MEASURING ECONOMIC, HEALTH AND SOCIAL CONDITIONS OF POOR RURAL WEAVING COMMUNITY

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ABSTRACT

The village handloom segment playing a key role in the economic growth and development for generating employment and income to the poor peoples. Handloom weaving work is one of the largest unorganized sectors for income and livelihood in the rural areas. It is important that many of the weaving workers are female and they are economically backward. Handloom textile weaving sector provides a substantial quantity on export of garments and receives foreign reserves to domestic country. It brings fifteen percent of export income earnings. Rural handloom weaving segment is achieving the production of twelve percent of the entire necessities of the country's demand for the handloom weaving commodities. Handloom sector was well stand in rural and semi-urban areas, more specifically in many developing countries. These are all the destiny for manufacturing handloom stuffs especially pure silk and cotton. To achieve the objectives of the current study, the research is carried out through the collection of primary data sources. Data has been collected from specified target sample directly a a semi-structured questionnaire. The data has been collected from 200 respondent from 12 rural areas. Data collection done by direct collection method. The collected information has been analysed through proper statistical and econometric tools to reveal the results. It is found from research work, that all the handloom weavers affected with occupational health problems. Due to occupational health diseases, productivity of the weavers has been dropped by a considerable quantum. The condition of handloom weaving workers was economically, socially and medically very poor and vulnerable.

Keywords: Hand loom, Weavers, Rural, Poverty and Low Wages.

INTRODUCTION

Our tradition and culture are mainly rooted in textile origin especially hand loom dresses in the olden days to the present. Handloom weaving work is one of the largest unorganized sectors for income and livelihood in the rural areas. It is important that many of the weaving workers are female and they are economically backward. Handloom textile weaving sector provides a substantial quantity on export of garments and receives foreign reserves to domestic country. It brings fifteen percent of export income earnings. Rural handloom weaving segment is achieving the production of twelve percent of the entire necessities of the country's demand for the handloom weaving commodities. Handloom sector was well stand in rural and semi-urban areas, more specifically in many developing countries. The Indian weaving methodologies are very unique and blend with traditional values. Because the hand loom products especially sarees are used for special occasions of all communities in India. The innovativeness and hard workmanship

of the master weavers are witnessing the beauty of products produced. The advantages of these hand loom products are durability, individuality in design and quality. So obviously, it gives pleasure and interest to people buy the hand loom commodity especially sarees. This sector contributes 14 per cent industrial production from the rural area and 2 per cent to gross domestic product. The Indian hand loom sector is the leading rural cottage industry in the nation and it has the largest potential employs 13 million weavers, directly and indirectly, next to agriculture. The hand loom sector employs rural poor, rural women and educated unemployed. But still, the hand loom weaver's economic and social condition was not moved up. The hand loom weavers in the rural areas are paid low level of wages, there is no social security measures provided, poor working condition, vulnerable health condition due to occupation, poor living conditions and non-availability of formal loans. The present analysis proposed to study in these lines to provide suggestion to the policymakers to make included them into the growth process.

History of Rural Hand Loom in Tamil Nadu

In the context of the present scenario, providing occupation to about ten million individuals and giving over 23 per cent of the total fabric making of the nation Khullar (1999). The hand loom industry stays out as most extensive small-scale and tiny industry our nation. Nonetheless, among all other states in India, West Bengal requires a superior reference. Present Indian Scenario: since India is having the prominent traditional values over the years together the hand loom sector in generating employment probability ranks merely after the agriculture sector. About 38 million hand looms, on these 13 million are in co-operatives and more than 100 million of the people depend on this job for day-to-day life. But this hopeful growth has developed imaginable because of genuine exertions by the policymakers and overview of numerous schemes.

Types of Hand Looms in India

The cotton textile: The cotton interlacing or the weaving has been one among the most unique ancient and renowned method of hand loom skill. Among the different states in India, the Gujarat and Maharashtra states have taken a part in the production of 68 per cent of cotton textiles goods. Mumbai has remained as the forerunner in modern cotton weaving. It provides over 2 lakhs employment opportunities in 57 textile mills, the Mumbai earned the appellation of "*the Cotton polis of India*". Concurrently, using raw cotton and great marketplace in India's North-Western state. The other prominent states such as Andhra Pradesh, Tamil Nadu, Uttar Pradesh, Madhya Pradesh, West Bengal, Karnataka, and Kerala are also having a unique place in producing cotton textiles with good quality and numbers too.

Government support: There are many schemes which were initiated by the government to uplift the rural poor hand loom workers. The monetary support was given to continue the hand loom work and provision of subsidised raw materials to improve the economic condition of hand loom weavers. The schemes were introduced to shape a substructure, progress the advertising, increase the promotional and endorse methods for up-gradation to generate a hard employed situation about this talented financial missile. There is a special scheme for the village hand loom development called Integrated Village Hand loom Development Scheme (IVHDS) and another scheme was launched for the silk yarn manufacturers in the year 1991-95. The total outlay of 63 crore rupees was allocated and 20 crore rupees respectively for both schemes during the eighth plan period. Another important initiative done by the government side was for the development of jute fibre hand loom industries. The union government was sanctioned about 10.3 crore rupees for

the hand loom product manufacturing by using jute fibre. One of the ongoing programmes such as Deen Doyal Hathkargha Protsahan Yojna and state-level financial support is very much helpful for hand loom weavers. The main objectives of the scheme were formed as to provide basic inputs such as raw materials, looms, accessories, small loans, skill-based training and support to market the produced goods.

Vital Challenges of the Handloom Industry and Weavers

1. Non-availability of formal finance
2 . Poor infrastructure facility
3 . Increased raw material cost
4 . Lack of working capital
5 . No proper support from the government
6 . Lacking in marketing the produced products

The composition of the workforce concerning overall labour force, 28.3 per cent hand loom weavers are in the rural area and 33.05 per cent are in urban areas. The total work participation rate was 28.85 per cent across India (Table 1).

Table 1 HAND LOOM WORKERS IN INDIA			
	Rural	Urban	Total
Size of the Household	3.93	3.58	3.88
Average Number of Workers Per Household	1.11	1.18	1.12
Work Participation Rate (%)	28.3	33.05	28.85

Source: Hand loom Census 2019, Ministry of Textiles.

It is quite important to note that the work participation by female hand loom worker is very high in rural and urban areas. It is evident from the report that 74.5 per cent of the hand loom workers are women in rural India (Table 2).

Table 2 GENDER-WISE NUMBER OF WORKERS			
Gender	**Rural**	**Urban**	**Total**
Male	778772 (26)	196961 (42)	975733 (28)
Female	2274516 (74.5)	271769 (58)	2546285 (72.3)
Transgender	403 (0.0)	91(0.0)	494 (0.0)
Total	3053691	468821	3522512

Source: Hand loom Census 2019, Ministry of Textiles

Objectives of the Study

1. To find out the income level of the hand loom weavers in the study area.
2. To emphasis the gender discrimination in wage and income.
3. To bring out the expenditure and savings pattern of the sample respondents in the study area
4. To explore the occupational health problems of the hand loom weaver in the study area

H_{01}:   *There is no association between income and age of the sample respondents*

H_{02}:   *There is no significant relationship between the number of days worked and income.*
H_{03}:   *No significant association between income and education*
H_{04}:   *There is no significant relationship between hours of work and income of the*
                   respondents.
H_{05}:   *There is no association between income and family expenditure.*
H_{06}:   *There is no significant correlation between work condition and occupational health*
                   issues.

RESEARCH METHODOLOGY

Statement of the Problem

Being one of the oldest artist works is weaving and weaver community in Tamil Nadu. The hand loom weavers are still struggling for various issues such as low income from work, lacking in social security, occupational health issue, long hours of work and non-accessibility of formal credit sources.

Data Collection and Sampling Design

To achieve the objectives of the current study, the research is carried out through the collection of primary data sources. Data has been collected from specified target sample directly a a semi-structured questionnaire. The data has been collected from 200 respondents from 12 rural areas. Data collection done by direct collection method. The collected information has been analysed through proper statistical and econometric tools to reveal the results. The present study adopts the stratified random sampling method to select the sample respondents from the total population universe. The total population of 2274516 women weavers, 200 samples were selected for study purpose to reveal the conditions of total weavers Dikchha & Tiwari (2017).

LITERATURE REVIEW

This panel of the study discusses the various research studies were conducted over a while in India on hand loom weavers and their economic conditions.

Das & Mahapatro (1986) in their paper analysed on the glitches confronted and the complications in Odisha and Assam states. Their study examined the collective difficulties of the adaptation of the hand loom weaving method to power loom method. They have deliberated about the deviations in the efficiency of the segment as it faces several competitions from the inexpensive factories and mills.

Doraiswamy (1996) attempted to reveal the excessive demand for the hand loom products produced by the weavers in his study area. He also found that decreasing the skilled workers to carry out the hand loom weaving. Because of coming generations are opting out from this low paying tough job. They are started migrating from rural areas to nearby urban areas to do some other informal works. In the meanwhile, the power looms taking dominations of producing a similar variety of commodities. But the power loom made fabrics are not at par with the quality, texture and durability.

Kutty (2000) has found in his study that the market is absent for the hand-woven products made by rural poor weavers. They are coming to their doorstep for selling off their hand oven sarees. The poor rural hand loom weavers are struggling to get better prices for their artistic commodities from the middlemen and agents. Moreover, they have been in exploitation in terms

of more hours of working and lesser wage rates.

Roy (2002) emphasised the power loom machines are engaged around 1.7 million and employed eighty lakhs workers in the year 1997. This ratio shows that this employment is more than 20 per cent of all industrial wage labour in India. Thus, the modern power loom industry is the most significant form of industrialization in India and unquestionably one of the world's largest industries. Roy stated that hand loom weaving occupies a key place in debates about Indian industrialization which tends to be identified with the rise of mechanized factories. Artisans have a marginal role in this narrative. In another view, artisans, particularly hand loom weavers, even represent a de-industrialization.

Durai (2005) considered the practical glitches of the rural hand loom industry in Erode District was found that the rural hand loom societies are measured "*Growing yarn price*" as the main production connected issue and rivalry from automated power looms and mills are as a chief promotional related issue.

Nagaraju & et al. (2014) have attempted to reveal the socio-economic conditions of hand loom weavers in Guntur district of Andhra Pradesh. Their study reveals that the hand loom weavers in the study area were earning low level of income and working for 21 to 30 days. These weavers are not provided by any social security benefits by the government nor the employer.

Mishra et al. (2016) in their study report on hand loom workers found that the hand loom weaving plays an important role in the sustainability of the hand loom sector in India and they are crucial for employment generation Raju & Rao (2014).

Rao et al. (2017) analysed in their study that among the total respondents 55 per cent are having health-related issues, the weavers are illiterates and their annual income is very low. Tiwari, (2017) aimed to emphasis on the housing situations of hand loom weavers in Varanasi. The persons of this communal are fronting severe deficiency and extreme poverty, making it hardly conceivable to brand their both sides to encounter in day to day expenses. With growing opposition in the arena, obtainability of inexpensive, power-loom machines arrivals have knockout the demand and supply of saree produced by hand loom workers and worsen the conditions. Hand loom weavers are living a disgraceful life is not command to permit on this sculpture to their peers to come, later the impending of this practice is at pale. He also expresses the limelight the poor condition of women and children involved in this art giving a picture of a declining economy and various health issues, the torch-bearers of this age-old traditions are bearing in this modern world.

Chand & Gere (2017) in their research work found that the hand loom products are having a wide range of demand in local and foreign markets. Even though they are running the weaving on their own, but lacking in professionalism in the overall handling of business. They also found from their study that the weavers are lacking in knowledge of modern methods and techniques of design, production and promotion. Sivasubramanian & Rajendran (2020) in their study evolves the poor working, living and health status of the home-based workers in Chennai city. They have found that the hand loom workers are also termed as home-based workers in the urban areas. Because all works related to hand loom cloth making were carried out in the home premises of the worker.

Identification of Research Gap

Many research studies were found the poor and vulnerable working conditions of the hand loom weaver in India. The various researches finds including poor wage rate, poor working

conditions and long hours of work. But there is no study were addressed the occupational health issues of a women hand loom weaver. So the present study focuses to address the occupational health issues of women hand loom weavers along with socio-economic conditions.

SOCIO-ECONOMIC PROFILE OF THE SAMPLE RESPONDENTS

Hand loom weavers are ultimately poor and vulnerable and the women weavers are suffering from discriminated low wages. The average age of the women respondent was 39 and their mean education is recorded at the middle school level. It is revealed from the study that women weavers are engaging almost 11 hours of work per day and 26 days per month (Table 3).

Table 3 DESCRIPTIVE STATISTICS OF SAMPLE RESPONDENT			
Descriptive Statistics			
Variables	**Mean**	**Std. Deviation**	**N**
Age	38.98	14.73653	200
Education	1.435	0.69872	200
Hours of Work	10.73	2.02977	200
Days of Work	25.72	2.44821	200
Income	8693	1837.4096	200

Source: Primary data

By engaging 11 hour of work and 26 days in a month, they are earning an average of rupees 8693 per month. The average wage per day is termed to be as 289.76 rupees. It is as low as for their hard work carried out by 11 hours per day. Among the total respondents 50 percent of them are male and remaining 50 percent was female.

DATA ANALYSIS AND RESULTS

The collected primary data from the sample respondents were analysed with the regression model. Income is taken as a dependent variable and other factors such as number days of work, hours of work per day, level of education, loan availed by the women weaver and age was taken as the independent variable to find out the relationship among the independent and dependent variables (Table 4).

Table 4 MODEL 1: OLS, USING OBSERVATIONS 1-200 DEPENDENT VARIABLE: INCOME				
	Coefficient	Std. Error	t-ratio	p-value
Constant	816.508	1370.73	0.5957	0.5521
Days of Work	133.653	51.0386	2.619	0.0095***
Hours of Work	230.148	58.5379	3.932	0.0001***
Education	322.526	170.952	1.887	0.0607*
Local Loan Availed	1363.17	268.899	5.069	0.0001***
Age	−8.70038	7.95651	−1.093	0.2755

*Significant at 95% confidence level.

**significant at 99% confidence level.

Government of India (2019) Probability value for the constant variable (Dependent variable is 0.5521 with the t-ratio of 0.5957 and the days of work is having the probability value of 0.0095, there is no significant relationship between income and days of work. The income of the respondent and hours of work is having a significant relationship with a p-value of 0.0001 and the null hypothesis was rejected. The variable income and local loan availed is having a significant relation with the calculated t-ratio of 5.069 and the p-value of 0.0001 and the null hypothesis was rejected. Age and education were not associated with income with calculated t-value of -1093 and 1.887 respectively with p-value 0.2755, so the null is rejected and 0.0607 probability value for education which is lesser than the significant value, so the null hypothesis rejected.

Family expenditure of the sample respondent depends on the income. The following model calculates the relationship between income and family expenditure. The null hypothesis framed as there is no relationship between income and family expenditure (Table 5).

Table 5
MODEL: 2. WLS, USING OBSERVATIONS 1-200
DEPENDENT VARIABLE: FAMILY EXPENDITURE
VARIABLE USED AS WEIGHT: INCOME

	Coefficient	Std. Error	t-ratio	p-value
Constant	8715.27	130.232	66.92	<0.0001***

The calculated t-value was 66.92 with the p-value 0.0001, which is significant at less than 5 per cent of the probability. So the null hypothesis is rejected. It is proven from the statistical analysis that income and family expenditure is having a significant association Singh & Naik (2010).

The following analysis correlation matrix emphasis the relationship between the age and the other independent variables such as income, hours of work, the days of work and occupational health issues of the sample respondents Jain & Gera (2017). Correlation with age, income and hours of work is positively related, days of work is also positively correlated at the significance level of 0.000 and occupational health issue is also positively correlated with significance at 0.553. Hours of work is strongly correlated with 0.006 significance level. But the hours of work and the days of work is correlated narrowly and less positively correlated with occupational health issues (Table 6).

Table 6
CORRELATIONS MATRIX 1

Control Variables			Income	Hours of Work	Days of Work	Occupational Health Issues
Age	Income	Correlation	1.000	0.192	0.322	0.042
		Significance (2-tailed)	0.001	0.006	0.000	0.553
		df	0	197	197	197
	Hours of Work	Correlation	0.192	1.000	0.025	0.086
		Significance (2-tailed)	0.006	-	0.722	0.228
		df	197	0	197	197
	Days of Work	Correlation	0.322	0.025	1.000	-.062
		Significance (2-tailed)	0.000	0.722	-	0.382
		df	197	197	0	197
	Occupational Health Issues	Correlation	-.042	0.086	-.062	1.000

		Significance (2-tailed)	0.553	0.228	0.382	-
		df	197	197	197	0

Srinivasa Rao & Sreedhar (2017) the days of work is relatively correlated with income, lesser positively correlated with hours of work and negatively correlated with occupational health issues at -0.062 with a p-value of 0.382. The occupational health issues are negatively correlated with income at -0.042, hours of work is positively correlated and negatively correlated with days of work (Table 7).

Table 7
CORRELATIONS MATRIX 2

Control Variables			Age	Education	Gender	Hours of Work	Days of Work	Occupational Health Issues
Income	Age	Correlation	1.000	.105	Days of Work	.150	.029	-.425
		Significance (2-tailed)	.000	.140	.708	.034	.685	.000
		df	0	197	197	197	197	197
	Education	Correlation	.105	1.000	-.081	-.120	.071	-.190
		Significance (2-tailed)	.140	.000	.254	.091	.317	.007
		df	197	0	197	197	197	197
	Gender	Correlation	-.027	-.081	1.000	.138	-.103	.060
		Significance (2-tailed)	.708	.254		.051	.148	.404
		df	197	197	0	197	197	197
	Hours of Work	Correlation	.150	-.120	.138	1.000	-.035	.007
		Significance (2-tailed)	.034	.091	.051		.628	.919
		df	197	197	197	0	197	197
	Condition of Work	Correlation	.029	.071	-.103	-.035	1.000	-.085
		Significance (2-tailed)	.685	.317	.148	.628		.233
		df	197	197	197	197	0	197
	Occupational Health Issues	Correlation	-.425	-.190	.060	.007	-.085	1.000
		Significance (2-tailed)	.000	.007	.404	.919	.233	
		df	197	197	197	197	197	0

Correlation matrix in the above table 7 exhibit the functional relationship among income of the respondent with age, educational status, gender, work hours, days of work and occupational health status Kumar (2020).

H_{01}: *There is no association between income and age of the sample respondents: The association between age and income was positively correlated at 1 with the p-value of 0.001 significance level. The null hypothesis rejected.*

H_{02}: *There is no significant relationship between the number of days worked and income: The correlation between number of days worked and income of the respondent was directly correlated at 0.332 with the p-value of 0.000 significance level. Null hypothesis may be rejected.*

H_{03}: *No significant association between income and education: The correlation was positive at 1 between income and education with the p-value of 0.000 significance level. So the null hypothesis rejected.*

H_{04}: *There is no significant relationship between hours of work and income of the respondents: The degree of correlation between hours of work and income was positive at 0.192. It shows the lesser degree of correlation with p-value of 0.006, which is higher than the 5 percent. So the null hypothesis may be accepted.*

H_{05}: *There is no association between income and family expenditure*

H_{06}: *There is no significant correlation between work condition and occupational health issues: The negative correlation was found in the analysis of correlation at -.085 with the p-value of 0.233 which higher than the p- value of 5 percent. So the null hypothesis rejected.*

FINDINGS OF THE STUDY

1. The average age of the sample respondent recorded as 39 years and the minimum age was 18 and the maximum was 79
2. The female participation in hand loom textile work was considerably good. Almost 50 percent of the sample respondents are women.
3. On an average 11 hours per day and 26 days per month were the hand loom workers are engaging on work.
4. The average educational status of the sample respondent recorded as high school level. Most of them have completed their school education of up to 10th and 12th standard. Due to poverty in the family they could not able to continue their education and started doing their family occupation of hand loom weaving.
5. The mean income of the hand loom worker registered as 8693 rupees per month. The average wage per day calculated as 289.76 rupees. Among the total respondents 18 percent of them are earning less than 150 rupees per day.
6. A majority of 81 percent of the women hand loom workers are engaging in the processing and assistance works of the production activity.
7. It is fund from the study that all the hand loom workers are affected by the occupational health issues. Because of their occupational health problems, their productivity has declined considerably.
8. There is no formal loans available for the weavers to become a self-employed.

The handloom industries in the rural area provides large size of employment opportunities to the poor people. It is also generating an income to the educated and uneducated unemployed skilled people. Due to modernisation and urbanisation, there was a decline in the production of handloom textile products. On the demand side, customers are not willing to buy the handloom textile goods due to its higher price. On the supply side, handloom workers are started migrating from rural areas to urban areas for change of job Krishnankutty (2000). The present study analyses the social, economic and health status of the handloom workers of the study area. The present study made to address the occupational health issues of women handloom weavers along with socio-economic conditions.

CONCLUSION

The average age of the women respondent was 39 and their mean education is recorded at the middle school level. It is revealed from the study that women weavers are engaging almost 11 hours of work per day and 26 days per month. The mean income of the handloom worker registered as 8693 rupees per month. The average wage per day calculated as 289.76 rupees. Among the total respondent 18 percent of them are earning less than 150 rupees per day. They are earning a very meagre wage rate as compare to other occupation. It is fund from the study that all the handloom workers are affected by the occupational health issues. Because of their occupational health problems, their productivity has declined considerably. On the whole the condition of handloom workers in the study area were very poor and vulnerable in terms of social and living standard.

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