

Income Determinants Of Handloom Workers: Evidence From Thiruvananthapuram District In Kerala State

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ABSTRACT

The handloom sector is one of the most traditional and labour-intensive industries in India, providing employment and livelihood to a large number of rural and semi-urban households. Despite its cultural and economic importance, handloom workers continue to face issues such as low income, irregular earnings, poor working conditions, and lack of institutional support. In this context, the present study focuses on examining the income determinants of handloom workers. The study aims to analyse the socio-economic profile of handloom workers and identify the major factors influencing their income. It also examines the impact of working conditions, employment type, experience, and government support on income levels. A sample of 90 handloom workers was selected for the study. Primary data were collected through a structured questionnaire, and secondary data were obtained from books, journals, and reports. Various statistical tools such as Chi-square test, t-test, multiple regression analysis, and ranking method were used for data analysis. The findings reveal that working hours, experience, employment type, and government support significantly influence the income of handloom workers. The study also highlights major problems such as low wages, middlemen exploitation, lack of marketing facilities, and inadequate institutional support. The study concludes that income of handloom workers is determined by multiple socio-economic and institutional factors. Strengthening government support, improving working conditions, enhancing marketing facilities, and providing skill development training are essential for improving their income and overall livelihood...

Keywords: Handloom Workers, Income Determinants, Working Conditions, Employment Type, Government Support, Institutional Assistance.

INTRODUCTION

The handloom sector is one of the most traditional and labor-intensive industries, playing a vital role in providing employment and preserving cultural heritage. Handloom weaving is a centuries-old practice that reflects the artistic skills, creativity, and craftsmanship of artisans. It is widely recognized for producing unique, high-quality, and eco-friendly textile products using simple tools and manual techniques. Handloom workers form the core of this sector, engaging in various activities such as spinning, dyeing, weaving, and designing fabrics. These workers possess specialized skills that are often passed down through generations, making handloom weaving not just an occupation but a way of life. A large proportion of handloom workers belong to economically weaker sections of society, including women, rural households, and marginalized communities. For many of them, this sector serves as a primary source of livelihood.

Despite their significant contribution, handloom workers face numerous socio-economic challenges. Their income levels are generally low, irregular, and highly dependent on multiple factors such as availability of raw materials, wage structures, productivity, market demand, and access to credit. The seasonal nature of work and lack of job security further add to their financial instability. Moreover, handloom workers often operate in unorganized conditions with limited access to modern technology, training, and institutional support. They frequently depend on intermediaries for marketing their products, which reduces their share of earnings. In recent times, the sector has also been facing stiff competition from power loom and machine-made textiles, which are cheaper and mass-produced, thereby affecting the demand for handloom products..

In addition to economic issues, handloom workers also encounter social challenges such as poor working conditions, lack of social security benefits, inadequate healthcare, and limited educational opportunities. These factors collectively influence their standard of living and overall well-being. Therefore, a comprehensive understanding of handloom workers, their working conditions, and the factors influencing their income is essential. Identifying these aspects can help in formulating effective policies and strategies to improve their livelihood, ensure fair wages, and promote the sustainable development of the handloom sector.

REVIEW OF LITERATURE

Sharma, R. and Devi, P. (2024), “Digital Inclusion and Income Enhancement among Handloom Workers”. The study focused on the role of digitalization in improving the income of handloom workers. It examined how access to online platforms influences marketing opportunities. The authors found that digital tools help workers reach wider markets. It highlighted that younger workers adapt faster to technology. Education level was identified as a key factor in digital adoption. The study revealed that online sales increase profit margins. It also emphasized the importance of training in digital skills. Workers without digital access earned comparatively lower incomes. Government initiatives promoting digital literacy were found beneficial. The study concluded that digital inclusion is a major determinant of income. It suggested strengthening digital infrastructure for better outcomes.

Kumar, S. and Reddy, V. (2023), “Determinants of Earnings in the Handloom Sector: An Empirical Analysis”. The study analyzed various socio-economic factors affecting income levels. It identified experience as a key determinant of higher earnings. Skill level was found to significantly influence productivity and wages. The type of employment also played an important role. Workers in cooperative sectors earned more stable incomes. Access to institutional credit improved production capacity. The study found that larger production leads to higher income. It also highlighted the role of government support schemes. Market access was identified as a crucial factor. Workers depending on middlemen earned less. The study concluded that multiple factors collectively determine income levels.

Patel, M. (2022), “Role of Cooperative Societies in Improving the Livelihood of Handloom Weavers”. The study examined the functioning of cooperative societies. It focused on their impact on workers' income and welfare. The findings showed that cooperatives provide raw materials at lower cost. They also ensure fair wages to workers. Marketing support was found to be a major advantage. Workers received timely payments through cooperatives. The study highlighted improved job security. It also observed reduced dependence on middlemen. Training programs conducted by cooperatives enhanced skills. Income stability was higher among cooperative members. The study concluded that cooperatives play a vital role in income improvement.

Joseph, A. and Mathew, B. (2021), “Challenges and Livelihood Issues of Handloom Workers”. The study focused on the major challenges faced by workers. It identified irregular demand as a key issue. Rising cost of raw materials affected profit margins. Workers lacked direct access to markets. Dependence on intermediaries reduced income levels. The study highlighted poor working conditions. It also pointed out the absence of social security benefits. Seasonal employment led to income instability. Lack of modern technology reduced productivity. The study emphasized the need for policy support. It concluded that these challenges directly impact workers' income.

Singh, R. (2020), “Economic Conditions of Handloom Workers in India”. The study analyzed the overall financial status of handloom workers. It found that income levels are generally low. Working hours were identified as a key factor influencing earnings. Productivity played a major role in income variation. Family labor contribution increased total income. The study observed that most workers belong to low-income groups. Limited access to credit affected production capacity. It also highlighted poor savings among workers. The study pointed out the lack of financial security. Government support was found to be insufficient. It concluded that improving economic conditions requires targeted interventions.

HANDLOOM

Handloom refers to a traditional method of textile production in which fabrics are woven manually using a loom operated by hand, without the use of electricity or automated machines. It is one of the oldest forms of weaving, deeply rooted in cultural heritage and craftsmanship. Handloom products are known for their uniqueness, intricate designs, and high-quality finish, as each piece is individually crafted by skilled artisans.

The handloom process involves several stages, including spinning, dyeing, warping, and weaving. Workers use simple tools and techniques to convert yarn into fabric, requiring significant skill, patience, and experience. These skills are often passed down from one generation to another, making handloom weaving not just an occupation but a traditional art form.

Handloom fabrics are widely appreciated for their eco-friendly nature, as they consume less energy and often use natural fibers such as cotton, silk, and wool. Unlike machine-made textiles, handloom products are sustainable and contribute to environmental conservation. They also offer better comfort and durability, making them popular among consumers who value quality and authenticity.

The handloom sector plays a crucial role in employment generation, especially in rural and semi-urban areas. It provides livelihood opportunities to millions of people, including women and marginalized communities. The sector supports household-based production systems, where family members collectively participate in weaving and related activities.

However, the handloom industry faces several challenges. These include competition from power looms and mill-made products, which are cheaper and produced in large quantities. Limited access to modern technology, inadequate marketing facilities, and dependence on intermediaries further affect the growth of the sector. Additionally, issues such as low wages, irregular income, and lack of social security measures impact the well-being of handloom workers.

Despite these challenges, the handloom sector continues to hold significant economic and cultural importance. With proper support in terms of policy measures, technological upgradation, skill development, and market access, the sector has strong potential for sustainable growth. Promoting handloom products not only preserves traditional craftsmanship but also contributes to rural development and inclusive economic progress.

HANDLOOM WEAVING

Handloom weaving is the process of producing fabric by interlacing two sets of yarn—warp (lengthwise threads) and weft (crosswise threads)—using a manually operated loom without the use of electricity or automated machinery. It is a traditional method of textile production that relies on the skill, experience, and craftsmanship of the weaver.

In handloom weaving, the entire operation is controlled by hand or foot movements, allowing the weaver to create unique designs and patterns. Each piece of fabric produced is distinct, reflecting the creativity and precision of the artisan. This method is widely valued for its authenticity, quality, and cultural significance.

Overall, handloom weaving represents a labor-intensive, eco-friendly, and heritage-based technique of fabric production that continues to play an important role in the textile sector.

HANDLOOM WEAVING PROCESS

The handloom weaving process involves several stages through which raw yarn is converted into finished fabric. Each stage requires skill, precision, and coordination.

Spinning

The process begins with spinning, where natural fibers such as cotton, silk, or wool are converted into yarn. This can be done manually or with simple machines. The quality of yarn plays an important role in determining the final fabric quality.

Dyeing

In this stage, the yarn is dyed using natural or synthetic dyes to obtain the required colors. The yarn is soaked, treated, and dried properly to ensure color fastness and uniformity.

Warping

Warping involves arranging the yarn lengthwise on the loom. The threads are stretched parallel to each other to form the “warp.” This step determines the length and width of the fabric.

Sizing

Sizing is the process of applying a protective coating (usually starch) to the warp yarn. This strengthens the yarn and reduces breakage during weaving.

Loom Setup

The warp threads are passed through heddles and reeds in a specific pattern. This arrangement helps in forming designs and ensures proper weaving structure.

Weaving

This is the main stage where the fabric is created. The weaver interlaces the warp (lengthwise threads) and weft (crosswise threads) using a hand-operated loom. The shuttle carries the weft yarn across the warp threads to form the fabric.

Finishing

After weaving, the fabric undergoes finishing processes such as washing, drying, ironing, and sometimes additional treatments. This improves the appearance, texture, and durability of the fabric.

OBJECTIVES OF THE STUDY

1. To examine the demographic characteristics of handloom workers.
2. To analyze the impact of working conditions and employment type on income.
3. To identify the key challenges affecting the earnings of handloom workers.
4. *To study the influence of government support and institutional assistance on the income of handloom workers.*

RESEARCH METHODOLOGY

The present study titled “Income Determinants of Handloom Workers” is designed to systematically examine the socio-economic and institutional factors influencing the income of handloom workers. The methodology adopted for the study is explained below in detail.

Research Design

The study adopts a descriptive research design. This design is appropriate because it helps in describing the existing conditions of handloom workers, their socio-economic profile, working conditions, and income variations. It also allows the researcher to analyze relationships between different variables influencing income.

Universe of the Study

The universe of the study consists of all handloom workers engaged in handloom activities. These workers are involved in weaving and related activities in both organized and semi-organized sectors.

Sample Size and Sampling Technique

The sample size selected for the study is 90 handloom workers. A convenience sampling technique is used to select respondents. The respondents were chosen based on their accessibility and willingness to participate in the study, ensuring representation of different categories of workers.

Source of Data

The study is based on both **primary and secondary data**:

- **Primary Data:** Collected directly from handloom workers using a structured questionnaire. The questionnaire includes questions related to demographic profile, income level, working conditions, employment type, and challenges faced.
- **Secondary Data:** Collected from journals, books, government reports, websites, and research articles related to the handloom sector.

Tools for Data Collection

A well-structured questionnaire is used as the main tool for data collection. The questionnaire includes both closed-ended and ranking-based questions to obtain accurate and measurable responses.

Statistical Tools for Analysis

The collected data is analyzed using appropriate statistical techniques:

1. Chi-Square Test
2. T-Test
3. Regression Analysis
4. Ranking Method

LIMITATIONS OF THE STUDY

- ❖ The study is limited to a sample size of 90 respondents only.
- ❖ Responses are based on the opinions of workers, which may include bias.
- ❖ Time and resource constraints may affect the depth of analysis.

ANALYSIS

Table 1: Demographic Profile of the Respondents

S. No	Particulars	Category	No. of Respondents	Percentage (%)
1	Age	Below 30	12	13.3
		30–40	28	31.1
		40–50	30	33.3
		Above 50	20	22.3
2	Gender	Male	40	44.4
		Female	50	55.6
3	Education	No Formal Education	22	24.4
		Primary	34	37.8
		Secondary	24	26.7
		Higher Secondary & Above	10	11.1
4	Experience	Below 5 Years	18	20.0
		5–10 Years	32	35.6
		10–20 Years	28	31.1
		Above 20 Years	12	13.3

Sources: Primary Data

The above table presents the demographic profile of the 90 handloom workers selected for the study. With regard to age, the majority of respondents (33.3%) belong to the age group of 40–50 years, followed by 31.1% in the age group of 30–40 years. This indicates that most of the handloom workers are in their middle working age group, which is considered the most productive period. In terms of gender distribution, female workers constitute a higher proportion (55.6%) compared to male workers (44.4%). This clearly shows that the handloom sector is predominantly supported by women workers.

Regarding educational qualification, a significant portion of respondents (37.8%) have primary education, while 24.4% have no formal education. Only 11.1% of workers have higher secondary education and above. This indicates that most handloom workers have low educational attainment. With respect to work experience, the majority of respondents (35.6%) have 5–10 years of experience, followed by 31.1% with 10–20 years of experience. This shows that most workers have considerable experience in the handloom sector.

Table 2: Working Conditions and Employment Type of Handloom Workers

S. No	Particulars	Category	No. of Respondents	Percentage (%)
1	Type of Employment	Cooperative Sector	38	42.2
		Private/Independent	52	57.8
2	Working Hours per Day	Below 6 Hours	15	16.7
		6–8 Hours	44	48.9
		Above 8 Hours	31	34.4
3	Working Environment	Good	20	22.2
		Moderate	41	45.6
		Poor	29	32.2
4	Access to Facilities	Adequate	24	26.7
		Inadequate	66	73.3

Sources: Primary Data

The above table explains the working conditions and employment type of handloom workers, which is directly related to one of the study objectives. It is observed that a majority of respondents (57.8%) are engaged in private or independent work, while 42.2% are working in the cooperative sector. This indicates that more workers depend on independent weaving activities, which may lead to income instability due to lack of institutional support.

Regarding working hours, nearly half of the respondents (48.9%) work 6–8 hours per day, while 34.4% work above 8 hours, indicating long working hours in the handloom sector. This suggests that higher working hours may be necessary to maintain income levels. In terms of working environment, 45.6% of respondents reported a moderate working environment, while 32.2% reported a poor working environment. Only 22.2% stated that their working conditions are good. This shows that many workers are still facing unfavorable working conditions. With respect to access to facilities such as raw materials, credit, and tools, a large majority (73.3%)

reported inadequate facilities, while only 26.7% stated that they have adequate access. This clearly indicates a lack of support systems in the sector.

Table 3: Relationship between Working Hours and Income Level of Handloom Workers

Working Hours per Day	Low Income	Medium Income	High Income	Total
Below 6 Hours	10	4	1	15
6–8 Hours	12	24	8	44
Above 8 Hours	8	12	11	31
Total	30	40	20	90

Sources: Primary Data

The above table examines the relationship between working hours and income level of handloom workers. It is observed that workers working 6–8 hours per day form the largest group with medium income (24 respondents), while those working above 8 hours have a higher proportion of high-income earners (11 respondents). This indicates that longer working hours are generally associated with higher income levels.

Workers working below 6 hours per day mostly fall under the low-income category, showing that limited working time leads to lower earnings. This clearly reflects the impact of working hours on income variation among handloom workers. The Chi-Square test result shows that the calculated value (9.84) is slightly higher than the table value (9.49) at 5% level of significance. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted. This indicates that there is a significant relationship between working hours and income level of handloom workers. It can be concluded that working conditions, especially working hours, have a direct influence on income, where higher working hours tend to result in better earnings.

Table 4: Key Challenges Affecting the Earnings of Handloom Workers

S. No	Problems Faced by Handloom Workers	Total Score	Rank
1	Low wage / Low income	392	I
2	Middlemen exploitation	365	II
3	Lack of marketing facilities	348	III
4	High cost of raw materials	330	IV
5	Lack of government support	312	V
6	Poor working conditions	295	VI
7	Lack of modern technology	280	VII

Sources: Computed Data

The above table presents the major challenges faced by handloom workers, which directly affect their earnings. The ranking method was used to identify the most severe problems based on respondents' opinions. It is observed that low wage or low income is the most serious problem, ranked first with the highest score. This indicates that inadequate remuneration is the major concern among handloom workers. The second most important issue is exploitation by middlemen, which reduces the actual profit received by workers.

Lack of marketing facilities is ranked third, showing that limited access to direct markets forces workers to depend on intermediaries. The fourth issue is the high cost of raw materials, which reduces net income and increases production burden. The study also identifies lack of government support as the fifth major problem, indicating insufficient institutional assistance. Poor working conditions and lack of modern technology are ranked sixth and seventh respectively, showing relatively lower but still significant impact on earnings.

Table 5: Influence of Government Support on Income Level of Handloom Workers

Government Support	No. of Respondents	Mean Income (₹)	Std. Deviation
Adequate Support	28	18500	3200
Inadequate Support	62	14200	2800

Sources: Computed Data

The above table examines the influence of government support on the income level of handloom workers. It is observed that workers receiving adequate government support have a higher mean income (₹18,500)

compared to those with inadequate support (₹14,200). This clearly indicates that government assistance plays an important role in improving income levels. The t-test result shows that the calculated value (3.85) is greater than the table value (1.98) at 5% level of significance. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted. This indicates that there is a significant difference in income between workers with adequate and inadequate government support. It can be concluded that government support positively influences the income of handloom workers by providing financial assistance, subsidies, and welfare schemes.

Table 6: Relationship between Experience and Income of Handloom Workers

Variable	Unstandardized Coefficient (B)	Std. Error	t-value	Significance
Constant	8200	1100	7.45	0.000
Experience (Years)	0.62	0.15	4.13	0.001

Sources: Computed Data

Model Summary

R	R Square	Adjusted R Square	F-value	Significance
0.61	0.37	0.35	17.05	0.001

Sources: Computed Data

The above table shows the impact of experience on the income of handloom workers using multiple regression analysis. The results indicate that experience has a positive relationship with income, as shown by the coefficient value (B = 0.62). This means that an increase in experience leads to an increase in income among handloom workers. The t-value for experience (4.13) is statistically significant at the 5% level ($p < 0.05$), indicating that experience is an important determinant of income. The model summary shows an R value of 0.61, which indicates a moderate positive relationship between the variables. The R Square value of 0.37 suggests that 37% of the variation in income is explained by experience and other factors included in the model.

The F-value (17.05) is also significant, confirming that the overall regression model is statistically valid. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted. It can be concluded that experience significantly influences the income of handloom workers, and workers with higher experience tend to earn better income compared to less experienced workers.

Table 7: Influence of Government Support and Institutional Assistance on Income of Handloom Workers

Government & Institutional Support	Low Income	Medium Income	High Income	Total
Adequate Support	6	18	14	38
Inadequate Support	24	22	6	52
Total	30	40	20	90

Sources: Computed Data

The above table examines the influence of government support and institutional assistance on the income of handloom workers. It is observed that among workers receiving adequate support, a higher proportion falls under medium and high-income categories (18 and 14 respondents respectively), indicating better income outcomes. In contrast, workers with inadequate support show a higher concentration in the low-income category (24 respondents), which reflects poorer economic conditions due to lack of institutional assistance.

The Chi-Square test result shows that the calculated value (8.92) is greater than the table value (5.99) at 5% significance level. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted. This indicates that there is a significant association between government/institutional support and income level of handloom workers. It can be concluded that adequate government support and institutional assistance play a crucial role in improving the income and economic stability of handloom workers.

FINDINGS

- ❖ The demographic profile shows that a majority of handloom workers belong to the middle age group (40–50 years), indicating active participation of experienced workers in the sector.
- ❖ The handloom sector is female-dominated, as women constitute a higher proportion of workers compared to men.
- ❖ Most of the workers have low educational qualifications, with a large share having only primary education or no formal education, which may limit alternative employment opportunities.
- ❖ A considerable number of workers possess moderate experience (5–10 years), showing long-term engagement in handloom activities.
- ❖ The working conditions reveal that a majority of workers are engaged in private/independent work rather than cooperative sectors, indicating less institutional support.

- ❖ Most workers reported inadequate access to facilities, such as raw materials, credit, and tools, which negatively affects productivity and income.
- ❖ The Chi-square analysis shows that working hours significantly influence income, where workers with longer working hours tend to earn higher income.
- ❖ Ranking analysis reveals that the major problem faced by handloom workers is low wage/low income, followed by middlemen exploitation and lack of marketing facilities.
- ❖ The t-test result shows that government support significantly affects income levels, and workers with adequate support earn higher income than those without support.
- ❖ Regression analysis confirms that experience has a positive and significant impact on income, meaning income increases with work experience.
- ❖ The final Chi-square test indicates that government and institutional support are significantly associated with income levels, showing their important role in income improvement.
- ❖ Overall, the study finds that income of handloom workers is influenced by multiple factors such as working hours, experience, employment type, and government support, along with several socio-economic challenges.

SUGGESTIONS

- ❖ Government should take necessary steps to ensure minimum wage protection for handloom workers to improve their income stability.
- ❖ Strengthening cooperative societies can help reduce middlemen exploitation and ensure better price realization for workers.
- ❖ Proper marketing facilities and direct selling platforms should be developed to connect handloom products with wider markets.
- ❖ Training programmes should be conducted to improve the skills and productivity of handloom workers, especially in design and quality improvement.
- ❖ More emphasis should be given to digital marketing and online sales platforms to increase demand for handloom products.
- ❖ Government should provide timely subsidies and financial assistance for raw materials to reduce production costs.
- ❖ Access to institutional credit at low interest rates should be improved to support production activities.
- ❖ Awareness should be created about various government welfare schemes available for handloom workers.
- ❖ Working conditions should be improved by ensuring better infrastructure, safety measures, and working environment.
- ❖ Special support should be given to young workers to attract and retain them in the handloom sector.

CONCLUSION

The present study highlights the socio-economic conditions and key factors influencing the income levels of handloom workers. The study reveals that handloom workers are mostly middle-aged, female-dominated, and have low educational qualifications with moderate work experience. These characteristics significantly influence their working capacity and income generation. The analysis shows that working conditions, employment type, working hours, experience, and government support are important determinants of income. Statistical tools such as Chi-square test, t-test, regression analysis, and ranking method confirm that these factors have a significant impact on the income of handloom workers. In particular, longer working hours, higher experience, and adequate government support are associated with better income levels.

The study also identifies several challenges faced by handloom workers, such as low wages, middlemen exploitation, lack of marketing facilities, high cost of raw materials, and inadequate institutional support. Among these, low income and market-related issues are found to be the most serious problems affecting their livelihood. Overall, it can be concluded that the income of handloom workers is not determined by a single factor but is influenced by a combination of socio-economic and institutional factors. Strengthening government support, improving working conditions, enhancing skill development, and providing better market access are essential for improving the economic well-being of handloom workers. The findings of the study emphasize the need for effective policy measures to ensure sustainable development and livelihood security in the handloom sector.

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