



A STUDY OF PROBLEMS AND PROSPECTS OF AUTO LOOM (SHUTTLE-LESS) SECTION IN ICHALKARANJI

Mrs. Madhura O. Kanitkar¹ and Dr. Amardeep D. Jadhav²

¹Research Scholar, CSIBER Kolhapur.

²Research Guide, CSIBER Kolhapur.



ABSTRACT

The Indian textiles industry is very diverse, right from hand-spun and hand-woven textiles at one end, while the capital intensive sophisticated mills sector at the other end of the spectrum. Before the period of 1980 Ichalkaranji was purely famous for cotton saris, cotton poplin and dhoti. In middle of 1980, weavers of the Ichalkaranji town started producing denim, chiffon, canvas, and fabric for school uniforms which is also known as khakhi. Fabrics like seersucker, Oxford, ripstop, tweed, chambray, and twill made in and around Ichalkaranji city are used by many domestic as well as international fashion brands like as Raymond's of India, John Player and international brands like Armani, Banana Republic, Hugo Boss, and Paul Smith. In Ichalkaranji looms have been gradually upgrading from handlooms, to power looms to semi-automatic looms, to fully automatic looms. The author analyzes production, labour, finance, marketing and managerial problems faced by the auto-loom owners in Ichalkaranji. Ichalkaranji said as "Manchester of Maharashtra is sunk itself into textile industry. From this vast ocean researcher wants to research or find out:-

KEYWORDS: Airjet, Rapiet looms.

1.0 INTRODUCTION:-

The auto-looms industry is a household activity carried out usually by the members of family. Looms industry from long time has pre- dominance of male members of family. The installation of looms is done at one place but it has internal segregation of looms unit wise. Each unit is under the name of one of the family members. Though it is under the name of female members but actually the business is purely looked after by the male members of family. Ichalkaranji has more tendency of inherited business. Many people who had set their plain looms or power looms previously replaced that machinery with automatic shuttle-less looms. The first generations had started up with plain or power looms and flourished a lot during the period of 1980 -2000. Gradually when automatic looms started holding pace with the advanced technology which was superior in both quality and quantity these men gradually started diverting their funds to settlement of shuttle-less looms. In case of auto looms in Ichalkaranji it can be said that the business is carried on in a decentralized manner. Majority is in form of Proprietorship and few of them can be seen under Partnership form of organization. There are a very few big companies like Reliance, Indocount working in centralized form which are in Kagal Industrial Area. Otherwise almost all of them are in decentralized form.

2.0 STATEMENT OF THE PROBLEM

Ichalkaranji has been a prominent textile hub today with continuous changes and up gradations since 19th century. Ichalkaranji city has seen the very beginning of looms those are pit looms, hand looms, power looms, power shuttle looms, and at present Shuttle-less looms. Knowing the current trends,

understanding the market scenario persisting to the Shuttle-less looms in Ichalkaranji, to examine the various problems that loom owners are tackling, to know if there are any opportunities to grow further are the questions to find the answers for by researcher and therefore researcher has opted to study:-

"A study on Problems and Prospects in Autoloom Section in Ichalkaranji"

3.0 OBJECTIVES OF THE STUDY

- 1) To study the profile of Shuttle-less loom owners in Ichalkaranji.
- 2) To analyze production and labour related problems of loom owners.
- 3) To study financial and marketing problems of loom owners.
- 4) To examine the managerial problems faced by loom owners.
- 5) To examine the frequency of the problem faced by auto loom owners (shuttle-less) in Ichalkaranji.

4.0 HYPOTHESIS

H₀: There is no significant difference in the frequency of the problems faced by small, medium and large scale Shuttle-less auto loom units.

5.0 RESEARCH METHODOLOGY

5.1 Primary Data Sources-

Corresponding to the theme and nature of the study, the primary data is collected by a well arranged questionnaire from the sample respondents. i.e. owners of Shuttle-less loom owners.

5.2 Secondary Data Sources-

The secondary data related to development of textile industry in Ichalkaranji and development of looms in particular have been collected. Data has been collected through various publications, reference books, websites etc.

5.3 Sample Design

According to the Micro, Small & Medium enterprises Act 2006 the firms are divided into micro, small and medium enterprises as per their investments in plant & machinery. Upto 25 lakhs it is Micro, from 25 lakhs to 5 crores it is Small and from 5 crores to 10 crores Medium Enterprises.

Table 2 Sample Size

Type of Enterprise	Ichalkaranji	Samples (30%)
Small (< 5 crores)	57	17
Medium (5-10 crores)	126	38
Large (>10 crores)	33	10
Total	216	65

Researcher has taken 30% of population as sample size. Out of 216 population 30% of samples were taken for collection of data. These 30% i.e. 65 respondents were also selected on basis of proportion of the sizes of small, medium or large. Thus the numbers of respondents were on basis of proportion allotment as per size. Further the samples for data collection were selected by Convenience Purposive Sampling Method.

6.0 DATA ANALYSIS & INTERPRETATION

The study has been under 5 categories:

A) Production Related Problems

Table 3-Problems of Raw Material

Problems of Raw Material	Small	Medium	Large	Total %
Fluctuations in yarn prices	12 (73%)	32(85%)	06(60%)	51(79%)
Sizing problem	11 (66%)	27(73%)	04(40%)	43(66%)
Poor quality of raw material	07(40%)	16(43%)	01(10%)	24(37%)

(Source: Compiled by Researcher)

1. Fluctuations in yarn prices: -

Shuttles less loom owners face raw material (yarn) prices fluctuations on daily basis. Whether it is owners working on 'Job Work basis' or 'Sale Purchase' the impact of fluctuation in yarn prices bothers their business. It affects directly to people working on 'Sale Purchase basis' and indirectly to people working on 'Job Basis'.

2. Sizing problem: -

Sizing is the prior process required for the yarn to be properly weaved. Thus if sizing is not properly done it affects the weaving process. May be there are knots in the thread or it may get cut in the middle of process which interrupts the smooth going production. With context of this problem **small, medium scale** firms face more problems compared to **large** scale firms. This is one of the prominent problems faced by all firms.

B) Labour Related Problems

Table 4 Frequency of Labour Related Problem

Labour-related problems	Frequency		
	Very Often	Occasionally	Never
Reluctance of skilled labour to work in your unit	30	19	16
High rate of labour turnover	56	9	-

1. High rate of labour turnover:-

This is the major problem faced by almost all business men irrespective of their size. From the total samples 86% of them have responded for the option "Very Often". The nature of the weaving industry is that, the labour is retained in this industry on temporary basis. From one year's Diwali to next year's Diwali is the standard duration maintained in these units.

2. Reluctance of skilled labour to work in your unit:-

It may happen that the skilled labour which is required to continue with the production may not be stable for long time in a particular weaving unit. This definitely affects the production of the unit.

B) Finance Related Problem**Table 5 Frequency of Finance related problems**

Finance-related problems	Frequency		
	Very Often	Occasionally	Never
Scarcity of Capital	32	28	05
Late recovery from buyers	48	17	-

1. Scarcity of Capital:-

All the respondents were of opinion that this would be a universal problem for all the business men. In case of weaving units, as the investment itself is in large amounts, funds get locked in plant and machinery. So it goes difficult to cover up the working cost.

2. Late recovery from buyers

From the table above one can analyze that the third option i.e. "Never" has not been opted by any units. Moreover "Very Often" option has been selected by 73.84% of samples. So irrespective of whether they are small or big 'Recovery from Buyers' is the problem genuinely faced by all the business men.

D) Marketing Related Problems**1. Overdependence on few Buyers:-**

There are owners who continue their programs with specific parties and in case if there are some problems with those parties then funds may not get available in continuous flow.

2. Severe Competition of other Units:-

When these looms were started just in Ichalkaranji, there were a very few units engaged in these types of units. So those people have earned good amount during those days. But now in recent 10-15 years these looms have grown tremendously. Now there is acute competition. Each one is trying to grab the program. They are not willing to share the program. They are also not willing to disclose the nature of programs running in their unit.

E) Managerial & Other Problems**1. Inability to appoint professional managers:-**

Professional Managers for production as well as for clerical work becomes difficult to obtain in Ichalkaranji. As mentioned in the "Labour Problems" academically qualified and trained candidates do not sustain here in Ichalkaranji. They go for better job opportunities outside the town. They have a fascination of working in big weaving units, industrial parks, composite mill etc. At local level we get the managers, who have reached that level not on the basis of qualification but on experience.

1) Decision Making Style:-

Various options were given to the respondents as to their decision making style and 92% of them reported as "Self decision". A few of them mentioned that they take help of consultants for major decisions. Otherwise also people among those 92% also stated that whenever they fail to cope up with the problem they ask their peer businessmen or consultants.

Table 6 Birds Eye View of Problems faced by Small Medium and Large Scale Units

Particulars of Problems	SMALL units	MEDIUM units	LARGE units
Fluctuations in Yarn Prices	✓	✓	✓
Irregular Raw Material Supply	✓	✓	✗
Non-Availability of Labour	✓	✓	✗
High Rate of Labour Turnover	✓	✓	✓
Sale of Credit	✓	✓	✓
Severe Competition	✓	✓	✓

F: Testing of Hypothesis

The problems relating to five important aspects of the auto loom sector in Ichalkaranji, namely, Production, Labour, Finance, Marketing and Management, have been analyzed from various angles.

At this juncture, it is imperative to understand as to whether there is any difference in the frequency of the occurrence of these problems faced by different size of auto loom units. For this purpose, the following null hypothesis (H_0) is tested with the help of One-way ANOVA Test, popularly known as F test.

H_0 : 'There is no significant difference between the frequencies of the problems faced by small, medium and large auto loom units'

This test is applied to all five categories of the problems and the result is presented in the following table.

Table: 7 One-way ANOVA test (F-Test) for the problems faced by Small, Medium and Large Auto-loom Sector in Ichalkaranji

Production Problems							
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F statistic	Critical Value of F ($\alpha :0.05$)	P value	Result
Degree	9-1=8	272.446	136.223	2.764	4.1468	0.1161	Not significant H_0 accepted
Error	8-2=6	295.744	49.291				
Total	14	568.19	49.291				
Labour-related Problems							
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F statistic	Critical Value of F ($\alpha :0.05$)	P value	Result
Degree	9-1=8	343.895	171.947	5.502	4.1468	0.0261	Significant H_0 rejected
Error	8-2=6	187.498	31.25				
Total	14	531.393	203.197				
Financial Problems							
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F statistic	Critical Value of F ($\alpha :0.05$)	P value	Result
Degree	9-1=8	210.32	105.16	22.452	4.1468	0.0006	Extremely significant H_0 rejected
Error	8-2=6	28.103	4.684				
Total	14	238.423	109.844				

Marketing Problems							
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F statistic	Critical Value of F ($\alpha :0.05$)	P value	Result
Degree	9-1=8	157.163	78.581	6.101	4.1468	0.0203	Significant H_0 rejected
Error	8-2=6	77.286	12.881				
Total	14	234.449	91.462				
Managerial Problems							
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F statistic	Critical Value of F ($\alpha :0.05$)	P value	Result
Degree	9-1=8	141.556	70.778	15.372	4.1468	0.0018	Extremely significant H_0 rejected
Error	8-2=6	27.625	4.604				
Total	14	169.181	75.382				

With the only exception of Production problems, as the calculated F values for the problems related to Labour, Finance, Marketing and Management are more than their critical value (4.1468) at 0.05 significance level at dfn 8 and dfd 6, the difference between the frequencies of the occurrence of these problems faced by small, medium and large auto loom units is significant. Therefore, the null hypothesis that 'There is no significant difference between the gravity and frequencies of the problems faced by small, medium and large auto loom units' is rejected.

This leads to conclude that the problems faced by different sized auto loom units in Ichalkaranji differ in the gravity and frequency according to size of the units.

7.0 FINDINGS :-

- 1) 79% of the shuttles less owners face the problem of Fluctuation in Yarn Prices. Yarn prices are subject to constant change in demand and supply of yarn in the yarn market.
- 2) 66% of the owners face sizing problem due which weaving is affected.
- 3) Most of the business men have given a passive response with respect to availability of labour. Everyone has been facing problem of easy labour availability.
- 4) Labour turnover is very high, and therefore business owners face a lot of problem. 86% of the respondents have stressed upon this problem.
- 5) Bills recovery period extents from 90-120 days. This has become a convention in weaving industry. If spoken at individual level many of the weavers feel that this period is too long, but they are helpless.
- 6) Almost all sales are on credit. So the weavers have to wait for the payment from the opposite party.
- 7) 92% of the business men take decisions on their own

8.0 SUGGESTIONS:-

- 1) There should be a proper, organized system of determination of yarn prices. Government should set a system which would supervise the yarn.
- 2) The loom owners should make arrangement of their residence/occupancy. Few of the large units give accommodation facility to their labourers that face less labour turnover problem as compared to other units.
- 3) The labours should be covered under welfare schemes like provident fund, insurance, pension (either of them) which the owners (those who can afford) are reluctant to initiate with.
- 4) Government should increase the financial assistance given to loom owners.
- 5) The weavers should come together and arrive at a consensus to reduce the credit period.
- 6) There should be creation of Export Houses which would help the parties to extend their markets.

7) Monetary incentives is most of the times the best motivator to workers. Owners should come up with some types of monetary incentives based on performance.

9.0 Future Prospects of Auto Looms

- 1) Ichalkaranji has always been prominent in production of cloth and sarees, similarly it will grow for production of bedsheets, cotton fabrics, denims etc for which these shuttle-less looms are excellent.
- 2) Business men are forwarding their production of grey fabric to brands like Raymond, John Player, Reid & Taylor etc. which is immense opportunity at international level.
- 3) As the demand for cotton fabric is always in demand not only in domestic market but also at international level, Ichalkaranji being a traditional master in weaving cotton, has a big and demanding market ahead.

10.0 CONCLUSION:-

Ichalkaranji is known as “Manchester” of Maharashtra. Still it can be said that for many things it has to depend on outsourcing. Ichalkaranji mainly concentrates on production of “Grey Fabric”. It can be said nearly 90% of Ichalkaranji production is grey. But, definitely there is scope for this town to develop and expand get into the market of finished product.

Books and Journals

- 1) Sabit Adanur (2000) Hand Book of Weaving CRC Press.
- 2) Maruf Mahfuz STUDY ON DIFFERENT TYPES OF LOOM by –Department of Textile Engineering World University of Bangladesh.
- 3) Talukdar’s, Sriramulu’s, Ajgaonkar’s “Weaving machines mechanisms management” Mahajan Publisher’s Pvt. Ltd.
- 4) Prof (Dr) PV Kadole & Prof (Dr) UJ Patil article in www.indiantextilejournals.com from D.K.T.E’s Engineering College, Ichalkaranji.



Mrs. Madhura O. Kanitkar
Research Scholar, CSIBER Kolhapur.