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Problems and Prospects of Silk Weavers with Emerging Technology - in Reference to Kancheepuram Town of Tamilnadu

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Abstract:

This research paper aims to examine the prospects and problems of silk weavers of Kancheepuram, Tamilnadu. This study also examines the various services offered to the silk weavers, the problems encountered by the silk weavers and the various suggestions offered to remove bottlenecks and expectations and services offered. This study emphasizes weavers problems like lack of continuous work, power holidays, lack of expansion and modernization etc. The study also focusses on the prospects and problems arising out of emerging technological developments. To overcome the problems faced, the study would also offer certain suggestions to make use of technology for better prosperity. It is estimated that due to increase in technological evolutions in the textile industries, silk weavers, being cottage industries, there is wide gap because of the prevailing market conditions.

Key words: Silk, Weavers, Handlooms, Technology

1. Introduction

India is an agriculture based country. Most of the people are involved in MSMEs for their livelihood. About ten million people depend on handloom industry. It is estimated that about 38 lakhs Handlooms industries account for livelihood of over two crore people spread across all over India. Out of these 38 lakh handlooms, about thirty per cent is covered by the cooperative societies of the total Handlooms in India among which 72% are engaged in cotton weaving and about 16% are involved in silk weaving.

2. Literature Review:

Directorate of Handloom and Textiles, Handlooms Survey, Tamilnadu studied the problems of handloom industry and emphasized the need to achieve maximum efficiency in production and marketing of handloom products. [1]

V V Padmaja Veturi in "Green Entrepreneurship – An Overview" emphasized the need of green initiatives in various sectors and focussed on the need of green entrepreneurship, on a global canvas. [2]

Expert Committee on Handloom Industry, Government of Tamilnadu surveyed and identified various problems faced by the weavers and offered certain suggestions to enhance productivity, and cost reduction. [3]

V V Padmaja Veturi in a recent study "Integrated Marketing Communication – The New Generation Approach stressed the need of adopting various marketing strategies, globally, in order to attract global customers. [4]

A High-Powered Study Team, Ministry of Commerce Government of India showed that Handloom sector remained weak among MSMEs. [5]

V V Padmaja Veturi in "Entrepreneurship Development" – Future Trends in Commerce emphasized that weaving community across India plays a crucial role with regard to entrepreneurship development in commerce and industry. [6]

Santhoshkumar, et. al. in "Employee Involvement and Engagement in Automobile Sector in Chennai City" revealed the need of various methods for employees' engagement. [7].

V V Padmaja Veturi in an Article, "Uneducated Management Gurus" showcased the marketing strategies of *Dabbawallahs* of Mumbai are considered as "Uneducated Management Gurus" who ensured 99% performance and 100% customer satisfaction in their supply chain management [8].

Rajula Devi, A.K., in "Problems Faced by Handloom Sector, Tamil Nādu" has analysed the problems faced by the weavers while competing with other small scale sectors and significance for introduction of new methods in weaving sector. [9].

Padmaja, Veturi VV. asserted in "Indian Origin Banks' Global Operations: Pre-Merger Performance Analysis" that Indian industries like textile industries played a vital role in expanding business operations globally.[10].

Thanigaiyarasu, R. et. al., in their study "Adoption of HR Strategies and Its Influence on Employee Retention in Service Sector with Special Reference to Chennai City" asseverated organizational commitments in adopting various polices with regard to retention of human resources plays a developmental role in productivity. [11].

Padmaja, Veturi VV., in her thesis "Performance of Indian Public & Private Sector Banks Operating Overseas—A Comparative Analysis" focused on the problems and prospects faced by Indian industries due to lack of exposure in global market. [12].

Veturi, Padmaja VV., in "Trends In Performance Of Indian Banks Overseas-Analysis On Select Indian Banks" affirmed that the growth and development of Indian banks operating overseas reflect the dependency over global exports involving several challenges of various industries. [13].

3. Objective:

This study aims to investigate into the prospects of silk weavers and problems encountered by silk weavers in Kancheepuram and offer certain suggestions in order to remove gaps between the prevailing conditions and expectations amid technology upgradations.

4. Methodology

The present study is a humble attempt to bring problems being faced by the weavers of silk sarees and related products in Kancheepuram. Since Kancheepuram is a significant geographical location for the manufacturing silk and silk products, the present location has been chosen for the study, in which a sample size of about a hundred silk weavers has been taken. A structured questionnaire was used to gather information from over 100 respondents in order to examine the potentials and opportunities of Silk Weavers with the emerging technology and also identify the problems faced by the silk weavers in certain areas and to suggest different ways and means in the production and marketing cycles wherein modern technology could be adopted for better productivity, quality and marketing.

Secondary data has been collected from various cooperative societies, journals, magazines, newspapers, annual reports of cooperative banks, etc.

5. Analysis and Interpretation:

The study used KS Test for analysis.

KS test : D = (O - E)

D - indicates Analyzed Component

O - indicates Aggregate perceived portion.

E - indicates to Aggregate anticipated portion.

After analysis perceived portion, Aggregate perceived portion (O) is Analyzed. On the basis of anticipated portion, Aggregate anticipated portion (E) is Analyzed. Total five opinion components in column, 0.20 is assumed as anticipated portion. For each gradation, the difference between Aggregate perceived portion and Aggregate anticipated portion is identified as Analyzed Component (D). The largest difference in this is treated as Analyzed Component. If the Analyzed Component is greater than the table Component, null hypothesis is rejected., if the Analyzed Component is less than the table Component, the null hypothesis is accepted.

5.1 Deficiency in technological development

The silk units in Kancheepuram are predominantly handloom based which means that the process of weaving is done manually, involving not much use of modern technology. The weavers go through lot of ordeals in the form of physical strain during weaving work and many difficulties are faced by the weavers to get the expected output. The present study is to study to identify whether in Deficiency in Technological development is the hindrances. To evaluate this aspect, an in-depth After analysis, result is given in table 5.1(a) & 5.1(b).

Table 5.1(a)

Response given by Silk workers on 'Deficiency in technological development'

Sl.No.	Response	No. of Responded Weavers	
1	Strongly Accepted	11	
2	Accepted	36	
3	Neither Accept nor Reject	39	
4	Rejected	08	
5	Strongly Rejected	06	
	Total	100	

Source : Questionnaire



Fig. 5.1(a): Response of Silk weavers on 'Deficiency in technological development'

Table: 5.1(b) Analysis on 'Deficiency in technological development'

Response	Observa- tion No.	perceived portion	Aggregate perceived portion 'O'	Anticipated portion.	Aggregate Anticipated portion 'E'	D = (O-E)
Strongly Accepted	11	0.11	0.11	0.2	0.2	(-)0.09
Accepted	36	0.36	0.47	0.2	0.4	0.07
Neither Accept nor Reject	39	0.39	0.86	0.2	0.6	0.26
Rejected	08	0.08	0.94	0.2	0.8	0.14
Strongly Rejected	06	0.06	1.00	0.2	1.00	0
Total	100					

Source: Questionnaire

Analyzed Component. = 0.26

Value at 95% confidence level = 1.36/V100

= 0.0136

As the Analyzed Component is greater than the table Component, the null hypothesis is rejected which proves that there is a significant difference among the responses of the silk weavers on Deficiency in technological development.

5.2 Inadequate work for entire year

There is a seasonal demand for silk textiles more specifically especially during festivities and wedding seasons and the demand is volatile. These factors mostly influence the workers' income.

Table 5.2(a): Response of Silk weavers on 'Inadequate work for entire year'

Sl.No.	Response	No. of Respondents
1	Strongly Accepted	16
2	Accepted	25
3	Neither Accept nor Reject	40
4	Rejected	16
5	Strongly Rejected	03
	Total	100

Source: Questionnaire

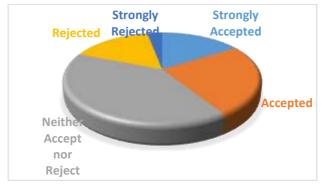


Fig. 2: Response of Silk weavers on 'Inadequate work for entire year'

Table 5.2(b): Analysis on 'Inadequate work for entire year'

Response	Observa- tion No.	perceived portion	Aggregate perceived portion 'O'	Anticipated portion	Aggregate Anticipated portion 'E'	D = (O - E)
Strongly Accepted	16	0.16	0.16	0.2	0.2	(-)0.04
Accepted	25	0.25	0.41	0.2	0.4	0.01
Neither Accept nor Reject	40	0.40	0.81	0.2	0.6	0.21
Rejected	16	0.16	0.97	0.2	0.8	0.17
Strongly Rejected	03	0.03	1.00	0.2	1.00	0
Total	100					

Source: Questionnaire

Analyzed Component = 0.21

Value at 95% confidence level = 1.36/V100 = 0.0136

As the Analyzed Component is greater than the table Component, the null hypothesis is rejected which proves that there is a significant difference among the responses of the silk weavers on 'Inadequate work for entire year'.

5.3 Deficiency of Infrastructure

The study reveals that majority of silk weaving units of Kancheepuram, the existing infrastructure seems to be obsolete. An attempt was made to know the response of weavers about the Deficiency infrastructure facilities and the result is given in the table below.

Table 5.3(a): Response of Silk weavers on 'Deficiency In Infrastructural Facilities'

Sl.No.	Response	No. of Respondents
1	Strongly Accepted	07
2	Accepted	30
3	Neither Accept nor Reject	43
4	Rejected	19
5	Strongly Rejected	01
	Total	100

Source: Questionnaire



Fig. 5.3(a): Response of Silk weavers on 'Deficiency Infrastructural Facilities'

Table 5.3(b): Analysis on 'Deficiency in Infrastructural Facilities'

Response	Observation No.	perceived portion	Aggregate perceived portion (O)	Anticipated portion.	Aggregate Anticipated portion (E)	D = (O-E)
Strongly Accepted	07	0.07	0.07	0.2	0.2	(-)0.13
Accepted	30	0.30	0.37	0.2	0.4	0.03
Neither Accept nor Reject	43	0.43	0.80	0.2	0.6	0.20
Rejected	19	0.19	0.99	0.2	0.8	0.19
Strongly Rejected	01	0.01	1.00	0.2	1.00	0
Total	100					

Source: Questionnaire

Analysed Component = 0.20

Value at 95% confidence level = 1.36/V100 = 0.0136.

As the Analysed Component is greater than the table Component, the null hypothesis is rejected which proves that there is a significant difference among the responses of the silk weavers on Deficiency in Infrastructural Facilities.

5.4 Unfamiliarity about Training Programmes

The silk workers in Kancheepuram normally indulge in traditional methods which has been an age-old convention, in which the weavers possess expertise in various techniques of weaving. In the marathon race of fashion, the savor of the users also vicissitudes rapidly. There is a considerable need for the weavers to update themselves with the emerging technologies and also to adopt various strategies like Greenhouse production techniques and green marketing for which vast training programmes should be conducted. The training modules should be focused on Green Entrepreneurship and various green marketing strategies might also include integrated marketing. These measures would definitely reduce lesser carbon emissions, thus ensure less production costs.

Table 5.4(a): Response of Silk weavers on 'Unfamiliarity about Training Programmes'

Sl. No.	Response	No. of Respondents
1	Strongly Accepted	12
2	Accepted	19
3	Neither Accept nor Reject	42
4	Rejected	25
5	Strongly Rejected	02
	Total	100

Source: Questionnaire

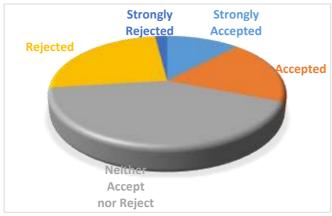


Fig. 5.4(a): Response of Silk weavers on 'Unfamiliarity about Training Programmes'

Observat perceived Anticipated Aggregate $\mathbf{D} = (\mathbf{O} - \mathbf{E})$ Response Aggregate perceived ion No. portion Anticipated portion. portion 'O' portion 'E' 0.2 Strongly 12 0.12 0.12 0.2 (-)0.08Accepted Accepted 19 0.19 0.31 0.2 0.4 (-)0.090.42 0.73 0.2 0.6 0.13 Neither 42 Accept nor Reject Rejected 25 0.25 0.98 0.2 0.8 0.18 02 0.02 1.00 0.2 1.00 **Strongly** 0 Rejected 100 Total

Table 5.4(b): Analysis on 'Unfamiliarity about Training Programmes'

Source: Questionnaire

Analysed Component. = 0.18

Value at 95% confidence level = 1.36/V100 = 0.0136

As the Analysed Component is greater than the table Component, the null hypothesis is rejected which proves that there is a significant difference among the responses of the silk weavers on Unfamiliarity about Training Programmes.

6. Conclusion:

From the above analysis, it is identified that the problems being faced by the silk weavers in Kancheepuram are - Deficiency Technological Modernization, Inadequate work for entire year, Deficiency in Infrastructure facilities, Unfamiliarity about Training Programmes. Most of the weaver community members are 'uneducated management gurus' who are entrepreneurs on one side but they lack certain knowledge, when it comes to technology. They face many problems in knowing the modem techniques in weaving. Hence, it is essential to create awareness among the weaver members by implementing modern technology embedded with 'green marketing strategies'. The weavers of Kancheepuram lack continuous work for entire year due to seasonal demand of the silk fabrics. To solve this problem, the weavers community should develop integrated marketing communication strategies like advertising, sales promotion methods, etc. to explore more global market which would enable the weavers to have work for entire year.

The Silk Weavers of Kancheepuram need to upgrade their production and marketing strategies through web marketing, provide popup publicities in various websites which could attract various potential customers. This would automatically reach the customers worldwide in marketing their products.

7. References:

- 1. Report of the Directorate of Handloom and Textiles, Handlooms Survey, Tamilnadu, pp. 20-26. (1979).
- 2. V V Padmaja Veturi : "Green Entrepreneurship An Overview" Rabindra Bharati Journal of Philosophy Vol.24, Issue 5. (2023).
- 3. Report of the Expert Committee on Handloom Industry, Government of Tamilnadu, February, p.266. (1973).
- 4. V V Padmaja Veturi: "Integrated Marketing Communication The New Generation Approach" Bharath Institute of Science and Technology, International Conference Proceedings. www.researchgate.net (2023).
- 5. Report of High-Powered Study Team on the Problem of Handloom Industry Ministry of Commerce Government of India, New Delhi. (1974).
- 6. V V Padmaja Veturi : "Entrepreneurship Development" Future Trends in Commerce National Conference Proceedings www.researchgate.net (2022).
- 7. Santhoshkumar, G., VV Padmaja Veturi and R. Thanigaiyarasu. "Employee Involvement and Engagement in Automobile Sector in Chennai City." In 3rd International Conference on Reinventing Business Practices, Start-ups and Sustainability (ICRBSS 2023), pp. 817-828. Atlantis Press, 2024.
- 8. V V Padmaja Veturi : "Uneducated Management Gurus" HRD Times National HRD Journal Vol.13, Issue 5 www.researchgate.net (2011).
- 9. Rajula Devi, A.K., A Study on the Problems Faced by Handloom Sector, Tamil Nādu Journal of Cooperation.
- 10. Padmaja, Veturi VV. "Indian Origin Banks' Global Operations: Pre-Merger Performance Analysis." 3rd International Conference on Reinventing Business Practices, Start-ups and Sustainability (ICRBSS 2023). Atlantis Press, 2024.
- 11. Thanigaiyarasu, R., and VV Padmaja Veturi, "Adoption of HR Strategies and Its Influence on Employee Retention in Service Sector with Special Reference to Chennai City." *3rd International Conference on Reinventing Business Practices, Start-ups and Sustainability (ICRBSS 2023)*. Atlantis Press, 2024.
- 12. Padmaja, Veturi VV. "Performance of Indian Public & Private Sector Banks Operating Overseas—A Comparative Analysis." *Studies in Indian Place Names* 40.20-2020 (2020).
- 13. Veturi, Padmaja VV. "Trends In Performance Of Indian Banks Overseas-Analysis On Select Indian Banks." *Request For Feedback & Disclaimer 13* (2020).