CHAPTER - 3



# **CHAPTER 3**

# Structural Pattern, Business Models, Employment & Investment Capabilities in Powerloom Sector

The industrial structure and the level of sophistication of the business models adopted have greater influence on the competitiveness of the powerloom sector in the state. Due to historical factors (based on the handloom textile production), the powerloom weaving continues to be quasi-household industry and to a lesser extent resembles the handloom cotton textile industry. Thus, the industrial structure and capacity (technology level and financial base) of the firms of powerloom units are clearly reflected in the location status of the loom sheds as well as the type of the building/ structures.

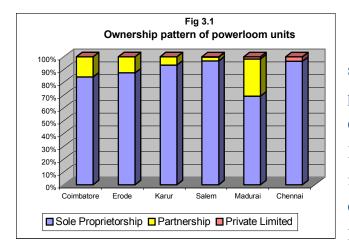
In areas like Somanur, Palladam and Avinashi where the textiles are produced mainly in grey form, the industrial structure is comparatively better placed than the ones in Salem or Erode areas. Likewise, the powerloom units in Karur and nearby areas producing yarn dyed furnishing and other fabrics are comparatively at a higher level. Still, the location status indicates that they are combined with the residences of the owners thus indicating the household-unit orientation. The industrial structure of the powerloom sector, what one observes in Tamilnadu, is unique and not comparable to other states like Gujarat. During the course of its growth and expansion, there has been a gradual shift from small 2 to 4 loom household units to medium sized industrial type units showing a shift from small disintegrated forms in favour of a system based on transactions among small and specialised firms. Trade regime and industrial structure have been connected because the level of openness matters to the labour intensive firms in getting market access; and to the capital intensive firms in getting technology and capital. Due to the continued restructuring policies towards the powerloom sector, enterprise reforms are now a problem for the state. It is especially serious for Tamilnadu as one of the late entrants into the highly competitive fabrics market.

In order to understand the industrial structure of the powerloom sector, data on the ownership pattern, type of production activity, location status, type of building, investment and other available infrastructural facilities were gathered and the findings are presented below.

#### 3.1 Ownership Pattern of the Powerloom units

A unit under the ownership of a single individual is termed as **Sole Proprietorship.** Business where two or more people share the risks and profits equally; registered or unregistered is termed as **Partnership. Private Limited** is a company with a small number of shareholders whose shares are not traded on the Stock Exchange and registered as Pvt. Ltd. under Comp. Act 1956. The powerloom units in the state are almost in the small size category having either upto 4 looms and/or 5-12 looms depending upon the investment capability of the powerloom owners.

Another aspect regarding the ownership of the powerlooms is that the production is not solely carried out by the powerloom owners but jointly with the manufacturer-master weavers. This factor is also responsible for the smaller size of the operational capabilities of powerloom units. Under the above circumstances, the powerloom units are single man owned and/or assisted/part owned by his own family members. Thus, unlike in other powerloom centres in the country, the units are also smaller in size and mostly owned by single persons. The sample survey confirms this phenomenon of the proliferation of individual owned smaller units. Around 90% of the units are found to be individual owned sole proprietorship category and the balance 10% are reported to be partnership owned. Further, few private limited companies are also in existence in Tamilnadu.



Among the different clusters, sole proprietorship category is predominant in Karur, Salem and Chennai cluster areas whereas Partnership firms are significant and form more than 10 percent in Coimbatore as well as Erode cluster. Madurai cluster shows a different

picture with 69% sole proprietorship units followed by 29% partnership firms and around 2% private ltd. companies. Among all the clusters, the same phenomenon is observed without any major variation.

This proves that the size of the powerloom units will remain smaller due to the reasons explained above. This is not conducive for the modernisation of the industry. The consolidation of smaller units into more viable bigger units is to be achieved in Tamilnadu powerlooms. Therefore, as an alternative, the co-operatives of smaller sized units for undertaking specific services to be provided to small powerloom units should be a solution.

Table No. : 3.1

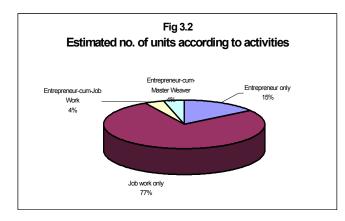
Ownership pattern of powerloom units

Sr No.	Cluster	Sole Proprietorship	Partnership	Private Limited	Total
1	Coimbatore	84.26	15.74	-	100
2	Erode	87.37	12.63	-	100
3	Karur	93.51	6.49	-	100
4	Salem	96.73	2.97	0.30	100
5	Madurai	69.83	28.45	1.72	100
6	Chennai	96.36	-	3.64	100
7	All Clusters	89.87	9.70	0.43	100

Note: Figures in percentages

# 3.2 Nature and Type of Production Activities

The powerloom unit owning looms and undertaking the production functions and marketing the same on its own is termed **Entrepreneur only.** The powerloom unit owning its looms but undertaking the production on behalf of the master weaver who supplies the yarn in the required form is called **Jobwork only.** The powerloom unit owning looms and



carrying out own production and selling activities as well as accepting job work from master weavers is termed **Entrepreneur cum Jobwork.** The **Master-Weaver** is a manufacturer of powerloom fabrics without owning any looms but carrying out the production activities

through jobber units. Such type of powerloom unit purchases the yarn, processes the same and hands over to the jobber for weaving on piece rate basis. The master weavers will carry out marketing. **Entrepreneur cum Master Weaver unit** is defined as owning

looms and carrying out the production activities pertaining to entrepreneur as well as master weaver.

Though the powerloom industry in Tamilnadu is organised in the same way as the powerloom units located in the other leading states of Maharashtra and Gujarat, there is a marked difference in the operational size as well as production pattern. As stated earlier, the industry in the state manufactures grey fabrics as well as yarn dyed textiles. This combination of product groups has been the deciding factor for the existence of large number of job work units. In the case of grey fabrics, 99% of the powerlooms are belonging to the category of job work only. As against this, the entrepreneurial category is more active in the products of home textiles and that too in clusters like Erode and Salem and not in other clusters.

Table No.: 3.2
Estimated No. of Units According to Activity Pattern

Sr. No.	Type of Activity	0/0	Estimated No. of Units
1	Entrepreneur only	15.32	6160
2	Job work only	76.54	30770
3	Entrepreneur-cum-Job Work	4.07	1636
4	Entrepreneur-cum-Master Weaver	4.07	1636
	Total	100.00	40202

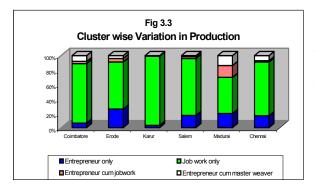
## 3.2.1 Predominance of job work activity

In Tamilnadu, most of the production in looms is being carried out on job work basis and the manufacturer/master weaver provides the yarn and also markets the products after being woven. Given this background of the industry, there are wide variations observed in the pattern of production activities adopted in the six clusters.

As revealed by this survey, more than three-fourth of the units operate on job work basis who depend on the master weavers for their survival. Only in the balance one-fourth of the units, the production is seen to be carried out on own business basis that includes the procurement of yarn, conversion into fabrics and marketing the same at the final stage.

Further, under the type of sole proprietorship units, 80% units are observed to be operating on job work basis and the balance 20% are carrying out own production and marketing. In the case of partnership type units, only 50% are seen to be working as job work units. A major chunk of the units undertake own production and marketing in the above category.

#### 3.2.2 Cluster wise variation in the production activity



Among the six clusters, job work units are comparatively more in Karur and Coimbatore, moderate in Salem and Chennai; and very less in Erode and Madurai clusters. The details of the same are presented below:

Table No. : 3.3
Cluster Wise Variation in Production

Cluster	Entrepreneur only	Job work only	Entrepreneur cum Job wok	Entrepreneur cum Master weaver	Total
Coimbatore	6.48	82.41	2.78	8.33	100
Erode	25.99	64.98	5.05	3.97	100
Karur	3.05	95.80	0.38	0.76	100
Salem	17.21	78.64	2.67	1.48	100
Madurai	19.83	50.00	16.38	13.79	100
Chennai	16.36	74.55	1.82	7.27	100
Total	15.32	76.54	4.07	4.07	100

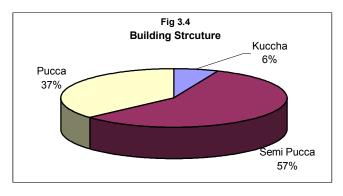
#### 3.3 Location status & type of buildings

"Peasant-weavers, familiar in south India are unknown in western India. In Tamilnadu, these units are located in farmhouses belonging to individuals who own some land, cattle and poultry. They become frequent in an area where the water table is 300-500 feet below the surface and has been falling due to extensive harvest. Investment in looms is a common way to diversify and secure incomes. Is this an example of "proto-industrialisation", that is, representative of a strategy of peasant families to employ their

surplus time/labour? In some cases, there may be an element of employing low-cost surplus time of peasant families. But, that element can not have been very critical for two reasons. First, the area is agriculturally well developed and occupied throughout the year. It is improbable that farming here does leave labour time that is relatively costless. And second, these firms are not intensive in family labour at all and over 90% of the labourers are hired. The diversification is probably better understood as a decision to employ capital, rather than labour, that is, in terms of the intent to maximise total returns to capital by dividing up resources between farming and textiles according to their relative risk-return profiles. The average powerloom operator in this context was a person with savings made from an initial agrarian expansion. When the very expansion drove the water table down in an already water-scarce area, he/she shifted increasingly to industry. In the course of this shift, farming was becoming riskier but textiles more lucrative thanks to the growth of cotton exports, while infrastructure, the great concentration of cotton spinning, textile engineering and handloom weaving, have all played phenomenally an enabling role" (Tirthankar Roy).

In order to understand the locational aspects of the powerloom units and also to gauge the investment levels in land and building by the powerloom owners, certain information was collected. An attempt was made to identify the types of building structures in which the units are functioning and are categorised as kuchcha, semi pucca and pucca structures. The objective is to know the investment capability as it is generally seen that the powerloom sector consists of cottage, household, industrial and well-organised factory types and the investment capability differs vastly from one type to the another.

#### 3.3.1 Building Structures of Powerloom Units



It is observed that more than 94% of the units are located in either pucca or semi pucca structures. Around 57% of the powerloom units are observed to be located in semi pucca whereas 37% of the units are

located in pucca structures. The units reported to be located in kuccha structure account for only about 6%. From this, it is evident that the powerloom owners have had to invest in the building significantly in addition to the investment in looms and other machinery. The permanent nature of the structures also indicates that the owners are continuing their occupation for a longer period.

Table No. :3.4

Loom Shed Building structure

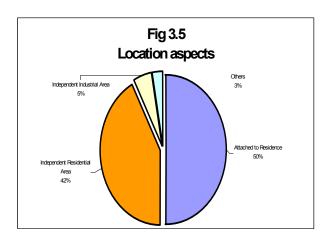
Sr. No.	Category	%
1	Kuccha	6.41
2	Semi Pucca	57.06
3	Pucca	36.53
	Total	100.00

# 3.3.2 Location aspects of powerloom units

The information regarding the location of the unit in the residential or industrial area, the loom-shed forming part of the residence of the powerloom owners etc. have been gathered under the location aspects of the units. The powerloom units are located in the fields and lands adjacent to the residences of owners irrespective of the sub cluster being semi urban or rural. It is observed that almost 50% of the powerloom units in the state are attached to the residences and, therefore, they are purely household units. This is due to the smallness of the units as well as their origin from handlooms. The later additions of powerloom units are found to be organised as small-scale industries located in either residential or industrial areas. Around 42% of the units are seen to be independently located in residential areas. It may be seen that only a marginally small number of 5% of units are located in industrial areas. It is also seen that the powerloom units are located on agricultural land adjacent to the residences of the owners that have been shown as others forming 2% of the units. Though the unit size may be comparatively smaller in the state, the organisational set up as industrial units is observed to be predominant. This is more conducive for further improvement in their functioning and technology upgradation.

In Coimbatore cluster, more than 54 % of the units are independently located and the balance 46% are put up along with the residence of the powerloom owners. In Erode cluster, it is seen that 69.5% of the units are independent from the residences and only 28%

are attached to residences. Some of the units are reported to be independently located in industrial areas also. Regarding Karur cluster, out of the total units producing the above varieties, 53.47% of the units are attached to residences and 34.61% of units are independently located. The units that are stated to be located in industrial areas are 5.38%.



In Salem cluster, a majority of the units (77.72%) are seen to be attached to residences. Only 19.35% of the units are independently located. The rest are located in industrial with areas independent structures. In Madurai cluster, the units attached to residences are observed to be insignificant. Such units are only 9.17% of the total units in

the above cluster. The differentiating feature of this cluster is that almost all the units (89%) are independently located either in residential areas or in industrial areas. In Chennai cluster, all the units are located either in semi pucca or pucca structures. Out of the total units, 85.45% of the units are of the type - attached to residence.

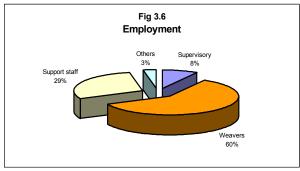
Table No. :3.5
Location status

Sr. No.	Category	%
1	Attached to Residence	50.30
2	Independent Residential Area	42.43
3	Independent Industrial Area	5.30
4	Others	1.97
	Total	100.00

#### 3.4 Employment in the powerloom sector

"The powerloom units are characterised by three main features: bimodal distribution of looms per firm, use of hired labour and local hiring of labour. Several local surveys have found that two size classes seem to dominate the industry: 6-10 looms per units, which accounts for well over half of the firms and more than 25 looms. The survey results confirm the findings. The bi-modality arises possibly because of the dominance of two types of entrepreneurs – the contract weaver engaged in low quality goods for the

home market and firms engaged in exportable cloths. Small and large firms both hire labour, but nearly all the labourers are locals or at the most migrants from other districts of Tamilnadu. Migrant settlements and a migrant lifestyle remain inconspicuous in the south, in stark contrast with western India. A majority of the labourers are former agricultural labourers. The only example of a relatively long migration comes from Tirupur area where diversified textiles have seen migration from the southern districts. Thus, there have been processes of recruitment: (a) occupational shift from agriculture to industry in northern districts, (b) release of surplus labour from the impoverished southern districts. Short distance migration in the south has been aided by Tamilnadu's excellent road infrastructure' (Tirthankar Roy).



presented in the table given below.

The weaving personnels in the powerloom sector are more important as compared to other supporting staff. The details of the personnel employed by their level of employment such as supervisory, weavers, supporting staff and others are

Table No. :3.6 Employment

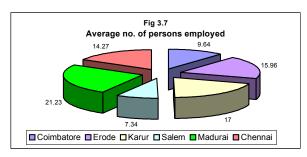
Sr.	Category	%
No.		
1	Supervisory	8.37
2	Weavers	59.82
3	Support staff	28.63
4	Others	3.18
5	Total	100.00

It is estimated that the personnel employed in the powerloom sector in Tamilnadu stand at 5,50,767 and majority of them are weavers. From the above, it may be seen that 60% of the employment is in the form of weavers and another 30% are in support function in the powerloom units. The balance 10% is accounted for supervisory and other functions.

#### 3.4.1 Women employment

Direct engagement of women in powerloom weaving is very less. Women are employed in all related activities excluding the weaving function. The exception to this is the looms in Vellakovil and nearby areas where women even operate the looms. The employment of women is substantial in this sector. They are involved in warping, sizing, winding etc. They are especially predominant in preparatory and post loom activities including the inspection and checking of the woven fabrics where they outnumber the men folk. Youngsters with less experience are also preferred for some preparatory jobs including helpers.

#### 3.4.2 Average employment per unit



On an average, there are 13.70 personnel per unit employed in the powerloom sector in the state. Among the different clusters, the per unit employment is more in Madurai (21.23)

whereas in Karur, Erode and Chennai, the per unit employment is estimated at 17.00, 15.96 and 14.27 respectively. Coimbatore shows a different picture with 9.64 followed by Salem with 7.34.

Table No. :3.7

Average No. of Persons Employed

Sr.	Cluster	Average no. of
No.		persons
		employed
1	Coimbatore	9.64
2	Erode	15.96
3	Karur	17.00
4	Salem	7.34
5	Madurai	21.23
6	Chennai	14.27

In the powerloom sector, basically the weaving activities are being carried out. For this purpose, the weaving preparatory activities including warping are done within the unit for the production of yarn dyed fabrics only. In the case of grey fabric production, the weaving preparatory activity is limited to pirn winding for the weft and no other production processes are involved. Therefore, the employment patterns in the grey fabric producing powerloom units are different from the yarn dyed fabrics producing units. This may be kept in mind while viewing the data pertaining to the employment pattern in different clusters.

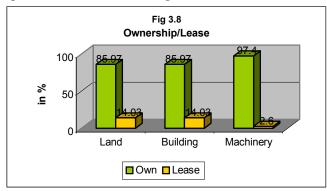
It has been observed that only less than 2% of the personnel employed happens to be formally trained whereas 98% of the work force consists of people trained by experience. In the category of formally trained personnel, majority of the workers are weavers. In the case of workers trained by experience also, majority of them belong to the category of weavers. The striking feature is that these personnel have grown out of the traditional handloom sector from time immemorial. The employment pattern observed in the powerloom sector is as presented below.

Table No.: 3.8
Trained Workforce

Sr. No.	Category	%
1	Formally trained	2
2	Trained by experience	98
3	Total	100

# 3.5 Ownership/lease details in powerloom sector

In the case of powerloom units, the ownership of land and building, machinery etc. may be showing some aspects of investment. Therefore, data regarding the ownership/lease details were collected and analysed. In Tamilnadu, the running of powerloom units on lease/rental basis is not common and generally the powerloom owner owns the land, building and machinery. Therefore, they have got more stakes in proper maintenance and up keeping of the units. Also the developmental aspects are more crucial for the owner-operators than the lease operators.



The data reveals that 86% of the units are reported to own the land and building and 98% of the units are observed to have their own machine/machinery. Only a small fraction of the units have reported to

have taken the land and building on lease basis. The units that have reported to take machinery on lease basis are insignificant in number. Regarding the varied pattern in the clusters, the difference is observed only in Erode cluster area where few cases of taking the machinery on lease have been reported.

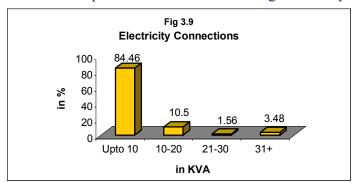
Table No. :3.9

Ownership and Lease Details

Sr.	Category	Own %	Lease	Total
No.			%	%
1	Land	85.97	14.03	100
2	Building	85.97	14.03	100
3	Machinery	97.40	2.60	100

### 3.6 Electricity and fuel requirements pattern

All the powerloom units are having electricity connections and all the machinery



are run by electricity. Due to the shortage of power and interrupted supplies, a large number of units are found to possess diesel-generating sets also. Therefore, the energy sources are both electricity and

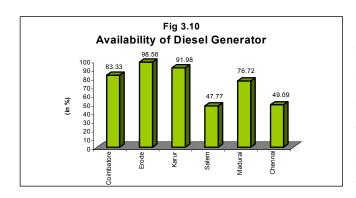
also diesel. It was observed that 84.46% of the units are having upto10 KVA connection and 10.50% have 11-20 KVA connections. The units having 21-30 KVA connections are 1.56% whereas 3.48% of the units have reported to take 31+ KVA connections. It may be mentioned here that the electricity rates are moderately less upto 10 KVA in the state and due to this reason, the bifurcation of units into smaller units is also possible.

Table No.: 3.10

Electricity Consumption Pattern

Sr.	<b>Electricity Connections</b>	%
No.	in KVAs	
1	Upto10	84.46
2	11-20	10.50
3	21-30	1.56
4	31+	3.48
	Total	100.00

#### 3.6.1 Usage of diesel generators in powerloom sector



The number of units having diesel generators is seen to be 76% and the balance 24% of the units are either unable to buy generators sets or they may have certain alternative arrangements. Regarding the cluster variations, in the case of Chennai

cluster, it is observed that only 50% of the units are having generators. In Salem cluster also the same pattern is observed. In all other clusters, generally 80% of the units are possessing diesel generators in addition to the use of electricity.

Table No. : 3.11

Diesel Generators used by Powerloom Units

Sr. No.	Cluster	%
1	Coimbatore	83.33
2	Erode	98.56
3	Karur	91.98
4	Salem	47.77
5	Madurai	76.72
6	Chennai	49.09

# 3.7 Investment in land and building of powerloom units

The average investments in land and building for different categories of the powerloom units vary according to the size of the units. In the case of upto 4 looms category, the average investment in land is Rs.42, 000 and investment in building is reported to be Rs.84, 000 and the combined total investment happens to be Rs.1, 26,000. Compared to this, the 5-12 looms category units show an investment of Rs.1, 04,000 in land and Rs.2, 49,000 in building, thus having a combined investment of Rs.3, 53,000. The other two categories of units have investments of Rs.5, 65,000 and Rs.36, 67,000 in land and building.

Regarding the cluster variations, in the case of Coimbatore cluster, the investment in land and building stands at Rs.8, 40,878, whereas in Erode cluster it is observed to be Rs.3, 49,526. Karur shows a different picture of Rs.2, 10,252 investments in land and building. In Salem, Madurai and Chennai clusters, the investment in land and building is estimated at Rs.2, 68,838, Rs.8, 68,231 and Rs.4, 94,730 respectively. In case of 49+ looms category in Chennai cluster, the average investment in land is Rs.5, 05,000 and investment in building is reported to be Rs.51, 66,667 and the combined total investment happens to be Rs.56, 71,667.

# 3.7.1 An analysis of total investment in land, building and machinery by the powerloom units

Taking the above estimate of Rs.1.26 lakh as investment in building for the category of upto 4 looms, we may be able to arrive at the approximate total investment of the entire powerloom unit by the addition of the estimated machinery investment. An average value of Rs. 15-20,000 per loom will result in the investment of Rs.60, 000 for three looms. Other preparatory machines may cost another Rs.30, 000. Thus the total investment will work out to Rs.2.16 lakh for very tiny units. As they are operating on job work, the working capital requirements are very marginal and therefore, not taken into account for analysis. Likewise we may do arrive at the estimates for other categories of units.

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