

RESEARCH PAPER

# Factors Influencing Performance of Rural Women in Economic and Non-economic Activities of Manipur State

Serto Sophiya Kom, Amod Sharma\* and S.H. Singh

Department of Agricultural Economics, School of Agricultural Sciences, Nagaland University Medziphema Campus, District: Chumoukedima, Nagaland, India

\*Corresponding author: hodsasrd2011@gmail.com (ORCID ID: 0000-0003-4609-8034)

Received: 07-09-2025

Revised: 25-11-2025

Accepted: 04-12-2025

## ABSTRACT

Rural women play an essential role in sustaining household economies through their contribution in both economic and non economic activities. This study was conducted to determine the factors influencing rural women's performance in opting different economic and non economic activities in Manipur. Data were collected from 320 rural women respondents from 2 districts of Manipur, viz; Churachandpur and Chandel. A structured interview schedule was used for data collection. A Multiple Linear Regression analysis was employed to determine the effect of independent variables such as age, education, marital status, household size, landholding, access to credit, training, experiences, access to market, decision making, income contributed by both men and women (in1000), social norms, social service, household size and family size on time spent by the rural women outside home (economic activities) and time spent by them at home (non-economic activities). Results revealed that some variables significantly influenced women's performance, while others showed minimal effect.

## HIGHLIGHTS

- Two districts of Manipur viz; Churachandpur and Chandel districts was selected with available resources viz; social environment, family situation and community norms or traditions; based on time spend for the economic and non-economic activities.
- To identify the socioeconomic factors influencing the rural women time spend at homes for non-economic activities viz; domestic chores, child care, other unpaid work etc.
- A multiple regression model was used to analyze the factors influencing to the rural women, time spend outside their homes for economic activities.

**Keywords:** Rural women, Economic activities, Non-economic activities, Multiple Linear regression

In rural India, the percentage of women who depend on agriculture for their livelihood is as high as 84.00 per cent. Women make up about 33.00 per cent of cultivators and about 47.00 per cent of agricultural labourers (Rao, 2006). Women are an important but often overlooked population involved in India's agricultural production-they represent the majority of the agricultural labor force in India (Borah and Sharma, 2021).

Rural women play a critical role in the rural economies of both developed and developing countries. In most parts of the developing world, they participate in crop production and livestock

care, provide food, water and fuel for their families and engage in off-farm activities to diversify their families' livelihoods. In addition, they carry out vital reproductive functions in caring for children, older persons and the sick (Mozhi and Sharma, 2020).

In India, the typical work of the female agricultural laborer or cultivator is limited to less skilled jobs, such as sowing, transplanting, weeding and

**How to cite this article:** Kom, S.S., Sharma, A. and Singh, S.H. (2025). Factors Influencing Performance of Rural Women in Economic and Non-economic Activities of Manipur State. *Econ. Aff.*, 70(04): 341-346.

**Source of Support:** None; **Conflict of Interest:** None



harvesting, that often fit well within the framework of domestic life and child-rearing. Many women also participate in agricultural work as unpaid subsistence labor (Prasad *et al.* 2010). According to United Nations Human Development Report only 32.80 per cent of Indian women formally participate in the labor force, a rate that has remained steady since 2009 statistics. By comparison, men constitute 81.10 per cent (UNHDR, 2011).

Generally, women are half of the population of the world. But women do two-thirds of the world's work, receive 10.00 per cent of the world's income and own 1.00 per cent of the means of production (SAFC, 2012). There is no doubt that women's participation in work force has increased at an overwhelming rate. But this has not reduced the inequality, has not endowed them with their rights and privileges in paid employment (Yadav *et al.* 2022). There is no significant evidence of improvement in the quality of life of women either at the household level or at the societal level (Pamela and Sharma, 2020).

It has been rightly observed that half of the women's work is unpaid and the other half is underpaid. Whatever work women do at home is unpaid and outside work is underpaid (Talang *et al.* 2024). There is no country where considerable differences are not found between the earnings of men and women. Gender differences become clearer when looking at women's workloads (Sharma *et al.* 2020). Despite women involvement in other economic or income generating activities, it is also estimated that women provide 85.00 to 90.00 per cent of the time spent on improving household, processing and preparation of food across a wide range of countries. In general, women perform a variety of tasks both on the farm as well as at home (Pathak, 2022).

## METHODOLOGY

The study was conducted in Manipur. The populations in this study were wholly women from 2 districts, viz; Churachandpur and Chandel. In this study, a total of 320 respondents were selected through a multistage random sampling method. A well structured questionnaire was used for collecting of data. To analyze the relationship between the dependent and independent variables, multiple regression analysis method was used

(Sharma, 2012; Sharma *et al.* 2018; Sharma and Sharma, 2020).

The general form of the multiple linear regression model is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \varepsilon$$

Whereas:  $Y$  = Dependent variable (outcome)

$X_1, X_2, \dots, X_k$  = Independent variables (predictors)

$\beta_0$  = Intercept term

$\beta_1, \beta_2, \dots, \beta_k$  = Coefficients of the independent variables

$\varepsilon$  = Error term (assumed to be normally distributed with mean 0)

## RESULTS AND DISCUSSION

To get an insight on the factors influencing rural women who engage in economic and non-economic activities, a multiple linear regression analysis was used with dependent variable of time spent by rural women outside home with several selected explanatory variables was presented in Table 1 and Table 2 representing dependent variable (time spent by rural women at home) with several independent variables (Chishi and Sharma, 2018).

Table 1 reveals that a multiple linear regression analysis was employed to identify the socioeconomic factors influencing the time rural women spend at homes for non-economic activities such as domestic chores, child care and other unpaid work. The model explains that 28.20 per cent of the total variation ( $R^2 = 0.282$ ) in women's time spent at home, while the adjusted  $R^2$  value of 0.226 indicates a reasonably good fit considering the number of explanatory variables. The overall model is statistically significant ( $p < 0.001$ ), indicating that the set of explanatory variables jointly influence the dependent variable. Similar line of findings was reported by Sharma (2016).

Based on the results of data, the following multiple linear regression equation is obtained:

$$Y = 5.453 + 0.059X_1 + (-0.052X_2) + 0.268X_3 + (-0.352X_4) + 0.425X_5 + 0.003X_6 + (-0.44X_7) + (-0.047X_8) + (-0.097X_9) + (-0.302X_{10}) + (-0.008X_{11}) + 0.197X_{12} + (-0.313X_{13}) + 1.531X_{14} + 0.025X_{15} + 0.343X_{16} + 2.023X_{17} + (-0.35X_{18}) + (-0.127X_{19}) + 0.753X_{20} + (-0.549X_{21}) + (-0.568X_{22})$$

**Table 1:** Multiple linear regression analysis results for the economic activities

Model	Unstandardized		Standardized	t	p-value
	Coefficient	SE	Coefficient		
	B	SE	Beta		
(Constant)	5.453	1.001		5.445	< 0.001
Age (years)	0.059	0.026	0.248	2.278	0.023
No.of children dependent	-0.052	0.075	-0.037	-0.688	0.492
Land holding (in ha)	0.268	0.169	0.103	1.587	0.114
Access to credit	-0.352	0.244	-0.073	-1.447	0.149
Training	0.425	0.262	0.085	1.618	0.107
Experience (in years)	0.003	0.031	0.011	0.1	0.92
Access to market	-0.44	0.282	-0.087	-1.559	0.12
Decision making	-0.047	0.234	-0.01	-0.201	0.841
Income contributed by women (mn/1000)	-0.097	0.08	-0.072	-1.215	0.225
Health issue	-0.302	0.297	-0.061	-1.016	0.31
Income contributed by men (month/1000)	-0.008	0.033	-0.017	-0.229	0.819
Education (Primary)	0.197	0.315	0.04	0.624	0.533
Education(secondary-HS/PU)	-0.313	0.303	-0.066	-1.031	0.303
Education (>Graduate)	1.531	0.702	0.122	2.182	0.03
Marital status (widow)	0.025	0.451	0.003	0.054	0.957
Employment type (triple work burden)	0.343	0.266	0.069	1.289	0.199
Social norms (Restricted)	2.023	0.312	0.416	6.476	< 0.001
Social norms (Supportive)	-0.35	0.513	-0.036	-0.683	0.495
Social services (Limited involvement)	-0.127	0.271	-0.028	-0.468	0.64
Social services(active involvement)	0.753	0.391	0.105	1.924	0.055
Family support (moderate support)	-0.549	0.447	-0.065	-1.229	0.22
Household_size	-0.568	0.305	-0.101	-1.865	0.063

\* , \*\* , \*\*\* = significant at 10%, 5% and 1% level

NS = not significant

R<sup>2</sup> = 0.282

Adjusted R<sup>2</sup> = 0.226

p-value = 0.000000000008

Dependent variable: Time spent by rural women at home (hr); Source: Primary data processed.

Based on it, the regression coefficient value of the age variable has a significant positive value of 0.059, *p* value of 0.023, significant at 5% level. This can be interpreted that every time there is an increase in the age of 1 year, it will increase the time spent by the rural women at home. As the older the women get, more likely of them to engaged more at home in domestic responsibilities due to reduced mobility and deteriorating of health (Walling and Sharma, 2018).

It can be seen that the regression coefficient of the education (>graduate) variable has a *p* value of 0.030. This means that every increase in the level of education increases the time spent by the women at home. This can be due to limited employment opportunities in rural areas that

match the requirement of the women or the women voluntarily choose to focus wholly on the well being of the family. Similar line of findings was reported by Sharma and Sharma (2023).

The coefficient for restricted social norms with  $p < 0.001^{***}$  is positive and highly significant at 1% level. This indicates that women living in communities with restrictive social norms spend significantly more time at home. As society and Cultural expectations may limit their participation in outside work, confining rural women to spend more time at home.

Here, the social services indicate community based social work or services in villages. The regression coefficient ( $p = 0.055^*$ ) suggest that communities time to time have social work, but often men are

**Table 2:** Multiple linear regression analysis for the non-economic activities

Model	Unstandardized Coefficient		Standardized coefficient	t	p-value
	B	SE	Beta		
(Constant)	11.26	1.039		10.833	< 0.001
Age (years)	-0.057	0.027	-0.239	-2.132	0.034
No.of children dependent	0.012	0.078	0.009	0.156	0.876
Land holding (in ha)	0.054	0.175	0.021	0.308	0.758
Access to credit	0.472	0.253	0.097	1.867	0.063
Training	-0.321	0.272	-0.064	-1.178	0.24
Experience (in years)	-0.022	0.032	-0.076	-0.694	0.488
Access to market	0.187	0.293	0.037	0.64	0.523
Decision making	0.007	0.243	0.001	0.027	0.978
Income contributed by women (month/1000)	-0.051	0.083	-0.038	-0.612	0.541
Health issue	0.173	0.308	0.035	0.562	0.575
Income contributed by men (month/1000)	0.01	0.034	0.022	0.287	0.774
Education (Primary)	-0.132	0.327	-0.027	-0.404	0.687
Education (secondary-HS/PU)	0.284	0.315	0.059	0.901	0.368
Education (>Graduate)	-2.257	0.728	-0.178	-3.098	0.002
Marital status (widow)	0.133	0.468	0.016	0.284	0.777
Employment type (triple work burden)	0.067	0.276	0.013	0.244	0.808
Social norms (Restricted)	-1.875	0.324	-0.384	-5.782	< 0.001
Social norms (Supportive)	0.435	0.532	0.045	0.818	0.414
Social services (Limited involvement)	0.115	0.281	0.025	0.409	0.683
Social services (active involvement)	-0.536	0.406	-0.074	-1.319	0.188
Family support (less support)	0.391	0.464	0.046	0.844	0.4
Family support (Strong support)	0.169	0.316	0.03	0.535	0.593
Household_size	0.03	0.07	0.023	0.431	0.666

R<sup>2</sup> = 0.233  
Adjusted R<sup>2</sup> = 0.174  
p-value = 0.00000001

\* , \*\* , \*\*\* = significant at 10%, 5% and 1% level  
NS = not significant

Dependent variable: Time spent by rural women outside home (hr); Primary data processed.

involved in it. While Women spend more time at home to manage domestic duties more efficiently within the home. It can be seen that the coefficient of household size *p* value 0.063 is negative and significant at the 10% level, suggesting that women from larger households spend less time at home on non-economic activities. This may be due to shared responsibilities among family members, allowing women to engage in other economic activities outside home, in order to reduce the family's burden. Similar line of findings was reported by Yadav *et al.* 2021)

The remaining variables including number of dependent children, landholding (ha), access to credit, training, experience (in years), access to market, decision-making role, income contributed by men or women (month/1000), health issues, marital status (widow), employment type (triple work burden), supportive social norms, limited

involvement in social services, and moderate family support were found to be statistically non-significant (Yani and Sharma, 2021). Although these factors may conceptually influence women's time use, their independent effects were not strong enough to achieve statistical significance.

The regression model was used to analyze the factors influencing the time spend by rural women outside their homes for economic activities. The model yielded an R<sup>2</sup> value of 0.233, indicating that about 23.30 of the variation in the dependent variable is explained by the included independent variables. The adjusted R<sup>2</sup> value of 0.174 shows a moderate explanatory variable. The model was statistically significant with *p* < 0.001, confirming that the set of independent variables jointly have a significant influence on rural women's participation outside home for economic activities (Ozukum *et al.* 2024).

Table 2 reveals among the explanatory variables, age (in years), access for credit, education (>graduate), and restrictive social norms were found to be statistically significant predictors of women's time spent outside the home; we can see that the regression coefficient for age has a p value of 0.034, showing negative but significant at the 5% level, implying that as women's age increases, the time they spend outside home for economic activities decreases. This suggests that younger women are more likely to engage in outside work compared to older women, possibly due to higher physical ability and a greater willingness to take up new economic opportunities (Sharma and Sharma, 2023).

The coefficient for Access to credit ( $p = 0.063^*$ ) has a positive association with time spent outside home for economic activities. This indicates that women who have access to credit are more likely to participate in income-generating activities. Access to financial resources empowers women to step in or explore small new enterprises. In contrast to access to credit, the independent variable education (>graduate) had a negative and significant relationship ( $p = 0.002$ ) with time spent outside home, indicating that rural women tend to spend less time outside for economic activities. The possible explanation could be that women with higher level of education may not have been involved in farm work during their upbringing, limiting their participation in farm work. It may also lead to engagement in better-paying, less time-intensive activities or home-based occupations such as teaching, tailoring, plastic bag making, weaving which reduce the need for extended time outside the home (Singh and Sharma, 2020).

The variable representing restricted social norms showed a highly significant and negative effect ( $B = -1.875$ ,  $p < 0.001$ ). This result indicates that in communities where social norms are restrictive, women spend significantly less time outside home for economic activities. Villages in India still follows patriarchal system where women are restricted under controlled cultural practices and gender norms, limiting women's mobility, discouraging their participation in public spaces and constraining their involvement in external income-generating opportunities.

The other variables like number of dependent children, landholding size (ha), training, experience

(in years), access to market, decision-making, income contribution by men and women (monthly / 1000), marital status, employment type (triple work burden), social services (limited and active), family support (less and strong), and household size were found to be statistically insignificant; although these factors did not exhibit individual significance, but still collectively contributing in explaining the variations in women's participation in economic activities (Debbarma and Sharma, 2024).

## CONCLUSION

Based on the comparative analysis of factors influencing rural women's time spent at home and outside economic activities reveals that age was a significant determinant in both models, with older women spending more time at home and less time outside, indicating that as age increases, they withdraw from involving in energy draining activities. Restrictive social norms emerged as the most influential factor, significantly increasing women's time spent at home and reducing participation in economic activities outside, showing the impact of community attitudes and gendered expectations on women's mobility and labor participation. Conversely, factors such as household size showed an opposite effect; larger households reduced the time women spent on domestic work, enabling greater participation outside the home, to share the household responsibilities. Meanwhile, access to training, credit and markets though statistically insignificant showed the expected direction of influence toward enhancing women's engagement in economic activities. The study therefore reveals that although money and resources are important in life, it is mainly the social environment, family situation and community norms or traditions that decide how rural women divide their time between unpaid household work (non-economic activities) and income-generating activities.

## REFERENCES

- Borah, M., Gogoi and Sharma, A. 2021. Strategic demographic and economic factors degerming the demand for hiring and total female labour contribution in Agriculture and allied activities. *International Journal of Agricultural and Statistical Sciences*, 17(1): 411-418.
- Chishi, S. Kunitoli. and Sharma, A. 2019. Resource Use Efficiency on different farm size groups of Integrated

- Watershed Development Programmes beneficiaries in Nagaland. *International Journal of Current Microbiology and Applied Sciences*, **8**(6): 2135-2144.
- Debbarma, T. and Sharma, A. 2024. IFS Model Determinant in Sepahijala District of Tripura. *International Journal of Agricultural Sciences & Statistics*, **20**(2): 409-419.
- Mozhui, J. and Sharma, A. 2020. Status of Extent of Technology Adoption by the SRI Paddy growers in Dimapur District. *Journal of the Social Sciences*, **48**(4): 2543-2548.
- Ozukum, L., Das, S., Sharma, A., Nakhro, R., Patra, N.K. and Dutta, M. 2024. Contribution of NTFPs towards Tribal Income and Employment Generation- A Study in Eastern Himalayan Region. *Economic Affairs*, **69**(01): 777-784.
- Pamela, B. and Sharma, A. 2020. Status of Farm Business Analysis of Kisan Credit Card in Dimapur district of Nagaland, India. *Plant Archives*, **20**(Supplement-2): 4284-4288.
- Pathak, A. 2022. Rural women in agricultural and household practices: An overview. *International Journal of Home Science*, **8**(2): 126-130.
- Prasad, G.T.S., Manjunatha, B.N. and Nataraju, M.S. 2010. Economics of production and marketing channel used turmeric growers. *Mysore Journal of Agricultural Sciences*, **44**(1): 144-147.
- Rao, E. Krishna. 2006. Role of Women in Agriculture: A Micro Level Study. *Journal of Global Economy*. Research Centre for Social Sciences, Mumbai, India, **2**(2): 107-118.
- SFAC. 2012. Is a financial consortium specialize in agriculture financing, agriculture loan, finance in agriculture and agriculture bank loans in Manipur, India: pp. 1-45.
- Sharma, A., Bendangjungla. and Sharma, R. 2018. Factors influencing Entrepreneurial Behavior of Fishery Growers in Dimapur district of Nagaland. *Agriculture Science Digest*, **38**(2): 118-122.
- Sharma, A. 2012. Inter-state disparities in socio-economic development in North East Region of India. *Journal of Agricultural Science*, **4**(9): 236-43.
- Sharma, A. 2016. Sustainable economic analysis and constraints faced by the Naga King chilli growers in Nagaland. *Indian Journal Agricultural Research*, **50**(3): 220-225.
- Sharma, A. and Sharma, Khan. C. 2023. Income Diversification in the rural areas of Nagaland. *Economic Affairs*, **68**(3): 1387-1393.
- Sharma, V.K., Kulshrestha, R.K. and Sharma, A. 2020. Contribution of Rural Women in Dairy Sector for their Family Income in Firozabad district. *Asian Journal of Food and Dairy Research*, **39**(4): 291-295.
- Singh, Th. Motilal. and Sharma, A. 2020. Resource-use-efficiency analysis for the selected major horticultural crops in the state of Nagaland and Manipur, India. *Plant Archives*, **20**(2): 9113-9119.
- Singh, Th. Motilal. and Sharma, A. 2021. Implication of Indigenous Farming Practices on the Employment and Income Pattern for the Selected Horticultural Crops of Nagaland and Manipur States of India. *Plant Archives*. **21**(2): 859-863.
- Talang, Indina. Lyngdoh.; Sharma, A. and Singh, H. 2024. Assessing the Post-Harvest Losses of Spice Crops: Findings from Ri-Bhoi and West Jantia Hills Districts of Meghalaya. *Economic Affairs*, **69**(11): 463-467.
- UNHDR-2011. www.unhdr.org.in. (Accessed on 14<sup>th</sup> August, 2025. 11:29a.m)
- Walling, I. and Sharma, A. 2018. Impact of Agricultural Technology Management Agency on different Enterprises for the enhancement of Production and Income to the Rural Economy of Nagaland. *Economic Affairs*, **63**(2): 331-335.
- Yadav, M.K., Sharma, A. and Singh, Th. Motilal. 2022. A Sustainability approach of Income, Expenditure and Employment through different activities adopted under watershed programme in Nagaland. *Agricultural Mechanization in Asia*, **53**(2): 5591-5598.
- Yadav, M.K., Sharma, A. and Singh, P. 2021. Intensity and Extent adopting the Watershed Management Activities in Nagaland. *Indian Journal of Agricultural Sciences*, **91**(1): 89-93.
- Yani, P. and Sharma, A. 2022. Prioritization Strategies for the Resources of Traditional Paddy-cum-fish Culture in Lower Subansiri District. *Indian Journal of Agricultural Research*, **56**(3): 357-362.