APPENDIX I

A study of the census of hand-looms in Salem District

Sources of information

There are four distinct sources from which we can gather information regarding the distribution of the hand-loom industry in each district. First come the village statistics published along with the census reports. They refer to the number of weavers in each village. But this reference was omitted since 1901. There is no separate grouping of weavers in the present village statistics. By the discontinuance of this practice we are deprived of a very useful source of information regarding the migration of the weaving community. At the time the writer commenced his work he was told that the original returns ' were destroyed as soon as the Census report was completed as they were considered to be of a confidential nature '.

The second source of information is the returns on the minor industries which the Tahsildar is asked to make at the time of the *Jamabandhi*. (*Ref.* Taluk Office Manual.) But these returns are seldom made and, even where they are submitted, they are rarely reliable.

Thirdly comes the village register maintained by the village officers. They enumerate from year to year the population of the village, the classification of the land, the extent of land cultivated etc., all with reference to the revenue administration of the village. Returns are also noted as to the number of artisans as blacksmiths. weavers, carpenters etc., and also the number of indigo vats, country oil presses, sugarcane presses and hand-looms. The village registers are a very satisfactory source of information regarding the revenue administration of the village but they are thoroughly unreliable so far as the agricultural stock, the industrial returns and other things not directly connected with the collection of revenue are concerned. Many village registers do not contain returns under these heads at all. To cite an instance of how returns are entered by the village officers: the sum of the number of hand-looms returned in the two previous quinquennial censuses is mentioned as the present number of hand-looms. No attempt is made to verify these figures. The village officers are not to blame; they have neither the intelligent guidance nor the practical training in the collection of statistics.

Fourthly come the quinquennial cattle census returns. They are no better than the village register, being returned by the same village officers. The higher revenue officials do not scrutinise the returns In many cases the forms are not even completely filled up. We cannot expect anything better in the returns in the near future unless the status of the village officers is improved and their strength is increased. Many of the village returns are not even available in the Taluk Office.

Considering all this the writer proceeded to take a census of the hand-looms in each Taluk with the help of the Revenue Inspector of the firka. But that was an uphill work for a single person. He was just then informed that a special hand-loom census was taken by the Weaving Superintendent in 1926. The writer is much obliged to him for the copy of the returns he had given him. The returns were made in the form prepared by the Director of Industries.

The following remarks regarding the conditions of the handloom industry in Salem District are based on the returns of the Weaving Superintendent.

THE NUMBER OF HAND-LOOMS

Nearly all the villages in the district made the returns except the villages in Hosur Taluk and some in Harur Taluk. The working of hand-looms—cotton, silk, kora, and kumbli—is reported in 245 revenue villages. There are 29,052 hand-looms of which about 1,600 looms are reported to be idle. The distribution of locms according to the census of the Weaving Superintendent and according to the returns of the Statistical Atlas of the Madras Presidency, 1921, and the density of the population Taluk-war are given below :—

		Density of Dong	Number of hand-looms			
Taluk		Density of Popu- lation per sq. mile	Census of the Weaving Superintendent	Statistical Atlas, 1921.		
Hosur		153	496	1,082		
Krishnagiri	••	255	364	355		
Uttangarai (Harur)		· · ·		0.07		
(Harur firka only)	•••	168	200	287		
Dharmapuri	•••	229	1,439	1,483		
Tiruchangode	•••	552	5,550	3,000		
Rasipuram	•••	439	5,502	8,674		
Salem		472	10,846	4,467		
Omalur	•••	420	3,090	3,052		
Namakkal		470	1,564	1,049		
Attur	•••	276		441		
Total	•••		29,051	23,890		

It is evident that nearly 80 per cent of the looms are found in the Taluks of Salem, Omalur, Tiruchangode and Rasipuram. The difference in the number of looms poted in the two censuses

- 1. concentration of population and hence a local market;
- 2. proximity to Salem which is the trading and financial centre for the industry.

IMPROVEMENTS ON LOOMS

More than 55 per cent of the looms are fitted with flyshuttle sleys. The localisation of the industry also leads to its rationalisation. In other taluks looms are most primitive and crude. They are mainly pit looms with throw shuttles.

Taluks	; ^{, , , ,}	Number of looms fitted with flyshuttle	Number of locms with throw shuttle	Percentage of flyshuttle looms
Hosur		7	489	1.5
Krishnagiri		58	306	16
Harur		64	136	32
Dharmapuri		706	733	48
Tiruchangode		3,344	2,206	60
Rasipuram	•••	3,265	2,237	58
Salem	•••	6,526	4,320	60
Omalur		1,526	1,564	49
Namakkal		454	3,110	27
Attur	•••	•••	•••	•••
	Total	15,950	13,101	56

Number of looms with and without flyshuttle sley.

Many looms in the taluks of Salem, Tiruchangode, Omalur and Rasipuram are manufacturing fine fabrics and solid bordered cloth; therefore throw shuttles are used.

The village officers do not note returns of dobbies and warping mills in use. These are not generally working in the industrially backward taluks. There are many in operation in Omalur, Salem and Rasipuram but no returns are made. Satisfactory returns are, however, available for the taluk of Tiruchangode—at least so far as the Tiruchangode firka is concerned—where the Superintendent himself directed the collection of data. On the whole,74 warping mills and 273 dobbies are noted. Their introduction is due to the indefatigable propaganda of the Weaving Party. Of the 74 warping mills, 34 are of the vertical type. 55 looms are fitted with weaver's beam which economises space occupied by the loom and saves time and labour involved in the shifting of lease rods and the arrangement of threads under the old system. Besides, 18 warping mills in Namakkal and 5 in Harur are also noted. But it is surprising that no warping mills, or weaver's beams or dobbies are noted in Salem. Salem is

easily the first and foremost in weaving industry. And it was here that the Department of Industries tried its experiments in handloom factories with all the modern equipment, and one would naturally expect there a large number of time-saving appliances in use. But no returns are made regarding this. This is an obvious error of omission. It is reported that there are only 24 dobbies in Salem Taluk. Salem weavers make special designs on the body and border of the cloth and they are exactly the province of the dobby and the jacquard harness. It is possible that the prohibitive initial cost of the jacquard harnesses might stand in the way of their adoption. But the failure to introduce simple and cheap dobbies in the draw-boy looms is unaccountable; perhaps they were not properly and carefully noted. In this connection it must be said that a local weaver of the Mudaliar community who is an expert in textile designing, has made a simple and cheap harness for elaborate design weaving. The country chain harness is cheap and therefore everywhere in use. The introduction of the new harness will benefit the industry.

THE NATURE OF YARNS USED

The Counts of Yarns Used.—Details of yarns used by looms are available for 20,500 looms. No information regarding the kind of yarn employed is noted in the case of 8,500 looms in Salem Taluk. It may be safely assumed that Salem being the centre noted for fine cloths, the count of yarn generally employed is above 30s. Of the 20,500 looms, 11,760 are using yarns of 40s and below, while many of the rest employ yarns varying from 20s to 100s. It is not definitely known how many looms are actually engaged in weaving cloths of count above 40s. But it is estimated that about 30 to 35 per cent of the looms manufacture fine cloths.

The Extent of Colour Yarn Employed.—13,887 looms are employed in manufacturing coloured fabrics. They use colour yarn wholly or partially. Only about 6,600 looms are using pure grey or bleached yarns. It is in the latter case that more fine counts are employed. A careful analysis indicates that the survival of the hand-loom is in no small measure due to the kind of fabric it manufactures. It employs more coloured yarn and manufactures such fabrics as are intended to suit local tastes, and as are not produced on power-looms. The looms using coloured yarn are mainly looms manufacturing sarees.

The Classification of Looms according to their Employment of Silk or Artificial silk or Cotton alone.—This classification is made in order to understand how much of hand-loom production is directly competing with mill product. Power-looms cannot compete so successfully against the hand-loom in the manufacture of mixed or purely silk fabrics. It is also said that hand-looms survive because they have now taken to the manufacture of silk or rayon.

The returns under this head are as usual incomplete. The writer is aware that there are at least 50 looms in Rasipuram which employ silk alone; but nothing is mentioned about silk looms there. Again, many looms employing both silk and cotton are manufacturing the celebrated Salem *Gundanjoo* which has a narrow silk border. Again, it is not mentioned how many looms are manufacturing solid bordered cloths which are not generally produced on power-looms. The village officers who have noted returns do not seem to appreciate what is meant by 'solid border'. Imperfect as these returns are, certain facts are worth noting. 66 per cent of the looms employ cotton alone while others employ silk, or silk and cotton, or rayon and cotton.

TALUKWAR	DISTRIBUTION	OF	LOOMS	Using	DIFFERENT
	Kinds	OF	YARN		

		Number of Looms Using Yarns of						
Taluk		40s and below	Above 40s	Grey yarns only	Coloured wholly or partially	Silk alone	Cotton only	Mixed silk, cotton, rayon
Hosur Krishnagiri Dharmapuri Harur Namakkal Omalur Tiruchangode Rasipuram Salem		465 240 1,332 200 1,680 2,137 4,155 1,926 251	 20 480 853 1,291 3,636 2,326	77 12 84 55 312 1,453 1,708 2,705 199	388 228 1,268 145 1,248 1,537 3,738 2,857 2,378	···· ··· ··· ··· 72	105 100 1,110 200 1,146 1,890 3,895 3,635 1,423	360 140 242 414 1,100 1,551 1,927 1,154
Total	'	11,786	8,606	6,605	13,787	72	13,504	6,888

Finer count is used more in the Taluks of Rasipuram, Salem, Tiruchangode and Omalur. Looms manufacturing grey cloths employ more fine count yarn than looms manufacturing sarees. It is remarkable that in this district the extent of lungi and kaili manufacture is limited. And where fine count is employed it is used for the manufacture of laced cloth. Most of the saree looms are manufacturing sarees for peasant women. Looms manufacturing high class saree and urumal are found in Salem and Rasipuram and in a few other centres.

The Range of Fabrics Woven on Looms in Salem District.— The range of fabrics woven on hand-looms in Salem district is wide. In pure grey cloths, dhoties with or without border, towels, duppaties and shirtings are important. There are laced and silkbordered cloths also. Sarees with or without solid border, cloth for bodice, angavasthram or upper cloth, urumals, peethambaram, are some of the important silk fabrics. The celebrated *Mayilkan* (peacock's eye) for which there is a craze among well-to-do Hindus is a staple article of manufacture in Salem town and Ammapet. Carpets, bedsheets, jamakkalam, sarees with or without solid border are some of the prominent manufactures of pure coloured cotton. There is now a demand for certain kinds of cloths made of mercerised yarn and artificial silk thread, and their manufacture is now expanding.

CLASSIFICATION OF LOOMS ACCORDING TO FABRICS MANUFACTURED.

The looms can be classified under the following heads :---looms manufacturing 1. sarees or other mainly colour fabrics, 2. veshtis or other cloths, mainly grey, and 3. both grey and colour cloths about which there is no definite information.

Information under this head is available for 20,500 looms, of which 55 per cent are employed in the manufacture of coloured cloths of some kind or other. The manufacture of the coloured cloths of the kind in demand in rural parts is the province of the handloom, and this accounts for its survival. The remaining 45 per cent of the looms, except so far as they manufacture solid bordered and laced cloths, compete directly with power-looms.

		Number of Looms Manufacturing				
Taluk		Sarees only	Grey or bleach- ed cloths only	Both coloured and grey		
Hosur		388	77			
Krishnagiri		162	12	66		
Dharmapuri		925	84	427		
Harur		93	55	52		
Namakkal		487	299	774 .		
Omalur		1,076	1,453	560		
Rasipuram		1,069	2,787	1,706		
Salem		1,524	241	884		
Firuchangode		2,941	1,918	598		
Te	otal	8,645	6,926	5,067		

NUMBER OF LOOMS IN EACH TALUK ACCORDING TO THE KINDS OF FABRICS THEY USUALLY MANUFACTURE.

N, B.-Details for 8,200 looms are not available in Salem taluk. There are about 5,000 looms in Salem alone. Roughly speaking, the whole of Arisi-palayam is manufacturing silk bordered grey and bleached cloth for men

with yarns of counts 40s. to 89s. There are about 500 such looms. In Gohai there are about 2,500 looms and all of them employ colour yara. They manufacture carpets and sarees. Here is the big colony of Devangas. In Ammapet there are 200 pure silk looms worked by Kaikolar Mudaliars. They manufacture costly cloths with silk and cotton and gold lace, sometimes with beautiful patterns. In Salem town there are nearly 1,000 looms and 60 per cent of them manufacture silk and rayon fabrics. There are a few saree looms which prepare very costly cloths, say from Rs. 150 to Rs. 500 sometimes.

THE SIZE USED

The census of hand-looms indicates that the weavers use no special size for the warp. They prepare their own size with the locally available materials as ragi or rice with sesame oil.

CASTES OF WEAVERS

The investigation reveals that nearly 85 per cent of the weavers are weavers by caste and by hereditary occupation. The important weaving castes are Kaikolar Mudaliars, Devanga Chettis and Naidus and Jedars. The following groups are not weavers by caste :---Padayachi, Siveyar, Sembadavar, Pulavar, Lingayats, Vellalas, Muslims, and Adi-Dravidas. The Sourashtras are weavers by caste, and they are found in Salem and Rasipuram towns only. There are about 300 to 400 families of Sourashtras in the two centres. The following table shows the distribution of certain weaver-castes.

		Number of families of						
Taluk		Devangas	Kaikolars	Jedars	Adi-Dravi- das	Kurum- bars		
Hosur		3 60		•••	6			
Krishnagiri		78						
Dharmapuri		231	1,069		41			
Harur		•••	130		55			
Omalur		1,250	1,600	•••	· · · · ·			
Tiruchangode		1,338	1,550	986	36	•••		
Rasipuram		. 859	2,650	•••				
Namakkal		700	810	•••	87	•••		
Salem		1,425	·	•••	•••	•••		
Attur	•••	•••				` ممه		
Total		7,542	7,809	986	225			

The census of the castes of weavers is very imperfect. But some conclusions are possible. The caste weavers account for 80 to 85 per cent of the weaving population, the Devangas and the Kaikolars being the two important sects. The Sourashtra and the Jedars come next. The Thogatars weaving dupatties, the Padmasales weaving sarees, and the Kurumbars weaving kumblis are important weaving castes found in Hosur, Krishnagiri and Dharmapuri Taluks. Adi-Dravida weavers are found in non-weaving taluks e.g. Harur, Namakkal and Dharmapuri. They are the relics of the old village communities.

Caste Specialisation.—Thus far we have proceeded on the basis of the hand-loom census. But certain features of the industry are not brought out by the census which can be gathered only from personal investigation. The first thing that strikes one is the fact that there is a conventional caste specialisation in the manufacture of products. The Devangas and the Sales generally manufacture only coloured goods such as sarees, jamakalams, etc. The Kaikolars specialise in the manufacture of grey and bleached goods, dhoties, towels, dupatties and towels. The Sourashtras mainly manufacture costly cloths of silk. There is very little specialisation among other castes.

As in fabrics, so in the counts of yarn employed there is some sort of specialisation. The Sourashtras and the Kaikolars employ fine count yarn, silk or lace. The Devangas and other communities use coarse and medium count yarns for dupatties, sarees and carpets.

Another factor worth noting is that there is a sort of local specialisation also. Salem and Rasipuram are noted for their high class fabrics : silk and cotton cloths with lace, dupatas, angavasthrams, sarees, etc. Dharmapuri is noted for its sarees for the middle class people. There are many villages where generally a particular variety of cloth alone is manufactured. There are certain advantages in this local specialisation : e.g., in the purchase of yarn, in the preparatory processes etc.

Tendency of the Industry to Localise

The next important feature of the industry is its tendency to localisation or concentration in a particular locality. The tendency is getting stronger now. Scattered artisans are now coming to towns or some semi-urban centres. With the passing away of the self-contained nature of the village and its isolation, the village weaver and the oil-monger are the first to come out of the village for they are not directly dependent on the agricultural industry. The carpenter, the blacksmith and the cobbler are necessary and indispensable artisans in the agricultural community the carpenter must repair the plough or the mhote, the blacksmith will have to replace the worn-out parts of some agricultural implements, the cobbler must provide the hide for the pickkota and keep it in proper repair. And for doing all this their immediate presence is necessary. But that is not the case with the weaver or the oil-presser. The demand for their services is neither so continuous nor so urgent as it is for the service of the primarily rural or agricultural artisans.

Besides, the weaver is attracted to the town or to the place where there is a weaver colony, for two other reasons: 1. There is economy in the preparatory processes in large weaving centres where they are done by classes of workers who specialise in each process. The advantage is that firstly, the cost of preparatory processes is reduced and secondly, some time is saved. This enables the weaver to increase his earnings by increasing his output. 2. The presence of the capitalist, specialising in cloth trade and financing the industry and trade, attracts the impecunious weavers who suffer for want of work and lack of capital. There are other advantages incidental to localisation: easy availability of the accessories to weaving such as flyshuttle, reeds, healds etc.; direct touch with the cloth and yarn market; knowledge of the changes in the demand; and a greater scope for work.

Rationalisation of the Industry

Though the investigation attempted to obtain facts regarding rationalisation in the matter of organisation of production, the material obtained is very scanty and unsatisfactory. The number of independent workers and the hired labourers and the size of each unit of production have not been properly ascertained. So nothing can be said regarding them. Nor is there any basis for comparative study of the recent changes in the condition of the • industry.

But there is ample evidence to show that the rationalisation of the industry on the technical side is going apace. Now, the old system, where the weaver did everything from winding to weaving with the help of the members of his family, is giving place to, a more rational system of division of labour. The tendency to specialisation and adoption of improved appliances deserves notice. The old peg warping has now given place to warping mills, except in the upland tracts where the industry is carried on by isolated workers. In those places, of course, all the preparatory processes are done by women and children of the weaver. But in all centres where weaving is of some importance, warping mills are found. But winding and sizing are done in the old way. Children and old persons do the bobbin winding at 2 to 3 pies per ladi or 10 hanks. Warping is the special function of some persons who are mainly weavers by caste, and their rates for warping vary according to the weight and count of yarn. Sizing is slowly becoming a specialised process. In some places it is done by weavers themselves on a co-operative basis. Those that help the weaver are given a nominal remuneration of 2 annas each per warp. In Salem and Rasipuram and other centres where weaving is the chief industry of the locality, sizing is done by special groups of workers. This obtains only where long warps are prepared. In Salem, sized warp is also sold by the merchant. Where short warps are prepared—say for sarees in Rasipuram—women do the sizing. But where longer warps are needed—more than 30 yards or so—sizing is done by men only.

The following facts become clear from a study of this hand-loom census :---

(i) improved weaving appliances are generally in use; more than 50 per cent. of the looms have flyshuttles. Drawboy harnesses, multiple sleys, and warping mills are also used. Only sizing and winding are done on primitive lines.

(ii) The tendency to localisation of the industry, the adoption of specialisation in processes and manufactures and the general tendency for the rationalisation of the industry are now in evidence;

(iii) nearly a third of the looms are producing cloths in direct competition with power-looms;

(iv) and the industry is not so primitive in its technical equipment as is often stated.

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APPENDIX II

THE HAND-LOOM CENSUS: A CRITICISM

The authors of the various provincial census reports in 1921 recognised that census figures as at present compiled, could not afford any useful information regarding the progress of the handloom weaving industry. This is true in all cases of small industries in India. It was observed by Mr. Talents : 'we must on the whole conclude that any estimate of the tendency of the home weaving industry based on the census figures is at present inconclusive. But the record of the hand-loom census if it be continued may afford material for a better estimate at a future census'. Sir Alfred Chatterton also emphasised on the need for the collection of useful occupational statistics : 'We desire to draw attention to the unsatisfactory means provided by the ordinary census for the collection of useful occupational statistics and to suggest the adoption of special enquiries; for, the object is at least as important as the ethnological discussions that have hitherto figured largely in the census report'. Mr. Amalsad, Textile Expert to the Government of Madras, writes: 'It is found that it is extremely difficult to estimate the decline in the condition of the cottage workers in India as no figures exist which will enable one to compare the past condition of the industry with that of the present. The census statistics are usually compiled by persons not in close touch with the industry and the classification of the various branches of the textile trade adopted in these figures affords very little help. The statistical publications regarding Cotton Mills in India give figures regarding the consumption of yarn in terms of weight without stating the counts of yarn. This conveys no meaning whatever regarding the decline in the industry and the changes in the economic condition of the weaver'. The quantity of yarn used by the loom, the daily outturn, the number of days the weaver gets work in the year, the counts of yarn used and the kind of fabric woven, the subsidiary occupation of the weaver, the average prices of yarn and cloth and other raw materials required for weaving, are essential data to gauge the changes in the economic status of the weaver and the progress of the industry and in some measure the economic progress of the The census of 1931 while offering no basis for comcountry. parison is yet an improvement on previous censuses. The workers are divided into three groups (a) persons following it as principal occupation, (b) persons following it as subsidiary occupation and (c) those who are 'working dependents'.

The Director of Industries, Madras, passing orders on the resolutions passed in the Handloom Conference in 1925 and recognising the value of a survey of the weaving industry observed that a certain amount of information in the form below would be helpful if collected by Weaving Superintendents.

Statistics of Hand-looms

- 1. Name of the weaving centre visited.
- 2. Taluk and district.
- 3. Village population.
- 4. Weaver population in the village : Men, Women-Total.
- 5. Probable number of persons engaged in
 - Winding
 - Warping
 - Sizing
 - Dyeing.
- 6. Classification according to weaver's caste.
- 7. Number of looms in the centre-Total.
 - (1) Looms fitted with flyshuttle sley.
 - (2) Ordinary looms with throw shuttles.
- 8. Number of looms lying idle.
- 9. Number of improved appliances at work.
 - (a) Dobbies, (b) warping mill, (c) sizing plant,
 - (d) jacquard harness, (e) weaver's beam etc.
- 10. Particulars of fabrics manufactured.
 - (1) Details—Sarees or dhoties, solid or other bordered cloth, plain weave or otherwise etc.
 - (2) Counts of yarn used (colour, grey or bleached).
 - (3) Nature and count of silk and artsilk thread used.
- 11. Character and composition of the size used.
- 12. Nature of dyes used.
- 13. Number of weaving factories.
- 15. Nature of any other textile industry followed there.
- 16. Remarks.

If the survey of the industry is carried on these lines periodically—say every ten years—it will indicate the tendency of the industry to localise, the movement of the industrial population, the changes in the range of articles manufactured in hand-looms, the technical progress of the industry, the mobility of labour and its employment, the changes in the caste monopoly in industrial occupations, the tendency or otherwise of the industry to concentrate in factories, the changes in the sex distribution of workers in the industry and in the various processes connected with the industry etc., etc.

But there is one great omission in this survey. It fails to get at the human factor in the industry. The two main objects of a study of an industry are 1. industrial progress, and 2. human progress. A study of the former without reference to the latter is necessarily incomplete; and what the Textile branch of the Industries Department has so far done is that its attention was mainly focussed on the technical progress of the industry and nothing was so far done to ascertain the changes in the economic status of the weaver. It is true that if a comprehensive statistical census along with the general census is taken, nothing more can be done. But this must be supplemented by special surveys in selected centres. A special survey will require workers with efficient training in practical economics, who have the training, tact and patience necessary to investigate the household budgets of a number of weavers, their general indebtedness to capitalists, the actual output of the loom with and without flyshuttle, the wages of cooly workers for different operations, the prices of yarn and other raw materials, the sale of manufactured articles and their prices in different shandles and many others.¹ A special staff is necessary to collect data simultaneously in all centres. Mere statistics on the lines suggested by the Director of Industries is of no value. And it is unscientific to collect data in a few centres at random and apply them to the industry as a whole. The census of the hand-loom industry and all other important small industries must be taken periodically and must be supplemented by special investigation on the human side². One cannot say how far the census of production contemplated by the Government of India will realize the objectives of the census of hand-looms stated herein.

¹ The Research Department of the University can carry on this work systematically with the help, and through the co-operation, of the Industries and the Co-operative Departments.

² The recent investigation in the Madras Presidency carried out by a special officer for cottage industries is a welcome departure in the industrial policy of the Government. But, unfortunately, for various reasons for which the special officer is in no way responsible, neither the enquiry nor the report is fruitful from the point of view of either technical and commercial organisation of the hand-loom industry or economic and social regeneration of the weaving community.

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APPENDIX III

Questionnaire

I. GENERAL CENSUS.

1. Name of the village and Taluk.

2. Population :

Men

Women

Children (below 10).

3. Number of weaver families.

4. Total weaving population (including dependents):

Men

Women

Children.

5. Number of actual workers in

(a) cotton, (b) silk, (c) mixed, (d) others:

Men

Women

Children.

6. Number of looms (a) working and (b) idle.

7. Number of looms fitted with flyshuttle sley

55	with throw shuttle sley
ý)	with lever dobby
**	with jacquard harness
"	with country chain harness
,,	with weaver's beam
,,	with multiple sley box
	with other mechanical improvements

8. Number and kind of warping mills used.

9. Number and kind of sizing plant in use.

10. Number of yarn depots in the locality.

11. Number of cloth dealers in the place : (2) dealers who are weavers themselves, and (b) dealers who are not.

12. Castes of workers.

 Number of actual workers (a) winding, (b) warping, (c) sizing, and (d) weaving, and number of men, women and children in each.

14. Number of (a) textile dyers, and (b) textile bleachers.

- 15. Civil condition of workers :
 - (a) literate or illiterate.
 - (b) age of workers-Below 10, 11-15, 16-60. Above 60.
 - (c) sex of workers,
 - (d) married, unmarried and widowed.
- 16 Extent and means of subsidiary income of the family.
- 17. Number of persons owning their looms,
- 18. Number of persons owning their houses and place of work.
- 19. Number of weavers who are members of the Co-operative Society.
- 20. Number of families and workers who are-
 - (a) independent cottage workers
 - (b) hired or wage earners (independent)
 - (c) dependent on the sowcar
 - (d) master craftsmen
 - (e) capitalist workers.
- 21. Number of looms manufacturing-
 - (a) sarees (ordinary).
 - (b) grey cloth
 - (c) sarees with solid border or lace or grey cloth with solid border or lace
 - (d) special kinds of cloths.
- 22. Number of families where all the preparatory processes are done by the members of the families themselves or at least part of the processes is done by them. Mention the processes that are done by them.
- 23. Number of looms using-
 - (a) grey yarns below 40s
 - (b) , above 40s.
 - (c) coloured yarns below 40s
 - (d) " above 40s
 - (e) mixed cotton, silk, and rayon.

APPENDIX IV

Questionnaire

II. CENSUS OF HAND-LOOM FACTORIES.

- 1. Name of the factory, name of the place etc.
- 2. Nature of the company : Private or public.

Limited or otherwise.

Jointstock or partnership or indi-

vidual basis.

3. Number of looms: Working

Idle

- 4. Number fitted with flyshuttle
 - " with dobbies
 - ,, with weaver's beams
 - with jacquard harness
 - , with swivel or multiple sley.
- 5. Number of looms manufacturing-

KINDS OF FABRICS WOVEN.

- (a) coating
- (b) shirting
- (c) sheetings
 - (d) others
- 6. Number of workers: Men

Women

Children.

7. Number of Weavers: Men

Women

Children.

- 8. Number of Warpers: Men, Women and Children.
- 9. Winding : Men, Women and Children.
- 10. Dyeing: Men, Women and Children.
- 11. Castes of workers.
- 12. Number of families
 - (1) Where only one member works in the factory.
 - (2) Where two members work in the factory.
 - (3) Where more than two members work.
- 13. Number of workers with whom weaving is the hereditary calling.

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14. Wages: for pirn winding for bobbin winding for warping for sizing for dyeing for weaving.

(State wages per operation in respect of different kinds of clothes woven, different kinds of yarns used, and different textiles used, as cotton, silk and rayon) and also the average earnings of workers.

- 15. Systems of remuneration-
 - (a) period : weekly, or monthly etc.
 - (b) piece rate or time rate

Wages for overtime work.

- 16. Hours of work per day.
- 17. Hours of work for the week.
- 18. Fines etc.
- 19. Provision for provident fund, profit sharing, bonuses etc.
- 20. Provision of sanitary and other amenities in the factory.
- 21. Provision of facilities for education, purchase of things etc. in the factory.
- 22. Details of improved appliances used.
- 23. Number, pay and qualification of special technical staff
 - (a) weaving foremen, (b) dyer, (c) business manager etc.
- 24. Special investigation on BUSINESS SIDE.
 - (1) Amount of capital invested.
 - (2) Amount of working capital.
 - (3) Amount of borrowed capital. Rate of interest. Securities offered, if any.
 - (4) Average monthly turnover. Quantity and value. Examination of the day sheet of workers in different processes.
 - Examination of the costing sheets in the factory.
 - Other matters of interest, e.g., study of balance sheets etc.

APPENDIX V

Questionnaire

SPECIAL INVESTIGATION re: HAND-LOOM INDUSTRY

(The purpose of the investigation is firstly to ascertain the cost of production so that it might be known where the hand-loom is beaten by the power-loom and secondly to ascertain the changes, in the economic condition of the weaver. The following questionnaire is framed with these two objects in view.)

I. Organisation-

1. Purchase of raw materials :-- Number of yarn dealers;

dealers in other

accessories :

Compare prices in towns and villages; Systems of purchase: cash or credit or otherwise noticing the advantages and disadvantages of each.

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- 2. Sale of manufactured goods : Agency for distribution : How goods are marketed : Conditions of the market.
- 3. Finance for production and distribution: note rates of interest, condition of security, systems of repayment etc.

II. Cost of production—

- 1. Kind of cloth woven: (a) description regarding the kind of weave, (b) the length of warp, (c) the number of ends and picks per inch, (d) the count and kind of yarn used for warp and weft: state the amount of the colour yarn used, (e) the amount of silk and lace used, (f) the dimensions of the cloth, (g) the cost of yarn and other raw materials employed, (k) the selling price of the cloth: (I) to the middleman and (2) to the consumer; (i) the weight of yarn required for warp and weft, (j) the warp if sized or not.
 - 2. In regard to the operations mentioned below state—
 - (a) time and labour required;
 - (b) by whom done: by the weaver or his relations or by outsiders.
 - (c) wages paid or usually paid for
 - 1. Bobbin winding.
 - 2. Warping.
 - 3. Sizing.
 - 4, Pirn winding,

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- 5. Joining the threads.
- 6. Rolling on the beam.
- 7. Weaving.
- 8. Others.
- 111. Economic Status of the Weaver to be studied in respect of each group.
- 1. Classification of workers (a) according to their industrial status
 - 1. Master craftsman.
 - 2. Independent cottage worker.
 - 3. Hired labourer.
 - 4. Indentured worker,
 - 5. Others.
 - (b) Classification according to the kinds of cloth woven.
 - 1. Cloths that are also produced in mills.
 - 2. Cloths that are the special province of hand-loom.
- 2. The weaver's family: Number of members: number of workers-men, women and children; number of dependents.
- 3. Income: Number of looms working: Work available daily. Number of full working days in the year. Kinds of operation done by the members of the family: Nominal and real wages of workers and of the family.
- Family budget: Expenditure (a) rice and other staple food grains and other food articles, (b) clothing, (c) housing and lighting, (d) education, (e) industrial equipment, (l) drink, (g) conventional extravagances etc.
- 5. Indebtedness of the family : Causes of indebtedness : Economic condition of the family in the last generation. Extent of debt : Interest : Secured or not : Capacity of repayment. When was the debt contracted.

APPENDIX VI

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