



International Economics

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**RESPONSIVENESS
OF WOMEN'S UNPAID WORK
TO FAMILY DEMOGRAPHICS IN TRIBAL
AND NON-TRIBAL AREAS OF INDIA**

Abstract

Across the globe, women are mostly in charge of working in the fields, providing unpaid care, which includes housekeeping and providing care for others in their homes and communities without receiving any specific financial compensation. The present study is aimed at assessing the significance, nature and size of the responsiveness of women's unpaid work to the various demographic characteristics of families in the tribal and non-tribal areas of India. The impacts of different variables on SNA, ESNA, NSNA, and overall unpaid work of tribal and non-tribal women were separately investigated. The Multiple Linear Regression Model was applied using the Microsoft Office Excel Analysis ToolPak. The findings suggest that women are engaged in SNA activities regardless of the family's demographic structure in both tribal and non-tribal areas. However, the participation of non-tribal women in ESNA activities is more complex and requires further study compared to tribal women. The involvement of tribal and non-tribal women in NSNA activities is influenced by factors beyond demographic variables (except age), such as psychological, social, and cultural factors. In case of the overall unpaid work burden, the impact of the same factors (except for the number of family

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members) on unpaid work differs between tribal and non-tribal women. However, education demonstrates a strong positive and significant impact on reducing unpaid work burden across both groups.

Key Words:

ESNA activities, non-tribal women, NSNA activities, SNA activities, tribal women, unpaid work.

JEL: J16, J22, J82.

8 tables, 12 references.

Problem statement

Women have played just as important role in the history of humanity as males have. Without the active engagement of women in national activities, a country's social, economic and political advancement will inevitably degrade and become stagnant (Muthukumar, 2020). Across the globe, women are mostly in charge of providing unpaid care, which includes housekeeping and providing care for others in their homes and communities without receiving any specific financial compensation.

Caregiving for others without compensation is vital to human potential and welfare. Unpaid caregiving contributes to the construction of human and social capital and is essential to the creation and support of economic prosperity. Because it is not taken into account by national accounting systems and deeply ingrained patriarchal structures, unpaid care work is frequently viewed as having low value and is not evident in mainstream economics. Unpaid caregiving and household labour are linked to adverse mental health outcomes and a lower standard of living (Pinquart & Sörensen, 2003).

In many Indian states, women continue to play a significant role in unpaid household chores. The value of the home budget is increased by these activities, although the majority of women who work for free have frequently remained outside of the production boundaries. Women have more difficulty finding employment since they tend to take care of children and elderly family members more often, as well as perform other household tasks more frequently. Furthermore, inactivity in economic activities may lead to a deterioration of the population's standard of living, loss of educational opportunities, and a violation of each person's right to self-determination (Yanovskaya et al., 2020).

While valuation is important, there is also a need to go beyond valuation. This is because valuation does not completely incorporate unpaid work into legislation because it separates it from paid work. It demonstrates the significance of unpaid work in terms of its contribution to overall well-being. However, it does not guide how this inferior and lagging sector of the unpaid economy can be incorporated into the mainstream economy in order to improve productivity and working conditions, or how it can be brought into policy-making. Valuation also does not reflect the dispersal of this work. There must be a strategy that goes beyond valuation to include unpaid work in the macroeconomic policy so as to recognize unpaid work as a component of the macroeconomics (Hirway, 2015).

Literature Review

Much household and community work that is not claimed and hence has no commercial value remains unvalued. Farm women make up the majority of the agricultural workforce, although they are mainly unpaid. Due to family commitments, women perform the majority of the laborious and back-breaking duties in agriculture and households (Kaur, 2008). Women devote a significant portion of their time not only to agricultural operations but also to the care of livestock, poultry, and other animals. However, the true picture of female labour and its contribution to family income is rarely revealed. Many economically productive tasks undertaken by women go unrecorded or are subsumed under «domestic work» (Goswami, 2013). Female workers contribute considerably to household income across all farm sizes, and their earnings are especially important for landless and small farm households (Sethi, 1991). Young boys work substantially more than young girls. Unmarried boys and girls begin working for pay earlier than married girls. In young adulthood, a higher proportion of adolescents from the Scheduled Castes/Scheduled Tribes and Other Backward Classes work for pay or for free than adolescents from the General Caste. Children of educated mothers are more likely to put off entering the labour force. When compared to their uneducated peers, adolescents who had completed 10-12 years (0.51, $p < 0.01$) and 12+ years (0.54, $p < 0.01$) of schooling till adulthood were less likely to have done paid labour in young adulthood. Young people who had some vocational training (1.83,

$p < 0.01$) and who had heard of the employment scheme (1.66, $p < 0.01$) were more likely to be employed. Higher levels of education and occupational training had pushed back their entry into the labour force (Pal et al., 2021).

An examination of social norms reveals the coexistence of certain conservative attitudes toward gendered divisions of care, as well as openness to a more equitable allocation of paid and care duties. For various reasons, the emphasis on social norms around care appears to be justified. *First*, higher levels of decision-making authority, education, and income for women do not appear to be connected with lower care burdens, indicating the need to modify social norms that may limit women's ability to negotiate on care even among otherwise «empowered» women. *Second*, it appears that progressive norms are associated with less care hours for women and a more gender-equal distribution of care within homes. *Third*, the provision of labour-saving equipment or access to infrastructure and services is not consistently associated with lower care hours for women, implying the need for additional research into what improves their effectiveness and whether combining these interventions with efforts to shift social norms would be beneficial (Karimli et al., 2016). Removing impediments to female labour force participation reduces the number of hours women spend at home and improves men's engagement in home production, resulting in a smaller gender gap in total hours of unpaid work. In the counterfactual scenario, the gap in unpaid work has been reduced by 45 percent in Pakistan, while it has decreased by roughly 20 percent in Mexico, South Africa, and the United Kingdom (Alonso et al., 2019). In every country, women do more unpaid work than males. Women's unpaid work is determined by the quantity of paid work, labour remuneration in the labour market, and the proportion of children and the elderly in the population. Paid job and labour remuneration have a negative impact. It is clear that the more time women spend on paid labour, the less time they have for unpaid work. Furthermore, the number of children and elderly persons has a good impact on female unpaid work. This could be related to women's roles in caring for these age groups. The amount of education also has an impact on unpaid work, in this case negatively (Hunady et al., 2014). Female status in the family was found to be positively associated with total female hours and had a high level of relevance. The number of years in school and the number of working male family members have a negative and significant impact on the extent to which women participate in agriculture. Cropping intensity has a positive and statistically significant link with the level of female participation. Women's agricultural labour involvement is adversely but insignificantly connected to the size of land holdings and total household income. As huge landholdings become more mechanized, the necessity for labour falls. High household wealth tends to diminish female labour supply (Baliyan & Kumar, 2014).

This article pursues the following objectives: (1) to assess the nature and size of responsiveness of women's unpaid work to the various demographic features of families in the tribal and non-tribal areas of India; (2) to test the signifi-

cance of the responsiveness of women's unpaid work to the various demographic features of families in the tribal and non-tribal areas; and (3) to compare the nature and size of the impact that various factors have on unpaid work of tribal and non-tribal women in India.

Methodology

The samples for the study were selected using purposive and multistage random sampling methods. The study area for this paper was Chamba District of Himachal Pradesh which was selected deliberately *in the first stage*, as it is the only district of Himachal Pradesh which comprises both tribal and non-tribal areas in India. *In the second stage*, Salooni and Tissa blocks of non-tribal area and Bharmour and Pangi blocks of tribal areas were selected again on purpose. Salooni and Tissa blocks were selected so that they would resemble Bharmour and Pangi blocks of tribal areas to the most in terms of terrains, climate and development aspects. Bharmour and Pangi blocks were selected as these are the only tribal blocks in the Chamba district. *In the third stage*, all the panchayats of tribal blocks and non-tribal blocks were listed alphabetically and 5 panchayats from each block were selected randomly. *In the fourth stage*, all the villages of these panchayats were again listed alphabetically, and 10 villages from each panchayat were selected. *In the final stage*, all the households were listed on the basis of female population in ascending order, and 101 households from tribal area and 101 from non-tribal area were selected again randomly.

A well-structured schedule was used to collect primary data. The reference period for the data was 2020-21. The unpaid household work was classified into three categories: the System of National Accounts (SNA) activities, the Extended System of National Accounts (ESNA) activities, and the Non-SNA (NSNA) or Personal activities (Hirway, 2015).

The System of National Accounts (SNA) activities include three sub-categories: (i) *Primary Production Activities*: gathering berries and other crops, forestry, wood cutting, fire wood collection, hunting and fishing, manufacturing of other main products such as mineral salts, cutting peat, water supply, and animal husbandry, etc.; (ii) *Secondary Production Activities*: grain threshing; flour milling; curing of skins and leather manufacture; meat and fish product production and preservation; fruit preservation by drying and bottling, etc.; production of dairy products such as milk, butter, and cheese; production of beer, wine, and spirits; production of baskets, mats, etc.; other types of processing include weaving cloth, dress making, tailoring, and the manufacturing of footwear, ceramics, kitchenware, durables, furniture, furnishings, tool making, machinery making, welding, etc.; (iii) *Tertiary Activities*: hair cutting, nail cutting, hair colour application, dropping and picking, etc.

The **Extended System of National Account (ESNA)** activities are referred to as «non-market-oriented» activities. These activities include household work that is unpaid, unacknowledged and has no market value in the form of remuneration or salaries, such as: (i) preparing a meal; (ii) cleaning (floor sweeping, utensil and clothing cleaning, etc.); (iii) water fetching; (iv) care giving; (v) shopping; (vi) tutoring services; (vii) group service in the community.

The **Non-SNA (NSNA) or Personal** activities encompass tasks that cannot be transferred to others and must be performed by the individual himself/herself. These are referred to as «non-economic activities» in most cases. These activities are not recorded in the National System of Accounts. These activities include: (i) self-education; (ii) personal care and maintenance; (iii) social and cultural activities; (iv) social contact hours; and (v) leisure and repose.

The time spent by women on these activities was recorded, and the factors which were likely to have an impact on the unpaid work were selected. These factors include: (1) woman's age, (2) woman's education, (3) woman's marital status, (4) structure of the family, (5) number of family members, (6) number of male members, (7) number of female members, (8) head of household, (9) total land holdings, (10) employment, (11) husband's education, (12) husband's occupation and (13) number of children.

Dummy variables 0 and 1 were assigned to the following categorical variables: family structure (1 – nuclear; 0 – joint); head of household (1 – male; 0 – female); marital status (1 – if married; 0 – otherwise); employment status (1 – private, government or company); 0 – otherwise); and husband's occupation (1 – private, government or company; 0 – otherwise).

The impacts of these variables on SNA, ESNA, NSNA, and overall labour participation of tribal and non-tribal women were separately investigated. The Multiple Linear Regression Model was applied using Ms-Excel Data Analysis ToolPak for the analysis of the data. The results were tested at 5 per cent level of significance and 100 degrees of freedom.

Research results

Factors affecting the unpaid work of tribal and non-tribal women engaged in SNA activities

Regarding SNA activities, the aforementioned explanatory variables were found to explain 38 per cent variation in the unpaid work of tribal women (adjusted $R^2=0.38$). The factors of age, education and the number of children were found to have significant negative impact on the unpaid work of tribal women in SNA activities ($p < .05$). Young women are more engaged in SNA activities compared to older women, as with age the capability to perform physical work decreases. More educated women are less involved in unpaid work, as they simultaneously perform activities that are remunerative, such as knitting, sewing, etc. Thus, raising the level of education of the tribal women can lower the burden of unpaid work in SNA activities. Surprisingly, women having more children were found to be less involved in SNA activities. This could be attributed to their increased responsibilities in caring for their children, leaving them with less time to engage in such activities. Additionally, the factors of marital status, family structure, number of family members, employment status, and husband's occupation were found to have positive but insignificant effect on the dependent variable. Conversely, number of male members, number of female members, head of household status, total land holding, and husband's education were found to have an insignificant negative impact on the unpaid work of tribal women in SNA activities (Table 1).

The data presented in Table 2 illustrate the impact of various factors on the unpaid work of non-tribal women in SNA activities. Similar to their tribal counterparts, age was found to have a significant positive relationship with the unpaid work of non-tribal women. However, unlike in the case of tribal women, the number of children was found to have a significant positive effect on the unpaid work of non-tribal women. This discrepancy may be attributed to differences in climate conditions—tribal areas have colder temperatures and longer winter seasons, which may limit women's ability to take their children to the farm. As a result, children in tribal areas require more care compared to those in non-tribal areas, as indicated by respondents. In contrast, in non-tribal areas, many women were observed to carry their children on their backs while working in the fields, using shawls for this purpose.

Table 1

**Regression analysis of factors affecting unpaid work of tribal women
in SNA activities**

Multiple R = 0.68, R-squared = 0.46, Adjusted R-squared = 0.38				
	Regression Coefficient	Standard Error	t-value	p-value
Intercept	2726.49	671.90	4.06	0.00
1. Age	-22.02	9.62	-2.29	0.02
2. Education	-82.20	22.86	-3.60	0.00
3. Marital status	830.38	559.91	1.48	0.14
4. Structure of the family	238.49	223.71	1.07	0.29
5. Number of family members	1135.51	618.83	1.83	0.07
6. Number of male members	-614.82	632.84	-0.97	0.33
7. Number of female members	-991.48	627.39	-1.58	0.12
8. Head of the family	-824.68	438.80	-1.88	0.06
9. Total land holding	-13.16	11.28	-1.17	0.25
10. Employment	86.36	253.17	0.34	0.73
11. Husband's education	-21.66	22.18	-0.98	0.33
12. Husband's occupation	162.02	191.02	0.85	0.40
13. Number of children	-216.74	103.68	-2.09	0.04

Source: author's calculations.

The factors of education, family structure, head of household status, total land holding, husband's education, and husband's occupation were found to have an insignificant negative relationship with the unpaid work of non-tribal women in SNA activities. On the other hand, marital status, number of family members, number of male members, number of female family members, and employment status were found to have a positive but insignificant relationship with the unpaid work of non-tribal women in SNA activities (Table 2).

Based on the results of the analysis, it can be concluded that out of the 13 factors examined, only three factors in the tribal area and two factors in the non-tribal area were found to have significant effects on the dependent variable. This indicates that women are engaged in SNA activities regardless of the demographic structure of their families, both in tribal and non-tribal areas of India.

Table 2

Regression analysis of factors affecting unpaid work of non-tribal women in SNA activities

Multiple R = 0.63, R-squared = 0.39, Adjusted R-squared = 0.30				
	Regression coefficient	Standard Error	t-value	p-value
Intercept	3631.38	1029.57	3.53	0.00
1. Age	-39.57	14.26	-2.77	0.01
2. Education	-88.34	45.30	-1.95	0.05
3. Marital status	1099.95	578.04	1.90	0.06
4. Structure of the family	-340.01	390.67	-0.87	0.39
5. Number of family members	83.82	98.84	0.85	0.40
6. Number of male members	143.71	81.80	1.76	0.08
7. Number of female members	138.31	139.22	0.99	0.32
8. Head of household	-584.99	445.11	-1.31	0.19
9. Total land holding	-34.91	30.67	-1.14	0.26
10. Employment	332.10	543.84	0.61	0.54
11. Husband's education	-57.78	42.91	-1.35	0.18
12. Husband's occupation	-210.70	335.03	-0.63	0.53
13. Number of children	288.39	127.82	2.26	0.03

Source: author's calculations.

Factors affecting the unpaid work of tribal and non-tribal women engaged in ESNA activities

Table 3 presents the influence of various factors on the unpaid work of tribal women involved in ESNA activities. The unpaid work of tribal women engaged in ESNA activities exhibited a significant negative relationship with several factors: family structure ($\beta=-1075.07$), number of male members ($\beta=-2199.79$), number of female members ($\beta=-2289.02$), and husband's education ($\beta=-123.10$).

The data in Table 3 show that, in nuclear families, women were found to be less involved in ESNA activities than those in joint families. This can be attributed to the reduced cooking and cleaning responsibilities in nuclear families due to fewer family members. Similarly, the number of family members was found to be significantly and positively associated with the unpaid work involved in ESNA activities. Having a greater number of male and female members in the family also reduces the burden of unpaid work for tribal women engaged in ESNA activities

because of disruptions in work. Additionally, husbands' higher levels of education were associated with a reduction in the unpaid work burden of tribal women engaged in ESNA activities, as educated men may share household chores responsibilities. Age, total land holdings, employment status, husband's occupation, and number of children were found to have insignificant negative relationships with the burden of unpaid work for tribal women engaged in ESNA activities. Conversely, women's education, marital status and head of household had positive but insignificant effects on the dependent variable (Table 3).

Table 3

Regression analysis of factors affecting unpaid work of tribal women in ESNA activities

Multiple R = 0.73, R-squared = 0.53, Adjusted R-squared = 0.46				
	Regression coefficient	Standard Error	t-value	p-value
Intercept	1436.48	1096.38	1.31	0.19
1. Age	-1.98	15.70	-0.13	0.90
2. Education	27.78	37.30	0.74	0.46
3. Marital status	316.18	913.65	0.35	0.73
4. Structure of the family	-1075.07	365.04	-2.95	0.00
5. Number of family members	2670.85	1009.79	2.64	0.01
6. Number of male members	-2199.79	1032.65	-2.13	0.04
7. Number of female members	-2289.02	1023.76	-2.24	0.03
8. Head of household	1004.43	716.03	1.40	0.16
9. Total land holding	-5.75	18.41	-0.31	0.76
10. Employment	-285.22	413.11	-0.69	0.49
11. Husband's education	-123.10	36.19	-3.40	0.00
12. Husband's occupation	-72.73	311.70	-0.23	0.82
13. Number of children	-71.44	169.18	-0.42	0.67

Source: author's calculations.

Contrary to the case of tribal women, the unpaid work of non-tribal women was found to be significantly and positively associated with only two variables: number of family members and number of children (Table 4).

Table 4

Regression analysis of factors affecting unpaid work of non-tribal women in ESNA activities

Multiple R= 0.67, R-squared= 0.45, Adjusted R-squared=0.37				
	Regression coefficient	Standard Error	t-value	p-value
Intercept	1695.89	1160.81	1.46	0.15
1. Age	-23.13	16.08	-1.44	0.15
2. Education	-75.71	51.08	-1.48	0.14
3. Marital status	458.51	651.72	0.70	0.48
4. Structure of the family	-263.45	440.47	-0.60	0.55
5. Number of family members	430.88	111.44	3.87	0.00
6. Number of male members	131.77	92.23	1.43	0.16
7. Number of female members	-178.25	156.96	-1.14	0.26
8. Head of household	-372.79	501.85	-0.74	0.46
9. Total land holding	55.37	34.58	1.60	0.11
10. Employment	294.38	613.16	0.48	0.63
11. Husband's education	45.80	48.38	0.95	0.35
12. Husband's occupation	-413.27	377.74	-1.09	0.28
13. Number of children	338.25	144.11	2.35	0.02

Source: author's calculations.

In the tribal area, the number of children was not a significant determinant of the unpaid work, but the number of family members had the same impact on tribal and non-tribal women's participation in ESNA activities. Age, education, family structure, number of female members, head of household, and husband's occupation had an insignificant negative impact on the participation of non-tribal women in ESNA activities. Conversely, marital status, number of family members, number of male members, total land holding, employment status, and husband's education were found to be positively associated with the dependent variable. It is inferred that the participation of non-tribal women in ESNA activities is a more complex system than that of tribal women.

Factors affecting the unpaid work of tribal and non-tribal women involved in NSNA activities

The NSNA activities are those that individuals can only perform by themselves. These activities encompass self-learning, self-care, leisure, social contact hours, etc. Table 5 displays the influence of various factors on the time spent by tribal women on these activities. It is evident from the data that only age was significantly positively associated with women's participation in NSNA activities. Older women have more time to devote to self-care as they are less involved in physical unpaid work. As discussed earlier, young women are more engaged in physical unpaid activities and consequently have less time for self-care. Education, family structure, number of male members, number of female members, head of household status, employment status, and husband's occupation were found to have insignificant negative relationship with the time spent by tribal women on NSNA activities (Table 5).

Table 5

Regression analysis on factors affecting the unpaid work of tribal women in NSNA activities

Multiple R= 0.55, R-squared= 0.31, Adjusted R-squared=0.20				
	Regression coefficient	Standard Error	t-value	p-value
Intercept	189.19	230.46	0.82	0.41
1. Age	9.45	3.30	2.86	0.01
2. Education	-4.85	7.84	-0.62	0.54
3. Marital status	156.44	192.05	0.81	0.42
4. Structure of the family	-86.71	76.73	-1.13	0.26
5. Number of family members	142.16	212.26	0.67	0.50
6. Number of male members	-166.99	217.06	-0.77	0.44
7. Number of female members	-105.29	215.19	-0.49	0.63
8. Head of household	-299.89	150.51	-1.99	0.05
9. Total land holding	3.47	3.87	0.90	0.37
10. Employment	-109.69	86.84	-1.26	0.21
11. Husband's education	10.96	7.61	1.44	0.15
12. Husband's occupation	-57.62	65.52	-0.88	0.38
13. Number of children	26.98	35.56	0.76	0.45

Source: author's calculations.

The findings of the analysis suggest that the participation of tribal women in NSNA activities is determined by factors other than those mentioned previously, except for age, which may be of a psychological nature.

In the case on non-tribal women, age was also the only determinant found to have a significant positive impact on women's participation in NSNA activities. All other factors were found to have insignificant positive or negative impacts. Specifically, education, marital status, family structure, number of family members, number of female members, total land, and employment had an insignificant positive impact on the time spent by non-tribal women on NSNA activities. On the other hand, the number of male members, head of household, husband's education, husband's occupation, and the number of children had an insignificant negative influence on the time spent by non-tribal women on NSNA activities.

Table 6

Regression analysis of factors affecting unpaid work of non-tribal women in NSNA activities

Multiple R=0.35, R-squared=0.12, Adjusted R-squared=0.01				
	Regression coefficient	Standard Error	t-value	p-value
Intercept	30.38	255.36	0.12	0.91
1. Age	9.56	3.54	2.70	0.01
2. Education	15.58	11.24	1.39	0.17
3. Marital status	150.26	143.37	1.05	0.30
4. Structure of the family	132.69	96.90	1.37	0.17
5. Number of family members	26.30	24.52	1.07	0.29
6. Number of male members	-5.24	20.29	-0.26	0.80
7. Number of female members	29.87	34.53	0.87	0.39
8. Head of household	-105.97	110.40	-0.96	0.34
9. Total land holding	2.07	7.61	0.27	0.79
10. Employment	43.10	134.89	0.32	0.75
11. Husband's education	-7.35	10.64	-0.69	0.49
12. Husband's occupation	-1.58	83.10	-0.02	0.98
13. Number of children	-49.39	31.70	-1.56	0.12

Source: author's calculations.

Hence, both tribal and non-tribal women exhibit similar patterns in terms of the determinants influencing their participation in NSNA activities. Furthermore, the engagement of both tribal and non-tribal women in NSNA activities was found to be influenced by factors beyond those previously mentioned, except for age, which may represent a psychological, social and cultural factor in nature.

Factors affecting the unpaid work of tribal and non-tribal women in overall unpaid household work

Unpaid work in SNA and ESNA activities was aggregated to determine the overall unpaid work in the household. Women's participation in NSNA activities was excluded from overall unpaid work calculation because this work cannot be exchanged for any value and therefore cannot be counted as unpaid work.

The findings in Table 7 suggest that a tribal woman's likelihood of engaging in unpaid work increases with the number of family members, as a strong positive relationship was found between these two variables. Conversely, the presence of male family members was found to significantly reduce the amount of unpaid work done by tribal women, as did the husband's level of education. Factors such as the woman's age and education, family structure, total land holding, employment status, and number of children showed a negative but insignificant relationship with the burden of unpaid work. The imputed regression coefficients for these variables were -2814.62, -3280.50, and -144.75, respectively. In contrast, marital status, head of household and husband's occupation were found to have positive but insignificant relationship with the dependent variable (Table 7).

The results in Table 8 indicate that the same factors have different effects on the unpaid work of non-tribal women compared to that of tribal women, with the exception of the number of family members. A greater number of family members, male members and children significantly increased the unpaid work of non-tribal women. This is because a greater number of family members, whether male or children, leads to more involvement in ESNA activities. Conversely, age and education were found to significantly reduce the burden of unpaid work for non-tribal women. In addition, family structure, number of female members, head of household, husband's education, and husband's occupation insignificantly reduced the burden of unpaid work for non-tribal women. Finally, women's marital status, total land ownership, and employment had a positive but insignificant relationship with total unpaid work among non-tribal women (Table 8).

Table 7

Regression analysis of factors affecting unpaid work of tribal women in overall unpaid household work

Multiple R=0.77, R-squared=0.59, Adjusted R-squared=0.53				
	Regression coefficient	Standard Error	t-value	p-value
Intercept	4162.97	1357.77	3.07	0.00
1. Age	-24.00	19.44	-1.23	0.22
2. Education	-54.42	46.19	-1.18	0.24
3. Marital status	1146.56	1131.47	1.01	0.31
4. Structure of the family	-836.57	452.07	-1.85	0.07
5. Number of family members	3806.36	1250.53	3.04	0.00
6. Number of male members	-2814.62	1278.84	-2.20	0.03
7. Number of female members	-3280.50	1267.83	-2.59	0.01
8. Head of household	179.75	886.73	0.20	0.84
9. Total land holding	-18.91	22.80	-0.83	0.41
10. Employment	-198.85	511.60	-0.39	0.70
11. Husband's education	-144.75	44.82	-3.23	0.00
12. Husband's occupation	89.29	386.02	0.23	0.82
13. Number of children	-288.19	209.51	-1.38	0.17

Source: author's calculations.

Table 8

Regression analysis of factors affecting unpaid work of non-tribal women in overall unpaid household work

Multiple R=0.72, R-squared=0.52, Adjusted R-squared=0.45				
	Regression coefficient	Standard Error	t-value	p-value
Intercept	5327.27	1702.87	3.13	0.00
1. Age	-62.70	23.59	-2.66	0.01
2. Education	-164.05	74.93	-2.19	0.03
3. Marital status	1558.46	956.05	1.63	0.11
4. Structure of the family	-603.46	646.15	-0.93	0.35
5. Number of family members	514.70	163.48	3.15	0.00
6. Number of male members	275.48	135.30	2.04	0.04
7. Number of female members	-39.94	230.26	-0.17	0.86
8. Head of household	-957.78	736.20	-1.30	0.20
9. Total land holding	20.46	50.73	0.40	0.69
10. Employment	626.48	899.48	0.70	0.49
11. Husband's education	-11.98	70.97	-0.17	0.87
12. Husband's occupation	-623.97	554.13	-1.13	0.26
13. Number of children	626.65	211.40	2.96	0.00

Source: author's calculations.

Conclusions

The results of this study reveal that among the 13 factors examined, only three factors in the tribal area and two factors in the non-tribal area had significant effects on women's involvement in SNA activities. This implies that regardless of the demographic structure of families, women in both tribal and non-tribal areas are compelled to engage in SNA activities. The participation of non-tribal women in ESNA activities is a more complex system to understand and study than that of tribal women. Tribal and non-tribal women stand on equal footing regarding the determinants that influence their participation in NSNA activities. It can be inferred that the participation of tribal and non-tribal women in NSNA activities is determined by factors other than those mentioned previously, except for age, which may be psychological, social and cultural in nature. Regarding the overall unpaid work burden, the impact of the same factors differs between non-tribal and tribal women, except for the number of family members.

One of the most important findings of this study is that it is now evident that education has a strong positive and significant impact on reducing unpaid work among both tribal and non-tribal women. Whether it is the education level of the woman or that of the husband, it can really make a difference. Education has the power to brighten the lives of both tribal and non-tribal women by alleviating the burden of unrecognized, unaccounted for, undervalued, and unpaid work. Therefore, it is suggested that, instead of focusing on other development parameters, the government should prioritize education. The focus on education alone has the potential to uplift the status of women in both tribal and non-tribal areas of India and shape other social and cultural values in favor of women's upliftment.

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