An Analytical Study on Issues of Handloom Industry in Undivided State of Andhra Pradesh

Dr. A. Kalyani, Asst. Professor,
Department of Business Management,
St. Martin's Engineering College, Hyderabad.

V. Rohitha, Student of Business Management, Dept. of Business Management,
Malla Reddy College of Engineering, Hyderabad.

M. Pragnya Bharathi, Student of Business Management, Dept. of Business Management,
Malla Reddy College of Engineering, Hyderabad.

Abstract

The aim of the study is to identify the issues faced by the handloom industry. The study draws the attention of master weavers from the undivided state of Andhra Pradesh, especially four districts namely, Nalgonda, Guntur, Krishna and Prakasam districts. This study adopted the quantitative methodology, where 365master weavers were selected through purposive sampling technique. The study findings reveal that the handloom industry in this district is unorganized. This reflects that there are some problems faced by the weavers. This study has limitations as it was conducted in four districts of the undivided state of Andhra Pradesh only. There may be other issues related to supply chain management practices of weavers in other districts. Therefore, the study inference can't be counted as general. Therefore, this study gives scope for conducting further research in future.

Keywords: Handloom industry, Issues raw material, Finance, Technology, Supply chain.

Introduction

This study attempts to analyse the issues in Indian handloom industry. In the last 100 years, the Handloom industry one of the ancient industries of India has faced a lot of changes in the form of mechanization, fibres used, refined methods of manufacturing and designing etc[1]. The Textile Industry occupies a vital place in the Indian economy and contributes substantially to its export earnings. Textiles exports represent nearly "30% of the country's total exports. It has a high weightage of over 20% in the National production. It provides direct employment to over 15 million persons in the mill, power loom and handloom sectors"[2].

The structure of the Indian textile and garment industry is full of variability having the players at every level of their supply chain with a lot of structural, operational and performance differences[3]. The supply chain consists of all the activities associated with the flow and transformation of goods from the raw material stage, through to the end user, as well as the associated information flow.

However, the supply chain management process involved in handloom sector is haphazard, i.e. there is lack adequate mechanism to procure the raw product and produce them, then to sell the end products to the consumer. Given this backdrop, the study has made an attempt to assess the issues faced by the handloom industry from the perspective of India as well as one district of Telangana.

Review of literature

Overview of Indian Handlooms

Of all the arts and crafts in India, hand-woven textiles are probably the oldest and most widely recognized. Handloom industry is the second largest economic activity in India providing direct and indirect employment to more than 30 lakh weavers. Handlooms contribute to nearly 23% of cloth production and it plays a major role in the Indian economy in view of its significant contribution to GDP. However, with the increasing onslaught of changes in fashion, the handloom sector has been suffering significantly in terms of technology, productivity and accessibility to market. Since 1960 and up to 95, the share of handloom production in the total textile production remained more or less constant at about 23%. "However, after 1995, it started declining and is pegged at 13% during 2004-05. The tradition of handlooms is so strong that the entire country is dotted with places famous for some or the other handloom product"[4].

Handloom Industry in Undivided State of Andhra Pradesh

Handloom sector plays an important role in state economy. Weaving is the basic process among the various manufacturing stages of handloom clothes.

Handloom Industry in Nalgonda District

Nalgonda is salient for nurturing legacies such as the handloom industry at Pochampally. A large population of ikat weavers lives in Koyalagudem, Pochampally, Puttapaka and Chautuppal in Nalgonda district. The mentioned villages specialize in weaving the cotton textiles for apparel fabrics, furnishings, and sarees while silk ikats are woven in Pochampally. Cotton is cultivated in Mahaboobnagar district[5].

Ikat sarees are made in the undivided state of Andhra Pradesh's Nalgonda District. Besides Nalgonda town, these sarees are also woven in Guntur and Hyderabad districts. A peculiar weaving style referred to as Pagdu-bandhu and Chitku are also used and Katakbuti is created by using tie and dye[6].

Handloom Industry in Prakasam District

Chirala region is one of the important places of weaving in Prakasam district. Moreover, within an 8-10 kilometer radius, the following towns and villages are noted for handloom weaving like: Ipurupalem, Perala, Chirala, Ramakrishnapuram, Hastinapuram, Jandrapeta, Amodagiripatnam, Dantampeta, Vetapalem, Desaipeta, Ravoorapeta and Pandilapalli. These locations have 16,000 working looms, reputed to be one of the largest concentrations in the state.

However, weavers often articulate their concerns in terms of wages and the availability of work. Again, it is necessary to place these perceptions within a larger economic context.

There have been crises in the availability of raw materials, especially yarn, are one such factor. Further, the phenomenal increase in yarn prices has been a major blow to handloom weavers. Therefore, the position of master weavers was strengthened during a severe drought during 1957-62. It has been observed that majority of the weavers work for master weavers, most in their own houses, but there are various weaving sheds with appalling conditions[7].

Handloom Industry in Guntur District

Guntur district has been part of the traditional weaving belt of Andhra Pradesh. Addepalli, Bhattiprolu, Ilavaram, Kanagala, K.R.Palem, Konetipuram, Mangalagiri, Nidubrolu, Peteru, Rajavolu, Repalle, Sattenapalli and Tenali are some of the main weaving centers. Weaving under the co-operative structure in is not up to the mark as there is a report of a decline in production under co-operatives since 1980-81[8]. However, in Guntur district, master weavers are doing well especially in Mangalagiri, where there is heavy demand for the products.

The statistics report of this district reflects that there are 75 medium enterprises having more than 12000 spindles are functional. In addition, there are 20 small enterprises comprising 750 manual ginning and 20 automated ginning. The turnover of functional units in the cluster is 50000 million. As far as power loom sector providing employment is concerned, 19950 are employed in spinning mills and 46200 are employed in ginning mills. However, there are issues faced by the handloom industry in this area are in terms of high cost of energy, low level of automation, the absence of technical business development service providers, inadequate manpower, lack of standard quality measures, and high input costs. In addition, there are problems in availing bank credit and low level of enterprise social responsibility. This indicates various issues at each level of supply chain management[9].

Handloom Industry in Krishna District

Pedana, Kappaladoddi, Polavaram, Machilipatnam, Challapalli are major cluster areas involving handloom industry in Krishna district. The problems faced by the Handloom Weavers Co-operative Societies in this district are inadequate activation of looms, political interference, high production cost, lack of adequate marketing facilities, improper implementation of development schemes, misuse of funds and heavy dues from the Apex Society (APCO). Another study in this regard revealed the lapses of the Government in respect of non-compliance with the rule of hank yarn to be produced by the spinning mills and the supply of yarn by the NHDC. This was the major reason for most of the weavers and master weavers to buy the required yarn from the mills. Moreover, there is no adequate mechanism for the regulation of prices of yarn, dyes and other chemicals[10]. All these concerns indicate about supply chain management issues being faced by the master weavers of Krishna district.

There are a few studies conducted in the past that have been reviewed as in the following:

The issue of easy sourcing of raw materials (both yarn and dyes & chemicals) at reasonable prices has been a key problem across centers of handloom production. Cotton yarn is the major input for handloom weaving. In recent years, there has been a phenomenal rise in the prices of yarn. The main reason for this is the sharp increase in the prices of cotton.

Supplementary reasons include lack of proper delivery systems, closure of spinning mills in some handloom producing States, and non- fulfillment of the Hank Yarn obligation by the organized mill sector.The dearth of innovation and limited dynamism is associated with the handloom sector, particularly in the field of marketing. One major factor impeding the expansion and growth of this sector is the lack of adequate investment, participation, and stake-holding by the private sector, mainly in marketing and supply chain[11].

"Irregular supply of yarn is a major hurdle of the handloom industry and the like in the cost of the raw material results in many problems regarding employment"[12].

Lack of awareness in artisans, quality accreditation, finance, intellectual property rights and branding, global/national ethnic appeal, lack of new talent and unhealthy working practices are the main issues faced by the handloom industry. Marketing is the weakest link in the development of handlooms which is manipulated according to the convenience of the middlemen[13].

The handloom sector is beset with manifold problems such as obsolete technologies, unorganized production system, low productivity, inadequate working capital, conventional product range, weak marketing link, overall stagnation of production and sales and, above all, competition from power loom and mill sector[14].

The problems of shortage of raw materials, lack of proper financing and marketing insufficiency of the finished products as well as competition with other sectors. The major problem faced by handloom weavers is the fluctuation in the price of hank yarn[15].

The handloom sector is the strongest backward linkage for the RMG sector regarding eco-friendly textile products[16].

In the present context of globalization and rapid technological developments, handloom sector is beset with many issues and challenges, which mainly focus on procurement of yarn, production, and distribution[17].

"Handloom products are best known for their eco-friendly nature. The world is solely concentrating on 'green technology', therefore 'green products' and 'social business concept' to save the struggling world, where 'Handloom technology' could be best 'green technology' to fulfill basic needs of human i.e., clothing. The Handloom sector has a great deal of potential for further value addition in the RMG sector for further meeting local needs of fabrics and expanding sales of its products directly in foreign countries. This sector is an important channel for balanced sustainable economic growth"[18].

To protect the weavers' lively hood we should ensure that weaving as a profession remains viable for those who choose to continue with it. This can be done by providing market linkages, removing middle-men from the supply chain, improving the quality of the end product, innovating on designs[19].

The major opportunities like rising power costs, rising production cost for non-handloom textile products, slowdown in imports, esp. fabric and clothes, slowdown in raw material exports, esp. cotton and cotton yarn, environmentally-acceptable production methods, skilled labor at low wages and growing market demand, no major investments in infrastructure is required. Improved levels of raw material and working capital are in fact critical inputs that determine the growth potential in the longer term[20].

An analysis of the products show that weavers are busy weaving age-old patterns, they lack skill in designing. As the products are open for the national and international market, they need to have variations in designs and vibrancy in colors. There is an urgent need to work on the improvement of the tools and infrastructure provided to the weavers[21].

The inheritance of skills and capacities to the young, next generation weavers, which is beyond the realm and reach of any modern training and educational institution is the greatest advantage of the handloom sector. And one biggest advantage of this sector at this epoch is; Handlooms are Eco-friendly; without any energy consumption. A handloom is a self-governing technology. The study finds out the availability of raw material such as yarn, dyes and dye stuffs is a major problem. Apart from this, there is a problem in introducing innovative designs as per the customer expectations and market trends to attract new customers towards handloom products. By incorporating changes in the supply chain problems like raw material procurement, technological problems in processing, logistics, stock handling and marketing problems by applying statistical and stochastic models to solve such problems and a major problem faced by handloom weavers is the fluctuation in the price of hank yarn. Marketing is a vital factor for the survival and growth of the handloom industry [1].

The problems faced by the weavers are in regard to the raw materials, labor problems, marketing of the handloom cloth, lack of financial assistance and how the power looms and mill sector are dominating the handlooms[22].

The handloom sector is facing a crisis, rising input costs, production costs, and falling prices, combined with competition from cheaper factory made goods are causing many weavers to leave the sector in search of other jobs[23].

Access to raw material, design improvements, the market for products and patenting designs/varieties have to be paid immediate attention[24].

Objective

To identify the issues faced by the Handloom industry in the undivided state of Andhra Pradesh.

Methodology

The study is conducted in four districts of undivided state of Andhra Pradesh, namely Nalgonda, Guntur, Krishna and Prakasam where the concentration of master weavers is more. The data used is primary as well as secondary. Primary data was collected using questionnaire and the secondary data using the books, research papers, web sites and government records.

The study is descriptive and explorative. First, the questionnaire is designed using the secondary source (literature) and the same was confirmed by discussing with the experts and the officials from the same field before going for the final study. The items are constructed using Likert Five-point scale (1Strongly Disagree -5 Strongly Agree).The study used SPSS 21.0 version for windows, MS-Excel for analyzing the data. Correlation and Factor Analysis is employed to analyze the data.

Results

A preliminary analysis of the data is analyzed using item statistics: mean and standard deviation and Cronbach's alpha. It is found that all the attributes have a standard deviation less than 2.0 which indicates that all the respondents have a relatively same level of agreement on the supply chain management practices and production performance. Cronbach's alpha coefficient and critical analysis of correlation of the data matrix are computed to ensure the usage of factor analysis. 2 items have been discarded due to cross loadings[25].

The reliability test was run to determine the internal consistency of the scale used. The Cronbach's alpha (reliability) is 0.863, which indicates internal consistency among all the items, as the minimum alpha value of 0.70 is acceptable for using the scale for further analysis.

Sample Adequacy (KMO and Bartlett's test of Sphericity)

A sample size of 365 is used to perform the factor analysis. This sample size meets the minimum requirement of five observations per variable[25]. The total variables in the study are 25 hence the minimum sample size requirement is 125. However, the present sample (365) is more than the minimum requirement hence, sufficient to carry out factor analysis. The other test to check the sample adequacy is Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy statistic. It indicates the proportion of variance in variables that might be caused by underlying factors. The KMO index ranges from 0 to 1, reaching 1 when each variable is perfectly predicted without error by the other variables.

The KMO value must exceed 0.50 for both the overall fit and each individual variable, and the value more than 0.8 is considered to be good[25]. The KMO value for the study is 0.800; hence, the sample size is adequate to perform the exploratory factor analysis. Bartlett's measure tests the null hypothesis that the original correlation matrix is an identity matrix, thus there are as many factors as the items, and thus for doing the factor analysis, the test should be significant[26]. For this data, Bartlett's test is highly significant (p =0.000), and therefore, factor analysis is appropriate. The results of KMO and Bartlett's test are shown in Table 1.

TABLE 1
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.800
Bartlett's Test of Sphericity	Approx. Chi-Square	6322.272
	Df	253
	Sig.	.000

Factor extraction

Principal Axis Factoring with VARIMAX rotation has resulted in four factors, which were the four constructs taken initially at the time of scale development, thus it helped to establish the construct validity.

As there are four factors the scale should be considered as multidimensional scale. Total cumulative variance explained these four factors is 57.589 per cent. Thus after the exploratory factor analysis, the final scale comprised of 23 items which were grouped under the following constructs, include, 'Finance' (eight items), 'procurement' (five items), 'production' (four items) and 'human resources' (six items), shown in Table 2.

TABLE 2

Rotated Factor Matrix[a]

	Factor			
	1	2	3	4
I20	.920			
I19	.881			
I21	.870			
I22	.816			
I18	.806			
I17	.780			
I16	.622			
I23	.584			
I4		.923		
I2		.815		
I3		.799		
I1		.588		
I5		.540		
I14			.889	
I12			.756	
I15			.624	
I13			.613	
I10				.751
I24				.689
I8				.560
I11				.540
I25				.513
I9				.418

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.[a]
a. Rotation converged in 5 iterations.

Eigen value which represented the amount of variance accounted for by a factor, and the value more than 1 is considered significant; per cent of variance explained represents how much variance is explained by the each factor, here 23.511, 13.332, 10.449 and 10.297per cent of total variance explained by the four factors namely finance, procurement, production and human resources respectively.

Reliability Analysis

Reliability refers to the extent to which a scale produces consistent results if repeated measurements are made[27]. The internal consistency of scale has been examined through Cronbach's alpha, which has a high value of 0.863, thus showing the reliability of the scale. The value of Cronbach's alpha if an item is deleted has also been examined to know the impact of the items on overall alpha value.

Discussion

By looking at the results it can be concluded that there is a major problem with the lead-times of supply of rawmaterials, high-interest rate to get the loans followed by too many formalities to be followed to get the loans, the subsidy is not available to the master weavers and so on.

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Appendix I

TABLE 3
Questionnaire

S. No.	Item	Item
1	I1	Continuous increase in the cost of raw material
2	I2	The quantity supply of raw material is not adequate
3	I3	The quality of raw materials is not up to the mark
4	I4	High lead times in supply of raw material
5	I5	Prevalence of middlemen in the supply of raw material causing short supplies and price fluctuations
6	I6	Absence of credit facility in case of public sector units Ex. NHDC
7	I7	Non-functioning of yarn depots opened under clusters through NHDC
8	I8	Degrading health and energies of Handloom weavers due to occupational
9	I9	Existence of un trained Handloom weavers is more
10	I10	Standards of life of weavers is degenerating
11	I11	Welfare measures from government side is not adequate
12	I12	Traditional and dated back looms and accessories causing low productivity
13	I13	There is a lack of innovative products in Handloom sector
14	I14	Existence of seasonal unemployment causing loom idleness
15	I15	There is a low level of value addition in the post production of Handloom
16	I16	Poor financial support from the banking sector towards Handloom industry
17	I17	Security to be furnished to get the loans
18	I18	Need to have influence to get the loans
19	I19	Too many formalities have to be followed to get the loans
20	I20	High rate of interest causing capital more costly
21	I21	Interest subsidy by the government is not available to the master weavers
22	I22	There is a compulsion to depend on private loans and advances
23	I23	Problem with the delayed payments by the marketing agencies like APCO, Handloom House, Lepakshi ... etc.
24	I24	Consumers are shifting from handloom products to others
25	I25	Younger generations are not willing to continue in this field