary and conclusions

11-0. Number of looms :

The estimated total number of looms in the State in 1954 was 521,598 out of which 479,292 looms or 91.9 percent are active looms and 42,306 looms or 8.1 percent are idle looms. The number of looms idle for the whole year is 32,733 looms or 77.3 percent out of the total number of idle looms and 9,573 looms or 22.7 percent are idle for part of the year. Fly shuttle looms are 94.6 percent of the total number of looms and 5.3 percent are throw shuttle looms. The number of semi-automatic and other looms is inconsiderable in the State. Looms weaving cloth from cotton yarn are 464,365 or 89 percent of the total number of looms, 26,291 looms or 5 percent are engaged in weaving cloth from mixtures of yarn, 16,250 looms or 3.1 percent weave cloth from art silk yarn, 12,224 or 2.3 percent weave cloth from silk yarn, 1,569 looms or 0.4 percent weave cloth from handspun yarn and 899 looms or 0.2 percent weave cloth from other fibres.

11-1. Number of weavers :

The total number of weavers in the State is 486,335, out of which 89,782 are independent weavers, 69,949 work under Co-operative Societies, 248,165 work under master weavers, 29,554 work in factories and 48,885 are hired weavers. The average number of looms per weaver, excluding the hired weavers is 1.12. Out of the total population of weavers, 457,376 weavers or 94.05 percent are solely occupied in weaving 27,236 weavers or 5.60 percent have other occupations above and for 1,723 weavers or 0.35 percent it is a subsidiary occupation. The primary occupation of weavers for whom weaving is a subsidiary occupation is Agriculture, Shop keeping, running tea shop, teaching or clerical work. The subsidiary occupations of the weavers to whom weaving is the main occupation are Agricultural work, cooly work, knitting fishermen-nets and running small shops. The average number of looms per weaver is 1.09.

11-2. Dependents on weavers :

The total number of dependents on weavers is 11,44,759 and number of those dependent on assistants to weavers is 40,086. The

number of dependents on each weaver is 2.35. The estimated population dependent on the handloom industry is 2,075,654. Compared with the estimated population for the Madras State in 1954 (37,301,000) the persons dependent on the handloom industry for their livelihood is 5.6 percent.

11-3. Assistants to weavers :

The number of paid assistants to the weaver is 56,731 and the number of unpaid assistants is 347,743. Roughly there is one assistant to each weaver in the State.

11-4. Average monthly earnings :

The average monthly earnings of 89,772 independent weavers is Rs. 26.9 per weaver per month, of 248,165 weavers working under master weavers is Rs. 26.6 per weaver per month, of 69,949 weavers who are members of Co-operative Societies is Rs. 27.2 per weaver per month, of 29,554 factory workers is Rs. 39.6 per weaver per month and of 48,885 hired weavers is Rs. 31.2 per weaver per month.

11-5. Indebtedness :

Out of 486,335 weavers in the State 298,351 weavers or 61.33 percent are indebted. The indebtedness is of the order of Rs. 77,204,000 or Rs. 159 per weaver.

11-6. Source of credit :

The principal sources of credit are money lenders, master weavers, retail dealers in yarn, banks and societies, friends and relations. Weavers dependent on local money lenders or sowcars form 47 percent, 13 percent of the weavers get means from master weavers 18 percent of the weavers get loans from friends and relations, 12 percent from merchants and retail dealers and 4 percent of the weavers from banks and societies.

11-7. Rate of interest :

The rate of interest charged by the local money lenders is higher being 37½ percent while the lowest rate of interest is charged by banks and co-operative Societies ranging from 6¼ percent to 9 percent.

11-8. Weavers' co-operative :

There were 895 weavers co-operative societies in the State in 1954 with a membership of 69,949 or 14.38 percent out of 486,335 weavers in the State.

11-9. Manufacturing process :

The manufacturing processes of winding, sizing, warping, beaming etc., are generally the same throughout the State. The finishing process of bleaching, dyeing, printing and calendering are not normally done by the weavers.

11-10. Cost of production :

Due to lack of uniformity in the cost of yarn at the different centres and lack of standardization in the quality of cloth there is no uniformity in the cost of production of the same variety of fabrics in all the centres. Handloom cloth is costlier by Rs. 0-4-1 per yard or 46 percent over mill cloth of comparable variety.

11-11. Consumption of yarn :

The consumption of yarn in the State in 1954 of all counts ranging from 10 to 120 counts, art silk, silk yarn, handspun cotton yarn and zari was of the order of 155,016,000 lb. Cotton yarn accounts for 147,526,000 lb. or 95.6 percent, art silk yarn 6,050,000 lb. or 3.54 percent, silk yarn 837,000 lb. or 0.5 percent, handspun cotton yarn 373,000 lb. or 0.2 percent, zari 150,000 lb. or 0.1 percent and yarn from other fibres 80,000 lb. or 0.06 percent. Consumption of cotton yarn of counts 206s was 57,645,000 lb. or 38.69 percent of the total consumption of yarn in the State. Next in the order of importance was cotton yarn of counts 40s, the consumption of which was 24,854,000 lb. or 15.83 percent of the total consumption of yarn. The total consumption of cotton yarn by 424,784 looms engaged in weaving cloth from cotton yarn was 147,526,000 lb. or 347 lb. per loom per annum or 22 lb per loom per month. Excluding zari and silk yarn, the consumption of dyed yarn was 82,113,000 lb. or 54.1 percent, of bleached yarn was 51,210,000 lb. or 32.8 percent and unbleached yarn consumed was 20,706,000 lb. or 13.1 percent of the total consumption of yarn.

11-12. Requirements of yarn :

If the shortage of yarn accounting for the under-employment of the weavers and looms is to be removed the estimated annual require-

ments of different varieties of yarn is 173,964,000 lb. The average requirements of yarn per loom per annum is 316 lb. and per loom per month is 26.3 lb.

11-13. Production of handloom cloth ,

Madras State produced 637,527,000 yards of handloom cloth in 1954 of which cloth from cotton yarn was 579,105,000 yards or 90.84 percent of the total production, 25,998,000 yards 4.08 percent of art silk cloth 18,989,000 yards or 2.98 percent of silk cloth and cloth from mixtures was 13,435,000 yards or 2.10 percent. Out of the total production of 637,527,000 yards, cotton sarees account for 191,677,000 yards, dhoties for 152,940,000 yards, lungies for 83,120,000 yards, towels for 47,289,000 yards. These varieties constitute 75% of the total production of cloth in the State. The average production of cloth per loom is 1,222 yards per annum or 102 yards per loom per month and 1,311 yards per weaver per annum or 109 yards per month.

11-14. Potential capacity for production of handloom :

Assuming that all the looms in the State get the requirement of yarn to keep them fully engaged, the potential capacity for the production of cloth is estimated to be 725,098,000 yards of which cloth from cotton yarn is 655,286,000 yards, art silk cloth is 33,517,000 yards, silk cloth is 21,065,000 yards and cloth from mixtures of yarn is 15,290,000 yards. The potential production of cloth per loom per annum is 1390 or 115.75 yards per loom per month and 124 yards per weaver per month.

11-15. Marketing :

Out of 486,335 weavers in the State 103,924 weavers or 21.4% sell 136,431,000 yards of handloom cloth themselves 312,462 weavers or 64.2% market 409,292,000 yards of handloom cloth through master weavers and 69,949 weavers or 14.4% sell 91,804,000 yards of handloom cloth through co-operative societies. Out of 637,527,000 yards of cloth produced 0.9% or 5,738,000 yards is used for domestic consumption, 84.1% or 536,160,000 yards for local sales within the State, 8.4% or 53,552,000 yards are exported to other States within India and 6.6% or 42,077,000 yards are exported abroad.

CONCLUSIONS :

Indications of the way economic progress lies :

The survey has revealed that the fortunes of the industry will be unstable in the plane of producing cloth which the mills can produce at a much lower cost and abundantly. Aids and subsidies may help to tide over depressions temporarily but, as a long range measure, to ensure stability the following conditions must be broadly satisfied.

a) Production must be developed in those sectors such as :

- 1) Cotton sarees made of fine counts of yarn of different colours and designs and intricate borders and heading interwoven with silk thread ;
- 2) silk sarees like the Conjeevaram and Kornadu sarees interwoven with gold and silver thread, and
- 3) sarees, dhoties (and) lungies and towels of low counts of yarn in the production of which there can be no competition from the mills. The production of fabrics in those sectors in which the Mills have the advantage has to be reduced to the minimum (5.3)

b) The price differential between cloth produced in Mills and handlooms must be reduced to the minimum, having regard to the limit of human preference for handloom cloth for its special qualities (5.2 and 9.2). The most important measures to bring this about are :

1. to ensure supply of yarn at the lowest prices through Co-operative distribution (5.3, 5.4, and 8.6) and
2. to introduce improved methods and technical appliances in weaving to increase efficiency and bring down Cost of production (5.5).

c) Earnings in handloom weaving for a worker must be comparable with the earnings in other occupations, leaving aside the question of a basic minimum wage. This condition is found to obtain in Industrial Co-operatives (4.5) where

1. earnings of weavers are highest compared with earnings of other classes of weavers, (5.6)

2. employment is steady (5.6)
3. efficiency of production is possible
4. the workers share the profits and contribute to a reserve fund for further development and
5. Quality control and standardised production are possible.

3. Expansion of markets and reduction of marketing costs through Co-operative Sales Organisations. (10.6, 10.7, 10.8 and 10.9).

CHAPTER XII

PART I

Extent and structure of handloom industry.

Question 1:

What is the total number of handlooms in your State according to types of handlooms viz., throw shuttle, fly shuttle, semi automatic and others?

Answer:

	Estimated Number of looms in 1954
a) Throw Shuttle	27,622
b) Fly Shuttle	493,806
c) Semi automatic	118
d) Others	52
Total	<u>521,598</u>

Question 2:

Please classify, separately, the number of looms engaged in weaving cloth from:—

- 1) Cotton Yarn, 2) Art Silk Yarn, 3) Silk Yarn, 4) Woollen yarn, 5) Jute yarn, 6) Yarn from other fibres, if any, 7) Mixture of any two of the above yarns, and 8) handspun cotton yarn.

Answer:

The estimated number of looms engaged in weaving cloth from different types of yarn and the number among them active during the year 1954 is shown below:

	No. of looms present	No. of looms active
1. Cotton yarn	464,365	424,784
2. Art Silk yarn	16,250	15,310
3. Silk yarn	12,224	11,948
4. Woollen yarn	...	...
5. Yarn from Jute	...	...
6. Yarn from other fibres	899	899
7. Mixture of any two of the above yarn	26,291	24,893
8. Handspun Cotton yarn	1,569	1,458
	<u>521,598</u>	<u>479,292</u>

Question 3:

The number, if any, of looms under each of the categories mentioned in 2 above, remaining idle during the whole or part of a year; state the reasons for such idleness.

Answer:

The number of looms weaving cloth from different types of yarn remaining idle for the whole or part of a year in 1954 is shown in the Statement below:

	No. of looms idle	
	Part of the year.	Whole year.
1. Cotton yarn	9,473	39,581
2. Art Silk yarn	100	940
3. Silk yarn	...	276
4. Woollen yarn	...	...
5. Yarn from Jute	...	...
6. Yarn from other fibres	...	...
7. Mixture of any two of the above yarn	...	1,398
8. Handspun Cotton yarn	...	111
Total	<u>9,573</u>	<u>42,306*</u>

* Inclusive of looms idle for part of the year.

Reasons for such idleness:

Idleness for part of the year is inherent in almost all looms. The main reason for idleness of looms is lack of adequate supplies of yarn in the case of weavers working under master weavers and Co-operative Societies. Due to the limited working capital of the weavers co-operative societies, continuous supply of yarn to the members is dependent on the ready sale of the finished fabrics. It has been the experience of the societies that there is no ready market and hence till the finished product is marketed, the societies are not in a position to provide yarn to their members. It has been noticed in the Survey that the weavers working under Co-operative Societies get work for only fifteen days in a month. For the other half of the month the weavers have no work and hence the looms remain idle. In the case of independent weavers the main reason is financial difficulties, lack of marketing facilities and low income from the weaving industry.

The other reason accounting for looms lying idle for part of the year is the seasonal factor viz., during the rainy season weaving is rendered impossible as the operations connected with the preparation of the warp which have to be done in the open could not be performed.

Question 4 :

The number of looms added or dismantled since 1942 under each of the categories mentioned in 2 above.

Answer :

The following statement shows the number of looms added and dismantled since 1942 - upto 1954.

Categories of looms	Number of looms	
	Added Since 1942 upto 1954	Dismantled
1. Cotton yarn	64,392	6,647
2. Art Silk yarn	696	...
3. Silk yarn	1,368	...
4. Woollen yarn	...	...
5. Jute yarn	...	...
6. Yarn from other fibres	...	...
7. Mixture of any two of the above yarn	1,361	...
8. Handspun cotton yarn	137	...
Total	67,954	6,647

Question 5 :

To what extent have improved types of looms been introduced in your area since 1942 ?

Answer :

In the two districts of Malabar and South Kanara where handloom industry is organised on a factory basis there are improved types of looms and semi-automatic looms. There are 118 semi-automatic looms and 15 looms of improved types in Malabar district and 37 looms of improved types in South Kanara district. These improved and semi-automatic types of looms have been introduced in these districts since 1942. Such improved types of looms are not in existence in any other district.

Question 6 :

The total number of weavers in your area classified under the following heads:— a) those working independently ; b) those working under mahajans or master weavers ; and c) those working in factories.

Answer :

Particulars of the different types of weavers in the State in 1954 are shown below :

Type of weaver	Estimated No. of weavers
a) Those working independently	89,782
b) Those working under Co-operative Societies	69,949
c) Those working under Mahajans or Master-weavers	248,165
d) Those working in factories	29,554
e) Hired weavers who do not own their looms but who work under items (a), (b) or (c) above	48,885
Total number of weavers	486,335

Question 7 :

The total number of assistants to weavers (paid or unpaid) employed by a) weavers ; b) mahajans or master weavers ; and c) factories.

Answer :

The statement below shows the number of *Paid and Unpaid Assistants to the Weavers* in 1954 :

	Paid Assistants	Unpaid Assistants *
1. Working independently	15,679	60,145
2. Working under Co-operative Societies	6,831	73,972
3. Working under Mahajans or Master Weavers	22,974	209,498
4. Working in Factories	11,216	...
5. Working as hired weavers	31	4,128
Total	56,731	347,743

* Unpaid Assistants are members of the weavers' family.

Question 8 :

The number of dependents (a) on weavers and (b) on assistants to weavers.

Answer :

The estimated number of dependents on weavers and on assistants to weavers in 1954 is shown below :

1. Number of dependents on	
a) Weavers	1,144,769
The average number of dependents on each weaver is	2.36
b) Paid Assistants to Weavers	40,086
The average number of dependents on each paid assistant to the weaver	0.71

Question 9 :

Since 1942, have there been any addition to the weaving population in your state by persons previously engaged on occupations other than weaving? If so, please state the number of such persons and the reasons for their change of occupation.

Answer :

Since 1942 there have been additions to the weaving population in the State. The estimated number of persons who have taken to the weaving profession since 1942 is 9,557. During the period of World War II and the years following it, the drift was due to the fact that consequent on the diversion of mill production to meet the requirements of clothing of the army personnel, there was a greatly increased demand for handloom cloth and hence the profits of the independent weavers and the wages of the weavers working under master weavers and Co-operative Societies rose appreciably. Attracted by this situation there was a drift of certain persons from other occupations to the weaving profession.

Question 10 :

The number of hereditary weavers, if any, who have left the weaving industry since 1942 and the reasons therefor.

Answer :

The number of hereditary weavers who left the weaving industry since 1942 was 71,000 of which about 10,000 weavers are from each of the districts of North Arcot, Salem, Malabar, 7,500 from Madurai, 7,000 from Coimbatore, 6,500 from Tirunelveli, 6,000 from

Chingleput, 5,500 from South Arcot, 3,500 from Ramanathapuram, 2,500 from Tanjore 1,000 from each of the districts of Madras and South Kanara.

The reasons are mainly financial difficulties, difficulty in getting regular supplies of the required counts of yarn and consequent lack of steady employment, unprofitable nature of the industry as the wages were not adequate to meet the bare necessities of life and lack of marketing facilities.

Question 11 :

The number of weavers for whom weaving is the sole occupation.

Answer :

Weaving is the sole occupation for 457,376 weavers or 94 per cent of the total number of weavers in the State. These are the traditional weavers. They cling to the profession despite the changing fortunes of the industry. Though unemployed not infrequently and underemployed almost all through the year things are temperamentally averse to and physically not fit for taking up any form of manual labour to supplement their earnings by engaging themselves in other occupations. The district-wise classification of the weavers for whom weaving is the sole occupation, main and subsidiary occupation is shown below :

Weavers for whom weaving is the sole, main or subsidiary occupation.

Sl. No.	Name of District	Number of weavers for whom weaving is			Total
		Sole Occupation	Main Occupation	Subsidiary Occupation	
1.	Chingleput	41,062	4,898	...	45,960
2.	Coimbatore	53,841	1,054	...	54,895
3.	Madurai	26,948	85	...	27,033
4.	Madras	12,176	...	...	12,176
5.	Malabar	39,992	662	88	40,742
6.	North Arcot	36,926	7,346	60	44,332
7.	Ramanathapuram	38,587	241	141	38,969
8.	Salem	106,524	1,692	...	108,216
9.	South Arcot	20,082	4,001	...	24,083
10.	South Kanara	4,230	137	...	4,367
11.	Tanjore	8,703	705	...	9,408
12.	Tiruchirapalli	24,117	4,154	21	28,292
13.	Tirunelveli	44,188	2,261	1,413	47,862
Total		457,376	27,236	1,723	486,335
(Percentage)		(94.0)	(5.6)	(0.4)	(100.0)

Question 12 :

The number of weavers for whom weaving is a subsidiary occupation. What is the primary occupation of this class of weavers ?

Answer :

Weaving is a subsidiary occupation for 1,723 persons or 0.4 percent of the total number of weavers in the State. Generally weaving is a wholtime occupation of the weavers irrespective of the fact whether the industry provides them with return sufficient to meet their minimum family requirements or not.

The primary occupations of this class of weavers are
1) Agriculture 2) Shop keeping 3) Teaching 4) Small provision store
5) Cooly work 6) Running coffee or tea stall 7) Clerical work, village
vaidyar (doctor) etc.

Question 13 :

The average monthly earnings of a weaver working
a) independently ; b) under a mahajan or a master weaver ? and c) in
factory.

Answer :

The average monthly earnings of the different types of weaver
in the state are shown below .

1) Independently	Rs. 26.9
2) Under Co-operative Societies	Rs. 27.2
3) Under Master Weavers or Mahajans	Rs. 26.6
4) In Factory	Rs. 39.6
5) As hired weaver	Rs. 31.2
Average for State	Rs. 28.00

A comparative Statement showing the districtwise average
monthly earnings of different types of weavers in the State is given
below :

Sl. No.	Name of District	Average monthly income of a weaver working				
		Indepen- dently	Under Master weavers	Under Co- operative Societies	In Fac- tories	As hired weavers
1.	Salem	29.5	25.5	21.5	38.0	23.5
2.	Coimbatore	36.0	32.8	40.8	55.0	28.0
3.	Malabar	21.0	...	20.0	29.5	...
4.	Tirunelveli	18.3	18.7	17.3	...	17.5
5.	Chingleput	29.6	24.8	26.3	...	20.1
6.	North Arcot	19.4	19.6	17.0	...	25.7
7.	Ramanathapuram	39.5	22.5	25.0	24.0	...
8.	Madurai	26.0	29.0	32.5	52.0	...
9.	Tiruchirapalli	29.1	27.2	30.3	49.1	35.6
10.	South Arcot	21.4	25.9	25.3	...	13.7
11.	Tanjore	34.8	24.5	21.8	...	20.7
12.	Madras	...	37.1	46.0	...	25.7
13.	South Kanara	21.0	...	30.0	54.0	31.0
STATE:		26.9	26.6	27.2	39.6	31.2

Question 14 :

The average monthly earnings from (a) weaving and (b) other
occupations of a weaver for whom weaving is only a subsidiary
occupation.

Answer :

The average monthly earnings of a weaver for whom weaving
is only a subsidiary occupation is Rs. 49 out of which the earning from
weaving is Rs. 21 and the earning from the main occupation is Rs. 28.

A district-wise comparative Statement showing the average monthly earnings of a weaver for whom weaving is only a subsidiary occupation is given below :

Average monthly earnings of weavers for whom Weaving is subsidiary occupation.		
Distriets	Income from Weaving Rs.	Income from other Occupations Rs.
1. North Arcot	12.10	37.00
2. Tiruchirapalli	14.38	40.00
3. Salem	No such weavers in this District.	
4. South Arcot	—	—
5. Chingleput	—	—
6. Madras	—	—
7. Tanjore	—	—
8. Tirunelveli	—	—
9. Coimbatore	20.75	18.65
10. Madurai	Not such weavers in this District.	
11. Malabar	—	—
12. South Kanara	21.00	29.50
13. Ramanathapuram	11.00	36.00
	28.00	36.43
STATE,	21.00	28.00

Question 15 :

How do the earnings of weavers in a producing centre compare with the earnings of those engaged in other occupations in the same centre ?

Answer :

The average earnings of a Weaver in the State is Rs. 28 per month.

The average earnings from other occupation is Rs. 33.00 per month. Details of average income from certain other important occupations in the State are given below :

Type of occupation	Monthly earnings in 1954 Rs.
HandloomWeavers	28
Other occupations	
Woodcutter	50
Running maligai store	49
Stone-breaking	42
Basket-making	41
Goldsmith	41
Barber	40
Tailor	34
Agriculture and other cooly works	32
Ploughman	30
Dhobi	29
Potmaking	28
Rope-making	25
Sanar	25
Bee-keeping	25
Cobbler	23

Question 16 :

What is the average extent of indebtedness of a weaver engaged solely on weaving ?

Answer :

The total indebtedness of 486,335 weavers in the State is estimated at Rs. 77,204,000 or Rs. 159 per weaver. The number of weavers for whom weaving is the sole occupation is estimated at 457,376. The average extent of indebtedness of a weaver engaged solely in weaving is therefore Rs. 168.8.

District-wise statement showing the extent of indebtedness of the weavers is given below :

Indebtedness of the Weavers							
District	No. of Independent weavers indebted	No. of weavers working under Cooperative societies indebted	No. of weavers working under master weavers indebted	No. of weavers working in factories indebted	No. of hired weavers indebted	Total number of weavers indebted	Amount of in debtedness per weaver
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Madras	—	612	3,154	5,166	—	8,932	158
Chingleput	6,495	1,164	21,296	—	10,355	39,310	177
South Arcot	2,417	2,361	8,865	—	7,223	20,866	142
North Arcot	3,576	496	28,890	—	618	33,580	173
Tanjore	2,128	1,109	1,313	—	2,551	7,101	179
Tiruchirapalli	767	1,775	5,657	3,234	518	11,951	197
Coimbatore	3,813	3,563	16,289	1,049	1,664	26,378	211
Salem	10,438	10,788	23,969	1,102	2,451	48,748	179
Madurai	2,567	4,476	5,253	1,712	—	14,008	127
Ramanathapuram	1,501	3,412	7,339	751	—	13,003	112
Tirunelveli	4,609	2,746	30,036	—	547	37,938	111
Malabar	17,673	5,926	—	9,055	—	32,654	118
South Kanara	1,403	469	—	519	1,491	3,882	201
STATE,	57,387	38,897	152,061	22,588	27,418	298,351	159

Question 17:

What is the normal source of credit and the usual rate of interest charged ?

Answer :

Normal Source of Credit :

The principal sources of credit for the weavers in the State are local money lenders or Sowcars, Master Weavers, merchants and retail dealers and Banks and Co-operative Societies. When these sources fail they approach friends and relatives.

The local money lender or Sowcar appears to be the most common and important source of credit. 47 percent of the weavers are dependent on them for credit facilities. The next important source is the master weaver who makes advances to 19 percent of the total number of weavers in the State. The loans while helping the weaver for the time being ensure the master weaver that the indebted weaver will stick to him and continue to work under him. The other sources of credit are friends and relatives who give loans to 18 percent of the weavers. Merchants and retail dealers constitute the source of credit for 12 percent of the weavers. Banks and Co-operative Societies come last in the order of importance as only 4 percent of the weavers avail themselves of the credit facilities from these sources. The reasons for such a small proportion of weavers availing themselves of bank and co-operative society credit are not far to seek. In most cases the weavers are not able to satisfy the condition of credit worthiness or deposit of security insisted upon by these agencies. Not being in a position to meet the requirements of the Banks and Societies as conditions precedent for sanction of loans and advances most of the weavers resort to agencies like the local money lenders, Master Weavers, merchants and retailers who do not insist on all the formalities of deposit of security etc., These agencies are therefore most popular with the weavers as they advance loans on the basis of personal security.

Rate of interest :

The rate of interest varies with reference to the credit worthiness of the weaver and the circumstances under which the loan is advanced. It is therefore not uncommon to find widely ranging rates of interest prevailing in the main centres. In certain centres it has been found that a rate of interest as high as 37½ percent is charged by the local money lenders. The rate of interest charged by Master weaver varies from 0% to 18¾%, while the rate charged by friends, relatives and merchants ranges from 0% to 12½%. No interest is charged in certain cases where loans are taken from friends and relatives. The lowest rate of interest is charged by Banks and Societies ranging from 6½% to 9%.

The particulars regarding normal source of credit and the rate of interest charged by the various agencies who supply credit to the weavers are shown below.

Source of credit.	Proportion of weavers availing of credit (percent to total)	Rate of interest per annum.
1. Local money-lenders	47	6 to 37.6 percent
2. Master Weavers	19	0 to 18.8 "
3. Banks and Societies	4	6.25 to 9 "
4. Friends and relatives	18	0 to 12.0 "
5. Merchants & Retail dealers	12	0 to 12.5 "

Districtwise particulars of the source of credit and rate of interest are shown in the Statement below:—

District-wise statement showing source of credit and Rate of Interest.

Districts.	Money lenders and Private Bankers.	Master Weavers.	Retail dealers.	Friends and relatives.	Banks.	Co-operative Societies.
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
1. North Arcot	68.87	30.33	0.54	0.13	0.13	...
2. Tiruchirapalli	92.84	3.68	0.64	1.05	1.79	...
3. Salem	75.00	21.00	...	2.00	2.00	...
4. South Arcot	48.07	46.06	0.48	2.43	2.96	...
5. Chingleput	51.85	29.06	8.90	7.25	2.87	0.07
6. Madras	37.39	35.61	...	15.19	10.63	1.18
7. Tanjore	46.29	41.73	1.96	8.93	0.87	0.22
8. Tirunelveli	17.00	11.00	11.00	56.00	...	5.00
9. Coimbatore	53.40	13.00	4.40	13.60	15.60	...
10. Madurai	12.00	16.00	21.00	40.00	10.00	1.00
11. Malabar	20.60	22.50	15.50	17.50	21.90	2.00
12. South Kanara	63.00	...	24.00	6.00	5.00	2.00
13. Ramanathapuram	12.00	7.00	14.00	59.00	4.00	4.00

The rate of interest per annum ranges from 0 to 37.6 percent.

PART II

Supply of Raw Material

Question 18:

What are the actual monthly requirements for the Handlooms in your State of (a) Cotton mill made yarn specifying the counts and the quantity in each count, (b) Silk yarn (c) Art Silk yarn (d) Woollen yarn (e) Jute yarn (f) Yarn from other fibres, if any and (g) Handspun cotton yarn.

Answer:

It was found in the Survey that most of the looms are under-employed. If they are to be kept continuously engaged the estimated monthly requirements of yarn of different varieties is shown below:

1. Cotton yarn (in lb.)	
10s	1,467,000
12s	2,000
14s	12,000
16s	33,000
18s	...
20s	5,500,000
22s	...
24s	4,000
26s	1,162,000
28s	...
30s	1,466,000
32s	5,000
36s	192,000
38s	...
40s	2,348,000
42s	...
44s	...
46s	...
60s	877,000
80s	352,000
100s	293,000
120s	...
2. Art Silk	529,000
3. Silk	69,000
4. Zari	124,000
5. Yarn from other fibres	29,000
6. Handspun	31,000

Question 19 :

What was the consumption during each of the last five years 1950, 1951, 1952, 1953 and 1954 of each of the types of yarn mentioned in question No. 18 above.

Answer :

Statement showing the consumption of yarn of different counts and varieties during years from 1950 to 1954 is given below :

Consumption of yarn by Handlooms in Madras States in lb.					
Counts	1950	1951	1952	1953	1954
(1)	(2)	(3)	(4)	(5)	(6)
10s	14,098,036	14,825,511	11,743,254	15,323,427	17,482,415
12s	54,813	59,223	18,852	54,813	32,714
14s	1,075,891	650,287	484,463	649,111	148,532
16s	361,315	406,462	282,645	406,756	534,520
18s	120,988	...	202	...	1,475
19s	79,091	441	...	1,029	...
20s	38,365,421	39,236,183	46,363,573	46,706,856	57,645,357
22s	12,202	...	...	...	572,752
24s	127,666	18,365	103,899	29,905	72,109
26s	5,242,824	3,321,859	10,784,538	6,730,379	9,995,255
28s	3,696	1,491	4,554	4,431	6,199
30s	16,099,227	16,220,132	12,192,854	15,906,730	16,852,973
32s	79,917	57,330	51,859	62,503	631,730
36s	2,235,702	2,009,972	1,584,022	94,220	2,257,829
38s	441	25,950	...	...	...
40s	23,346,137	23,211,614	20,155,809	21,443,756	24,853,662
42s	116,137	12,607	...	...	...
44s	5,880	...	...	...	...
46s	1,176	...	...	...	...
50s	4,410	...	...	2,940	...
60s	9,100,038	9,112,215	7,272,820	9,186,557	8,527,852
80s	3,644,648	3,614,955	2,630,929	3,562,682	4,651,982
100s	3,456,336	3,357,598	2,344,252	3,394,149	3,252,630
120s	171,105	745	512	745	755
Art Silk	3,633,081	3,296,509	3,685,322	3,540,769	6,050,137
Silk	2,700,467	699,083	422,202	744,356	842,634
Zari	171,105	171,763	89,758	171,744	149,605
Others	26,669	26,261	61,814	40,880	80,394
Handspun	455,613	464,180	337,867	415,062	372,236
Total	124,790,032	120,800,736	120,616,000	128,473,800	155,015,747

Question 20 :

What is the normal channel of supply of yarn to the weaver (i.e.) whether through the wholesalers, co-operative Societies, retailers or directly from mills. Please specify the extent to which each of these media functions in your State ?

Answer :

The bulk of the weavers in the State forming 51 percent of the total population of weavers work under master-weavers. The source of supply of yarn to these 248,165 weavers is therefore the master-weaver who supplies the yarn and takes back the finished product after paying a wage to the weaver. The next important channel of supply of yarn to the weaver is the retail dealer in yarn. He supplies the yarn on credit to the weavers and normally takes back the finished product of the weavers. The weaver is hard hit in two ways when he gets yarn from the retail dealer. The yarn price is inflated and the product is taken at an uneconomic price leaving no adequate return to the weaver for the labour put in by him. The co-operative societies supply the yarn to the weavers who are members of these societies. The factory establishments and master-weavers get the supply of yarn from the wholesalers. It was not in the survey that no weaver gets yarn directly from the mills.

Extent to which yarn is supplied by each agency is shown below :

Channel of supply	Extent to which supplied
a) Whole-saler	9 percent
b) Co-operative Societies	10 "
c) Retail dealers	32 "
d) Master-weavers	49 "
e) Directly from the mills	Nil

A statement showing the normal channel supply of yarn in the State district-wise from the various sources is given below :

Channel of supply of yarn to the weavers.

Districts.	Whole- salers.	Co-opera- tive Societies.	Retail dealers.	Master Weavers.	From mills.
(1)	(2)	(3)	(4)	(5)	(6)
	Per centage	Per centage	Per centage	Per centage	Percentage
1. North Arcot	...	3.33	14.94	81.18	...
2. Tiruchirapalli	87.61	3.93	0.30	8.16	...
3. Salem	5.00	11.00	22.00	62.00	...
4. South Arcot	...	33.33	17.86	48.81	...
5. Chingleput	...	4.83	28.10	67.07	...
6. Madras	...	8.60	...	91.40	...
7. Tanjore	...	19.90	75.24	4.86	...
8. Tirunelveli	...	7.00	5.00	88.00	...
9. Coimbatore	...	10.00	14.00	76.00	...
10. Madurai	18.00	18.00	26.00	38.00	...
11. Malabar	72.00	9.00	19.00	...	...
12. South Kanara	14.00	12.00	74.00	...	...
13. Ramanathapuram	53.00	32.00	15.00	...	...

Question 21 :

What is the normal channel of supply of dyes, chemicals and other auxiliary stores for the handloom industry in your State? To what extent is the handloom industry in your state dependent for its requirements of auxiliary stores on materials produced in other States or imported from foreign countries?

Answer :

1. Dyes and Chemicals.

Dyes and chemicals are imported from abroad and supplied locally to the institutions doing the finishing processes of bleaching and dyeing except in the case of Malabar and Madurai districts where the dyes are produced locally.

(2) Auxiliary stores.

Auxiliary stores such as healds, shuttles, pirns, bobbins, pickers, reeds, rattu, pannai, dobby pegs and starch oil are produced locally in all the districts of the State, except in the case of Madurai, Malabar and South Kanara where healds and reeds are obtained from other States. Ramanathapuram and Tirunelveli districts obtain their requirements of healds, reeds, pirns and dobby pegs from other States in India.

Question 22 :

To what extent is bleached or dyed yarn used by the Handloom weaving industry in your State?

Answer :

Estimated consumption of yarn in 1954.

Type of Yarn.	Lb.
a) Bleached yarn	51,210,000
b) Dyed yarn	82,113,000
c) Unbleached yarn (Grey)	20,706,000
Total	154,029,000 *

* Excludes Zari and Silk yarn.

A district-wise statement showing the estimated consumption of bleached, dyed and un-bleached (Grey) yarn in the State in 1954 is given below. —

Consumption of yarn in 1954.

Districts	Bleached yarn.	Dyed yarn.	Unbleached yarn.
	(In thousand pounds.)		
1. Chingleput	3,089	4,304	7
2. Coimbatore	15,141	10,039	...
3. Madras	614	737	...
4. Madurai	4,600	5,883	449
5. Malabar	2,653	4,355	6,542
6. North Arcot	1,404	7,693	63
7. Ramanathapuram	1,348	7,221	1,931
8. Salem	17,593	17,411	7,286
9. South Arcot	887	1,114	740
10. South Kanara	82	1,091	240
11. Tanjore	370	903	186
12. Tiruchirapalli	1,145	14,881	2,537
13. Tirunelveli	2,284	6,481	675
Total	51,210	82,113	20,706

Question 23 :

To what extent is yarn finished by the weaver himself cheaper or dearer than yarn bought in the finished stage for weaving by the Handloom weaving industry ?

Answer :

In the sample survey conducted, in no case has it been found that the weaver himself makes the yarn. Out of 521,598 looms in the State, 520,029 looms use yarn produced by the mills while 1,569 looms used hand-spun cotton yarn supplied by the Khadi Spinning centres. In either case the weaver does not produce the yarn. Therefore the question whether the yarn finished by the weaver himself is cheaper or dearer does not arise in the case of the handloom weavers in this State.

PART III

Statistics of Production

Question 24 :

On the basis of actual part-time or wholetime working of handlooms in your state, what is the potential capacity of the handloom industry for producing cloth ? What, in relation to this potential capacity was the actual production of cloth during each of the three years 1950, 1951 and 1952 ? (Please give separate figures for cotton cloth and other fabrics).

Answer :

In the survey it was found that most of the looms are under employed. If the required quantity of 173,964,000 lb. of yarn is supplied to them the potential capacity of the handloom industry for the production of handloom cloth is 725,098,000 yards per annum. The estimated production of different varieties of cloth is shown below :

Varieties of cloth	Estimated production in yards.
Cloth from cotton yarn	655,286,000
Cloth from Art Silk yarn	33,517,000
Cloth from Silk yarn	21,005,000
Mixtures of yarn	15,290,000
Total	725,098,000

The following statement shows production in yards of cotton cloth and other fabrics in the years 1950, 1951, 1952, 1953 and 1954 and their relation to the potential capacity.

PRODUCTION OF CLOTH IN THE YEARS 1950, 1951, 1952, 1953 & 1954 FOR THE MADRAS STATE.

Year.	Cotton fabrics.	Art Silk fabrics.	Silk fabrics.	Others.	Total production.	percentage to potential capacity.
1950	493,470,000	15,919,000	2,489,000	1,338,000	513,216,000	70.8
1951	478,652,000	16,421,000	2,585,000	1,167,000	496,825,000	68.5
1952	476,418,000	15,967,000	2,494,000	1,181,000	496,060,000	68.4
1953	505,781,000	17,763,000	3,268,000	1,681,000	528,433,000	72.9
1954	579,105,000	25,998,000	18,989,000	13,435,000	637,527,000	87.9
Potential capacity for production of cloth.	655,286,000	33,517,000	21,005,000	15,290,000	725,098,000	...

Question 25:

What is the average production of cotton cloth per pound of cotton yarn?

Answer:

The production of cloth in the State in 1954, is 637,527,000 yards and the yarn consumed was 155,016,000 lb. The average production of cloth from 1 lb of cotton yarn is 4.1 yards. The output of cloth from 1 lb. of yarn varies according to different counts of yarn used. In the case of yarn of finer counts such as 80s and above, the output is 6 to 8 yards. The production of cloth per lb. of yarn of medium counts such as 40s to 80s is 4 to 6 yards. The production of cloth per lb of yarn of lower counts 20s to 4's is 2 to 4 yards.

A statement showing the production of cotton cloth per lb of cotton yarn in the districts of the State is given below:

Average output of cloth per lb. of yarn.			
Sl. No.	District	Yarn consumed (lb)	Average production of cloth per pound of cotton yarn (yards)
1.	Madras	1,363,000	9,902,000
2.	Chingleput	7,480,000	30,870,000
3.	South Arcot	2,741,000	21,198,000
4.	North Arcot	9,461,000	50,338,000
5.	Salem	42,406,000	174,950,000
6.	Tiruchirapalli	18,563,000	49,748,000
7.	Tanjore	1,463,000	7,450,000
8.	Coimbatore	25,628,000	97,815,000
9.	Madurai	10,933,000	28,206,000
10.	Ramanathapuram	10,558,000	31,407,000
11.	Tirunelveli	9,454,000	72,116,000
12.	Malabar	13,550,000	58,005,000
13.	South Kanara	1,416,000	5,422,000
	State :	155,016,000	637,527,000

PART IV

Types of Fabrics Produced

Question 26:

What portion of the actual production of handloom cotton cloth during each of the years 1950, 1951, and 1952 was utilised (a) for domestic use, (b) for local sale, (c) for export to other States within the country, (d) for export outside the country?

Answer:

Particulars regarding the mode of disposal of cloth produced in this State are given below:

(Yards in thousands.)

Mode of the disposal of cloth produced.	1950	1951	1952	1953	1954
(Figures given in brackets indicate percentage)					
1. Domestic Use	4,619 (0.90)	4,472 (0.90)	4,465 (0.90)	4,756 (0.90)	5,738 (0.90)
2. Local sale	431,615 (84.10)	417,830 (84.10)	417,186 (84.10)	444,412 (84.10)	536,160 (84.10)
3. For exports to other States within the country	43,110 (8.40)	41,733 (8.40)	41,669 (8.40)	44,388 (8.40)	53,552 (8.40)
4. For exports outside the country	33,872 (6.60)	32,790 (6.60)	32,740 (6.60)	34,877 (6.60)	42,077 (6.60)

It may be seen that the bulk of the production constituting about 84.10 percent is sold locally. Next in order of importance is exports to other States within the country accounting for about 8.40 percent of the total production. The portion of the handloom cloth exported outside the country is about 6.60 percent. The proportion of the total output of handloom cloth used for domestic consumption of the weavers is less than 1 percent.

A statement showing district-wise particulars of the Mode of disposal of the cloth produced in 1954 is shown below :

(Yards in thousands.)

Districts	Total	Domestic use	Local sale	Exports to other States within the country	Exports outside the country
1.	2.	3.	4.	5.	6.
1. Chingleput	30,870	10 (0.03)	5,189 (16.81)	1,963 (6.36)	23,708 (76.80)
2. Coimbatore	97,815	193 (0.20)	87,134 (89.08)	10,488 (10.72)	...
3. Madras	9,902	...	2,699 (27.26)	3,603 (36.37)	3,600 (36.37)
4. Madurai	28,206	564 (2.00)	27,078 (96.00)	564 (2.00)	...
5. Malabar	58,005	159 (0.28)	56,899 (98.09)	947 (1.63)	...
6. North Arcot	50,338	40 (0.08)	42,218 (83.87)	7,062 (14.03)	1,018 (2.02)
7. Ramanathapuram	31,407	...	21,985 (70.00)	9,422 (30.00)	...
8. Salem	174,950	3,499 (2.00)	161,102 (92.09)	10,349 (5.91)	...
9. South Arcot	21,198	...	21,198 (100.00)	...	...
10. South Kanara	5,422	45 (1.00)	5,377 (99.00)	...	...
11. Tanjore	7,450	...	5,977 (80.23)	...	1,473 (19.77)
12. Tiruchirapalli	49,748	...	48,753 (98.00)	995 (2.00)	...
13. Tirunelveli	72,216	1,228 (1.70)	50,551 (70.00)	8,159 (11.30)	12,278 (17.00)
STATE:	637,527	5,738 (0.90)	536,160 (84.10)	53,552 (8.40)	42,077 (6.60)

Note : Figures in Bracket represent percentages.

Question 27 :

What were the principal varieties of cloth produced against (a), (b), (c) and (d) above? Please give constructional details.

Answer

PRINCIPAL VARIETIES OF CLOTH PRODUCED IN MADRAS STATE IN 1954 WITH CONSTRUCTIONAL DETAILS

District.	For domestic use	For local sales	Exports to other States within the country	For export outside the country
(1)	(2)	(3)	(4)	(5)
Chingleput	1. Cotton Sarees 40s x 40s and 60s x 60s, 6 to 9 yds. x 48"	1. Cotton Sarees 40s x 40s & 60s x 60s, 6 to 9 yds. x 48"	1. Lungies 40s x 60s 9 & 18 yds x 54"	1. Lungies 40s x 60s 9 & 18 yds x 54"
	2. Silk Sarees 9 Yards x 54"	2. Silk Sarees 9 yds. x 54"	2. Handkerchiefs 40s x Art Silk 8 yds x 36"	2. Handkerchiefs 40s x Art Silk 8 yds x 36"
Coimbatore	1. Dhories 20s x 20s 3 to 8 yards x 50"	1. Dhories 20s x 20s 3 to 8 yds. x 50"	1. Carpets 10s x 19s, 20s x 20s, Japanese Silk 28" x 72" 52" x 90"	
	2. Cotton Sarees 80s x Art Silk 5 to 8 yds. x 45"	2. Dhories Silk 4 to 8 yds. x 50"		
		3. Art Silk Sarees 5 to 8 yds. x 45"		
		4. Silk Sarees 5 to 8 yds. x 45"		
		5. Mixture Sarees 5 to 8 yds. x 45"		
		6. Turbans 100s x 100s and silk 3 yds. x 100"		

PRINCIPAL VARIETIES OF CLOTH PRODUCED IN MADRAS STATE IN 1954 WITH CONSTRUCTIONAL DETAILS

District	For domestic use	For local sales	Exports to other States within the country	For export outside the country
(1)	(2)	(3)	(4)	(5)
Tamil Nadu (Contd.)				
Madurai	7. White and coloured pieces 40s x 40s, 60s x 60s and silk 10 to 12 yds. x 50" 8. Khadar 10 yds x 50"			
	1. Cotton Sarees 40s x 40s; 60s x 60s 8 yds. x 46"	1. Lungies 40s x 60s 8 to 9 yds x 60"	1. Lungies 40s x 60s 8 to 9 yds x 50"	2. Handkerchiefs 40s x 60s 50s x 60s x Art Silk 8 yds x 36"
	2. Art Silk Sarees 8 yds x 45"			
	1. Sarees 5 yds to 9 yds 36" x 54" 60s, 80s, Art Silk, Zari.			
	2. Dhoties 2 yds by 48" x 48" x 50" 20s x 26s			
	3. Bedspreads 10s & 20s 5 yds x 50"			
Aligarh	1. Thortu 20s x 20s 27" x 54"	1. Thortu 20s, 54" x 27"	1. Bedspreads 10s & 20s 95" x 60"	
	2. Dhoties 20s x 20s; 40s x 40s 2 yds. x 48"	2. Dhoties 40s, 20s, 2 yds x 48"	2. Shirtings 20s & 40s 24 yds x 30"	
	3. Second cloth 20s, 30s, 40s, 36" x 56"	3. Second cloth 20s, 30s 40s, 56" x 36"	3. Coatings 20s, 26s; 24 yds x 28"	
	4. Pudava 20s, 26s; 16 yds x 42"	4. Bedspreads 10s, 20s, 54" x 40"; 90" x 48"	4. Dhoties 10s 2 yds x 48"	
		5. Pudava 20s, 26s; 16 yds x 42"	5. Lungies 26s; 2 yds x 48"	
		6. Shirtings 20s, 40s; 24 yds x 30"		
		7. Coatings 20s, 26s; 24 yds x 28"		
		8. Lungies 26s; 2 yds x 48"		
North Arcot	1. Cotton Sarees 60s, 36s, 40s; 8 yds. x 45"	1. Cotton Sarees 60s, 36s, 40s, 8 yds. x 45"	1. Cotton Sarees 60s, 36s, 40s; 8 yds x 48"	1. Lungies 40s x 60s; 80" x 50" 40s x 40s; 8 yds x 44"
	2. Dhoties 40s; 2½ yds. x 48"	2. Dhoties 40s; 2½ yds x 48"	2. Silk Sarees 9 yds x 45"	
		3. Silk Sarees 9 yds x 45"	3. Lungies 40s x 60s; 80" x 50" 40s x 40s; 8 yds x 44"	

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PRINCIPAL VARIETIES OF CLOTH PRODUCED IN MADRAS STATE IN 1954 WITH CONSTRUCTIONAL DETAILS

District.	For domestic use	For local sales	Exports to other States within the country	For export outside the country
(1)	(2)	(3)	(4)	(5)
Ramanathapuram	1. Sarees 20s; 5 yds. x 40" 7 to 8 yds x 43" 2. Shirtings 20s; 12 yds. x 44" 3. Coatings 20s; 12 yds. x 32" 4. Dhoties 20s; 2½ yds. x 38"	1. Sarees 80s & 100s; 40s; 30s; 20s; 6 to 9 yds, 46" x 50" 2. Shirtings 20s; 12 yds x 44" 3. Coatings 20s; 12 yds x 32" 4. Dhoties 20s; 2½ yds x 38" 5. Towels 20s; 1½ yds x 38" 6. Gauze and Bandage cloth 20s; 26s; 30s; 18 to 20 yds 37" x 47"	1. Dhoties 26s; 2 yds x 50" 2. Shirtings 26s; 15 yds x 45" 3. Coatings 26s; 12 yds x 30"	
Salem	1. Sarees 30s; 40s and Art Silk 60s; 6 to 8 yds. x 42" to 45" 2. Dhoties 30s; 40s; 4 yds. to 8 yds., 12 yds., x 50" 3. White pieces 30s; 40s; 10 yds & 12 yds 33" x 46" & 50"	1. Sarees 40s Art Silk 60s; 80s Art Silk 100s; 6 to 9 yds x 46" to 50" 2. Dhoties 60s; 80s; 100s 4 to 8 yds x 52" 3. White pieces 30s; 40s; 10 yds & 12 yds 33" x 46" & 50"	1. Sarees 60s; 80s; 100s Art Silk 8 yds x 46" to 48" 6 yds x 48" 2. Lungies 60s; 8 yds x 50"	
South Arcot		4. Towels 30s; 2 to 3 yds x 26" 5. Shirtings 40s; 12 yds x 26" 6. Coatings 30s; 12 yds x 27" 7. Thupatas 80s; 100s; 2 to 2½ yds x 32" to 40"		
South Kanara	1. Mundus 26s; 40s; 2 yds. x 48" 2. Thortu 20s; 54" x 30" 3. Lungies 26s; 2 yds. x 50" 4. Towels 20s; 2½ yds. x 24" 5. Bedspreads 26s; 2½ yds. x 50" 6. Sarees 40s; 60s, 80s 6 yds x 45" 7. Shirtings 26s; 24 yds. x 36"	1. Lungies 40s; 60s; 18 yds x 29"; 50" 2. Dhoties 20s; 80s; 20 yds x 50" 3. Shirtings 40s; 18 yds x 44" 4. Sarees 20s; 18 yds x 44"		

PRINCIPAL VARIETIES OF CLOTH PRODUCED IN MADRAS STATE IN 1954 WITH CONSTRUCTIONAL DETAILS

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District	For domestic use	For local sales	Exports to other States within the country	For export outside the country
(1)	(2)	(3)	(4)	(5)
South Kanara —(Contd.)	8. Loin cloth 20s; 6 yds. x 24" 9. Pudava 26s; 4 yds x 44"	8. Loin cloth 20s; 6 yds x 24" 9. Pudava 26s; 4 yds x 45" 10. Dhoties 30s; 8 yds x 52" 11. Canvas 26s; 24 yds. x 18" 12. Casement cloth 20s; 24 yds x 48" 13. Kallies 10s; 24 yds x 44" 14. Gauge and Bandage cloth 10s; 1 yd x 28"	—	—
Tanjore	—	1. Sarees 45s x 6, 7, 8 & 9 yds 40s x 46s, 6, 7, 8 & 9 yds 60s; 47" x 6, 7, 8 & 9 80s; x 100s; 48" x 6, 7, 8 & 9 yds 50" x 6, 7, 8, & 9 yds 2. Silk Sarees 50" x 6, 7, 8 & 9 yds 52" x 6, 7, 8 & 9 " 3. Dhoties 40s; 52" x 8 yds 54" x 8 yds	—	1. Lungies 32" x 7 yds, 30s 2. Kambayam 20s; 40½" x 9 yds 47" x 12 yds

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Tiruchirappalli	4. Towels 20s - 36" x 7 yds 36" x 8 yds, 42" x 7 yds 46" x 8 yds 1. Sarees 6 to 9 yds x 50" 2. Dhoties 100s, 80s 40s ; 8 yds x 48" to 52" 3. Towels 10s; 2/20s; 6 yds x 30" 4. Bedspreads 10s; x 2/20s; 5 yds x 50"	—	—	—
Tirunelveli	1. Sarees 20s, 24s, 30s, 7, 7½ yds. x 42", 44" 2. Dhoties 20s, 26s 2 to 2½ yds. x 44" 3. Towels 20s, 2 yds. x 32" 4. Lungies 20s x 26s ; 2 yds. x 44"	1. Sarees 20s, 24s, 30s, 7 to 7½ yds x 42", 44" 2. Dhoties 20s, 26s, 2 to 2½ yds x 44" 3. Towels 20s, 2 yds x 32" 4. Lungies 20s, 26s, 2 yds x 44"	1. Lungies 20s; 26s; 20s x 36s; 2 yds x 44" 1. Lungies 20s; 26s; 20s x 36s; 2 yds x 44"	1. Lungies 20s; 26s; 20s x 36s; 2 yds x 44"

Question 28 :

Has the Handloom Industry in your State taken advantage of the field of production reserved for that industry in 1950? If so, with what results?

Answer :

From the survey conducted it is noticed that in the districts of Chingleput, Coimbatore, Madras, Malabar, North Arcot, South Arcot, South Kanara, Tanjore and Tiruchirapalli the handloom industry has not taken advantage of the field of production reserved for that industry in 1950.

In Salem district the handloom industry has taken advantage of the field of reservation. However there has been no appreciable increase in production.

In Madurai, Tirunelveli and Ramanathapuram districts 40 percent of the weavers have taken advantage of the reservation and the increase in production in these districts is estimated at 12 percent.

There was thus no substantial benefit for the handloom weavers resulting from the reservation of certain types of fabrics exclusively for the handloom industry. The possible benefit was vitiated by the small scale power-looms which were free to produce the reserved varieties along with the handlooms. The powerloom factories were also free to produce coloured sarees in counts of 36s and above. The white sarees produced in mills were processed and dyed either by the Mill owners themselves or by others. These were the forces that operated against the accrual of much benefit to the handloom industry as a result of the reservation.

Question 29 :

Would it be possible for the weavers in your state to adhere to standard piece length of, say 24 to 40 yards?

Answer :

Almost all the weavers say it is not possible for them under the present arrangements to manufacture standard piece length of 24 to 40 yards. Only in two districts (South Kanara and Malabar) certain weavers find it possible to adhere to the standard length of 24 to 40 yards. However 75 percent of the weavers in South Kanara and 29 percent of the weavers in Malabar are estimated to find it not possible to adopt the standard length of 24 to 40 yards. The present standard length is mostly 8 to 9 yards except in the case of Malabar, South Kanara, Salem and Coimbatore where the standard length is higher going upto 18 yards

A district wise statement showing the proportion of weavers for whom it is or is not possible to adhere to the standard piece length of 24 to 40 yards and the present standard length is given below :

Name of the districts.	Chingleput	Coimbatore	Madras	Madurai	Malabar	North Arcot	Ramanathapuram	Salem	South Arcot	South Kanara	Tanjore	Tiruchirapalli	Tirunelveli
Percentage of weavers for whom it is not possible to adhere to the standard length of 24 to 40 yards.	100	100	100	100	29	100	100	100	100	75	100	100	97
Percentage of weavers for whom it is possible to adhere to the standard length of 24 yards to 40 yards.	...	...	...	...	71	...	...	...	...	25	...	...	3
Present standard length in yards.	8-9	8-16	8-9	8	5-18	8-9	9	7-16	8-18	6-12	8-9	8-9	8

PART V

Question 30 :

What is the normal mode of marketing adopted by the handloom weavers in your State?
STATEMENT SHOWING METHOD OF MARKETING DISTRICT WISE IN MADRAS STATE IN 1954.

(Figures are expressed in percentages)

Method of marketing	Chingleput	Coimbatore	Madras	Madurai	Malabar	North Arcot	Ramanathapuram	Salem	South Arcot	South Kanara	Tanjore	Tiruchirappalli	Tirunelveli	State
Through Independent Local Sales ...	21.8	8.2	...	13.8	89.6	8.1	15.1	15.4	10.4	86.9	53.3	38.5	9.4	21.4
Through Master Weavers ...	75.2	65.4	97.0	59.4	...	90.5	72.3	69.2	72.2	...	28.8	48.9	85.1	64.2
Through Co-operative Societies ...	3.0	26.4	3.0	26.8	10.4	1.4	12.6	15.4	17.4	13.1	17.9	12.6	5.5	14.4

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Question 33 :

Since 1948 has there been any change in the types of cloth produced by the handloom industry in your state owing to changes in fashion or in popular tastes ?

A district-wise statement showing the extent to which there has been change in the types of cloth produced by the Handloom Industry in response to changes in fashion or popular taste is shown below :

District.	Chingleput	Coimbatore	Madras	Madurai	Malabar	North Arcot	Ramanathapuram	Salem	South Arcot	South Kanara	Tanjore	Tiruchirappalli	Tirunelveli
Changes in types ...	% 100	% 100	% 100	% 46	% 41	% 100	% 31.5	% 100	% —	% 67	% —	% —	% 13
No changes in types ...	—	—	—	54	59	—	68.5	—	100	33	100	100	87

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It is seen from the statement that there has been change in the types of cloth produced by all the weavers owing to changes in fashion or popular taste in the districts of Chingleput, Coimbatore, Madras and Salem. In South Arcot, Tanjore and Tiruchirappalli there has been no change in types due to change in fashion.

Question 34 :

Do the weavers in your State normally adhere to uniform quality in their production; if not, is it possible for them to manufacture cloth to given construction particulars?

Answer :

Adherence to uniform quality in the production of handloom cloth depends on the extent to which production is organised. The adherence to quality is perhaps most in the case of weavers working under co-operative societies. There are special staff who check up the finished product and if any flaw be detected in the constructional make up of the fabric, it is summarily rejected. The weaver would lose heavily as he will not only lose his wage but will also have to make good the yarn wasted if he were to produce materials that will not stand the test of scrutiny. The adherence to quality is also marked in the case of fabrics produced by weavers working under master-weavers. There is no great risk of loss of quality in the case of fabric produced in handloom factories.

The instances of non-adherence to quality are found in the case of independent weavers who have to hawk their products in the streets and bazaars. It is however not a normal lapse on his part but the result of the economic forces operating against him. The fluctuations in the price of yarn and cloth are far too much for his slender means. The demand for his product is extremely unsteady. His earnings are meagre and not in proportion to the amount of labour put in. His period of employment is irregular. He buys yarn in the dearest market and compelled by economic necessity he sells his products in the cheapest market. With the proceeds he has to buy not only the requirements of food but also the necessities to weave cloth the next day. When the selling price is lower than his cost price the weaver has no alternative but to resort to methods to keep down his cost to the level of price at which he could sell. Naturally there is deterioration in the quality of the cloth produced by him. Thus the independent weavers of small means are the persons who do not adhere to uniform qualities in their production.

As 80 percent of the weavers work under master weavers, co-operative societies and in factories or on a hired basis, there is adherence to uniform quality in their production of cloth. The non-adherence to uniform quality is found in the case of 20 percent of weavers who work independently.

It is possible for the weavers who normally adhere to uniform quality in the production of cloth to manufacture cloth to given construction particulars also. The complaint existed that there is no uniform quality between one yard and another of the same piece of cloth. To the extent there is organisation of the industry under the co-operative sector, there has been rigid adherence to uniform quality as there is effective arrangement for quality control. In the case of cloth produced by the independent weaver there is no such rigid adherence to uniform constructional pattern.

Question 35 :

Are the existing facilities for the transport of handloom cloth from producing centres in your State to marketing centres adequate, if not, have you any suggestions to make in this behalf?

Answer :

From the sample survey conducted it is noticed that the existing transport facilities are adequate in all districts except in Malabar District.

Transport facilities are no doubt adequate in Malabar district normally but there is difficulty during the rainy season to transport handloom goods from producing centres to the marketing centres. Most of the areas in Malabar district get severed due to several streams springing up during the rainy season. The weavers contacted suggested the need for bridges on the routes connecting producing centres and marketing centres to keep line of communication intact.

PART VI

Supply of Designs

Question 36 :

Do the weavers in your State adhere to traditional patterns in the production of cloth or do they alter such designs to suit the changing demands of consumers?

Answer :

The handloom weavers normally adhere to the traditional patterns. However it would be incorrect to say that the weavers are incapable of altering the designs to catch up the caprice of fashion. In fact the master-weavers and co-operative production Societies have specialised staff such as expert designers to watch the trends of fashion and give new designs. Out of these novel designs a selection is made for production on the handlooms and then introduced into the market. The market response is watched and the

further production is suitably regulated. It was noticed in the Survey that the master-weavers find themselves in a position of vantage in catching up the consumer preference and arranging for the quick change over to meet the demand.

In olden days when production was mainly carried on in the villages and production was also mainly for the local market, the weavers adhered to traditional patterns in the manufacture of handloom fabrics.

With the centralisation of production for distant markets there has arisen a need to regulate the production in accordance with the changing demands. The weavers are able to adjust production to meet the changing fashions in the matter of design.

Question 37 :

What means, if any, are adopted by the handloom industry in your State to ascertain, and adopt itself, to the changing demands of the consumer ?

Answer :

In the case of weavers working under master-weavers and co-operative Societies the designs are supplied by the master-weavers or societies. There is no question of studying the market to ascertain the trends of changing fashions in the case of these weavers. The co-operative production Societies engage the services of expert designers for the purpose of supplying the designs.

The weavers who work independently in most cases copy the designs of the mill made goods and in certain cases get the patterns from the local markets.

Weavers in handloom factories and hired weavers produce the cloth according to the designs supplied to them.

PART VII

Cost of Production

Question 38 :

Please state the cost of production, under the following heads of a few typical varieties of handloom cloth largely produced in your areas.

Answer :

A statement showing the cost structure in respect of certain typical varieties of handloom cloth largely produced in the state is shown below :

COST STRUCTURE IN RESPECT OF CERTAIN TYPICAL VARIETIES OF HANDLOOM CLOTH LARGELY PRODUCED IN THE STATE.

Name of District.	Type of cloth with measurements.	Cost of yarn.	Cost of dyes.	Preparatory process.	Wages.	Finishing process.	Total.	Normal mar- gin of pro- fit *	Selling price
Rs. A. P. Rs. A. P. Rs. A. P. Rs. A. P. Rs. A. P. Rs. A. P. Rs. A. P.									
1. Chingleput	Lungies 40s x 60s 2½ yds x 54" ... Madras Handkerchief 40s x 60s x Art Silk 8 yds x 36" ... Saree Silk 9 yds x 54"	2 8 0 — — — 6 0 0 — — — 54 0 0 48 0 0	— — —	0 5 0 1 0 0 1 0 0 2 8 0 2 0 0 30 0 0	— — —	3 13 0 — — — 9 8 0 — — — 134 0 0 10 0 0 144 0 0	— — —	— — —	— — —
2. Coimbatore	80s & Art Silk Sarees 8 yds x 45" ... Sarees (Silk) 8 yds x 45" ... 10s Khavani Carpets 90" x 52" ...	5 13 0 — — — 35 0 0 — — — 4 12 0 — — —	— — —	0 2 6 — — — 0 6 0 — — — 0 3 0 — — —	— — —	— — —	— — —	2 4 0 8 3 6 20 0 0 55 6 0 2 1 0 7 0 0	— — —
3. Madras	Lungies 40s x 60s 9 yds x 44" ... 40s x 60s & Art Silk, Handkerchiefs 8 yds x 30" ...	9 0 0 — — — 7 0 0 — — —	— — —	0 8 0 3 8 0 1 4 0 2 8 0	— — —	— — —	13 0 0 — — — 10 12 0 — — —	— — —	— — —
4. Madurai	100s Sarees 9 yds x 50" ... 80s Dhoties 4 yds x 50" ...	9 4 0 — — — 3 13 0 — — —	— — —	0 8 0 2 4 0 0 8 0 2 8 0	— — —	— — —	12 0 0 — — — 6 13 0 — — —	— — —	— — —

* Relates to independent Weavers.

**COST STRUCTURE IN RESPECT OF CERTAIN TYPICAL VARIETIES OF HANDLOOM CLOTH
LARGELY PRODUCED IN THE STATE.**

Name of District.	Type of cloth with measurements	Cost of yarn.		Cost of dyes.		Preparatory process.		Wages.		Finishing process.		Total.		Normal mar- gin of pro- prices fit *	
		Rs. A	P. Rs.	A. P. Rs.	A. P. Rs.	A. P. Rs.	A. P. Rs.	A. P. Rs.	A. P. Rs.	A. P. Rs.	A. P. Rs.	A. P. Rs.	A. P. Rs.	A. P. Rs.	A. P. Rs.
5. Malabar	Thortu 20s 54" x 32" Bedspreads 90" x 60".	0 7 0	—	—	—	0 0 9	—	—	—	—	—	—	—	0 1 3	0 9 0
	40s Lungies 8½ yds x 44"	5 14 0	1 14 0	6 0 5	6 0 5	—	—	—	—	—	—	—	—	1 13 6	9 15 6
6. North Arcot	Silk Sarees 9 yds x 45"	4 12 0	—	—	—	0 6 0	1 10 0	—	—	—	—	—	—	—	—
	Sares Silk 8 yds x 54"	49 8 0	—	—	—	1 8 0	11 0 0	—	—	—	—	—	—	—	—
	40s Sarees 8 yds x 46"	33 0 0	—	—	—	2 0 0	7 8 0	—	—	—	—	—	—	—	—
7. Salem	60s Sarees 8 yds x 45"	5 14 0	—	—	—	0 8 0	—	—	—	—	—	—	—	1 1 0	7 7 0
	60s Dhories 4 yds x 52"	6 10 0	—	—	—	0 8 0	—	—	—	—	—	—	—	2 0 0	9 2 0
	Sarees (Art Silk) 8 yds x 44"	2 0 6	—	—	—	0 4 0	—	—	—	—	—	—	—	0 8 0	2 12 6
8. South Kanara	26s Bedspreads 2½ yds x 44"	10 13 0	—	—	—	0 8 0	—	—	—	—	—	—	—	3 11 0	15 0 0
	20s Towels 30" x 54"	1 12 0	—	—	—	0 4 6	—	—	—	—	—	—	—	0 4 6	2 5 0
	26s x 40s Mundu 2 yds x 45"	0 8 6	—	—	—	0 1 6	—	—	—	—	—	—	—	0 1 6	0 11 6
9. Tanjore	Silk Sarees 9 yds x 50"	1 5 0	—	—	—	0 3 0	—	—	—	—	—	—	—	0 7 0	1 15 0
10. Tiruchirapalli	10s x 2/20s Bed sheets 5 yds x 50"	55 0 0	—	—	—	—	5 0 0	—	—	—	—	—	—	0 15 0	0 75 0
	10s x 20s Towels 6 yds x 30"	8 8 0	—	—	—	0 1 0	0 14 0	—	—	—	—	—	—	—	—
	...	2 9 0	—	—	—	0 1 0	0 8 0	—	—	—	—	—	—	—	—

* Relates to independent Weavers.

PART VIII

Preparatory and Finishing Processes

Question 39:

Please describe briefly the practices adopted in your State for

- a) winding
- b) sizing
- c) warping
- d) beaming and finishing processes

- like a) bleaching
- b) dyeing
 - c) printing and
 - d) calendering

Answer:

Manufacturing Processes

Weaving Processes :

Woven fabrics are composed of longitudinal or warp threads and transverse or weft threads which are interlaced with one another according to the class of structure and form of design desired. Warp threads and weft threads are otherwise described as "Ends" and "Picks".

Weaving consists in interlacing two sets of threads, one set placed longitudinally and the other transversely in a fabric. The longitudinal or warp thread having been arranged and evenly wound upon a beam is separated into two lines and a transverse of weft thread is passed through the division. Healds are employed to divide the warp technically known as "shedding". Healds consist of a series of twine loops each passing round a warp thread and fastened to a wooden rod. The number of loops on a rod and the number of rods employed depend upon the breadth and closeness of warp threads and the order of interlacing them.

Supply of yarn :

Supply of yarn is generally made to the weavers in bundles and knots which are found to be the most convenient form of

supplying it. Most of the yarn used by the handloom weavers is either sized in hank form or after the warp has been laid out. Similarly yarn is also dyed before using. Supply of yarn in the hank form is cheaper and more convenient to handle. Ready made warp will no doubt save a considerable amount of preparatory labour. Supply of ready made warp will however prove a disadvantage to the weaver as the preparatory processes such as winding, warping and sizing provide employment to the members of the weavers' family. The small additional earnings to the weavers' family will be wiped out if supply of yarn is in the form of ready made warp.

Several processes such as winding, warping, sizing warp joining and beaming described, as "preparatory processes" as distinct from "finishing processes" are done before the actual process of weaving is commenced. Broadly speaking, the manufacturing processes are essentially the same in the various centres of production in this State.

Winding :

Winding is done usually by women and children of the weaver castes. Weft yarn is wound on shuttle pirns and the process is called *pirn winding*. Yarn for making warp is wound on cones or bobbins. This is known as *bobbin winding*. A spinning wheel locally called "*rattu*" fitted with a bamboo or wooden frame is employed for the process of winding in both the cases. This practice is almost universal in that it is used in all districts of the State. The "*rattu*" is operated with the help of a wooden handle fitted to it.

Except in large institutes like the Madras Textile Institute and a few factories where hand driven bobbin winding has been introduced with a fair amount of success, a change over to machine winding is not being helpful with the present method of street sizing and short warps. Therefore the introduction of bobbin-winding machines depends on the system of sizing and length of the warp.

It is interesting to note how winding is done on the hand-driven bobbin winding machine. The principal parts of the machine are the creel, the heck and the mill. The mill is a gigantic reel mounted on a vertical axis and reaching from 15 to 20 yards in circumference. The mill is rotated by hand first in one direction and

then the other. The creel is a vertical curved frame work arranged to hold the bobbin in a horizontal position. The heck consists of a frame containing a number of steel pins between which the threads pass through.

The threads from the creel bobbins are passed through the heck and gathered together in a loose rope and attached to the top of the mill. The mill is revolved so as to wind the rope of yarn round the mill at a definitely regulated speed. When the yarn has been wound sufficiently low down on the mill, the latter is reversed and a second layer of threads wound over the first one. The process is repeated a sufficient number of times to give the required number of threads for the warp.

Warping :

Efficiency of weaving depends on the process of warping. Warping is the operation by which a number of threads equal in length are arranged length wise and in parallel order. The number of threads depends on the width of the cloth to be woven.

Warping also, like winding, is done by women assisted by children. Two forms of warping are common in the Madras State viz., *peg warping* and *wheel warping*. In wheel warping, two kinds of wheels are used (1) the vertical wheel and (2) the horizontal wheel. The length wound on the wheel during the one up or down motion will represent the length of the warp. This length will depend upon the circumference of the wheel and the number of revolutions during the lift. The warp length varies with the type of fabric to be produced. It varies from 16 yards to warp lengths over 16 yards. The finished warp is then wound off and formed into a large ball and is then sized.

The practice of sizing yarn in hanks before warping is not popular in Madras.

Street sizing :

Generally the warp is stretched supported by bamboo sticks at intervals in the streets. The sizing mixture is applied to the surface of the warp by rolling a cloth bag containing the "sizing mixture" throughout the length of the warp and is then carefully brushed over and over again. The threads are prevented from sticking to one

another by constantly manipulating the loose rods. Sized yarn is then allowed to dry in the air. Usually in the process of sizing, a weaver is helped by other weavers, who in turn helps them. Street sizing becomes impossible during the rainy season.

This is for the warp. Weft yarn is sized after being wound on the pirns.

Street sizing is found throughout the state. Where there is no facility for street sizing, yarn in hanks is sized after the preliminary process of cleaning and softening. In the factories of the west coast, yarn is sized on the looms itself with the help of a hand brush.

Yarn of lower counts is not usually sized, for example in the factories of the West Coast where coarse yarn is used for weaving thicker fabrics like bed spreads; twisted yarn used for weaving thicker fabrics is also not sized in places like Karur in Tiruchirapalli district. The finer the yarn, the greater the number of times the warp is brushed. Quality depends upon the various processes connected with sizing such as wetting, boiling, oiling etc.

Sizing plant operated by hand which enables the sizers to make a long warp and possible to work even during the rainy season is not popular with the weavers for the following reasons.

The cost involved is beyond the means of the weavers; it is contended that hand sized warp is superior to machine sized warp; and the advantages to the weavers and his family by way of economy by doing the sizing himself is lost to him. The street sizing method obtaining in Madras is found to be satisfactory, but tedious and wasteful.

In certain big centres, there are men who specialise in sizing, and they undertake sizing for the weavers and master weavers on piece rate basis.

Drawing-in and Warp Joining :

After the sized warp is prepared, the warp is passed through the eyes of healds and dents in the reeds and this operation is called "Drawing in".

After the first warp is woven, the warp ends are not removed from the heald. The cut ends of the old warp are joined to the ends of the new warp to be woven. This is known as warp joining and is a tedious process involving length of time and patience.

Beaming :

After the sized yarn is dried, the one end of the warp is fixed to a wooden beam and rotated while the continuous length of the warp is held at tension by another attender until the rear end is firmly wound on the beam.

The beam with the warp is fixed at the back of the loom, thereby bringing the warp in level with the loom and tension required to operate in the process of weaving. When the above processes are completed, weaving is commenced. Before the invention of the fly shuttle, the weavers at work threw the shuttle across the sley by hand and it was brought to stand still by the other hand and this operation was repeated again and again. This method is very slow.

Fly shuttle is an improvement over the throw shuttle. By this method, weavers attach the shuttle to a handle with cords fitted to it. At the ends of the cords two pieces of stout leather run on the two spindles attached to either end of the sley. A pull of the cord drives the shuttle to the other end. The weaver is able to weave nearly 6 yards on the fly shuttle loom per day whereas it is possible to weave only 4 yards on the throw-shuttle loom.

Finishing processes :

Bleaching, dyeing, printing, and calendering constitute the finishing processes. These processes are not performed by the weavers except in the factories of the West Coast.

Bleaching :

Bleaching is the process of converting the coarse or grey yarn into white soft yarn. Grey yarn is soaked in water for a period of one night. The next day the yarn is removed and boiled for about ten hours in a solution of caustic soda and ash. The yarn is washed in water the following day and then dipped in a solution of bleaching

powder for one hour. Then yarn is squeezed and dipped into the diluted solution of hydrochloric acid or sulphuric acid for about fifteen minutes. It is then washed with soap and dried. Caustic soda is not used in certain cases when boiling the yarn.

Dyeing:

In Malabar and South Kanara districts two methods of dyeing are adopted generally viz. vat dying and sulphur dyeing. In the case of vat dyeing, the required dye is converted into a thin paste by adding Turkey red oil and any other oil. The paste is then mixed with a solution of caustic soda and stirred well. Hydrosulphate is slowly added while stirring goes on. The solution is then kept undisturbed for about half an hour. This is the stock solution of dyes. Meanwhile a dye bath is prepared and caustic soda is added. The stock solution of dyes is added to the dye bath and stirred well. While the stirring goes on, additional quantity of hydrosulphate is added. The bath is then kept undisturbed for fifteen minutes. The yarn is then squeezed and placed on the dye sticks and introduced into the dye bath, proper care being taken to see that the dye reaches all the threads. The process of dyeing lasts for about an hour. The yarn is then taken out, squeezed and exposed to the air for fifteen minutes. It is then soaked in sulphuric acid solution and washed in soap water, cleaned several times, squeezed and then dried.

In sulphur dyeing, the dye bath is prepared with the following dyes and chemicals, sulphur colours, sodium sulphate, soda ash and common salts. These dyes and chemicals are mixed with water and heated to the boiling point. The processed yarn is introduced into the dye-bath and kept there for about an hour. After dyeing, the yarn is rinsed well in water, washed in the diluted ash solution and then washed in clean water. The yarn is then squeezed and dried.

Printing and calendering:

Printing of floral or other designs is done by the hand for the handloom fabrics in small establishments. Calendering is the process of ironing or hot pressing of cloth. These operations are performed in factories.

Except in Malabar and South Kanara districts, none of the finishing processes are done by the weavers themselves. As 65.41 per cent of the weavers are working under the Master Weavers and Co-operative Societies, the vast majority of the weavers are only concerned with converting the yarn supplied to them into finished fabrics. Out of the total quantity of yarn consumed in the State 54.1 per cent of yarn is dyed yarn. Printing and calendering are done in large establishments only.

Question 40:

What is the average percentage of cotton yarn wasted in the course of preparation of cloth.

Answer:

Wastage occurs during the preparatory process of winding, warping, sizing and beaming. No Wastage occurs in the actual weaving process. The quantity of yarn wasted in the preparatory process is estimated at 0.25 to 4 per cent. The wastage is lower in the case of experienced weavers. The higher proportion of wastage is usual in the case of yarn of inferior quality.

Question 41:

Would it be helpful if warp yarn is supplied to weavers on sized beams and weft yarn on pirns instead of in hanks as at present?

Answer:

Generally dyed yarn is supplied to or brought by the weavers in knots or hanks. The supply of yarn in knots or hanks is found by the weavers to be more convenient. It provides ancillary employment and supplementary earnings to the weavers family in doing the preparatory processes such as winding, warping, sizing and beaming. Supply of warp yarn in sized beams and weft yarn in pirns will eliminate the supplementary earnings to the weavers. If warp yarn is supplied in sized beams and weft yarn in pirns the weavers state that the yarn loses the moisture and becomes difficult to handle. The time lost in the preparatory processes will be saved and production could be speeded up. Weavers' preference however is for the supply of yarn in hanks.

APPENDIX I

Enclosure

GOVERNMENT OF MADRAS

ABSTRACT

Handloom Industry - Cess Fund - Schemes for 1954-55 - Scheme for the collection of Statistics relating to Handloom Industry - Sanctioned.

Department of Industries, Labour and Co-operation.

G. O. Ms. No. 2737

dated 4th October '54.

- 1) From the All India Handloom Board letter No. HB/10-54 (MDR)/2348 dated 12th August 1954.
- 2) From the Director of Statistics letter No. 2632/54-A dated 26th August '54.

ORDER :

The Chairman of the All India Handloom Board has sanctioned a grant of Rs. 1,18,064 to the Madras Government towards the expenditure to be incurred during 1954-55 for collection of essential statistics relating to the Handloom Industry in Madras State. The Secretary, All India Handloom Board has stated that the statistics to be collected should be the same as those required in the questionnaire in the annexure to this order and that the work should be completed before 31st March 1955.

2. The Director of Statistics reports that having regard to the number and nature of the questions in the questionnaire to be answered, it will not be possible to formulate a scheme for covering the entire population of 5 lakhs looms within 31st March 1955 as stipulated by the All India Handloom Board. He has therefore proposed that a survey for the collection of Statistics relating to Handloom Industry may be conducted on a sample of 5 percent strength and that a period of one year may be allowed to collect the required data, process them and draft a report furnishing answers to the questions. For conducting the survey and for the compilation of statistics, the Director of Statistics has proposed the employment of the following staff for one year.

Headquarters :

1. Statistical Officer on Rs. 300-50/2-700 per mensem
1. Junior Superintendent on Rs. 140-5-190 per mensem
3. Economic Investigators on Rs. 150-5-200 per mensem each
4. Lower Division Clerks on Rs. 45-90 per mensem each
1. Typist on Rs. 45-90 per mensem
1. Senior Draftsman on Rs. 90-125 per mensem
3. Peons on Rs. 18-25 per mensem each

Field Staff :

6. Economic Investigators on Rs. 150-5-200 per mensem each
30. Supervisors on Rs. 45-90 per mensem each
6. Peons on Rs. 18-25 per mensem each

The Government accept the proposals of the Director of Statistics. The All India Handloom Board will be informed that the survey outlined by it will be completed within one year without exceeding the limit of expenditure fixed by it and that it will not be possible to complete the work by 31st March 1955 as suggested by it.

3. Sanction is accorded for the employment of the following staff by the Director of Statistics for a period of one year from the date of appointment for the work relating to the collection of the Statistics pertaining to the Handloom Industry.

Headquarters :

1. Statistical Officer on Rs. 300-50/700 per mensem.
1. Junior Superintendent on Rs. 140-190 per mensem.
3. Economic Investigators on Rs. 150-200 per mensem each
4. Lower Division Clerks on Rs. 45-90 per mensem each
1. Typist on Rs. 45-90 plus a special pay of Rs. 10/- per mensem
1. Senior Draftsman on Rs. 90-125 per mensem
3. Peons on Rs. 18-25 per mensem each

Field Staff :

6. Economic Investigators on Rs. 150-200 per mensem each
30. Supervisors on Rs. 45-90 per mensem each
6. Peons on Rs. 18-25 per mensem each

The staff will draw dearness allowance and other allowance admissible under the rules.

4. Sanction is also accorded to the incurring of an expenditure not exceeding Rs. 31,200 (Rupees thirty one thousand and two hundred only) towards the Travelling Allowance of the staff and an expenditure not exceeding Rs. 3,900 (Rupees three thousand and nine hundred only) towards the contingencies including expenditure on postage and one calculator.

5. The expenditure should be debited to "D Compilation of Handloom Statistics" to be newly opened with the usual sub-head under "47-Miscellaneous Departments - e. Statistics".

6. The Statistics collected should be the same as those required in the questionnaire in the annexure to this order. The Director of Statistics is requested to send quarterly progress reports and the statements of audited expenses called for in the All India Handloom Board's letter cited to the Registrar of Co-operative Societies to enable him to prepare and send consolidated reports on all the Cess fund Schemes to the All India Handloom Board.

(By Order of the Governor of Madras)

(True copy)

Copy of letter No. HB/10-54 (MDR)/2348 dated 12th August 1954 from the All India Handloom Board, Bombay (Government of India, Ministry of Commerce and Industry).

SUB: Grants to States from the Cess Fund for collection of Statistics relating to the handloom industry.

With reference to letter No. 48 (29) -CT (A)/53 dated the 5th August 1954, from the Government of India, Ministry of Commerce and Industry, New Delhi, I am directed to convey the sanction of the Chairman, All India Handloom Board, Bombay to the payment of a grant of Rs. 1,18,064/- (Rupees one lakh eighteen thousand and sixty four only), to the Madras State Government towards expenditure to be incurred during 54/55 for collection of essential statistics relating to the handloom industry.

The grant is debitable to "43 - Industrial Development - Expenditure on Development of Handloom Industry".

COPY TO

The Secretary to the Government of Madras, Development Department, Fort St. George, Madras. The Statistics to be collected should be the same as those required in the questionnaire (copy enclosed) which was circulated with this office letter No. HB/27-53/648 dated 20th July 1953. The work should be completed by 31st March 1953. The State Government should submit to this office a quarterly report showing the progress of implementation of the scheme together with a statement of audited expenses incurred. The unutilised balance of the grant at the end of the year should be surrendered *in time* to the Deputy Accountant General (I & S), Bombay.

QUESTIONNAIRE.

Extent and Structure of Handloom Industry :

1. What is the total number of handlooms in your State according to types of handlooms viz., throw shuttle, fly shuttle, semi-automatic and others ?
2. Please classify, separately, the number of looms engaged in weaving cloth form :—
1) Cotton yarn ; 2) Art silk yarn ; 3) Silk yarn ; 4) Woollen yarn ; 5) Jute yarn ; 6) Yarn from other fibres, if any ; 7) Mixture of any two of the above yarns and 8) Hand-spun cotton yarn.
3. The number, if any, of looms under each of the categories mentioned in 2 above, remaining idle during the whole or part of a year ; state the reasons for such idleness.
4. The number of looms added or dismantled since 1942 under each of the categories mentioned in 2 above.
5. To what extent has improved types of looms been introduced in your area since 1942 ?
6. The total number of weavers in your area classified under the following heads :—
a) Those working independently ; b) those working under mahajns or master-weavers ; and c) those working in factories.

7. The total number of assistants to weavers (paid or unpaid) employed by a) weavers b) Mahajans or Master-Weavers and c) factories.

8. The number of dependents a) on weavers and b) on assistants to weavers.

9. Since 1942, have there been any addition to the weaving population in your State by persons previously engaged on occupations other than weaving? If so, please state the number of such persons and the reasons for their change of occupation.

10. The number of hereditary weavers, if any, who have left the weaving industry since 1942 and the reasons therefor.

11. The number of weavers for whom weaving is the sole occupation.

12. The number of weavers for whom weaving is subsidiary occupation. What is the primary occupation of this class of weavers?

13. The average monthly earnings of a weaver working a) independently; b) under a Mahajan or Master-weaver; and c) in factory.

14. The average monthly earnings from a) weaving and b) other occupations of a weaver for whom weaving is only a subsidiary occupation.

15. How do the earnings of weavers in a producing centre compare with the earnings of those engaged in other occupations in the same centre?

16. What is the average extent of indebtedness of a weaver engaged solely on weaving?

17. What is the normal source of credit and the usual rate of interest charged?

PART II. SUPPLY OF RAW MATERIALS.

18. What are the actual monthly requirements for the handlooms in your State a) cotton mill made yarn, specifying the counts

and the quantity in each count; b) silk yarn; c) art silk yarn; d) woollen yarn; e) jute yarn; f) yarn from other fibres, if any and g) hand-spun cotton yarn?

19. What was the consumption during each of the last three years 1950, 1951 and 1952, of each of the types of yarn mentioned in 18 above.

20. What is the normal channel of supply of yarn to the weaver, i.e. whether through wholesalers, co-operative societies, retailers or directly from mills? Please specify the extent to which each of these media functions in your State.

21. What is the normal channel of supply of dyes, chemicals and other auxiliary stores for the handloom industry in your State. To what extent is the handloom industry in your State dependent on its requirements of auxiliary stores on materials produced in other States or imported from foreign countries?

22. To what extent is bleached or dyed yarn used by the handloom weaving industry in your State?

23. To what extent is yarn finished by the weaver himself cheaper or dearer than yarn bought in the finished stage for weaving by the handloom weaving industry?

PART III. STATISTICS OF PRODUCTION.

24. On the basis of actual part time or wholetime working of andlooms in your State, what is the potential capacity of the andloom industry for producing cloth? What, in relation to this potential capacity was the actual production of cloth during each of the three years 1950, 1951 and 1952? (Please give separate figures for cotton cloth and other fabrics)

25. What is the average production of cotton cloth per pound of cotton yarn in your State?

PART IV. TYPES OF FABRICS PRODUCED.

26. What portion of the actual production of handloom cotton cloth during each of the years 1950, 1951 and 1952 was utilised

a) for domestic use b) for local sale c) for export to other States within the country and d) for export outside the country ?

27. What were the principal varieties of cloth produced against a), b), c) and d) above ? Please give constructional details.

28. Has the Handloom Industry in your State taken advantage of the field of production reserved for that Industry in 1950 ? If so with what results ?

29. Would it be possible for the weavers in your State to adhere to standard piece lengths of say 24 or 40 yards ?

PART V. METHOD OF MARKETING.

30. What is the normal mode of marketing adopted by the handloom weavers in your State ?

31. To what extent do weavers manufacture cloth against specific orders ?

32. The extent of sales of cloth made through weavers Co-operative Societies during each of the 3 years 1950, 1951 and 1952.

33. Since 1942, has there been any change in the types of cloth produced by the handloom industry in your State owing to changes in fashion or in popular tastes ?

34. Do the weavers in your State normally adhere to uniform qualities in their production ; if not, is it possible for them to manufacture cloth to given construction particulars ?

35. Are the existing facilities for the transport of handloom cloth from producing centres in your State to marketing centres adequate ; if not have you any suggestions to make in this behalf ?

PART VI SUPPLY OF DESIGNS.

36. Do the weavers in your State adhere to traditional patterns in the production of cloth or do they alter such designs to suit the changing designs to suit the changing demands of consumer ?

37. What means, if any, are adopted by the handloom industry in your State to ascertain and adopt itself to changing demands of the consumer ?

PART VII COST OF PRODUCTION.

38. Please state the cost of production, under the following heads of a few typical varieties of handloom cloth largely produced in your area : (1) cost of yarn (2) cost of dyes and chemicals (3) cost of preparatory process such as winding, warping, sizing, beaming etc, (4) cost of finishing processes such as calendering, bleaching, dyeing, printing, etc., (5) wages paid (6) depreciation (7) normal margin of profit for the weaver.

PART VIII PREPARATORY AND FINISHING PROCESSES.

39. Please describe briefly the practices adopted in your State for (a) winding (b) sizing (c) warping and (d) beaming and for finishing processes like (a) bleaching (b) dyeing (c) printing and (d) calendering.

40. What is the average percentage of cotton yarn wasted in the course of preparation of cloth ?

41. Would it be helpful if warp yarn is supplied to weavers on sized beams and weft yarn on pirns instead of in hanks as at present ?

(True copy)

APPENDIX II

GROUP I-100

Serial No.	Name of the Villages	No. of looms surveyed
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Chingleput

1.	Kunnappaathur	24
2.	Irumbili	6
3.	Kothimangalam	14
4.	Vembedu	53
5.	Irاندam Kattalai	2
6.	Sandaivelur	56
7.	Anandanallur	1
8.	Perumbakkam	58
9.	Karani	2
10.	Nallur	23
11.	Kuruvimalai	4
12.	Kutharambakkam	18
13.	Panaiyur	4
14.	Siruvakkam	68
15.	Mettuthangal	3
16.	Isapallavaram	4

North Arcot

17.	Mothur	6
18.	Perumbadi	7
19.	Kandampalayam	31
20.	Nandimangalam	6
21.	Anamallur	40
22.	Dasarapet	23
23.	Vilambadi	25
24.	Mathur	13
25.	Pappanthangal	2
26.	Melavi	3

South Arcot

27.	Chellamjeri	72
28.	Vandurajankuppam	39
29.	Tiruvathigai	18
30.	Manjaripalayam	6

Serial No.	Name of the Villages	No. of looms surveyed
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31.	Adurkuppam	3
32.	Thumbur	1
33.	S. V. Palayam	21
34.	Chennagunam	82
35.	Jambai .	59
36.	Kilmalai	27
37.	Vadalapakkam	9
38.	Kasipalayam	9
39.	Vasishtapuram	31
40.	Anichampalayam	8
41.	Erumbur	7

Tanjore

42.	Pattukottai Kilapalayam	17
43.	Vaduvakkudi Suramangalam	64
44.	Mappillai Kuppam	45
45.	Thalaignairu	27
46.	Sirgali	5

Tiruchirappalli

47.	Nagampalli	4
48.	Vengaimedu	17
49.	Pudur	59
50.	Irungalur	7
51.	Semiapatti (Virailimalai)	2
52.	Pudukottai	65
53.	Chettipatti	12
54.	Ambikapuram	4

Salem

55.	Dharmapuri	8
56.	Thukkachur	4
57.	Rakipatti	34
58.	Veerangadu	4
59.	Bodinaickenpalayam	2
60.	Mohanur	2
61.	Pahamplayam	5
62.	Pazhandinnipatti	80
63.	Karuvanur.	25
64.	Kadayambatti	15

Serial No.	Name of the Villages	No. of looms surveyed
65.	Marukkalampatti	5
66.	Malayanur	5
67.	Muddanapalli	6
68.	Gollapalli	4
69.	Sengodanpalayam	8
70.	Karkalangadu Karuveppampatti	3
71.	Ulageppanur	5
72.	Puttipatti	64
73.	Akkarapatti	22
74.	Koothanur	6
75.	Kavendampatti	96
Coimbatore		
76.	Kanniampalayam	46
77.	Uthamballi	20
78.	Periamoduchur	16
79.	Semmambayalam	16
80.	Batragowndenur	81
81.	Gobichettipalayam	99
82.	Sevakarampalayam	98
83.	Pullavadi	73
84.	Gengapuram	41
85.	Vijayamangalam	70
86.	Sengowndempalayam	8
87.	Karuthambalayam	4
88.	Villarampatti	4
89.	Kolagampalayam	8
90.	Alaguthivalasu	11
91.	Mallipuram	19
92.	Thumbilampatti	5
93.	Periathupalayam	11
94.	Sakkarapalayam	7
95.	Kungumampalayam	2
96.	P. A. N. Palayam	6
97.	Ammapalayam	5
98.	Chettipalayam	2
99.	Thoppapalayam	1
Madurai		
100.	Nalligowndenvalasu	13
101.	Vadaparuthiyur	7
102.	Kothyam	1

Serial No.	Name of the Villages	No. of looms surveyed
103	Dadi Kombu	74
104	Keelachockanathupuram	5
105	Gudalore	9
Ramanathpuram		
106	Ramanathapuram	28
107	Namar Viruthampatti	1
Tirunelveli		
108	Gopalasamudram	10
109	Karuvelambadu	22
110	Koilpatti	27
111	Gangaikondan	17
112	Samsikapuram	87
113	Keelveeravanam	2
Malabar		
114	Vyyur	92
115	Chevayoor	4
116	Melatoor	3
117	Adoor	48
118	Cannanore	25
119	Kavanur	3
120	Kunnatheru	49
121	Padutheru	42
122	Pookadi	7
123	Trimbiliam	3
124	Kollangode	5
125	Tiruvagoor	32
126	Chavesseri	2
South Kanara		
127	Ujjini	13
128	Mudperar	9
129	Tenkandiyur	5
130	Nandalike	1
131	Bantuval	1
132	Podoor	18
133	Meenja	33
134	Mangalor thotta	62

Serial No.	Name of the Villages.	No. of looms surveyed
Group II 101-200		
South Arcot		
1	Puzhovanur	134
North Arcot		
2	Subbanraopet	112
3	Melkalathur	166
Tiruchiripalli		
4	Koimpalli	185
Salem		
5	Uthamasolapuram	118
Coimbatore		
6	Doddampalayam	149
Ramanathapuram		
7	Tirupathur Town	109
Tirunelveli		
8	Sankarankudiyurpu	103
Malabar		
9	Panniangara	106
10	Payyanur	183
11	Choova	125
12	Alavil	183
13	Kottakkal	128
South Kanara		
14	Derabail	193
15	Neeleshwar	133
Group III 201-300		
Chingleput		
1	Tiruppukuzhi	211
North Arcot		
2	Arni	284
South Arcot		
3	Kannipattinam	261
4	Anandapuram	218
5	Peruvalur	206

Serial No.	Name of the Villages	No. of looms surveyed
Salem		
6	Thijadapalayam	229
7	Namakkal Town	295
Coimbatore		
8	Arasur	267
9	P. Puliyampatti	219
10	Rokiyapalayam	230
11	Sirumugaipudur	212
Ramanathapuram		
12	Neeravi	232
Malabar		
13	Chirakkal	226
14	Kodumba	291
South Kanara		
15	Surathkal	214
Group IV 301-400		
Madras		
1	Mylapore	350
Chingleput		
2	Manellore	395
North Arcot		
3	Ponnai	318
Salem		
4	Patchal	319
5	Kakaveri	322
6	Kalipatti	304
7	Kumaramangalam	386
Malabar		
8	Chirukkunnu & Iranian	362
9	{ Thillanoor, Chembilode, Athadappa and Koygode }	371
10	Pinarai	312
11	Palappuram	381
12	Manujur	359

Serial No. Name of the Villages No. of looms surveyed

Group V 401-500

Tiruchirapalli

1	Manamedu	494
2	Udayarpalayam	425

Tirunelveli

3	Ayanpottalpudur	481
4	Pudianputhur	480

South Kanara

5	Kadri	408
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Group VI 501-600

South Arcot

1	Vandipalayam	597
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Tanjore

2	Ammamet	525
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Group VII 601-700

South Arcot

1	Kurinjpadi	684
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Tiruchirapalli

2	Kodiampalayam	618
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Salem

3	Alavoypitti	677
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Coimbatore

4	Vandipudur	639
5	Seeranaickenpalayam	625
6	Kollegal Town	699

Group VIII 701-800

Malabar

1	Muzhippillangadu	733
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Group IX 801-900

Coimbatore

1	P. Mettupalayam	858
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Group X 901-1000

Nil

APPENDIX II—(Contd).

Names of the centres where there are more than 1000 looms

S. No. Name of the centres No of looms surveyed

Coimbatore

1	Coimbatore Town	92
2	Bhavani Town	113
3	Erode Town	90
4	Sivagiri	98
5	Tiruppur	129

Salem

6	Kondalampatti	537
7	Atthanur	165
8	Guruswamypalayam	515
9	Koonavelampatti	220
10	Vennandur	602
11	Rasipuram Town	360
12	Devasthanavanavasi	116
13	Jalagandapuram	104
14	Tharamangalam	505
15	Avadathur	203
16	Papparapatti	93
17	Shevapat	315
18	Guhai I Division	171
19	Guhai II Division	988
20	Salem Town	321
21	Arisipalayam	239
22	Ammamet	516
23	Ponnammapet	473
24	Surlampalayam	46
25	Edappadi	358
26	Pallipalayam	122
27	Kumarapalayam	204
28	Mallasamudram	75
29	Tiruchengode	71

Malabar

30	Eddakhadu	265
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Serial No. Name of the centres No. of looms surveyed

Tirunelveli

31	Malapalayam	446
32	Veeranallur	147
33	Tenkasi	126
34	Tirunelvelipettai eto	77
35	Kadayanallur	237
36	Sankarankoil	108
37	Ambasamudram	59
38	Puliyangudi	138
39	Kallidaikurichi	114
40	Ettayapuram	155

Chingleput

41	Kunnathur	249
42	Tirumishi	99
43	Madarpakkam	214
44	Arani	92
45	Kancheepuram	522
46	Iyyampettai	113
47	Anakaputhur	120
48	Saidapet	163

North Arcot

49	Gudiyattam	786
50	Aroot	80
51	Wallajah	133
52	Viswanathapuram	119
53	Panappakkam	94
54	Cheygar	150
55	Tiruvattipuram	107

Ramanathpuram

56	Aruppukottai	636
57	Karaikudi	191
58	Chathirapatti	123
59	Rajapalayam	185
60	Srivilliputhur	201
61	Paramakudi	83
62	Emaneswaram	60

Serial No. Name of the centres No. of looms surveyed

Madurai

63	Madurai city	786
64	Sithayankottai	49
65	Dindigul Town	110
66	Chinnalapatti	234
67	Palani	182
68	Jakkampatti	95

Tiruchirapalli

69	Woriyur	86
70	Karur Town	580

South Arcot

71	Chennappanaickenpalayam	58
72	Melbhuvanagiri	52

Madras

73	Triplicane (Ice House)	126
74	Washermanpet	106
75	Saidapet	225

Tanjor

76	Tirunageswaram	203
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APPENDIX III

Estimated number of handloom in each district.

Name of the district.	Number of looms according to the Textile Control Officer's list in the villages surveyed.	Number of looms as found by the survey in the villages selected for the survey.	Percentage increase (+) or decrease (-) of the figures in column (2) over the figures in column (3)	Number of looms as found in the Textile Control Officer's list for the whole district.	Estimated number of looms in the district with reference to the variation noticed in column (4)
(1)	(2)	(3)	(4)	(5)	(6)
Chingleput	2,456	2,511	2.2	45,201	46,200
Coimbatore	5,268	5,032	4.5	63,722	60,836
Madurai	1,660	1,551	6.6	31,828	29,726
Madras	673	807	19.9	10,000	11,966
Malabar	3,660	3,847	5.0	50,548	53,068
North Arcot	2,801	2,482	11.4	51,800	45,907
Ramanathapuram	1,901	1,847	2.8	36,890	35,872
Salem	12,316	10,362	15.9	135,152	113,663
South Arcot	2,792	2,580	7.6	30,381	28,063
South Kanara	918	1,096	19.4	5,703	6,808
Tanjore	897	886	1.2	9,861	9,738
Tiruchirappalli	2,580	2,542	1.5	30,062	29,609
Tirunelveli	2,866	2,838	1.0	50,647	50,142
STATE	40,788	38,381	5.9	551,795	521,598

APPENDIX IV DEPARTMENT OF STATISTICS.

Enquiry for Collection of Essential Statistics Relating to the Handloom Industry in Madras State.

SCHEDULE I. GENERAL.

District :
Taluk :
Village :
Name of the owner of looms at the given address.
Name of establishment ...
Address ...

Part I Extent and Structure of the Handloom Industry.

1. Number of looms according to type (questions 1 and 5)—

Type of looms.	Number of looms.	Number added under items (ii) to (iv) since 1942
(1)	(2)	(3)
(i) Throw Shuttle ...		
(ii) Fly Shuttle ...		
(iii) Semi-Automatic ...		
(iv) Other improved types ...		
Total ...		

2. Classification of looms (questions 2, 3 & 4).

Looms engaged in weaving cloth from	Number of looms working through-out 1953.	Number idle in 1953.		Number added since 1942.	REMARKS : Reasons for looms lying idle, if any.
		Whole year.	Part of the year		
(1)	(2)	(3)	(4)	(5)	(6)
(i) Cotton yarn ...					
(ii) Art silk yarn ...					
(iii) Silk yarn ...					
(iv) Woollen yarn ...					
(v) Jute yarn ...					
(vi) Yarn from other fibres ...					
(vii) Mixture of any two of the above fibres ...					
(viii) Hand spun cotton yarn ...					
Total ...					

3. Classification of weavers (questions 6, 7, 8, 9, 11, 12, 13, 14 and 16):—

Items.	Classification of the number of weavers.		
	Weavers working independently.	Weavers working under Mahajans or Master-weavers.	Weavers working in factories.
(1)	(2)	(3)	(4)
(i) Number of weavers ...			
(ii) Number of dependents on weavers ...			
(iii) Those who became weavers since 1942 ...			
(iv) Reasons for becoming weavers since 1942 ...			
(v) Number of weavers solely occupied in weaving ...			
(vi) Average monthly earnings from weaving (1953) ...			
(vii) Indebtedness of weaver or weavers, if any, solely occupied in the weaving ...			
(viii) Number of weavers for whom weaving is a subsidiary occupation ...			
(ix) Average monthly earnings in 1953 from—			
(a) Weaving ...			
(b) Other occupations where weaving is a subsidiary occupation.			
(x) Assistants to the weavers—			
Paid ...			
Unpaid ...			
Total ...			
(xi) Number of dependents on Assistants to the weavers...			

4. (Question 17)—

Source of credit and rate of interest paid by the weaver.

PART II.

Supply of Raw Materials.

5. Consumption of yarn (questions 18 and 19)—

Category of yarn.	Consumption in pounds (lb.)			Average monthly requirements (in 1953) pounds (lb.).
	1950.	1951.	1952.	
(1)	(2)	(3)	(4)	(5)
(i) Cotton mill-made yarn—				
10's ...				
20's ...				
30's ...				
40's ...				
60's ...				
80's ...				
100's ...				
(ii) Silk yarn ...				
(iii) Art silk yarn ...				
(iv) Woollen yarn ...				
(v) Jute yarn ...				
(vi) Yarn from other fibres ...				
(vii) Hand-spun yarn ...				
Total ...				

6. State the normal channel of supply of yarn (question 20)—

- (i) Retail dealers ...
- (ii) Co-operative Society ...
- (iii) Wholesale dealers ...
- (iv) Mills ...

7. State the normal channel of supply to the weaver of the following (question 21)—

- (i) Dyes ...
- (ii) Chemicals ...
- (iii) Auxiliary stores—
 - (a) Produced locally ...
 - (b) Produced in other States ...
 - (c) Imported from outside India ...

8. (Question 22)—

Consumption of bleached and dyed yarn—

- (i) Bleached ...
- (ii) Dyed ...

9. (Question 23)—

Does the weaver himself do any of the following finishing processes in respect of yarn?

- (i) Bleaching ...
- (ii) Printing ...
- (iii) Dyeing ...
- (iv) Calendering ...

Is the yarn finished by the weaver himself dearer or cheaper than the yarn bought in the finished stage for weaving?

PART III
Statistics of Production

(Question 24)—

Varieties of cloth. (1)	Measure- ments. (2)	Maximum quan- tity of cloth that can be produced on the looms (yards). (3)	Actual production (in yards).		
			1950 (4)	1951 (5)	1952 (6)
(i) Dhoties ...					
(ii) Sarees ...					
(iii) Towels ...					
(iv) Handkerchiefs ...					
(v) Bed-spreads ...					
(vi) Carpets ...					
(vii) Lungies ...					
(viii) Others (specify) ...					
(ix) ...					
(x) ...					

1. (Question 25)—

Cloth produced in yards.
Yarn used in Lb.

What is the production of cotton cloth per pound of cotton yarn.

PART IV

Types of Fabrics Produced

12-A. Cloth produced for domestic use. (Questions 26 and 27.)

Cloth produced. (1)	What percentage was actually utilised for domestic use in		
	1950 (2)	1951 (3)	1952 (4)
(i) Dhoties ...			
(ii) Sarces ...			
(iii) Towels ...			
(iv) Handkerchiefs ...			
(v) Carpets ...			
(vi) Lungies ...			

12-B. Cloth produced for local sale.

Cloth produced. (1)	What percentage was actually sold locally in		
	1950 (2)	1951 (3)	1952 (4)
(i) Dhoties ...			
(ii) Sarees ...			
(iii) Towels ...			
(iv) Handkerchiefs ...			
(v) Carpets ...			
(vi) Lungies ...			

12-C. Cloth produced for export to other
States within the country.

Cloth produced. (1)	What percentage was actually exported in		
	1950. (2)	1951. (3)	1952. (4)
(i) Dhoties ...			
(ii) Sarees ...			
(iii) Carpets ...			
(iv) Lungies ...			
(v) Others (specify) ...			

12-D. Cloth produced for export to countries
outside India.

Cloth produced. (1)	What percentage was actually exported in		
	1950. (2)	1951. (3)	1952. (4)
(i) Hand kerchiefs ...			
(ii) Lungies ...			
(iii) Sarees ...			
(iv) Dhoties ...			
(v) Others (specify) ...			
(vi)			
(vii)			

13. (Question 28)—

Did the weaver take advantage of the field of production reserved for handloom industry in 1950 ? (see instructions).

If so, give the increased quantity produced under various reserved items as compared with production in 1949.

14. Is it possible for the weaver to adhere to standard piece lengths of say 24 or 40 yards ?

If not what is the standard length now produced by the weaver ?

15. (Question 30)—

16. (Question 31)—

17. (Question 32) –

1950. 1951.

18. (Question 33) —

19. (Question 24) —

(ii) If not, is it possible for the weaver to manufacture cloth to given construction particulars ?

20. (Question 35) —

(ii) If not, what are his suggestions for improvement?

Supply of designs.

21. (Question 36)—

Does he alter the designs to suit the changing demands of the consumer ?

22. (Question 37)—

What are the means, if any, adopted by the weaver to ascertain and adopt weaving to changing demands of the consumer?

PART VII.

Cost of production.

23. Cost of production of principal varieties (Question 38)—
(See Instructions).

[illegible]

PART VIII

Preparatory and Finishing Processes.

(Question 39)—

24. What are the practices adopted for :

A. Preparatory processes—

(i) Winding	...	...
(ii) Sizing	...	...
(iii) Warping	...	...
(iv) Beaming	...	...

B. Finishing processes—

(i) Bleaching	...	...
(ii) Printing	...	...
(iii) Dyeing	...	...
(iv) Calendering	...	...

25. (Question 40)—

Average percentage of cotton yarn wasted in the course of weaving cloth.

26. (Question 41)—

Will the supply of warp yarn on sized beams and weft yarn on pirns be more helpful to the weaver than the supply of yarn in hanks as at present ?

Checked by Economic Investigator.

____ Circle.

Checked and tabulated at Headquarters by

____ Supervisor.

APPENDIX IV—(Contd).

DEPARTMENT OF STATISTICS.

Enquiry for collection of Essential Statistics Relating to the Handloom Industry in Madras State

SCHEDULE II.

Statistics for the village as a whole.

1. (Question 10)—

Number of hereditary weavers in the village who have left the weaving industry since 1942 and the reasons therefor.

2. Average monthly earnings in the following occupations (Question 15)—

In 1953.

(i) Ploughmen	...
(ii) Carpenters	...
(iii) Blacksmiths	...
(iv) Cobblers	...
(v) Cottage Industries other than handloom	...
(vi) Others (specify)	...
(vii)	...
(viii)	...

3. (Question 35)—

Are the existing transport facilities adequate for transport of cloth from the village to marketing centres ?

If not, what are the suggestions for improvement ?

Economic Investigator.

____ Circle.

Checked and tabulated at Headquarters by

____ Supervisor.

APPENDIX V

COST STRUCTURE IN RESPECT OF CERTAIN PRINCIPAL VARIETIES OF CLOTH PRODUCED AT IMPORTANT CENTRES IN MADRAS STATE

Name of District (1)	Type of cloth with measurements (2)	Cost of yarn (3) Rs. a. p.	Cost of dyes (4) Rs. a. p.	Prepara- tary process (5) Rs. a. p.	Wages (6) Rs. a. p.	Finish- ing process (7) Rs. a. p.	Total (8) Rs. a. p.	Normal margin of profit (9) Rs. a. p.	Selling price (10) Rs. a. p.
1 CHINGLEPUT	Sarees 8 yds x 48"	6 0 0	—	0 8 0	1 8 0	—	8 0 0	—	—
	Silk Sarees 9 yds x 54" (Zari Border)	78 0 0	—	2 0 0	25 0 0	—	105 0 0	—	—
	Lungies 4½ yds x 27"	3 8 0	—	0 4 0	1 2 0	—	4 14 0	—	—
	" 2½ " x 54"	2 8 0	—	0 5 0	1 0 0	—	3 13 0	—	—
	Hand - Kerchiefs 8 yds x 36"	6 0 0	—	1 0 0	2 8 0	—	9 8 0	—	—
2 COIMBATORE	Hand - Kerchiefs (A. Silk) 8 yds x 36"	11 0 0	—	—	4 0 0	—	15 0 0	—	—
	Kollegal Sarees 8 yds x 45"	5 13 0	—	0 2 6	—	—	—	2 4 0	8 3 6
	Kollegal Silk Sarees 8 yds x 45"	35 0 0	—	0 6 0	—	—	—	20 0 0	55 6 0
	Dhoties (silk) 4 yds x 50"	16 0 0	—	0 3 0	—	—	—	8 0 0	24 3 0
	Carpets 90" x 52"	4 12 0	—	0 3 0	—	—	—	2 1 0	7 0 0
BHAVANI TOWN	Carpets 72" x 28"	2 2 0	—	0 2 0	—	—	—	1 0 0	3 4 0
	Japanese Silk 90" x 52"	13 0 0	—	0 2 0	—	—	—	13 0 0	26 2 0
3 MADRAS	Sarees 8 yds x 46"	6 0 0	—	0 8 0	2 8 0	—	9 0 0	—	—
	" 8 yds x 45"	5 0 0	—	0 8 0	2 0 0	—	7 8 0	—	—
	Lungies 9 yds x 44"	9 0 0	—	0 8 0	3 8 0	—	13 0 0	—	—
	" 9 yds x 50"	10 0 0	—	0 8 0	4 0 0	—	14 8 0	—	—
	" 8 yds x 36"	7 8 0	—	0 8 0	2 0 0	—	10 0 0	—	—
	Hand-Kerchiefs 8 yds x 36"	7 0 0	—	1 4 0	2 8 0	—	10 12 0	—	—
	Sarees 7 yds x 48"	4 10 0	—	0 12 0	2 0 0	—	7 6 0	—	—
4 MADURAI	" 6 yds x 44"	4 14 0	—	0 8 0	1 8 0	—	6 14 0	—	—
	" 9 yds x 42"	9 4 0	—	0 8 0	2 4 0	—	12 0 0	—	—
	Dhoties 2 yds x 48"	1 0 6	—	0 1 0	0 7 0	—	1 8 6	—	—
	" 4 yds x 50"	3 13 0	—	0 8 0	2 8 0	—	6 13 0	—	—
	Towels 1½ yds x 30"	0 10 0	—	0 1 0	0 2 0	—	0 13 0	—	—
	Thortu 54" x 32"	0 7 0	—	0 0 9	—	—	—	0 1 3	0 9 0
	Dhoties 2 yds x 50"	0 15 0	—	0 1 0	—	—	—	0 4 0	1 4 0
5 MALABAR	Bed Spreads 90" x 60"	5 14 0	1 14 0	0 0 5 6	—	—	—	1 13 6	9 15 0
	Second Cloth 2 yds x 36"	0 14 0	—	0 1 6	—	—	—	0 4 6	1 4 0
	Dhoties 2 yds x 48"	1 0 0	—	0 1 0	—	—	—	0 8 0	1 9 0
	Katcha 144" x 36"	1 12 6	—	0 1 6	—	—	—	0 8 0	2 6 0
	Dhoties 2½ yds x 48"	0 13 0	—	0 2 0	0 4 0	—	1 3 0	—	—
	" 2 yds x 50"	1 1 0	—	0 0 6	0 3 6	—	1 5 0	—	—
	Lungies 2 yds x 44"	1 2 0	—	0 0 6	0 5 6	—	1 8 0	—	—
6 NORTH ARCOT	" 8½ yds x 44"	4 12 0	—	0 6 0	1 10 0	—	6 12 0	—	—
	Silk Sarees 9 yds x 45"	49 8 0	—	1 8 0	11 0 0	—	62 0 0	—	—
	" 8 yds x 54"	33 0 0	—	2 0 0	7 8 0	—	42 8 0	—	—
	" 8 yds x 54"	33 0 0	—	2 0 0	7 8 0	—	42 8 0	—	—

APPENDIX V—(Contd.).

Name of District (1)	Type of cloth with measurements (2)	Cost of yarn (3) Rs. a. p.	Cost of dyes (4) Rs. a. p.	Prepara- tory process (5) Rs. a. p.	Wages (6) Rs. a. p.	Finish- ing process (7) Rs. a. p.	Total (8) Rs. a. p.	Normal margin of profit (9) Rs. a. p.	Selling price (10) Rs. a. p.
7 RAMANATHA- PURAM	Dhoties 52" x 2 yards	1 4 0	—	0 2 0	—	—	—	0 9 6	1 15 6
	Shirtings 12 yds x 4"	5 1 6	—	0 8 0	—	—	—	0 10 6	6 4 0
	Gauze 18 yds x 46"	4 8 6	—	0 6 0	—	—	—	0 12 0	5 10 6
	Sarees 7 yds x 44"	3 12 0	—	0 12 0	—	—	—	3 12 0	8 4 0
	Towels 2 yds x 30"	0 8 9	—	0 0 9	—	—	—	0 3 3	0 12 9
	Sarees 6 yds x 45"	5 12 0	—	0 4 0	—	—	—	1 8 0	7 8 0
8 SALEM	Sarees 8 yards x 46"	5 14 6	—	0 8 0	—	—	—	1 1 0	7 7 6
	" 8 yards x 45"	6 10 0	—	0 6 0	—	—	—	2 0 0	9 0 0
	Dhoties 4 yards x 50"	1 14 0	—	0 2 0	—	—	—	0 8 0	2 8 0
	" 4 yds x 52"	2 0 6	—	0 4 0	—	—	—	0 8 0	2 12 6
	Sarees 8 yds x 45"	6 0 0	—	0 8 0	—	—	—	2 8 0	9 0 0
9 SOUTH ARCOT	" (Art silk) 8 yds x 44"	10 13 6	—	0 8 0	—	—	—	3 10 6	15 0 0
	Lungies 18 yds x 29"	10 12 0	—	1 10 0	3 7 0	—	15 13 0	—	—
	" 18 yds x 50"	20 0 0	—	3 2 0	6 8 0	—	29 10 0	—	—
	Sarees 7 yds x 49"	4 4 0	—	0 10 0	1 0 0	—	5 14 0	—	—
	Shirtings 18 yds x 44"	11 14 0	—	1 0 0	6 0 0	—	18 14 0	—	—
10 SOUTH KANARA	Dhoties 2 yds x 50"	0 15 6	—	0 1 6	0 6 6	—	1 7 6	—	—
	Lungies 18 yds x 29"	11 0 0	—	1 10 0	3 0 0	—	15 10 0	—	—
	Bed Spreads 2½ yds x 44"	1 12 0	—	0 4 6	—	—	—	0 4 6	2 5 0
	Towels 30" x 54"	0 8 6	—	0 1 6	—	—	—	0 1 6	0 11 0
	Mundu 2 yds x 45"	1 5 0	—	0 3 0	—	—	—	0 7 0	1 15 0
11 TANJORE	Sarees 5½ yds x 45"	3 10 0	—	0 8 0	—	—	—	1 4 0	5 6 0
	Lungies 2 yds x 40"	1 3 9	—	0 3 0	—	—	—	0 9 6	2 0 3
	Sarees 8 yds x 45"	5 0 0	—	0 12 0	—	—	—	1 4 0	7 0 0
	" 8 yds x 50"	8 8 0	—	1 6 0	—	—	—	2 8 0	12 6 0
	" 8 yds x 46"	6 8 0	—	0 14 0	—	—	—	1 10 0	9 0 0
12 TIRUCHIRA- PALLI	Dhoties 8 yds x 54"	5 0 0	—	0 8 0	—	—	—	1 0 0	6 8 0
	" 8 yds x 54"	6 12 0	—	1 0 0	—	—	—	2 4 0	10 0 0
	" 8 yds x 54"	6 11 0	—	1 0 0	—	—	—	2 4 0	9 15 0
	Sarees 9 yds x 50"	9 0 0	—	1 5 0	5 0 0	—	15 5 0	—	—
	" 9 yds x 50"	9 8 0	—	1 8 0	4 14 0	—	15 14 0	—	—
13 TIRUNELVELI	Dhoties 8 yds x 52"	6 12 0	—	0 14 0	3 4 0	—	10 14 0	—	—
	" 8 yds x 48"	3 9 0	—	0 4 0	1 0 0	—	4 13 0	—	—
	Bed Spread 5 yds x 50"	8 8 0	—	0 1 0	1 4 0	—	9 7 0	—	—
	Towel 6 yds x 30"	2 9 0	—	0 1 0	0 8 0	—	3 2 0	—	—
	Sarees 7 yds x 44"	4 0 0	—	0 6 0	—	—	—	0 5 6	4 11 6
	" 6½ yds x 48"	4 4 0	—	0 6 0	—	—	—	0 5 6	4 15 6
	Dhoties 2 yds x 52"	1 1 7 9	—	0 2 0	—	—	—	0 2 0	1 11 9
	" 2 yds x 50"	1 6 6	—	0 1 6	—	—	—	0 1 9	1 9 9
	Lungies 2 yds x 42"	0 13 9	—	0 1 9	—	—	—	0 4 3	1 3 9
	" 2 yds x 42"	0 15 3	—	0 2 0	—	—	—	0 3 3	1 4 6

APPENDIX VI

Production of Cloth in 1950.

(Yards in thousands)

Sl. No.	Name of Districts	Cotton Fabrics	Art Silk Fabrics	Silk Fabrics	Others
1	Chingleput	20,838	16	232	—
2	Coimbatore	90,205	7,321	255	1,330
3	Madurai	7,870	847	—	—
4	Madras	6,600	2	—	—
5	Malabar	41,331	424	—	8
6	North Arcot	43,266	—	1,653	—
7	Ramanathapuram	12,278	314	—	—
8	Salem	167,193	4,446	343	—
9	South Arcot	24,388	—	—	—
10	South Kanara	3,331	2,549	—	—
11	Tanjore	7,627	—	6	—
12	Tiruchirapalli	43,549	—	—	—
13	Tirunelveli	24,994	—	—	—
TOTAL		493,470	15,919	2,489	1,338

APPENDIX VII.

Production of cloth in 1951.

(Yards in thousands)

Sl. No.	Name of Districts.	Cotton fabrics.	Art Silk fabrics.	Silk fabrics.	Others.
1.	Chingleput	20,741	17	239	—
2.	Coimbatore	78,292	7,499	309	1,160
3.	Madurai	8,054	863	—	—
4.	Madras	6,543	2	—	—
5.	Malabar	39,225	367	—	7
6.	North Arcot	42,597	—	1,653	—
7.	Ramanathapuram	11,730	336	—	—
8.	Salem	166,887	4,815	378	—
9.	South Arcot	24,200	—	—	—
10.	South Kanara	3,492	2,522	—	—
11.	Tanjore	7,683	—	6	—
12.	Tiruchirapalli	43,177	—	—	—
13.	Tirunelveli	24,031	—	—	—
Total		476,652	16,421	2,585	1,167

APPENDIX VIII.

Production of cloth in 1952.

(Yards in thousands)

Sl. No.	Name of Districts.	Cotton fabrics.	Art Silk fabrics.	Silk fabrics.	Others.
1.	Chingleput	20,836	15	206	—
2.	Coimbatore	78,802	6,699	279	1,181
3.	Madurai	7,866	790	—	—
4.	Madras	6,843	2	—	—
5.	Malabar	45,459	201	—	—
6.	North Arcot	41,414	—	1,552	—
7.	Ramanathapuram	11,591	306	—	—
8.	Salem	161,438	4,902	451	—
9.	South Arcot	24,123	—	—	—
10.	South Kanara	3,699	3,052	—	—
11.	Tanjore	7,360	—	6	—
12.	Tiruchirapalli	42,979	—	—	—
13.	Tirunelveli	24,008	—	—	—
Total		476,418	15,967	2,494	1,181

APPENDIX IX.

Production of cloth in 1953.
(Yards in thousands)

Sl. No.	Name of Districts.	Cotton fabrics.	Art Silk fabrics.	Silk fabrics.	Others.
1.	Chingleput	28,217	13	225	...
2.	Coimbatore	68,376	703	312	1,670
3.	Madurai	18,423	4,459	...	...
4.	Madras	7,554	2	...	...
5.	Malabar	46,196	104	...	...
6.	North Arcot	36,832	...	1,584	...
7.	Ramanathapuram	44,577	1,839	715	...
8.	Salem	129,997	8,386	420	11
9.	South Arcot	20,248	...	...	...
10.	South Kanara	3,006	2,257	...	...
11.	Tanjore	6,485	...	12	...
12.	Tiruchirapalli	36,749	...	...	...
13.	Tirunelveli	59,061	...	...	...
Total		505,721	17,763	3,268	1,681

APPENDIX X.

Production of cloth in 1954.
(in yards)

Sl. No.	Name of Districts.	Cotton fabrics.	Art Silk fabrics.	Silk fabrics.	Others.	Total.
1.	Chingleput	30,827,000	16,000	27,000	...	30,870,000
2.	Coimbatore	87,084,000	9,404,000	309,000	1,018,000	97,815,000
3.	Madras	9,899,000	3,000	...	...	9,902,000
4.	Madurai	22,706,000	5,500,000	...	...	28,206,000
5.	Malabar	50,575,000	281,000	...	7,149,000	58,005,000
6.	North Arcot	48,103,000	...	2,235,000	...	50,338,000
7.	Ramanathapuram	28,567,000	954,000	898,000	988,000	31,407,000
8.	Salem	147,753,000	7,773,000	15,443,000	3,981,000	174,950,000
9.	South Arcot	21,198,000	...	...	...	21,198,000
10.	South Kanara	3,098,000	2,067,000	...	257,000	5,422,000
11.	Tanjore	7,331,000	...	77,000	42,000	7,450,000
12.	Tiruchirapalli	49,748,000	...	...	...	49,748,000
13.	Tirunelveli	72,216,000	...	...	...	72,216,000
Total		579,105,000	25,998,000	18,989,000	13,435,000	637,527,000

APPENDIX XI

STATEMENT SHOWING METHOD OF MARKETING OF HANDLOOM CLOTH IN MADRAS STATE IN 1954.

(Figures are given in percentages)

Method of Marketing	Chingleput	Coimbatore	Madras	Madurai	Malabar	North Arcot	Ramanathapuram	Salem	South Arcot	South Kanara	Tanjore	Tiruchirapalli	Tirunelveli	State
Through Independent Local Sales	21.8	8.2	...	13.8	89.6	8.1	15.1	15.4	10.4	86.9	53.3	38.5	9.4	21.4
Through Master Weavers	75.2	65.4	97.0	59.4	...	90.5	72.3	69.2	72.2	...	28.8	48.9	85.1	64.2
Through Co-operative Societies	3.0	26.4	3.0	26.8	10.4	1.4	12.6	15.4	17.4	13.1	17.9	12.6	5.5	14.4

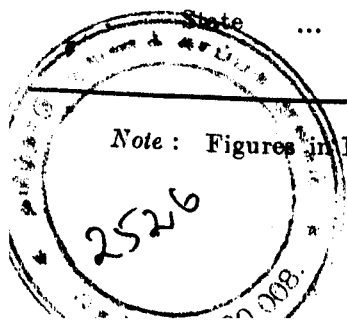
APPENDIX XII.

A Statement showing district-wise particulars of the Mode of disposal
of the cloth produced in 1954 is shown below :

(yards in thousands)

Districts.	Total.	Domestic use.	Local sale.	Exports to other States within the country.	Exports outside the country.
(1)	(2)	(3)	(4)	(5)	(6)
1. Chingleput	30,870	10 (0.03)	5,189 (16.81)	1,963 (6.36)	23,708 (76.80)
2. Coimbatore	97,815	193 (0.20)	87,134 (89.08)	10,488 (10.72)	...
3. Madras	9,902	...	2,699 (27.26)	3,603 (36.37)	3,600 (36.37)
4. Madurai	28,206	564 (2.00)	27,078 (96.00)	564 (2.00)	...
5. Malabar	59,005	159 (0.28)	56,899 (98.09)	947 (1.63)	...
6. North Arcot	50,338	40 (0.08)	42,218 (83.87)	7,062 (14.03)	1,018 (2.02)
7. Ramanathapuram	31,407	...	21,985 (70.00)	9,422 (30.00)	...
8. Salem	174,950	3,499 (2.00)	161,102 (92.09)	10,349 (5.91)	...
9. South Arcot	21,198	...	21,198 (100.00)	...	...
10. South Kanara	5,422	45 (1.00)	5,377 (99.00)	...	...
11. Tanjore	7,450	...	5,977 (80.23)	...	1,473 (19.77)
12. Tiruchirapalli	49,748	...	48,753 (98.00)	995 (2.00)	...
13. Tirunelveli	72,216	1,228 (1.70)	50,551 (70.00)	8,169 (11.30)	12,278 (17.00)
State	637,527	5,738 (0.90)	536,160 (84.10)	53,552 (8.40)	42,077 (6.60)

Note : Figures in Brackets represent percentages.



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