

# The Determinants of Women Workforce Participation among the Rabha women in Rabha Hasong Autonomous Council Area of Assam



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*Abstract Workforce participation of women is considered as a major factor in the progression of their economic independence and usually it has been considered as an indicator of their overall wellbeing status in the society. Higher participation of women in workforce is symbolised for their autonomy status and social and economic empowerment. But there are many determinants related to women entering into the workforce. The purpose of this study is to examine the main determinants of women workforce participation among the Rabha women in Rabha Hasong Autonomous Council (RHAC) area of Assam. The data from the socio-economic survey of Rabha women undertaken in four blocks of RHAC area during January to March 2019, are analysed by the logistic regression model. A number of potential variables are used in the model as independent variables. The results suggest that Marital status of Women, Education of Women, Age of Women, Number of earning members of the family and Number of existing children between the age group 0-6 affect significantly; and Occupation of Head of the household, Types of family, Age of Head of the household and Household income (in Rs. 1000) does not significantly affect the Rabha women entering into the workforce. It is suggested that in order to improve the working condition of female labor force, the economy will need to create more appealing working opportunities and government policies will have to create higher quality jobs which will encourage the women to enter into the job market.*

**Keywords:** Assam, Determinants, Rabha Hasong Autonomous Council, Rabha Women, Women Workforce Participation.

## I. INTRODUCTION:

The importance of women workforce participation in socio-economic development cannot be overemphasised. There is a positive relationship between economic development and women workforce participation. This rate is very low in India because importance was not given to the development of female human capital. At the household level, household income is the primary determinant for women to enter into the job market. Household size, household composition and education have positive relationship with the entrance of women in the workforce while high occupational status, highest wage rate of their husbands have negative effects on the participation of women (Hamid. S 1991).

Women's economic participation is influenced by many factors such as their age, education and marital status etc. The employment status of the head of the household, number of earning members of the family, children below 6 years old etc. are also important factors that affect women participation in the workforce (Naqvi, F.Z. and Lubna, 2002).

This study seeks to identify the major factors influencing workforce participation among the Rabha women in Rabha Hasong Autonomous Council (RHAC) area of Assam and to examine how these factors associate with them.

## II. METHODOLOGY:

To cope with the objectives of the study, an evaluative and descriptive method is adopted for the study. Since the study needs both secondary and primary information, first it requires to go through various published sources. Published sources were used to conceptualise the issue. Therefore secondary data were gathered from various books, journals, periodicals, reports, etc.

To achieve the ground realities and to induct the issue, the study proposed to gather primary information from the study area. For this purpose a purposive multi-stage random sampling technique was adopted. The study area RHAC was chosen purposefully in the first phase of the study, because mostly the area is inhabited by Rabha community.

Since, the area of RHAC extended to two districts- Kamrup (R) and Goalpara, in the second stage two Community Development (CD) blocks from each district were chosen randomly from the total of 22 (14 from Kamrup Rural and 8 from Goalpara) CD blocks.

Selection of blocks are followed by selection villages in the third stage of the survey. Here eight (8) number of sample villages (two villages from each block) are chosen randomly from the four selected CD blocks.

In the fourth and final stage of survey, a random selection of sample units were conducted. This stage included random selection of Rabha inhabiting households from the selected villages numbering 20 from each village constituting the sample size to 160 households. The selected sample units were interviewed with a pre tested questionnaire schedule to collect necessary information. The statistical procedure through which primary information were gathered is given in a tabular form (**Table- 1**).

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**Table 1: Procedure For Collecting Primary Information**

Districts	Blocks	Villages
Goalpara	Rangjuli	Maslam Pt-I
		Madang Pt-I
	Kochdowa	Siluk Pt-I
		Purani Bhita
Kamrup (R)	Boko	Pakharapara
		Sakhati
	Chaygaon	Kukur Mara
		Bhathi Para

The above table depicted that a total of 160 households are selected randomly for the field survey. The data for this study are collected from January 2019 to March 2019 from a female respondent of each households between the age group 15-59. Thus a total of 160 females in the age cohorts of 15-59 years are considered in this study.

### III. RESULT ANALYSIS

#### Factors affecting Women's Workforce Participation:

There is a significant difference between working men and working women since women are burdened with childbirth and the responsibility for the whole family as well as domestic works. There are many factors such as age, marital status, education, husband's income, number of children etc. which have bear a great significance on the decision of a woman to be in the workforce. The degree of relationship between each variable with the dependent variable i.e. Women Workforce Participation (WWP) rate varies from country to country and region to region.

**E. E. Macoby's (1966)** study reflects that the workforce status of married women has important social and economic implications. It affects their entire life and their role in the society. Moreover, it affects the whole family and their marital relationship.

**F. Elkin (1972)** states that marital status is a key factor of workforce participation for women and it has also great economic significance. The rate of economic growth of a nation is affected by the proportion of married women in the labour force and shifts in the job structure of the economy which create increasing demands and opportunities for women and consequently raise their economic wellbeing.

**Ostry's (2014)** study states that the presence of young children is a very strong deterrent for workforce, especially for young mothers. The negative influence of child status declines with age. Education in fact is a more important factor than age and it positively affects the workforce participation rate of women. If education is taken into account, the negative effect of presence of young children, which still strong is weakened.

**Hamid S. (1991)** observed about the determinants of supply of women in the job market. He analysed that married women are highly engaged in earning activities rather than unmarried women. His empirical test depicts that household income is the primary determinant for women to enter into the job market. There are some factors like household size, household composition and education which have positive relationship with entering of women in the workforce.

Moreover, he analyzed that husbands having higher status, earning high wage rates put negative impact on the women workforce participation.

**Izhar's and Massod's (2009)** observation based on NSSO 61st round (2004-05) data revealed that personal variables like education and wages are significant determinant for urban women's workforce participation, but not for rural women.

**Majumdar (2011)**, demonstrated how the workforce participation decision is influenced by individual, various household activities, and a set of macro level factors with the help of a binary choice model. The variables taken into consideration by him are marital status, age, years of schooling, place of residence, sex ratio, household dependency ratio and household income at the household level; and average unemployment rate and average wage rate at macro level.

**Shah et al. (1976)** indicates that there is a direct and proportionate relationship between female workforce participation and their marital status.

**Anbreen and Afzal's (2012)** study in case of Pakistan exposed that husband's income, employment status and education have positive impact on work force participation of women.

#### Factors used as independent variable in the study:

**(i) Marital status of women:** It is an important demographic factor for determining WWP. This variable is divided into two categories, married and unmarried. From the above discussions, it is found that married women are more likely to participate or not participate in the job market. So, both positive and negative impacts are expected among marital status and WWP.

**(ii) Education of women:** It is an important social factor in determining the women workforce participation. To capture the effect of different educational levels on women workforce participation, we have included two categorical education dummy variables in our model. The relationship between education and WWP is expected as positive.

**(iii) Occupation of head of the household:** It is an economic factor that strongly influences WWP rate. It is expected that women's workforce participation is inversely related with the occupational status of head of the household.

**(iv) Type of family:** Family set-up is another important social factor which affects women workforce participation. It is used as a categorical variable in the model because families are divided into two categories- nuclear and joint family.

It is expected that, women belonging to joint family system are more likely to join in the workforce participation.

**(v) Age of women:** Age is a very crucial demographic factor for the decision of workforce participation. In this model this factor is used as a continuous variable. It is, expected that the relationship between age and WWP decision will be both positive and negative with respect to different age groups.

**(vi) Age of head of the household:** It is also an important demographic factor that influence the workforce participation status of women. The more aged the head of a family, and if there are no male member to take the responsibility of the family, then the greater will be the responsibility of females of the family to undertake the household burden by entering into workforce. So there is an expected positive relationship between the age of main household earners and women of the family. In this model it is taken as a continuous variable.

**(vii) Number of earning members of the family:** Women workforce participation is also influenced by an important economic factor i.e. the number of earning members in the family. The larger the earning members in the family, the lower will be the women workforce participation. So, negative sign is expected between earning members of the family and WWP. It is also taken as a continuous variable in this model.

**(viii) Household income:** It is an economic factor that determines women workforce participation rate. It is expected that there is an inverse relationship between household income and women workforce participation. The higher the family income, the lesser will be women's participation in the workforce. It is used as a continuous variable in the model.

**(ix) Number of existing children of age 0-6:** A demographic factor influences women workforce participation is the number of existing young children in the age group 0-6 of the women. It is seen from various studies that number of existing young children and women's participation in economic activities are negatively related. Larger the number of children, the lesser will be the interest of women to enter into the workforce.

**Model to be applied and justification:**

Based on the nature of the dependent variable, Y ( Women Workforce Participation), which takes the value Y= "1" if the women is in the workforce and Y= "0" if the women is not in the workforce, two models, Probit and Logit models can be used. Both these models, provide a prediction for the probability that the women with a given set of characteristics is in workforce. However, since logistic model is easier to understand than other models and uses a

standard form of analysis, therefore logistic regression model is used in this study. It explains the relationship between one binary variable which is taken as dependent variable and one or more ordinal, nominal, interval or ratio-level independent variables. In the logistic regression model with more than one independent variable, the model can be written as-

$$\ln \frac{p_i}{1-p_i} = \alpha + \beta_1 X_{1i} + \dots + \beta_n X_{ni}$$

Where,  
n=1.....9.  
p<sub>i</sub>= the probability that a woman is in workforce.  
1-p<sub>i</sub>= the probability that a woman not in workforce.  
α =constant term.  
β<sub>1</sub>.....β<sub>n</sub>= coefficient of independent variables X<sub>1</sub>.....X<sub>n</sub> respectively.

**Description of independent variables and their values in logistic regression:**

The table below portrays the set of independent variables of the study and their relevant values used in the logistic regression:

**Table 2: Description of independent variables and their values**

Variables	Type	Value
Marital status of Women	Categorical	"1" if married and "0" if unmarried
Education of Women	Categorical	"1" for "10 <sup>th</sup> +" and "0" for below "10 <sup>th</sup> +"
Occupation of Head of the household	Categorical	"1" if employed in organized sector and "0" for others
Types of family	Categorical	"1" for nuclear and "0" for joint
Age of Women	Continuous	They have different numerical values
Age of Head of the household	Continuous	
Number of earning members of the family	Continuous	
Household income (in Rs. 1000)	Continuous	
Number of existing children between the age group 0-6	Continuous	

**Results of binary logistic regression:**

**Table 3: Result of binary logistic regression for Rabha women in RHAC**

Independent Variables	B	Wald	Exp.(B)
Marital status of women	1.488**	5.971	4.429
Education of women	-0.975**	3.903	0.377
Occupation of Head of the household	0.275	0.167	1.317
Types of family	0.265	0.043	1.304
Age of women	-0.051**	4.695	0.950
Age of Head of the household	0.006	0.116	1.006



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Number of earning members of the family	1.690***	10.731	5.420
Household income (in Rs. 1000)	0.000	0.107	1.000
Number of existing children between age group 0-6	0.568**	3.955	1.764
Constant	-2.867	3.762	0.057

Note: \*\*\* and \*\* denotes significant levels at 1% and 5% level of significance respectively.

-Log likelihood= 113.047, Cox & Snell R square= 0.373, Nagelkerke R square= 0.497

Hosmer and Lemeshow goodness of fit test statistics= 9.746, P= 0.283, Iteration number= 5

### Discussion of results of binary logistic regression:

From table 3 it is found that, out of nine independent variables, one is obviously significant at 1% which is 'Number of earning members of the family' and four variables are significant at 5% i.e. 'Marital status of women', 'Education of women', 'Age of women' and 'Number of existing children between age group 0-6'.

It is seen from the table that marital status, one of the independent variable of the study is statistically significant in determining workforce participation and the positive result of coefficient (B=1.488) implies that marital status is positively related with women workforce participation. The exponential B value of regression coefficient here shows that, holding other factors constant married women for Rabha tribe are 4.429 times more likely to participate in the workforce than the single women. Theoretically, it is seen that married women's participation in the labour market should fall because of increasing responsibilities at home. But the result here does not justify the theory. The possible reason behind this positive relationship may be that like some other tribal societies, in Rabha society also there is a saying that women only should engage in earning activities after marriage. When they enter in conjugal life, they have to bear the liabilities both for their children and family of the laws and so, to maintain their families they have to enter into the workforce. The finding is similar to the work of Muhammad Zahir Faridi, Coaudhry and Anwar (2009) who portrays that there is a positive significant effects of MSOF on WWP and they explains that the females want to join in the labour market just to share the financial burden of their family and to support their counterparts in meeting basic economic necessities of life.

Regarding the level of education, it is seen that education level is seen statistically significant for workforce participation and the negative value of coefficient (B= -0.975) implies that higher the level of education, lower will be the level of workforce participation. The exponential B for education of women here shows that women having education level above high school are less likely to participate in the workforce by 62.3 percent. The possible reason for this negative relationship is that with increase in level of education, the expectation of women for high quality job increases. If they don't get the job as per their expectation they prefer to stay at home and do household works. This situation is found common in developing countries like India. Sinha (2005), said that there is often found an inverse relationship between literacy and WWP in Indian context and he interpreted that higher WWP is often a reflection of greater distress in the country.

Occupation of Head of the Household is statistically insignificant for determining workforce participation. The positive sign of coefficient (B= 0.275)

indicates the positive association of this variable with workforce participation. This may be due to the reason that if the head of a family is in a high position (here it indicates engaged in organized sectors), he or she wants to make their family members (including the female members of the family) self-dependent and encourages them to enter into the job market. In those families, the female members of the family get minimum support from their head of the households.

Nuclear family shows insignificant result with workforce participation in this study. The positive result of coefficient (B= 0.265) indicates that with nuclear family workforce participation increases. The possible reason for this case is that women living in a nuclear family have less burden and such type of family are less restricted where generally women take their own decisions independently.

Age of women is statistically significant and shows negative association (B= -0.051) with workforce participation for Rabha women. Here the exponential B of the age of women shows that with increase in additional 1 year, women are less likely to participate in the workforce by 5 percent. The result is similar to the findings of Huang (2016), who said that with the increase in age, women are less likely to participate in the workforce.

Age of Head of the household is seen statistically insignificant in this study but it shows positive association with workforce participation (B= 0.006) that means with increase in age of the head of households women's workforce participation increases. The possible reason behind this situation is that with increase in age of their head of the households, if there are no any efficient male members within the families, women of the families have to take the responsibility to maintain their family mainly, they have to earn money for their livelihood and therefore seeks to enter into the job market.

Number of earning members of the family is seen statistically significant concerning workforce participation of Rabha women in the study area. The exponential B value here shows that, with additional increase in earning member in the family, workforce participation of women increases by 5.420 percent. The positive result of coefficients (B= 1.690) indicate that with increase in the number of earning members in the family women workforce participation also increase. This finding may be due to various reasons viz. inspiration from other earning members in the family, want to make themselves financially independent and want to make their own identity within and outside the family and therefore they want to enter into the workforce.

The household income is insignificant but positively associated with workforce participation (B= 0.000). The positive relationship between the two variables indicate that with increase in household income women workforce participation increases. This result is due to the fact that the total income of their family may not be sufficient to fulfil the needs of the family and therefore to earn some extra money the women of those households enter into the workforce.

Number of existing children of age group 0-6 shows statistically significant and positive association with workforce participation for Rabha women ( $B = 0.568$ ). The exponential B value of the number of children of the age group 0-6 shows that with increase in additional 1 children of age group 0-6, work participation increases by 1.764 percent. The positive value of coefficient indicates that with increase in number of young children women workforce participation increases. The possible reason for this situation is that in formal labour market there is provisions for maternity and child care leave. In many play schools also there are provisions of child care for the whole day. Therefore young children do not affect the workforce participation of mothers.

#### IV. CONCLUSION:

This paper has been concerned with the investigation and assessment of the magnitude and direction of workforce participation amongst the Rabha women in RHAC area of Assam. A brief attempt of this study is to highlight some of the factors and their potential relation with workforce participation of Rabha women in the study area. For this purpose an econometric tool i.e. binary logistic regression is used to examine the effects of a set of independent variables on the dependent variable (i.e. women workforce participation) and from the analysis of the model it becomes evident that participation of women in workforce is influenced by various individual and household characteristics.

Ensuring that women can take part in the workforce on equal terms with the men is important for gender equality and poverty reduction of a region. When women enter into the various types of workforce, they are able to provide for themselves and for their families to some extent. To attract more women into the workforce, the economy will need to create more appealing working opportunities. Devoting extensive resources to programs, supporting female entrepreneurship and tailored to socio-economic context should constitute a key part of government policies which aiming to create higher quality jobs and encouraging greater participation by women.

#### REFERENCES:

1. Anbreen, B., & Afzal, A. (2012). Determinants of Married Women's Labour Force Participation in Wah Cantonment: A Descriptive Analysis. *Academic Research International*, II(1), 599-622.
2. Chishti, S., Lodhi, A., & Rashid, S. (1989). Female Labor Participation Behaviour: A Case Study of Karachi. *Pakistan Journal of Applied Economics*, VIII(2), 157-165.
3. Elkin, F. (1972). *The Child and Society: The process of socialization*. New York: Random House.
4. Faridi, Z. M., Chaudhury, I. S., & Mumtaz, A. (2009). The Socio Economic and Demographic Determinants of Women Work Participation in Pakistan: Evidence from Bahawalpur District. *South Asian Studies*, XXIV(2), 351-367.
5. Hamid, S. (1991). Determinants of the Supply of Women in the Labor Market: A Micro Analysis. *The Pakistan Development Review*, XXX(4), 775-766.
6. Kozel, V., & Alderman, H. (1990). Factors Determining Work participation and Labour Supply Decisions in Pakistan's Urban Area. *The Pakistan Development Review*, XXIX(1), 1-18.
7. Maecoby, E. (1966). *The Development of Sex Difference*. Stanford University Press.
8. Majumder, R. (2011). Female Labour Supply in India: Proximate Determinants. MPRA Paper No. 43250.
9. Massod, T., & Ahmad, I. (2009). An Economic Analysis of Inter-state Variation in Women Labour Force Participation in India. Online

<http://mpra.ub.unimuenchen.de/19376/MPRA> Paper No. 19376, posted 14, December.

10. Naqvi, F., & Lubna. (2002). How do Women Decide to Work in Pakistan. *The Pakistan Development Review*, XXXXI(4), 495-513.
11. Ostry, J. (2014). Redistribution, Inequality and Growth. IMF Staff discussion note.
12. Psacharopoulos, G., & Tzannatos, Z. (1991). *Female Labour Force Participation and Education*. Oxford: Pergamon Press for the World Bank.
13. Shah, J., Kruglanski, A. & Ryan, R. (1976). *Intrinsic and Extrinsic Motivation: The Search for Optimal Motivation and Performance*. Academic Press, New York

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