

EXTENT OF INCOME INEQUALITY OF THE WOMEN LABORERS IN MATCH INDUSTRY AT SATTUR TALUK

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ABSTRACT

In earlier the women studies were mostly related to the nature of income distribution alone. In the present study, the extent of income inequality is thoroughly discussed. So, this study has been devoted to analyze the extent of distribution of income inequality of the women before and after joining in match industries in the study area.

KEYWORDS: INCOME, INEQUALITY, WOMEN LABORERS, MATCH INDUSTRY, UNORGANIZED SECTORS

Introduction

In India, the population has already crossed one billion and nearly one third of the population is living under below poverty line. When compared with urban population the intensity of poverty in rural area is deplorably worse, where almost half of the residents live hand to mouth life and below poverty line. In the international arena, out of 1.3 billion people who live in abject poverty, 70 per cent are women. In India, rural women though constitute almost half of the population the participation in the labour force is only 33 per cent, while it is 56 per cent for male. Thus 67 per cent of the female population is not gainfully employed. Majority of them are poverty ridden. The Government should take earnest efforts to utilize women force into productive employment.

For these women, poverty does not just mean scarcity and want. It means rights denied, opportunities entailed and voices silenced. In fact women work two-third of the world's working hours, earning only 10 per cent of world's income, own less than one per cent of world's property and accounts for two-third of the world illiterate adults and 60 per cent of the world's women children do not attend to schools.

Former President of Tanzania Julius Nyerere rightly observed that 'a person can't walk very far or very fast on one leg. How can we expect half the people to be able to develop a nation?' Here, he sorrowfully pointed out the negligence of women, when the development needs are addressed and discussed. He further emphasized the role of women in building the nation to new heights.

At this juncture the need of the hour is that the women should be self dependant at any cost. So the present study, "Extent of income inequality of the women labourers in match industry at sattur taluk" has mainly focused to analyses the income of the women labourers in match industry in the study area at a micro level.

Statement of the Problem:

No major studies had been carried out to examine the nature and extent of income pattern of labourers working in small and cottage industries particularly of women in Sattur Taluk in Virudunagar district. Further, the alleviation of poverty through the involvement of women in one way or other in income generating activities in Sattur Taluk has so far not been studied. So, in order to find out the level of status of women workers in match industries Sattur Taluk has been chosen as the study area, where there are numerous match industries functioning in this taluk.

Objective

To assess the extent of distribution of income of the sample respondents before and after joining in match industry.

Methodology

The present study is an exploratory study of descriptive in nature. It is a fact finding survey. Descriptive research studies are designed to obtain information concerning the current status of a phenomenon. They are directed towards determining the nature of a situation as it exists at the time of the study. The aim is to describe what exists with respect to variables of conditions in a situation. The survey method has been used in this study with the help of a pre-tested interview schedule specially designed to collect comprehensive information for fulfilling the objectives of the study.

STATISTICAL ANALYSIS OF DATA

The extent of income inequality has been measured with the help of Disparity Ratio, Centile Ratio, Lorenz Curve, Gini Co-efficient and Logarithm of Variance.

DATA ANALYSIS & DISCUSSION

Income Distribution

Extent of Inequality

Relative measure is a far better approach than an absolute measure. The well-being of the people can be measured only when the income is redistributed evenly among them. So, the distribution of income of the women labourers before and after joining in match industries has been studied in order to understand the lack of equality. If the income is distributed unevenly, it reflects that the respondents are not better placed. In other words, the sample respondents are earning income erratically. Instead, if the income is evenly distributed it implies that the income earned by the sample respondents is uniform. In order to measure the extent of inequality, Lorenz Curve, Gini Ratio, Logarithms of Variance, Disparity Ratio and Centile Ratio have been employed and analyzed below.

3.4.2.1 Lorenz Curve

The following Table 1 provides the decile distribution of monthly income of the women labourers before and after joining in match industries.

Table 1 Decile Distribution of Monthly Income Distribution of the Women Labourers Before and After Joining in Match Industries

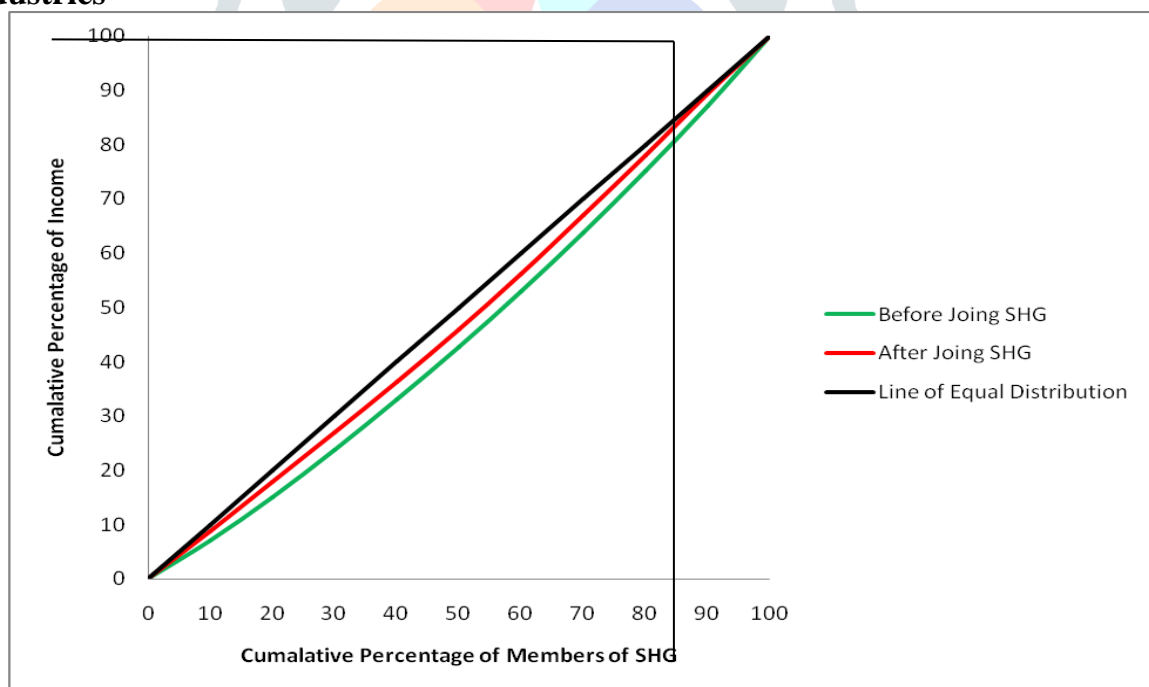
Decile group of respondents	Before joining			After joining		
	Percentage share of income	Cumulative Percentage	Mean income (Rs.)	Percentage share of income	Cumulative percentage	Mean income (Rs.)
0-10	7.56	7.56	4236	7.59	7.59	5147
10-20	8.25	15.81	4622	8.31	15.90	5635
20-30	8.58	24.39	4809	8.72	24.62	5913
30-40	9.33	33.72	5025	9.82	34.44	6659
40-50	9.59	43.31	5376	10.03	44.47	6801
50-60	9.61	52.92	5386	10.47	54.95	7106

60-70	10.02	62.94	5615	11.01	65.96	7463
70-80	11.18	74.12	6262	11.08	77.04	7514
80-90	12.42	86.54	6957	11.25	88.29	7629
90-100	13.46	100.00	7542	11.71	100.00	7943

Source: Primary Data

- ❖ It is evident from Table 1 that the average income of the women labourers before joining in match industries increased from first decile to tenth decile group. The percentage share of mean income of first decile accounted to 7.56 per cent while the top decile accounted to 13.46. A difference of 5.90 per cent level of mean income was realized between first and the tenth decile group of respondents. Further, it is clear that the average income of the sample respondents after joining in match industries increased from bottom decile group to top decile group. But the percentage share of mean income between the first and the tenth decile group range from 7.59 percent to 11.71 per cent. It showed a difference of only 4.12 per cent mean income between the first and the tenth decile group. By comparing the sample respondents before and after joining in match industries it was found that the income was not evenly distributed for the sample respondents before they have joined in match industries; but it was observed that the income was evenly distributed for the sample respondents after they have joined in match industries in the study area. It implied that the intensity of poverty has been considerably reduced after the respondents have joined in match industry.

Figure 1 Lorenz Curves of Monthly Income of the Sample Respondents Before and After Joining in Match Industries



Source: Data given in Table 1

By using the data in Table 1, Lorenz Curves for the women labourers before and after joining in match industries were drawn. Figure 1 portrays that the Lorenz curve of the sample respondents before joining in match industries was farther away from the line of equal distribution. Further, the Lorenz Curve of the sample respondents after joining was closer to the line of equal distribution. It implied that the income inequality of the sample respondents before joining in match industries was greater than the inequality after joining in match industries in the study area. From the analysis it could be inferred that the income was evenly distributed in the case of sample respondents after joining in match industries than before joining in match industries in the study area.

- ❖ So, the researcher concluded, as far as the sample respondents were concerned income was more evenly distributed after joining in match industries than before joining in match industries. It implied that the gap between the higher earned group and lower earned group had been considerably reduced for the sample respondents only after they joined in match industries in the study area. It implied that the intensity of poverty has been considerably reduced after the respondents have joined in match industry.

3.4.2.2 Gini Co-efficient

The Gini Co-efficients were estimated for the sample respondents for income distributions of the members before and after joining in match industries in the study area. The calculated results are presented in Table 2

Table 2 Gini Co-efficients for the Income of the Women Labourers Before and After Joining in Match Industries

Category of Respondents	Gini Co-efficient
Before joining in match industries	0.237
After joining in match industries	0.152

Calculated

from Primary Data using Table 1

Table 2 shows that the Gini Co-efficient ratio 0.237 was higher for the sample respondents before joining in match industries than that after joining in match industries which was 0.152 in the study area. This showed that the inequality in the income in the case of women labourers before joining in match industries was greater than after joining in match industries in the study area. So it could be concluded that the income of the sample respondents were evenly distributed after joining in match industries than they were not employed in match industries in the study area. It implied that the intensity of poverty has been considerably reduced after the respondents have joined in match industry.

3.4.2.3 Variance of Logarithms

To test the validity of the Gini Ratio, Variance of Logarithms has been employed. The calculated value of Variance of Logarithms has been presented in Table 3

Table 3 Variance of Logarithms for the income of the Sample Respondents Before and After Joining in Match Industries

Category of Respondents	Variance of Logarithms
Before joining in match industries	0.0357
After joining in match industries	0.0198
F *	1.62
F (500,500)	1.00

Source: Primary Data F* = Calculated Value, F = Table Value

The variables considered are to be log normally distributed with mean μ and variance 6_1^2 and 6_2^2 for the women labourers before and after joining in match industries respectively. The difference between 6_1^2 and 6_2^2 was tested using F ratio. It was found that the value of variance of logarithms for the sample respondents before and after joining were 0.0357 and 0.0198 respectively. The calculated value of F* was 1.62 which was greater than the table value of 1.00 at $F_{0.05}(500, 500)$ degrees of freedom. It showed that there was a significant difference in the degree of income inequality between the sample respondents before and after joining in match industries. So, from the above analysis the

researcher concluded that after joining as a labourer in match industries, the income distribution among the sample respondents was evenly distributed in the study area.

Disparity Ratio

Disparity ratio was measured with the help of data given in Table 1. The disparity ratio of the sample respondents before and after joining in match industries is presented in Table 4

Table 4 Disparity Ratio of the Sample Respondents Relating to Income Before and After Joining in Match Industries

Category of the Respondents	Disparity Ratio
Before Joining in match industries	1: 1.78
After Joining in match industries	1: 1.54

Source: Primary DataSource: Primary Data

Table 5. Centile Ratios for the Sample Respondents Before and After Joining in Match Industries

Percentile Values	Centile Ratios Before Joining		Difference	Percentile Values	Centile Ratios After Joining		Difference
4667.79	P ₁₀	86	14	5319.44	P ₁₀	76	24
4835.57	P ₂₀	90	10	5902.17	P ₂₀	84	16
5003.94	P ₃₀	93	07	6325.40	P ₃₀	90	10
5200.79	P ₄₀	96	04	6691.78	P ₄₀	95	05
5397.64	P ₅₀	100	00	7023.15	P ₅₀	100	00
5679.11	P ₆₀	105	05	7254.63	P ₆₀	103	03
6043.21	P ₇₀	112	12	7486.11	P ₇₀	107	07
6351.85	P ₈₀	118	18	7659.86	P ₈₀	109	09
6802.33	P ₉₀	126	26	7829.93	P ₉₀	111	11

Table 4 indicates that the disparity ratio between the mean income of the bottom 10 percent and the top 10 percent of the sample respondents before and after joining in match industries were 1: 1.178 and 1:1.54 respectively. These ratios indicated that there was a higher disparity in the case of the sample respondents before joining in match industries than after joining in match industries in the study area. So, it could be concluded that the income gap between the higher and lower group came down after the women joined as workers in match industries in the study area.

Centile Ratio

With the help of centile ratio, the extent of inequality of income between the groups from top to bottom percentile has been analyzed. The computed values of the centile ratios for the sample respondents before and after joining in match industries are presented in Table 5.

From Table 5 it is inferred that the centile ratios in the case of sample respondents before joining in match industries in the middle were more or less equidistant from 100 while the ratios at the

bottom were far away from 100 compared with those at the top end. This indicated that the inequality in the distribution of income was more or less equal in the middle, while the inequality in the lower end was greater when compared with the upper end.

The centile ratios in the case of sample respondents after joining in match industries showed that the deviation was narrowed down and evenly distributed among the respondents except at the first and second centile ratios. It showed that the distribution of income was evenly distributed among the sample respondents after joining in match industries in the study area.

- ❖ By comparing the centile ratios, one could infer that the inequality in the distribution of income was greater for the sample respondents before joining in match industries and lesser for the sample respondents after joining in match industries in the study area. It indicated that the level of distribution of income spread over of the sample respondents was even in the case of sample respondents after joining in match industries than before joining in match industries in the study area. It implied that the intensity of poverty has been considerably reduced after the respondents have joined in match industry.

To Sum Up

- Out of 500 sample respondents before joining as labourers in match industries surveyed only 15.2 per cent of the respondents had earned more than Rs. 6500 as their family monthly income, while the remaining 84.8 per cent had earned less than Rs. 6500 per month in the study area. Such a concentration in the lower end of income distribution disclosed the fact that the income distribution was positively skewed.
- Out of 500 sample respondents after joining in match industries 65.6 per cent had earned more than Rs. 6500 per month while the remaining 34.4 per cent had earned less than Rs.6500 per month in the study area. Such a concentration in the upper end of income distribution revealed the fact that the income distribution was negatively skewed.
- The women labourers after joining in match industries had been better placed in earning income and their inequality had also been reduced considerably when compared to the women labourers before joining in match industries.
- The average income of the women labourers before joining in match industries increased from first decile to tenth decile group. The percentage share of mean income of first decile accounted to 7.56per cent while the top decile accounted to 13.46. A difference of 5.90 per cent level of mean income was realized between first and the tenth decile group of respondents.
- The average income of the sample respondents after joining in match industries increased from bottom decile group to top decile group. But the percentage share of mean income between the first and the tenth decile group range from 7.59 percent to 11.71 per cent. It showed a difference of only 4.12 per cent mean income between the first and the tenth decile group.
- By comparing the sample respondents before and after joining in match industries the researcher concluded that the income was not evenly distributed for the sample respondents before they have joined in match industries; but it was observed that the income was evenly distributed for the sample respondents after they have joined in match industries in the study area.
- The Gini Co-efficient ratio 0.237 was higher for the sample respondents before joining in match industries than that after joining in match industries which was 0.152 in the study area.
- The values of variance of logarithms for the sample respondents before and after joining were 0.0357 and 0.0198 respectively. The calculated value of F^* was 1.62 which was greater than the table value of 1.00 at $F_{0.05}$ (500, 500) degrees of freedom. It showed that there was a significant difference in the degree of income inequality between the sample respondents before and after joining in match industries.
- The disparity ratio between the mean income of the bottom 10 percent and the top 10 percent of the sample respondents before and after joining in match industries were 1: 1.178 and 1:1.54 respectively.

- The centile ratios in the case of sample respondents before joining in match industries in the middle were more or less equidistant from 100 while the ratios at the bottom were far away from 100 compared with those at the top end. The centile ratios in the case of sample respondents after joining in match industries showed that the deviation was narrowed down and evenly distributed among the respondents except at the first and second centile ratios.
- From the values of mean, median, mode, skewness, Lorenz curve, Gini ratio, disparity ratio, centile ratios the investigator found that the intensity of poverty has been considerably reduced after the respondents have joined in match industry.

SUGGESTIONS

- In order to bring about improvement in the conditions of women, the Governments concerned should strengthen the capacities of women by making them to participate in the community related programmes.
- Voluntary organizations should take efforts to popularise the Workers education through street plays, meetings in regional language either near the work sites or colonies of these women labourers.
- Providing employment opportunities and avenues for self employment to women are necessary to help them to come out from the clutches of poverty that cripple their families.

General Conclusion

The match industry is considered a vital one in many respects. It provides major employment opportunities to women in Virudhunagar District of Sattur Taluk. The present study is an attempt to study the nature and extent of poverty and socio economic status of women laborers in the match industry. The findings of the present study will be highly useful to the laborers, Governments, chambers of match association, employers of the match industry in particular to improve the standard of living of women labourers in the match industry. The investigator of the present study concluded that the intensity of poverty has been considerably reduced after the respondents have joined in match industry. This in turn improves the standard of living and helps to free from clutches of poverty in the study area.

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