Women and Informal Employment: An Analysis of Socio-Economic and Health Conditions of Women Home-Based Workers in Chennai, India

Sivasubramanian K.
Pushpa A.
Raju V.
Madhu Dhruva Kumar

Follow this and additional works at: https://vc.bridgew.edu/jiws

Part of the Women's Studies Commons

Recommended Citation

This item is available as part of Virtual Commons, the open-access institutional repository of Bridgewater State University, Bridgewater, Massachusetts.
Women and Informal Employment: An Analysis of Socio-Economic and Health Conditions of Women Home-Based Workers in Chennai, India

By Sivasubramanian K.1, Pushpa A.2, Raju V.3, Madhu Dhruva Kumar 4

Abstract
This study seeks to analyse the socio-economic and health status of women workers in the informal sector in Chennai, India. Informal employment consists of various kinds of micro-enterprises offering commodities and services and home-based work. Of all these different types of work in the informal sector, home-based work is associated with women because of its nature and characteristic features. Home-based work is piecework for remuneration that is completed in the premises of the worker’s choice rather than the workplace of the employer. Women homeworkers face many issues such as long hours of work, low wages, meagre rates per piece, lack of social security and lack of union or organizational support. More importantly, their conditions of work and health are deplorable. The present study has followed the descriptive research method to carry out the survey. The data for this study has been collected directly using the field survey method. A formally structured questionnaire was prepared and circulated among the target sample for this purpose. The questions were formulated using the variables taken from the literature review and research gap. A stratified random sampling method was adopted for the survey. The sample size was justified on the calculation of secondary data and by applying the appropriate formula to collect data from 150 sample respondents in the study area. As the study focuses on female home-based workers, a direct survey was conducted among women workers. The data collected relates to the socio-economic and work conditions of women workers. The findings reveal that 59.2 percent of the home-based women workers are in the age group 25 to 35 years, and the average wage is low at Rs.164.7 per day, based on a fixed piece rate. Further analysis of the data shows that 35.5 percent of the respondents earn Rs. 100 per day, which is significantly below the minimum wage. Therefore, the findings reveal that female home-based workers are subject to multiple forms of exploitation such as low wages, delayed and irregular

1 Dr. Sivasubramanian. K is currently working as Assistant Professor of Economics at Kristu Jayanti College (Autonomous), Bengaluru. He has done his Ph.D. from Guru Nanak College (Autonomous), Chennai. He has published more than 15 research papers in peer-reviewed UGC-Care listed Journals, and He has presented various research papers in national and international level conferences. He has received two best paper awards in the international conferences held at Chennai and Bangalore. The author can contact at sivasubramanian@kristujayanti.com.

2 Pushpa A., M. Com., MBA., M. Phil., Ph. D is currently working as Assistant Professor at Kristu Jayanti College (Autonomous), Bangalore with teaching experience of 17 years in various Colleges and Universities. She is specialist in the area of Accounting, Finance, and Marketing. She has 18 research papers published in various national and international journals.

3 Dr. Raju. V. is at present working as an Assistant Professor in Kristu Jayanti College (Autonomous), Bangalore with teaching experience of 18 years. He is a specialist in the areas of Economics, Banking, International trade and Human Resources Management. He has 27 research papers published in various national and international journals.

4 Mrs. Madhu Druva Kumar. MCom, M.Phil. is currently working as Associate Professor, Department of Commerce, Kristu Jayanti College. She has 18 years of teaching experience. She has specialised in accounting taxation and finance. She has presented and published 15 papers in various national and international journals and won best paper award for some papers.
payments and sporadic work. In conclusion, the researcher states that despite these problems, home-based work is the most suitable avenue for poverty alleviation and employment generation among urban women. However, low wages, lack of micro-capital for entrepreneurial ventures and non-payment of dues on time are serious issues that these workers face.

**Keywords:** Women workers, Informal sector, Home-based work, Low wages, and Occupational health issues

**Introduction**

According to the National Commission for Enterprises in Unorganized Sector (NCEUS), 93 percent of the workforce in India is engaged in economic activity in the informal sector, which forms a significant percentage of the available employment in both rural and urban areas. Informal employment consists of daily wage work, construction work, street vending, tailoring, hair grooming, domestic work and home-based work primarily. Of these types of informal work, home-based work is considered to be more suitable for women due to the nature of the work. Home-based work may be defined as the work completed at the residence of the worker, who may be an independent own account worker or an enterprise outworker. As per the report of NSSO 66th round, homeworkers are those who carry out their work for remuneration in the premises of their choice without any social security support and at low wages.

**Informal Sector**

According to National Commission for Enterprises in Unorganized Sector (NCEUS, 2007) the informal sector consists of all independent enterprises owned by private individuals, or households engaged in sales or production with less than ten workers. Informal work is characterized by easy entry and exit and low remuneration.

**Brief Overview of Home-Based Work and Workers**

The home-based economic operation is a global phenomenon, that is found in both developing and developed economies. Workers in the home-based economic operation produce the goods and services in their home premises—the commodities produced by the home-workers are resold in the domestic and international market. However, the substantial economic benefits accruing from such an enterprise are not passed on to the home-based workers. Most of these workers are engaged in the manufacturing and processing of various commodities under a direct contract or a sub-contract system. The main objective of any enterprise is to derive maximum profit by cutting down on labour costs. To avoid labour costs that arise due to payment of worker benefits mandated by labour laws, firms and industrial enterprises outsource jobs to home-based workers through contractors. Technological advancement also helps them by facilitating the outsourcing of work (Chen et al. 1999). Home-based work represents an important platform for generating employment opportunities for the urban poor and illiterates, migrants and particularly women in India.
Definition of Home-Based Workers

This category of workers and the kind of work they carry out are unique. There are two different sub-categories among home-based workers. They are differentiated based on the work carried out and the wages received, or profits earned. The first category is the self-employed own account worker, and the second category is the piece-rate worker.

Characteristics of Self-employed Own-Account Home-Based Workers

a. The worker bears the entire risk of capital invested in production.

b. The entire process of production starting from the purchase of raw material until the goods and services are sold is the responsibility of the worker.

c. Goods produced are mainly sold in the local market and retail outlets.

d. Most of the home-based workers in this category will not employ any other person as an employee. They will carry out the work on their own. They are termed as own-account workers. They may use their family members as unpaid workers and helpers.

These workers are either directly contracted by the industrial enterprises or subcontracted through intermediaries. The raw materials for production will be provided by the employer or contractor to the workers. Wages are fixed based on the piece produced. The hidden costs, such as room rent, electricity, and any loss of materials used for production, will be borne by the workers.

The present empirical study aims to discover the socio-economic, and health status of women home-based workers in Chennai.

Objectives

• To deduce the reduced wage rate of women homeworkers and determinants of income.
• To establish the poor working conditions of the women homeworkers in the study area.
• To bring out the connections between home-based work and the occupational health issues of women workers.
• To suggest that the government frame an appropriate policy to improve the condition of poor workers in the informal sector

Hypotheses

Ho1: There is no association between education and wages of home-based women workers.
Ho2: There is no relationship between poor working conditions and health status
Ho3: There is no association between occupational health issues and home-based work

Select Literature Review

A survey of the available literature and studies on a particular area provides the information necessary for the better understanding of a particular area. It also delivers extensive knowledge of the particular area of research and views the data from various perspectives. The survey of available literature was collected from various sources to establish the relevant facts on the informal sector and women home-based workers. In her study, Mitra (1998) emphasizes
the share and contributions of state-level workers in informal employment and the interdependence of employment in the organized sector to gauge the extent of industrialization and rapid urbanization.

Unni & Rani (1999) have found in their study that formal jobs are declining in India. They insisted on the need for structural adjustment of employment. Increasingly, the labour force is being absorbed into the informal sector. They also opined that the growth of small operative sectors, sub-contracting, and the promotion of export-focused enterprises has started driving the growth of the informal sector in India in an exponential manner. According to the survey conducted in Ahmedabad in 1998-99, an enormous section of the informal sector is self-employed. Their operative cost is termed to be very low due to the lower capital outflow. They also found that women contribute more to informal economic activity and generate income and employment opportunities in the city.

Unni's (2000) study revealed that in 1997-98, Ahmedabad city absorbed almost 1.5 million people and generated substantial income of U.S. $1253 million as per the study mentioned by Self Employed Women’s Association. Balakrishnan (2002) argues in her study that many export-based firms are mainly engaged in informal forms of enterprise and production. In the informal sector, production and output costs for these firms are relatively low as their labour costs are very low. In their study on women, Bai & Joseph (2009) emphasize that women over occupy informal employment in India. It shows that significant feminization of the labour force has taken place in rural areas and urban areas. The study reported that in many cases, the informal sector women workers are working in terrible conditions. This was evident in many enterprises in the informal sector such as garment-making industries, export industries, retail stores, and domestic work.

Kathuria et al. (2010) found that the informal sector has proliferated in recent decades in both developing and developed nations. It has grown widely after the crisis in the 1970s and the beginning of the 1980s. The contribution of the income and employment generation from the unorganized sector to the nation has increased over time. The sector also absorbs sufficient labour force both from rural and urban areas to provide employment opportunities. This sector has become vital to researchers, academicians, and policymakers to provide greater opportunities for unemployed people in developing nations like India. Mishra (2010) conducted her study on women informal sector workers and found that the informal sector's women are poorly paid and face unsafe working and living conditions. Her study mainly focused on the non-manufacturing informal sector enterprises such as service and service-oriented sectors.

In their work on home-based workers, Sudarshan & Sinha (2011) reported that social protection for the women home-based workers in the unorganized sector, exists only on paper, it has not yet been implemented. According to them, labour laws must be so framed so as to protect and encourage women workers. Their findings also indicate the poverty and vulnerability of women workers in the focus area.

Mehta (2012) opined that the unorganized sector plays a vital role in the economy in the labour market in many countries, especially in developing countries like India. He defined informal labour as individuals involved in casual work, ignorant of the labour market, illiterate and carrying out small scale operations. The informal sector has great potential for generating economic means, but this area is still neglected by researchers and policymakers. He has also added that the informal economy constitutes a significant share of the gross domestic product.

Sudarshan et al. (2007) study notes that in Madhya Pradesh, the women workers' home-based household revenue was 30.9 percent. The beedi (cigarette) workers made a significant
contribution, in rural Tamil Nadu the income from *beedi* workers recorded as 46 percent and in urban Tamil Nadu it was 71 percent.

Patel *et al.* (2017), in their study, found that women workers are most vulnerable due to their employment in the informal sector. They belonged to the marginalized sections of society, where legal, political, and economic conditions are critical. Moreover, women could not demand their fundamental rights, such as equal wages, social security measures, and regular payments for their work. The study also found that the number of people in the informal sector has increased considerably. Women workers were characterized as weak, illiterate, and socially backward.

Mazumdar (2018) has written a working paper on home-based work has found that it is largely gender specific. She has suggested that the government be involved in the home-based workers' issues and consider their poor economic conditions. She has also emphasized that women home-based workers are invisible to society.

**Research Gap**

Having surveyed theoretical studies, and articles from various books, journals, and reports, it is found that there is no proper research conducted earlier to compute the occupational health problems of the home-based workers, especially women workers. Hence, there is a need to bridge this research gap through descriptive research focused on this problem and offer suggestions to policymakers.

**Research Methodology**

*Statement of the Problem*

Women in the informal sector are exploited in many ways: discriminated wages, long hours of work, and non-availability of social security measures. Among the informal sector work, home-based work is more interesting, but women who engage in home-based work are more vulnerable compared to others in the informal sector. Women workers face many issues such as long hours of work, low wages, piece rate wages, no social security, no union support, and most importantly, poor working and health conditions.

*Research Design, Sampling method, and sample size*

The present study has adopted the descriptive method of research to carry out the research. A formal questionnaire was prepared and circulated among the total population universe. The questionnaire was formulated based on the information acquired from the review of literature and research gap. Since the population universe was homogenous, it was decided by the researcher to apply a stratified random sampling method to select the samples for primary data collection. Using an appropriate sample size, the population universe was calculated from the secondary data sources. According to the National Sample Survey Office 66th round (NSSO), 18500 home-based workers were present in Tamil Nadu. The sample size was determined statistically by applying the Bill Godden sample size formula. After calculation, the sample size was obtained and determined as 150, which is 5 percent of the total population universe of Chennai.
Data Collection

Since the study focused on women home-based workers, that is a direct survey conducted among women workers alone, the data was collected based on the social, economic, and working conditions of the women workers. The surveyed data was tabulated and analysed with appropriate econometrical tools such as regression model and correlation analysis. The Gretl econometric software used to analyse the primary data.

Socio-Economic Profile of Sample Respondents

The mean age of the sample respondent was recorded as 33 years, and the minimum age of the respondent was 18 years; the maximum was 72 years. It shows the median age group of the female work force engaged in this occupation. The average wage is recorded as Rs.165 rupees; the minimum wage of the women home-based workers registered as Rs.100. The maximum was Rs.350 per day, and it was earned in terms of piece rated wages. It is essential to note here, the mean wage of the women workers is much lower than the minimum wage rate fixed by the government for unorganized workers. The women home-based workers put in an average of 7 hours of work per day. The duration of work ranges from a minimum of four hours to a maximum of 13 hours according to the availability. On average, the women home-based workers are engaged for 24 days a month. The minimum is recorded as 15 days and the maximum is 30 days per month. It is found from the primary data that almost all the women workers are affected by one or more type of occupational health problems. These include back pain, skin diseases, varicose veins, knee pain, and eye-related issues. The women workers face problems such as delayed payment from contractors, sub-contractors, or enterprises. Among the total respondents, 78.5 percent of the workers have the problem of delayed payments. The average educational level of the respondent recorded as primary school level. Among the total respondents, the majority of 53.52 percent of them are illiterate, and 16.25 percent of women have completed their schooling up to the higher secondary level. The women workers who studied up to the 10th standard constitute 30.28 percent.

Data Analysis and Results

Based on the regression model, the following analysis has been made and interpreted. The coefficient of regression is calculated as 151.897 and the t-ratio is 2.685, the probability at 0.0081, which is less than 5 percent. The calculated t-ratio was 0.7488, with a p-value at 0.4552, which is higher than the significant value of 5 percent. It shows that there is no relationship between the age of the respondents and wages. The calculated t-test for working hours was 4.625, with 0.0006 as a p-value less than the significant value of 0.005. So, the relationship between wage and working hours exist. The calculated t-test value for the number of days worked was -1.747 and the p-value at 0.0027, which is lesser than the significance value of 0.005. It reveals a relationship between the number of days worked and the wages earned by the sample respondents.
Model 1: OLS, using observations 1-150

Dependent variable: Wages

<table>
<thead>
<tr>
<th>Co-efficient</th>
<th>std. error</th>
<th>t-ratio</th>
<th>p-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>151.897</td>
<td>56.5692</td>
<td>2.685</td>
<td>0.0081</td>
</tr>
<tr>
<td>Age</td>
<td>0.276848</td>
<td>0.369699</td>
<td>0.7488</td>
<td>0.4552</td>
</tr>
<tr>
<td>Work hour</td>
<td>13.376</td>
<td>2.89226</td>
<td>4.625</td>
<td>8.19E-06</td>
</tr>
<tr>
<td>Days</td>
<td>−3.78936</td>
<td>2.16895</td>
<td>−1.747</td>
<td>0.0027</td>
</tr>
</tbody>
</table>

The dependent variable's mean value is 164.7000 (wage), and the standard deviation of the dependent variable is 77.46883. The adjusted R-square is 0.622365. The Akaike criterion test value was 1715.001, and the p-value significant at 0.000062.

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-ratio</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const</td>
<td>2.66417</td>
<td>1.04513</td>
<td>2.549</td>
<td>0.0118</td>
</tr>
<tr>
<td>Work Hours per day</td>
<td>−0.0992385</td>
<td>0.05061</td>
<td>−1.961</td>
<td>0.0518</td>
</tr>
<tr>
<td>Days of Work per month</td>
<td>0.00958</td>
<td>0.03785</td>
<td>0.2531</td>
<td>0.0006</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>0.19343</td>
<td>0.14208</td>
<td>1.361</td>
<td>0.1755</td>
</tr>
</tbody>
</table>

Model 2: OLS, using observations 1-150

Dependent variable: Health issues

The second model expresses the regression analysis of dependent variables (Occupational Health Issues) and the independent variables such as hours of Work per day, days of Work per month, and working conditions of the women home-based workers in the study area.
The OLS regression model analysis is used to find the relationship between the dependent variable and the independent variable. In this secondary analysis, the sample respondents' occupational health issues were the dependent variable with other related independent variables such as working hours per day, days of work per month, and the working conditions of the sample respondents. The calculated t-test values for an hour of work, days of work, and working conditions are -1.961, 0.2531, and 1.361, respectively, with p-values of 0.0518 and 0.0006 and 0.1755. It shows a correlation between the respondents' occupational health issues and hours of work, days of work, and the poor working conditions.

**Major Findings**
1. The majority of 59.2 percent of the home-based women workers are in the age group of 25 to 35. It shows that home-based work attracts greater numbers of young women. The respondents have a desire to work from home rather than travel to other places. It makes many unemployed women choose this job.
2. The present study found that the average wage was very low at Rs. 164.7 per day based on piece rate wage. It also found that 35.5 percent of the respondents were earning Rs. 100 per day, which was less than the minimum wage. This shows the strong presence of labour exploitation and wage discrimination against the workers.
3. The majority of 78.5 percent of the respondents face delayed payments for the completed work. The contractors or the subcontractors disburse the wages after two to three days of work has been completed by the woman worker. In some of the worst cases, the delay could be even a week.
4. There are no proper workplace women workers at home, and there are no social security measures provided by the contractors, including medical assistance.
5. The working conditions of the women are deplorable, creating occupational health issues among the workers.
6. The women workers put in long hours of work to complete the production of goods and services on time. However, they are not compensated based on the hours they spend on the work.
7. The women workers do not have access to any sort of formal credit.
8. There is no motivating factor for the women workers to start a similar enterprise on their own.

**Conclusion**
Among all other types of work in the informal sector, home-based work is mostly associated with women. Home-based work is characterized as the work carried out at the premises of the worker’s choice, mostly the home. The present study found that women workers are poorly paid for their work and they do not have any social security protection, including no paid holidays and no insurance schemes. There is a provident fund facility. The wages received by the women are purely on a piece rate basis. The average wage is much lower than the minimum wage set by the government. The women workers are severely affected by various occupational health issues such as back pain, knee pain, skin issues, eye problems, and breathing problems. It has been found from the field survey that these health issues arise due to the nature of their work. The women exploited through various means such as low wages,
delayed payments for their work, irregular work and remuneration. On the whole, the study has concluded that home-based work is the best avenue to create employment opportunities and effect poverty alleviation among urban women. However, the low remuneration, non-availability of loans for self-employment, exploitative employer attitudes, delayed payment, and poor health conditions are areas of concern.

**Policy Suggestions**

1. The government has to create awareness among the workers in the informal sector about all the schemes and social security programs.
2. The policymakers have to frame a separate scheme for the women workers in the informal sector, particularly for home-based workers.
3. A separate mass study has to be conducted by the Union government to highlight the problems of home-based workers.
4. The wage rate fixed for the women workers has to be modified based on time rate rather than the piece rate.
5. The employer or contractor has to provide the necessary equipment to improve conditions for workers and help alleviate the occupational health issues of women workers.
References


