

Participation of the married women in informal sector: the case study of kesargarh village in purulia district

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ABSTRACT: Women's participation in the labour market varies greatly across countries. Female labour force participation plays an important role for the development of an economy. The participation of women is the outcome of various macro and individual factors. Given the complex nature of female labour force participation in developing countries, it is important to analyse the socio-economic factors influencing the decision of women to engage in the labour market. Against this backdrop the present study is an attempt to investigate the factors influencing the participation of the married women in the informal sector. In the developing countries informal employment is generally a larger source of employment. The study is based on an individual survey conducted in a village (namely Kesharghar from Hura block) of Purulia district, West Bengal. The findings of our study highlight that in case of informal sector participation does not significantly depend on formal education. The regressors like number of child, non-labour income and health expenditure etc. have significant impact on the probability of a woman being employed in informal sector works. As number of child increases probability of the participation in informal sector increases on the other hand it is inversely related with non labour income and health expenditure. To our knowledge not much of works in this direction was done in the context of West Bengal.

I. INTRODUCTION

Female labour force participation strengthens economic growth and development. More and more women were joining the workforce after World War II because many male soldiers died during World War II so women of those households were involved in a variety of activities to maintain their own economics status. Developing country typically shows direct relationship between high rate of women's participation in the labour force and poverty. In developing country the high rate of women's participation in labour force reflects the poor condition of that country. Women earn relatively

less than men and they are more likely associated with insecure jobs. According to the inequality report of Oxfam 2018 the gender pay gap in India was 34% that means, women get 34 per cent less compared to men for doing the same job with same qualifications Women's labour force participation in India is one of the lowest in the world. Women make up half of India's population, but still less than a quarter of the workforce. According to the Deloitte report 2018 the female workforce participation in India has decreases from 36.7% (2005) to 26% (2018) and 95% or 195 million women are employed in the unorganised or informal sector. The reasons for the decline in female participation in the workforce are social and economic barrier, deteriorating education system. Unorganised or informal sector is a major part of Indian economy; more than 90% of workforce and 50% of the national products are coming from informal economy. Women's participation in the labour market helps to standardised the education levels, social norms and also reflecting a major difference in economic development. Women's participation in labour market also improves fertility rates, access to childcare and other supportive services. In developing countries the participation of married women in the labour force (Informal sector) is complex. So it is important to analyse the socio-economic factors which influencing the participation of the married women in the informal sector work. Against this backdrop the present study is an attempt to investigate the several aspects of women labour supply in the context of West Bengal. We have done our study based on an individual survey conducted in a Kesargarh village of Purulia district, West Bengal. We have already mentioned our motivation of the present study. The specific objective of our study is to analyse the factors influencing the employment of the married women in the informal sector work. We briefly review the underlying theory explaining women's labour force participation and labour supply with focus on developing countries. The selected review of the literature on intra-household resource allocation is dictated by the scope of this

study. Lachaud (1993) conducted a comparative study where six sub-Saharan African countries – Burkina Faso, Cameroon, Côte D'Ivoire, Guinea, Madagascar and Mali were taken as sample. They showed that women participation in the labour market is directly related to their age and education but inversely related to the income of other family members of the household if leisure is a normal good having positive income elasticity. They also acknowledged that the employment status of the head of the household greatly influences the tendency of women to join in workplace. They concluded that female labour supply in Africa is too lower than men, especially where the incidence of traditional structure is high. The decision for women to participate in labour market is influenced by several socioeconomic factor and variables such as family size, husband's education, labour market condition and other environmental variables in Nigeria (Okojie 1981; Urama and Obinna 2003). According to El-Hamidi (2003), there is a lot of work to be done in developed economy regarding the women labour supply. These studies are generating broad estimates of the elasticity of labour supply in terms of wages and income. Killingsworth and Heckman (1986) gives a comprehensive list of positive estimates of wage elasticity while Nakamura, and Cullen (1979) lists assumption about negative uncompensated wage elasticity. No such work done regarding married women labour force in west Bengal and also in our purulia district.

II. SAMPLE SELECTION

We have randomly selected one namely kesharghar village from the hura block in purulia district. Now we discuss about the Village profile

through census 2011. The Kesharghar village is located in rural area of Purulia district of West Bengal. It is the under of Hura block of Purulia district. According to Census 2011, kesharghar population is 4626. The total numbers of households in kesharghar village are 937 out of this 2340 are males whereas the females count 2286 here. According to Census 2011 information the location code or village code of Kesharghar village is 330855. It is situated 11.2km away from sub-district headquarter Hura and 25.5km away from district headquarter Purulia. As per 2009 stats, Kesharghar is the gram panchayat of Kesharghar village. The total geographical area of village is 1398.7 hectares. As per 2019 stats, Kesharghar villages comes under Kashipur assembly & Purulia parliamentary constituency. Purulia is nearest town to Kesharghar which is approximately 26km away.

The survey was conducted at individual level in Kesharghar village of purulia district and the target population was married women. The present study is an attempt to determine the factors responsible for participation of married women in informal sector work. The main informal activities of the survey areas were identified by consulting with local government bodies. Out of 144, 98 women respondents are employed in the informal sector and 46 are unemployed. We have surveyed them using a constructed questionnaire. The questions are primarily on five aspects- (i) details of women respondent (ii) labour market details of women respondent (iii) family details of the women respondent (iv) annual Expenditure data of the women respondent's household (v) other details of women respondent's household. **Table1** gives the descriptions of those variables which are used in our econometric analysis.

Table1: Description of Variables

VARIABLE	Description
CATEGORY	Social category- UR/SC/ST/OBC
AGE	Age of the woman respondent
HHSIZE	Household size of the women respondent
WORK	Employment (informal) status of the Women respondent. We set work =1 if employed and 0 otherwise.
WNATURE	Nature of the Informal work (like vegetable seller, vendor, maid, labour, tuition teacher, etc).
EDUCATION	Years of schooling of the woman respondent.
WORKHOUR	Working hour of the women respondent.
LABINCOME	Self income of the women respondent. So, if she is unemployed then it becomes 0.
NONLABINCOME	Total Income of the household except the woman respondent's income (if employed). We collect women respondent's husband income and other family members' income data separately and then we take the summation of these to find the non labour income.

CHILD	Number of children in the age group less than 14yrs.
FEXP	monthly average household expenditure on food and fuel of the woman respondent
HEALTHEXP	Monthly average household- health expenditure. Health expenditure is composed of expenditure on chronic healthcare and hospitalization episode(s).

III. DESCRIPTIVE STATISTICS

Now, we present the descriptive statistics of our sample in the **Table2** and try to analyse the basic characteristics of the relevant variables. From the **Table2** we found that mean age of female respondents is about 32 years and standard deviation is high which indicates that there is a deviation in terms of age. We found maximum and minimum ages are 61 and 16. The average

household size is 5, with the maximum of 9. The data shows not much dispersion in the household size. Important fact comes out that mean a year of schooling is 6 and standard deviation is not high that directly shows that there is a lack of female education. In our sample the highest year of schooling is 14 and there are 28 women who reported to be illiterate.

Table2: Descriptive statistics of sample household

Variable	Observation	Mean	Std.Dev.	Min	Max
AGE	144	31.992	9.746	16	61
HHSIZE	144	5.227	1.368	2	9
EDUCATION	144	6.817	1.174	0	14
WORKHOUR	98	5.268	1.474	2	8
LABINCOME	98	3780.488	1091.769	1000	8000
NONLABINCOME	144	7866.667	3802.771	0	21000
WORKMEMBER	144	2.267	0.683	1	5
CHILD	144	1.433	0.817	0	3
FEXP	144	4237.5	1535.248	1000	10000
HEALTHEXP	144	2521.25	2079.104	100	7500

Source: Own Calculation

There are 98 women in our sample who are employed in the informal sector works like labour, vegetable seller, maid, tuition teacher etc. The mean working hours of the employed women is 5 hours and standard deviation is not so high that means there are not so much deviation in working hours among the female workers involved in the mentioned works. Mean self income of women labour income is near about 3800 and early we got mean of household size is 5members. Now mean of per capita income is 760. In our data set maximum self income of a woman respondent is 8000 and minimum is 1000. Mean of the other family members' income is 7870 and we can't be ignoring the standard deviation here. A women doing job or not is directly depend on the other family member income. When we calculate the mean of women respondents has children it becomes near about 1.5. In our sample we take all the married women as our respondent but some women not having any child at that moment for this reason mean is not so high. Mean of average food expenditure is 4237 rupees

and standard deviation is not so high if there is some deviation only because of household size. Mean value of average health expenditure is near about 2520 and standard deviation is high which shows that there is a high deviation of health expenditure among the households. During our survey we asked the married women respondent regarding their category status. We found all types of social category say General (32), ST (25), SC (35) and OBC (52).

IV. METHODOLOGY AND ECONOMETRICS ANALYSIS

In the previous section we have examined some aspects of our sample respondents. Now, we have intended to do some deeper analysis on the target group. In specific we are interested into the factors that influencing the informal employment among the married women. To do so we have fitted logistic model and also used multi regression model.

The logistic regression model is applied to examine the factors that influencing the informal employment among the married women. The unit of analysis used for the regression is the married woman. The dependent variable, **work** in the logistic regression is a dichotomous variable defined as 1 when the married woman is involved in any informal- sector work and 0 otherwise.

Based on the logistic distribution function, the probability of a woman participating in informal-

$$\text{sector work is: } p = \Pr(\text{work} = 1) = \frac{e^{x_i'\beta}}{1+e^{x_i'\beta}}$$

Where, x_i is a set of regressors, β a set of parameters is to be estimated. In our analysis $x_i = \{\text{AGE, ADULT, CHILD, NONLABINCOME,}$

EDUCATION, HEALTHEXP, CATEGORY}

For the category regressor, we consider UR as the base

After the logit transformation,

$\ln\left(\frac{p}{1-p}\right) = x_i'\beta$ Where $\frac{p}{1-p} = e^{x_i'\beta}$ is known as the 'odds ratio'. It indicates how often the event happens, relative to how often it does not, under a certain circumstance.

V. SPECIFICATION AND RESULTS

To examine the factors influencing the employment of the married women in the informal sector work we fit the logistic model as mentioned above and results are represents in the Table4.

Table 4: Factors influencing informal employment among the married women

Dependent variable: work	Coefficient	Odds Ratio	z	P
AGE	-.0685338	.9337619	-1.42	0.156
ADULT	-.1011528	.903795	-0.40	0.692
CHILD	1.124571	3.078896	2.26	0.024
EDUCATION	.0914699	1.095784	0.27	0.788
NONLABINCOME	-.0004866	.9995136	-4.10	0.000
HEALTHEXP	.0007511	1.000751	3.81	0.000
CATEGORY				
UR (base)	0	1		
SC	-.216796	.8050942	-0.22	0.826
ST	-.0386695	.9620686	-0.04	0.968
OBC	-.681004	.5061086	-0.65	0.517
Constant	4.13784	62.66731	1.59	0.112
Number of observation	144			
LR chi2(10)	74.97			
Prob > chi2	0.0000			
Log likelihood	-37.790569			
Pseudo R2	0.4980			

Source: Own calculation

The LR chi-square of 74.97 with a p-value of 0.0000 implies that our model as a whole fits significantly. The regressors number of child, non-labour income and health expenditure have significant impact on the probability of a woman being employed. Moreover, their coefficients have expected signs. With other variables remaining constant, if the non-labour income of the household increases by a unit; on average the estimated logit of informal employment of married women decreases, whereas it increases with the rise in health expenditure and number of children of the women. Women those who are having more children are 1.12 times more likely to join the informal labour-force. In case of health expenditure and non-labour income, women those who are

having higher health expenditure and non-labour income in their household are slightly more than 1 times more likely and slightly less than 1 times less likely to join the informal labour-force. We find that education has no impact in the informal sector employment. We consider category-dummies as regressors in our logit model. The UR category is considered as the base. Our results show that, the social categories have no impact in the informal sector employment of married women.

VI. CONCLUSION

Present statistics of women labour force motivate us to know their status, lifestyle, occupation. So we select Kesargarh village as our

survey area. From our result and analysis part we came to know that: 98 married women respondents are employed in informal sector and 46 are unemployed out of 144 respondents. Most of the employed married women of this area are depends on agriculture and labour Working as their source of income. Some of women respondents are joined with maid, vegetable seller, tuition teacher etc. We found all types of social category say UR, ST, SC and OBC as our respondent. We considered the UR category as base and found that social categories have no significant impact in the informal sector employment of married women. Our results show that, in case of informal sector a married women getting work or not does not highly depend on formal education. The regressors Number of child, non-labour income and health expenditure have significant impact on the probability of a woman being employed. Women those who are having more children are 1.12 times more likely to join the informal labour-force on the other hand it is inversely related with non labour income. If other variables remaining constant then the non-labour income of the household increases by a unit, on average the estimated logit of informal employment of married women decreases. Probability of married women to participate in the labour force increases as household monthly average food expenditure increases.

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