Production Problems In Textile Industry With Special Reference To Karur District, Tamil Nadu

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INTRODUCTION

The textile industry is the single largest foreign exchange earner for India. Currently, it accounts for about 8 % of GDP, 20 % of the industrial production and over 30 % of export earnings of India and it has only 2-3 % import intensity. About 38 million people are gainfully employed with the industry, making it the second largest employment providing sector after agriculture.

The textile policy of 1985 and the economic policy of 1991 accelerated the economic growth during 1990's. Textile sector growth has been led by the spinning and the manmade fibre industry. The number of cotton/ manmade fibre textile mills rose from 1035 in 87-88 to 1741 by December, 1997. The number of spinning mills rose to 1461 in December 1997 from 752 in 87-88. Liberalization led to the installation of open end rotors and setting up of Export Oriented Units (EOU).

Currently, India has the second highest spindle age in the world after China. Aggregate production of cloth during 1996-97 was 34,265 million sq. meters, an increase of nine percent over 1995-96. India's contribution in world production of cotton textiles was about 12 % a decade back, while currently, it contributes about 15 % of world cotton textiles. The production of silk has increased from 9498 tonnes in 1987-88 to 14,093 tonnes in 1996-97. Wool, is another major raw material for which India depends on imports, especially from New Zealand, to meet its requirements.

Growth rate in exports of textiles/ clothing during 1996-97 was 11%. Introduction of a soft loan scheme during the 7th plan called Textile Modernization Fund Scheme (TMFS) facilitated the process of modernizing textile industry significantly. Indian textile industry has performed remarkably well during the last one decade, but it still needs to carve a competitive edge through quality output and high value addition, especially when India is on the fast track of globalization.

TEXTILES POLICY 2006-07

The Textiles Policy of 2006-07 aims at facilitating and promoting growth of the Textile industry, achieve global standards in product quality, contribute more to exports and to encourage textile clusters

Thrust areas include:

- Produce textiles to cater satisfactorily to the quantity, quality and price requirements of both domestic and international markets, keeping in view the industry's potential for employment.
- Identification of markets, products for each market, inputs required, technology, human and financial resources.

OVERVIEW OF TEXTILE INDUSTRY IN TAMIL NADU

- Tiruppur, known as the knitting city has about 3,000 exporters.
- Tamil Nadu has a large Cotton Textile industry cluster which accounts for about 39% of India's production capacity.
- Chennai is known for woven garments with about 2,400 registered exporters.
- Textiles and garment exports are about US$ 3 billion.
- Major part of the business comes from Coimbatore and Tiruppur.
- Karur, Madurai, Rajapalayam are other textile centers.

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KEY PLAYERS IN THE TEXTILE SEGMENT

MADURA COATS

❁ Started in 1974 as a result of the merger of Madura Mills, J & P Coats and A & F Harvey.
❁ Has the unique distinction of being the only professionally managed Multinational Company in the textile industry.
❁ MCL supplies its products to its clients such as Clairborne, Lee, Levis, Gap, Nike, Adidas, Tommy Hilfiger, among others and operates through 2 divisions- Coats India and Global Thread Supply India.

HOME TEXTILES

Exhibit 1 :Powerloom Unit

Exhibit 2 :Stitching Unit

Exhibit 3 :Weaving Unit

Karur is famous for its home textiles. Karur has a niche in five major product groups - bed linens, kitchen linens, toilet linens, table linens and wall hangings. Overall, Karur generates around ₹ 6000 crores ($300 million dollars a year) in foreign exchange through direct and indirect exports. Allied industries like ginning and spinning mills, dyeing factories, weaving etc employs around 300.000 percent in and around Karur.

On the international textile map, Karur has become synonymous with hand-loom "made-ups" first as Tirupur in the hosiery product. The weaving industry came to Karur from Kerala and has earned a reputation for its high quality hand-loom products today. Hand-loom Exports from Karur began on a modest scale with just 15 exporters in 1975 and today, Karur has 1000s of exporters and the products are supplied to world leading chain stores like Walmart, Target, and IKEA etc.

The hand-loom products being exported have been broadly classified under three heads viz., kitchen, bathroom and bedroom furnishing items. Some of the hand-loom made-ups exported from Karur are Bedspreads, Sheet sets, Towels, Floor rugs, Tea towels, Napkins, Aprons, Kitchen towels, Pot holders, Plate mats, Bathmats, Tea mats, Curtains, Pillow, Quilt covers, shower curtains (above 500 classified varieties). The Karur Textile Manufacturers and Exporters Association (KTMEA) was primarily formed in the olden days to allocate yarn to handloom weavers through a system of quota administered by the government. Today, it acts as a dynamic body to help the home textile industry influence government policy for its development, upgrade technology, upgrade worker skills, and instill best practices amongst its members, provide common facility for testing, design centre, common hostel facility for workers, training institute for skilled and unskilled workers, testing laboratory etc. On the international textile map, Karur has become synonymous with handloom "made-ups" first as Tirupur in the hoisiery product. The weaving industry came to Karur from Kerala and has earned a reputation for its high quality handloom products today. Handloom Exports from Karur began on a modest scale with just 15 exporters in 1975 and today, Karur has 100s of exporters.

The handloom products being exported have been broadly classified under three heads -Kitchen, bathroom and bedroom furniture items. Some of the handloom made-ups exported from Karur are Bedspreads, Towels, Floor rugs, Tea towels, Napkins, Aprons, Kitchen towels, Pot holders Plate mats, Bathmats, Tea mats, Curtains, Pillow, Quilt covers, Shower curtains etc. The textile products are exported to Europe, U.S.A., Japan, Canada, Australia, Singapore, South Korea, South Africa and the Scandinavian countries among others. The handloom industry in Karur generates nearly an annual turn over of ₹1000 Crores with ₹.700 Crores of direct and indirect exports of textile goods. The development of export as a major trade has led to the enormous growth of other allied industries like handloom and power loom weaving units, dyeing and bleaching units, tailoring, packaging units etc. The handloom and its allied industries provide direct and indirect employment to over a lakh of people.

Exhibit 4 : Karur Textile Products

Bed Linen : Bedspreads, Cushion Covers, Quilt Covers, Duvets, Throws

Kitchen Linen : Kitchen Towels, Aprons, Oven Gloves, Potholders

PRODUCTION

The set of interrelated management activities, which are involved in manufacturing certain products is called as production management. In product manufacturing, the major inputs are capital, machines, equipments and tools and labour is required to operate and maintain the equipments. The materials input are the basis for the conversion process.

PRODUCTION PROCESS

A set of correlated interacting activities and resources that transform input elements into output elements. It refers to means, methods, and techniques of creating and / or adding the usage value of the goods and services by using the existing resources.

Figure 1: System Concept of Production

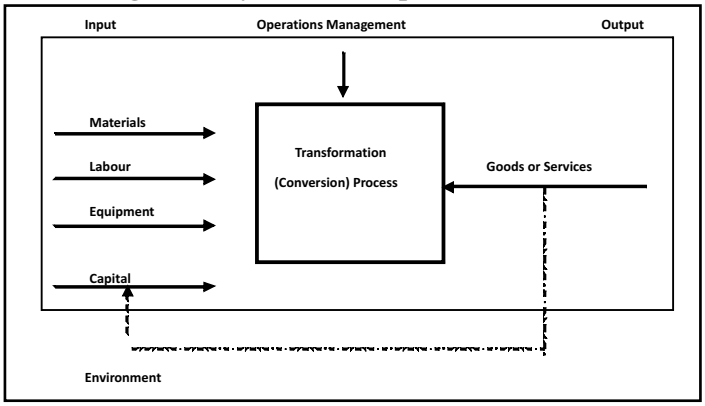
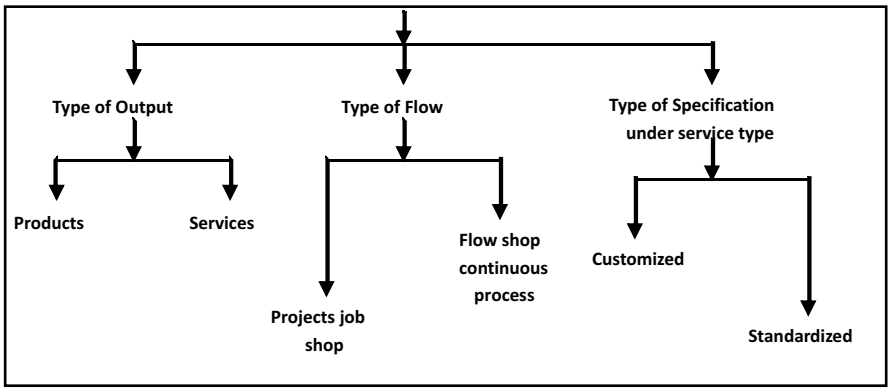


Figure 2: Classification of The Production System



PRODUCTION STRATEGIES

- Timely delivery of products / Services.
- Flexibility in meeting customers' demand in terms of change in product design, and production volume.
- Quality of products / services to meet customers' specifications.
- Cost effectiveness in terms of low price for its products / services relative to that of its competitors.

NEED FOR THE STUDY

This study aims at analyzing the problems of exporters that would be very much useful to make preventive measures. Identifying the own production problems helps the textile authority to provide valuable suggestions to the exporters' and manufacturers' too. This study analyzes problems related to the company for raising its standards.It helps the company to earn more profit and aim at less waste.

OBJECTIVES OF THE STUDY

- To analyze the problems in the production process.
- To assess the percentage of wastage in the production.
- To find out the deviation that occurs and evaluate necessary precaution to eliminate the waste.
- To understand the real problems(in the production area) faced by Karur Textile Industry.

SCOPE OF THE STUDY

- The purpose of the study is to analyze the production problems faced by the producers in the Textile Industry, Karur.
- This study is very much useful to know about the various causes that occur in the production department in Textile Industry in Karur District.

LIMITATIONS OF THE STUDY

- The respondents sometimes hesitate to give information about their company.
- The study has been targeted towards the employees of a sample size only 200 respondents. The findings are based on the opinion of the respondents.

RESEARCH METHODOLOGY

RESEARCH DESIGN

Descriptive research design is one that simply describes something such as demographic characteristics of textile industry. The descriptive study is typically concerned with determining the frequency with which something occurs.

METHODOLOGY

Both primary and secondary sources of data were utilized for the study. Primary data was collected by means of administering a questionnaire to the textile industry. Secondary data had been collected from various publications, periodicals, journals, etc.

SAMPLE DESIGN

For the purpose of the study, the data has been collected from different places of Karur District. 200 textile organizations were randomly selected for the study. In this method, the sampling units are chosen primarily in accordance with the investigators' convenience.

POPULATION

It is the aggregate of all elements, usually defined prior to the selection of the sample. It indicates finite sample of respondents. Reference to the Karur exporter's association “Membership exporter” is 133 in number and “Non Membership exporter" is termed to be above 500.

STATISTICAL TOOLS USED FOR STUDY

The research has the following tools during analysis:

a) Percentage Analysis b) Simple Ranking Method

a) PERCENTAGE ANALYSIS

As the data was presented in large numbers, it was not easy to interpret. To make interpretation easy, percentage analysis was used.

$$\text{Percentage Analysis} = \frac{\text{No. of Respondents X 100}}{\text{Sample Size}}$$

b) RANKING ANALYSIS

The Ranking analysis is a technique used for ranking a category of factors influenced over a particular statement. The analysis was used to know the level of opinion of the respondents over different aspect and their satisfaction level.

$$\text{Mean score} = \frac{\text{Total Score}}{\text{Sample Size}}$$

DATA ANALYSIS AND INTERPRETATION

FORM OF ORGANIZATION

Table 1 : Form of Organization

Form of Organization	No. of Respondents	%
Sales Proprietorship	48	24
Partnership	138	69
Joint Family	14	7
Total	**200**	**100**

It is interpreted that among 200 respondents, 69% of the respondents' form of organization is Parternership organisation, 24% of the respondents' form of organization is Sole Proprietorship organisation, and 7% of respondents' form of organization is Joint Family organisation.

AGE OF THE COMPANY

Table 2: Age of The Company

Age of the company	No. of Respondents	%
Upto 5 years	66	33
5-10 years	64	32
Above 10 years	70	35
Total	200	100

It is interpreted that among 200 respondents, 35% of the textile organizations have crossed above 10 years of experience. 33% of the textile organizations' experience in the textile industry is upto 5 years, and 32% of the respondents have crossed 5 years of experience but it is less than 10 years.

MODE OF EXPORT

Table 3: Mode of Export

Mode of Export	No. of Respondents	%
Direct	48	24
Export through agency	76	38
Both	76	38
Total	**200**	**100**

It is inferred from the table that among 200 respondents, 38% of the textile organizations are doing their export direct and through agency, 38% of the textile organizations are doing their business export through agency only, and 24% of the respondents prefer the direct export method.

NATURE OF BUSINESS

Table 4: Nature of Business

Nature of Business	No. of Respondents	%
Production and Export	170	85
Production Only	30	15
Total	**200**	**100**

It is evident from the above table that among 200 respondents, 85% of the respondents' nature of business is Production and Export, 15% of the respondents' nature of business is Production of textile products only.

METHOD OF USING MACHINES

Table 5 : Method of Using Machines

Method of Using Machines	No. of Respondents	%
Own Machines	44	22
Outsourcing	156	78
Total	**200**	**100**

The table indicates that 78% of respondents are using the machines through outsourcing, and 22% of the respondents are using their own machines for the production.

PROBLEMS FACED DURING INSPECTION

Table 6 : Problems Faced During Inspection

Problems During Inspection	No. Of Respondents	%
Rejection	50	25
Reprocessing	70	35
Modification	80	40
Total	**200**	**100**

Among 200 respondents, 40% of the respondents are facing modification problems in their product design during the inspection time, 35% of the respondents are reprocessing their production, and 25% of the respondents are rejecting the products which could not meet the quality standards during the inspection.

PERCENTAGE OF WASTAGE

Table 7: Percentage of Waste

Percentage of Wastage	No. of Respondents	%
Below 5%	76	38
6-10%	68	34
11% - 15%	54	27
16% - 20%	2	1
Total	**200**	**100**

It is stated that among 200 respondents, 38% of respondents are meeting below 5% of wastage during the production process, 34% of the respondents are meeting 6-10% of wastage, 27% of the respondents are facing 11% - 15% of the wastage, and just 1% of respondents are meeting 16% - 20% of wastage in their production process.

TYPE OF MAINTENANCE

Table 8 : Type of Maintenance

Type of Maintenance	No. of Respondents	%
Preventive Maintenance	120	60
Breakdown Maintenance	80	40
Total	**200**	**100**

Among 200 respondents, 60% of the respondents are using preventive maintenance, 40% of respondents are using breakdown maintenance for improving quality of the products and also to eliminate the production problems.

PROBLEMS OF RAW COTTON

Table 9 : Problems of Raw Cotton

Particulars	I	II	III	IV	V	Total Score	Mean Score	Rank
Low Quality of Seed / Cotton	40	224	84	152	32	532	2.66	III
High Price	880	48	24	8	0	960	4.80	I
Shortage of Cotton	40	264	144	84	36	568	2.84	II
Depending upon output type	30	104	186	92	60	472	2.36	V
Paying heavy advance to weavers	20	160	162	64	70	476	2.38	IV

It is clear from the above table that high price factor is the foremost influencing factor for the exporters in buying of raw cotton. The factor- shortage of cotton secured II rank among the respondents. Low quality of seed/cotton secured III rank, and the factor depending upon the output type occupied last position as ranked by the respondents regarding factors in buying of raw cotton.

PROBLEMS FACED WHILE WEAVING

Table 10 : Problems of Weaving

Problems	I	II	III	IV	Total Score	Mean Score	Rank
Mending	368	162	72	18	620	3.10	I
Dust Problem	80	60	132	94	366	1.83	IV
Strains	72	216	148	36	472	2.36	III
Colour Problem	280	162	48	52	542	2.71	II

The above table is indicating that the mending factor is the foremost influencing factor for exporters in problem in weaving. The color problem secured II rank among the respondents. Strains secured the III rank and the dust problem occupied the last position among the weaving problems.

PROBLEMS FACED IN PRODUCING GOODS

The Table 11 shown that the weaving factor is the foremost problem in producing the goods, the printing problem secured the II rank among the respondents. Stitching secured the III rank and the packing problem occupied the last position among the identified problems in producing goods.

PROBLEMS IN TYPE OF WASTES DURING PRODUCTION

It is stated from the Table 11 that the over production factor is the foremost wastage problem occurring during production. Making defective products secured the II rank and the motions occupied the last position as ranked by the respondents regarding factors of waste during production.

Table 11: Problems In Producing Goods

Particulars	I	II	III	IV	V	Total Score	Mean Score	Rank
Purchase	140	80	126	60	60	466	2.33	IV
Weaving	360	120	66	36	32	614	3.07	I
Printing	160	240	90	104	52	646	3.23	II
Stitching	120	160	138	80	56	554	2.77	III
Packing	20	200	180	120	0	520	2.60	V

Table 12 : Problems In Type Of Wastes During Production

PROBLEMS	I	II	III	IV	V	VI	VII	Total Score	Mean Score	Rank
Over production	238	456	190	80	60	8	8	1040	5.20	I
Waiting	210	72	60	96	138	56	48	680	3.40	VI
Transportation	154	156	100	136	48	52	56	702	3.51	V
Processing itself	210	144	340	144	72	12	12	934	4.67	III
Stock	84	144	160	208	138	44	12	790	3.95	IV
Motions	14	24	50	96	60	200	40	484	2.42	VII
Making defective products	532	204	100	40	84	20	24	1004	5.02	II

PRECAUTIONS TAKEN TO ELIMINATE THE WASTES

Table 13 : Precautions Taken To Eliminate The Wastes

PRECAUTIONS	I	II	III	IV	V	Total	Mean Score	Rank
Good house keeping	180	344	138	36	14	712	3.56	II
Proper Material handling	190	240	222	28	14	694	3.47	III
Clearness	100	16	114	164	56	450	2.25	IV
Visual control	30	8	48	128	102	316	1.58	V
Proper training to employees	500	192	78	44	4	818	4.09	I

Most of the respondents have given I rank to proper training for employees for eliminating the wastage in the production process. Good house keeping secured II rank among the respondents, proper material handling secured the III rank, and the visual control is given the last position by the respondents regarding precautions used for eliminating the wastage.

FINDINGS

The cotton textile industry is one of the traditional and largest industries in India. The cotton textile industry has immense potential to earn foreign exchange and provide gainful employment for millions of rural and urban people. In addition to this, the textile industry faces some problems in producing goods at the time of production. This study indicates the problems in buying of raw cotton, weaving, producing goods and analyzing the suggestions given by the exporters in Karur. Most of the textile organizations in Karur are partnership based organizations, and they have mostly completed 10 years of experience. Most of them prefer export through agency mode. Karur textile exporters are mostly using the machines through outsourcing for their production and modifying their production process and product designs during the inspection. They are using preventive maintenance to improve the quality and process that results in reducing the wastage. From this study, most of the respondents have given more importance to proper training of employees for eliminating the waste.

RECOMMENDATIONS

Yarn prices should be reduced to meet client requirements. If the yarn prices continue to increase, definitely the cost of production will increase very rapidly. So, the government should take effective actions and maintain adequate stock of raw material to avoid the problems in the textile production process. The government should fix the raw material cost for annual consumption or as per the availability. The textile organizations should provide proper guidance and adequate training to all types of employees for improving their contributions to reduce the production problems. The production department should take sincere measures to reduce the waste and make use of wastage in producing useful products. Infrastructure plays an essential part in the production process; the textile organizations should improve their infrastructure facilities for eliminating the production problems.

CONCLUSION

The production process is one of the core components that should be effectively maintained by the exporter. The production problems are to be solved systematically by the exporter and the measures to reduce the waste should be implemented and executed in the organization. The Government should take necessary steps to overcome the problems of the exporters during the production process.

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