

CHAPTER V

Socio-Economic Determinants of Paid and Unpaid Expended Labour Time: A Regression Analysis

5.1. Asymmetric Paid and Unpaid Activities among Rural Women

Achieving gender equality and the empowerment of women is a multifaceted objective. As mentioned earlier, at the heart of gender inequality and the subordination of women is the division of labour by sex. Historically, paid work has been a responsibility assigned to men, while women have been relegated to performing unpaid work that provides support for paid work activities. Unpaid work predominates in subsistence production, household work that includes direct care for others, services that support this care, and community volunteering. Women are increasingly taking on paid work, although this has not led to a significant redistribution of the unpaid work. Universally, women continue to take most unpaid work responsibilities and therefore, their contribution to the economy goes mostly unrecognized. As stated earlier in the thesis, sexual division of labour is perpetuated by patriarchal family structure where the man is the highest authority and sole provider and there is consequent rigid division of tasks and responsibilities, regulated by social norms that have become ingrained over time. These asymmetries in the distribution and valuation of work have adverse effects on gender equality and the empowerment of women and, at the same time, on the visibility of their interests in policymaking. The intersection between gender, social class, and ethnicity gives poor women a particular disadvantage in terms of the burden of unpaid work, options for paid work, and the representation of their interests in the political process.

Women's ability to participate in the labour market is affected by what the feminist economist Ingrid Palmer (1992) has called "the reproduction tax" arising from the unpaid work they perform within the home because of an unwritten pact that endorses men as the universal economic providers for their families and women as carers. For women, the time allocation decision is not simply labour vs. leisure but is contained in three-parts - work at home, work in the market and leisure (Mincer, 1962). An examination of the interaction between market and non-market activities in the economy, particularly in the

allocation of time spent between productive and unproductive work, is crucial for a comprehensive assessment of gender inequalities in the labour market.

Generally, people allocate their time to activities that can be classified as paid work, unpaid work, and no work. Leaving aside sleep time, the concept of “no work” is commonly understood as consisting of free time spent on personal care and leisure activities. A clear but often-neglected distinction must be drawn, of course, between “no work” as voluntarily chosen free time and “no work” as the outcome of enforced inactivity due to chronic lack of employment opportunities. Traditional economics presumed that within the span of a day what is not accounted for by work-time is leisure (Pigou, 1920; Becker, 1965; Linder, 1970). Heterodox economic traditions warn that “no work” can also be the outcome of social exclusion from paid work, in which case a person is rendered forcefully inactive for short or long periods of time (Vickery, 1977; Minsky, 1986).

There is a clear relationship between the division of labour by sex and the representation of women in poor sectors. First, since women have the primary responsibility for child care and housekeeping, they have fewer opportunities to participate in the paid labour market, and thus they have less access to the economic benefits and social protection linked to that participation. Second, since “women’s work” is socially and economically undervalued when performed in the household, it is not recognized as work. Moreover, the primarily female jobs and sectors of the labour market enjoy less prestige and remuneration. In fact, the domestic role tends to be considered the “natural” role of women and ‘feminized’ jobs are considered an extension of this role, requiring no special qualifications since women can perform them ‘naturally’ for free. The underestimation of unpaid work in economic terms is partly due to the limited definition of economic activity, which considers economic value synonymous with market value. As such, for example, domestic work is considered a contribution to production when it is performed in other households for pay, but not in one’s own household.

In a broad sense, the concept of empowerment refers to expansion of the freedom to choose and act. The freedom to opt for paid work is limited by the balance that women and men are able to establish between formal work and the unpaid work of maintaining the household. This balance depends on internal agreements between household members

regarding the distribution of responsibilities, the availability of and access to public services for the care of dependent family members, the ability to pay for private services, the amount of flexibility offered by paid work, labour policies that allow for harmonization of both sexes in the public and private spheres, and, finally, lack of domestic violence, particularly against women, which is used as a means of limiting their options. This chapter validates the fact that women's domestic unpaid work role along with the other socio-economic factors forms a barrier in seeking or keeping a paid job.

5.2. Socio-Economic Factors and Intra-Household Division of Labour

The gender division of household labour is not static; however, they change in response to changing wages and conditions in paid work, to policy reforms and to a host of demographic, economic and social factors. Changes in educational attainment, technology, size of household, number of children, land holding pattern of households cause women and individuals to adjust time between activities, bringing about alterations in the use of labour. Macroeconomic conditions, labour and social policies and social services also affect the level and distribution of unpaid work in a household.

The time spent by a person in growing food for subsistence, gathering fuel and water, engaging childcare, sick and elder care, and performing domestic chores is co-determined by the time spent in paid market work. Thus, reproductive work time directly affects individuals' labour market options. Unpaid work also affects the rate at which time in paid work is rewarded, by limiting women's time available for work and their ability to specialize. Again, unpaid work activities such as domestic chores, fuel and water gathering, subsistence production and care work in the household are crucial to the production of the labour force, generation of knowledge and overall social reproduction. Finally, the interrelatedness of paid and unpaid work is reinforced by the complementarity and substitution between workload of men and women in a household and also by other social and economic parameters. The division of the total household labour force into paid and unpaid worker categories establishes hierarchies within the household that are reflected in the lower social status of women both within the household as well as in the labour market. The unpaid work performance of women

which remains invisible in conventional statistics has subsequent implications for employment and welfare policies.

The present chapter based on an econometric application using field survey data (as illustrated in the earlier chapter) draws inferences on inter-linkages between paid-unpaid activities and public-private domain conflicts. The sample was restricted to married or cohabiting couples, because of the need to study the relationship between paid, unpaid work and family welfare. Since prime age women in particular are confronted with choices concerning family life and paid work, the study further restricted its analysis to couples where both husband and wife are engaged and performing some SNA activities within or outside home domain to sustain their household. The amount of time spent per week in paid SNA activities unpaid household work activities or Ex-SNA work, unpaid SNA work, care for elderly, educational activities, organizational participation, personal care of self, social activities, etc., was determined on the basis of a survey schedule. The hours spent on an activity calculated on daily basis and then multiplying it by the 7 days of a week was calculated to get the hours spent in those activities in a week.¹

For quick recapitulation, twenty seven predetermined categories of activities and the time use are listed in the introductory chapter. The twenty seven categories includes six paid SNA activities viz., land preparation, dwelling construction, common infrastructure, making handicrafts, market sales and purchase for both primary and secondary production, and the remaining 17 activities are divided between unpaid SNA activities and unpaid extended SNA activities but these activities are income generating or income saving which includes post harvest activities, poultry rearing, water and fuel wood collection, livestock management, cooking cleaning and management of household, care of children, community participation, etc., and the rest being non-SNA such as leisure activities that is time spent on personal care, social conversation and rest and relaxation.²

The purpose of this chapter is to examine the factors that determine the hours spent by women in paid activities in rural households. The factors identified from the issues arising out of literature survey are the hours spent by the women in paid activities is a function of age of women, total income of household, educational attributes, time spent on household care and childcare, time spent in unpaid activities like livestock care, post

harvest activities and land holding of the household and the status of women as paid labour. Respondents were also asked to identify whether participation in paid activities made by the respondent or by her spouse or jointly were influenced by any religious and socio-cultural norms. Based on responses of the women, it was decided to include two other qualitative factors i.e., religion practiced by the household and the community to which it belongs, to assess their influence on women's participation in paid activities.

The traditional division of labour by sex prescribed that women's work be strictly limited to the home. While peasant men were responsible for all the agricultural tasks performed in the field, such as ploughing, transplanting and harvesting, women were burdened with all the household chores and with indoor agricultural tasks (i.e., pre-planting and post harvesting operations). They undertook to handle the seeds, and did arduous and labour intensive tasks like winnowing, parboiling and husking. Toiling from dawn till dusk within their homes, women's scope for social interaction was very limited. Similarly, in our study villages, women spent their time in those unpaid activities that not only required more time but needed more physical strength i.e., some of the most vital and arduous tasks in an agrarian economy like fetching water, livestock management, poultry rearing, making dung-cakes, etc., that required bending for hours. Again, women who were not engaged actively in production activity as paid labour, spent more time in unpaid work than women engaged in production activity. The differences in time spent in paid work among them are significantly higher in the paid labour group than unpaid labour such as house-wives or family helpers who spent more time in unpaid activities but nevertheless, both the groups spent a very high proportion of their total time in performing domestic activities. Thus, irrespective of her engagement in paid or unpaid activity, the hours spent in household chores are not reduced along with her familial responsibilities that are assigned by the society. The economic roles of a woman as a producer and as a consumer are combined in unpaid labour at home. Society assigns her the role of wife and mother and in doing so reduces the feminine productive function to that of providing services to the household itself. Women in rural agricultural households are largely involved in non-market, subsistence economic activities which, while not recognized as work having direct exchange value, nonetheless provide the basic survival strategies of particularly poor households. Traditional division of labour most often situates women in roles based on providing emotional support and maintenance, while

men are primarily responsible for economic support and contact with the world outside the home. Women's participation is in activities such as cooking, care of children and food processing, all of which are outside the cash economy and concentrated around the household. Thus the time spent by women in household activities is also responsible for determining the time expenditure pattern of women. Before dwelling on the factors that impact women's participation in paid activities, focus is drawn on the differences in time expenditure pattern between the men and women of the respondent households to validate the above.³

The data on the daily time dedicated to paid-unpaid work confirm a strong gender difference: on an average working day, men dedicate 4.14 hours to 8.38 hours in paid work while women dedicate 3.14 to 4.17 hours to it. Table 5.1 brings focus on activities performed autonomously by rural men and women and also to other activities where the household effort is jointly shared by both as the detailing of structure of activities has been outlined in the earlier chapter i.e. chapter IVth.

Identification of gender structures within such rural activities also uncovers the prevailing gender division of labour among households in rural Bengal. As this structural schema indicates, 6 principal paid activities and 17 unpaid activities involve work-sharing between rural men and women. Four unpaid household activities are carried out autonomously by women, in which women make autonomous time allocations. As the average daily time contributions in the table show, in most shared paid and unpaid activities, except land preparation, kitchen gardening and the building of common village infrastructure, the roles of rural women are subsidiary to those of men. In land preparation and infrastructural activities, rural women and men make nearly matching contributions, and in kitchen gardening, women take the lead. Among paid and unpaid activities, the only ones in which men share significantly are community work and crop protection. Rural men do not profess to participate in social conversation which they deem to be akin to gossip. Daily opportunities for them to socialize occur in the midst of work, and are therefore not recorded separately. However, for rural women who have to work, a long hour within the home, the hour or so that they spare each day to meet peers and friends is their only social outlet.

Table 5.1 : Mean Workload for Spouses: Gender Division of Labour within Rural Families

Paid Activities	Darjeeling		Jalpaiguri	
	Daily hours contributed by Men	Daily hours contributed by Women	Daily hours contributed by Men	Daily hours contributed by Women
SAN1	2.36	2.04	5	3.39
SAN6	0.56	0.53	0.70	0
SAN13	0.92	0.09	1.23	0.10
SAN15	0.76	0.31	1.26	0.41
SAN16	0.12	0.17	0.14	0.23
SAN17	0.02	0.00	0.05	0.04
Total working hours per day on paid activity	4.14	3.14	8.38	4.17
Unpaid Activities				
SAN2	1.46	1.43	0.92	0.07
SAN3	0.90	0.98	0.17	1.18
SAN4	1.11	0.99	0.72	0.02
SAN5	0.22	0.27	0.08	0.24
SAN7	0.76	0.87	0.10	0.72
SAN8	0.16	0.33	0.14	0.13
SAN9	0.00	0.00	0	0.81
SAN10	0.11	0.16	0	0.22
SAN11	0.29	0.38	0.02	0.41
SAN12	0.09	0.13	0.37	0.10
SAN14	0.58	0.21	0.26	1.06
XNA1	0.21	3.14	0	3.03
XNA2	0.37	1.12	0.20	1.48
XNA3	0.27	0.99	0	0.75
XNA4	1.01	1.03	0.20	0.15
XNA5	0.37	0.39	0.08	0.15
XNA6	0.01	0.00	0.02	0.08
Total working hours per day on unpaid activity	7.92	12.42	3.28	10.6
Leisure Activities				
NNA1	0.61	0.82	0.36	0.36
NNA2	0.89	0.98	0	0.37
NNA3	0.68	0.81	0.22	0.60
NNA4	4.78	4.83	6.00	5.88
Total working hours per day on leisure activities	6.96	7.43	6.58	7.21

Source: Compiled from Primary Survey

Since this study concentrates on the time allocation patterns of paid and unpaid labour in rural households of India, the average or the mean working hours devoted to paid and unpaid and leisure activities by women's are taken for analysis. Mean hours and standard deviation (S.D.) has been calculated to capture the distribution of time of rural women since S.D is least affected by sample fluctuations in Darjeeling District whereas except leisure activities variation are observed among paid and unpaid activities' of women in Jalpaiguri District.

Most of the women chosen were either from marginal and small land-holding families and a few among them were middle or large holding families. The mean age of the sample population was about 30 years and most of them were either illiterate or functionally literate. The women, in general, were found to be working on an average of 35 hours per week in the household activities like cooking, cleaning and care of elderly or children, while paid women workers spent marginally less hours in household activity than the unpaid women workers of the households. The most time-consuming household task is cleaning-cooking, i.e. food preparation and household management. This activity accounted for about 28 to 30 hours on an average per week and farm women allocated about 7-10 hours per week to physical and non physical care of family members including children (Table-5.2). The data presented in the table 5.1 show that the average number of hours per day allocated to work by women is higher than men's. This heavier workload is basically due to the accumulation of paid and unpaid activities, that is, to the fact that women are submitted to a double shift of work.

Table 5.2 : Decomposition of Average Work Time According to Type of Work, by Women in Two Districts

Activity/ Weekly Hours	Darjeeling		Jalpaiguri	
	Mean	S.D	Mean	S.D
Time Spent (hours)				
Paid Activity	32.75	17.70429	24.51333	24.43626
Unpaid Activity	42.86	12.5658	58.29067	26.62918
Leisure Activity	29.13	5.36667	42.50533	8.890043

Source: *Compiled from Primary Survey*

Thus rural women are subject to much more conventional gender relations due to the overwhelming conservative and traditional nature of rural society or inherent rural gender

structures. Even though men are becoming more involved in unpaid activities like childcare and housework, table 5.2 indicates that women's spent weekly a higher proportion of their total time in unpaid activities i.e., household labour time and leisure time. It is commonly known that employed women spend less time in paid labour than employed men. The imperatives of household labour may lead married women (but not men) to withdraw from the labour market completely or to reduce their attachment to it significantly, but wives' commitment to market labour does not alter the number of household tasks or a significant redistribution between men and women. In the agricultural economy, rural women again contribute to the management of the production system through their participation in post-harvest and processing activities. However, their involvement in such managerial functions generally limits the participation of rural women in direct market-related activity. Here, the economic functions that are carried out almost entirely by men give them a disproportionate say in the economic decisions taken by the rural household.

5.3. Impact of Socio-Economic Factors on Time Allocation for Paid Activities by Rural Women

An analysis of men's and women's time allocation captures the interdependence between the market and non-market or household economies. Women work longer hours than men which has been established in the previous chapter. Much of women's productive work is unrecorded and not included in the System of National Accounts. Children are closely integrated into household production systems, and the patterns that disadvantage girl-children begin very early. Poor households need their children's labour, sometimes in ways that also disadvantage boys. Domestic chores, notably fetching water and fuel wood, are one of the factors limiting girl's access to schooling and consequently, the woman's inability to participate in certain economic activities.

In the household context, members of the household are expected to get involved in those activities in which they have a comparative advantage and in this way household welfare can be maximized. Unfortunately, gains from this type of a relationship can be uneven because of the way activities may be perceived: some activities are perceived to have more value and consequently to confer more power than others. The gains may also be uneven because of the socio-cultural endowments that ascribe to the stereotyping of

responsibilities and activities by gender with differing powers. Thus the division of labour within home economies restricts women specially confines unpaid women family labourer to certain categories of SNA activities which are highly time consuming such as sowing, weeding, transplanting, harvesting, etc. The study has considers total weekly time spent in both the unpaid SNA activities and unpaid household activities i.e., Extended SNA activities jointly as total hours spent in unpaid activities (HSUPA) and hours spent in paid activities (HSPPA) i.e. activities that are done for earning cash incomes and also hours spent in leisure activities (HSLA) i.e. activities done for self enrichment or self essentials to capture the burden of women in rural household economies

In order to explain the impact of socio-economic and demographic control variables as mentioned earlier on the time spent on paid activities a multiple regression analysis has been undertaken in the study for the two districts Darjeeling and Jalpaiguri. Again, to examine the statistical relationship among the exogenous variables, a correlation matrix between the variables for both the districts have been constructed to explain their interconnectedness and it has been found that the association between the control variables are least; though they have small negative or positive correlation, their individual impact on the dependent variable or a particular variable is not large enough to outweigh the effects of other variables, thus ruling out multicollinearity.

Table 5.3: Correlation Matrix among the Independent Variables (Jalpaiguri)

	LNDHLD	HSLA	INC	HH.SIZE	AGE	HSUPA	EDU	NO.CHL
LNDHLD	1							
HSLA	0.037178	1						
INC	-0.00955	0.042208	1					
HH. SIZE	-0.00596	0.067956	0.465726	1				
AGE	-0.07568	-0.01304	-0.17554	0.055349	1			
HSUPA	-0.00746	0.088864	0.320673	0.086906	-0.0687	1		
EDU	0.030812	0.050827	0.238784	0.138148	0.047882	0.122407	1	
NO.CHL	-0.02085	-0.0835	0.043338	0.467449	-0.01709	0.016983	0.056844	1

Table 5.4 : Correlation Matrix among the Independent Variables (Darjeeling)

	LNDHLD	HSLA	INC	HH.SIZE	AGE	HSUPA	EDU	NO.CHL
LNDHLD	1							
HSLA	-0.1205	1						
INC	-0.06691	-0.09798	1					
HH.SIZE	0.015893	0.032873	0.215616	1				
AGE	-0.11274	0.019895	0.262833	0.179906	1			
HSUPA	-0.00904	0.468502	-0.16652	0.005042	-0.08649	1		
EDU	-0.02258	-0.05507	0.100197	0.122656	0.093184	-0.10115	1	
NO.CHL	0.035205	0.01144	-0.02003	0.319826	-0.13392	0.011627	0.161006	1

5.4. Regression Analysis and Interpretation

A woman is considered economically active or taken as a paid labour when she is engaged in the activity that generates income for herself i.e., if she is engaged in any of the following activities: farming such as transplanting, harvesting; animal husbandry such as shed cleaning, fodder collection, livestock management; post harvest activities such as threshing, drying, parboiling; foodstuff production, handicraft production, or trade activities (the same activities may be considered for subsistence production) for herself or for her family and sells some of the products of such work. In other words, income generating activities may be differentiated from subsistence production where the former establishes direct contact with the market. In the majority of cases, this category is equivalent to labour force participation and is usually measured in terms of total time committed to such kind of paid activities or total weekly hours involvement in paid activities. If these activities are done by women only as to maintain her household without receiving any kind of cash, then this time has been taken as unpaid labour time and counted as time spent under unpaid SNA activities. Thus time spent by women on paid activities are determined by both socio-economic factors and restrictions imposed by the family such as number of children, landholding pattern of household, income of the household or the extent of involvement of their husband in paid activities. Here in this model it is assumed that hours spent on such paid activities for cash is dependent on the above mentioned explanatory variables.

However, it should be noted that it is often uncertain whether a socioeconomic variable should be treated as dependent or independent variable. Furthermore, "independent"

variables may be dependent on deeper "causal" variables. For example, a wife may work outside the home for cash income because her husband compels her to do so as he wants to use the extra income for himself. In such a case, the wife has no independent choice and may not be empowered to any significant extent by her outside paid work. This result is at odds with the view of some economists (e.g., Agnihotri et al., 1998; Anand and Sen, 1995) who treat the earning of income outside the home by wives as a variable leading to their empowerment. We argue here that the causal significance of such a variable depends on the cultural context in which it is embedded, and seems to be different in an Indian context from a Western one. Differences may also occur between rural and urban areas and may also change with the 'evolution' of societies. The interrelationships between variables of this type are complex. Nevertheless, the present analysis provides strong evidence that the applicability of bargaining theories of labour time of the family varies considerably with socio-cultural context.

Considering households where both women and men are economically active multiple regression analysis has been undertaken to determine whether certain predictor variables could explain variation in time spent in paid work. Econometric application of ordinary least squares method has been undertaken for this analysis. More specifically, the model that has been estimated takes the form:

$$HSPPA = \beta_1 + \beta_2 AGE + \beta_3 EDU + \beta_4 INCOME + \beta_5 HH.SIZE + \beta_6 LNDHLD + \beta_7 HSUPA + \beta_8 HSLA + \beta_9 NO.CHL + \mu$$

where,

HSPPA= Weekly hours spent in paid activities

AGE= Age of women

EDUCATION= Education as per number of schooling years (women)

INCOME= Total income of the household

HH SIZE= No of total family members in a household

LNDHLDG= Ownership land holding of household

HSUPA= Weekly hours spent in unpaid activities

HSLA= Weekly hours spent in leisure activities

NO.CHL= No of children in the household

u = Error term

The results of the regression analysis for the dependent variable "time used in paid work by rural women" are presented in Table 5.5 and Table 5.6.

**Table 5.5: Impact of Socio-Economic Factors on Paid Activities: Multiple Regression
Results of Jalpaiguri**

Explanatory variable	Coefficient	Std.Error	t-Statistic	Prob.
C	44.5096	8.9750	4.959	0.000013*
AGE	0.9880	0.4076	2.424	0.019847**
EDU	-0.1743	0.3062	-0.569	0.572212
INC	-1.6106	0.3136	-5.136	0.000007*
HH_SIZE	0.2851	0.0932	3.060	0.003888*
LND_HLD	-0.0926	0.0333	-2.779	0.008195*
HSUPA	-0.0782	0.1731	-0.452	0.653835
HSLA	0.4374	0.2583	1.693	0.098035***
NO_CHL	-0.0875	0.0398	-2.196	0.033819**
Adjusted R-squared	0.738	S.D. dependent var		20.43626
R-squared	0.781	Mean dependent var		24.51333
S.E. of residual	2.1751	F-statistic(8,141)		18.2459
Sum squared resid	193.9742	Prob(F-statistic)		0.000000
First-order auto-cor coefficient	0.179	Durbin-Watson stat		1.637

*Significant at 1% level, ** Significant at 5% level, *** Significant at 10% level

**Table 5.6: : Impact of Socio-Economic Factors on Paid Activities: Multiple Regression
Results of Darjeeling**

Explanatory variable	Coefficient	Std.Error	t-Statistic	Prob.
C	41.3460	5.5598	7.437	0.000000*
AGE	0.3916	0.2354	1.664	0.093626***
EDU	-0.1984	0.2987	-0.664	0.510097
INC	-0.0851	0.0391	-2.175	0.035271**
HH_SIZE	-1.5910	0.3076	-5.171	0.000006*
LND_HLD	-0.0876	0.0311	-2.814	0.007420*
HSUPA	-1.1552	1.0826	-0.641	0.526043
HSLA	0.2582	0.0709	3.646	0.000734*
NO_CHL	-1.0671	0.3645	-2.927	0.005497**
Adjusted R-squared	0.743	S.D. dependent var		17.70429
R-squared	0.780	Mean dependent var		32.75
S.E. of residual	2.1544	F-statistic(8,91)		21.2255
Sum squared resid	194.9397	Prob(F-statistic)		0.000000
First-order auto-cor-coefficient	0.173	Durbin-Watson stat		1.649

*Significant at 1% level, ** Significant at 5% level, *** Significant at 10% level

The effect of independent variables on the time expenditure pattern of paid activities is depicted in the OLS model to predict the labour time allocation pattern among the indigenous households in Darjeeling and Jalpaiguri district of West Bengal. The value of R^2 indicates that about 73 and 74 percent of the total variation is explained by the explanatory variables in the Jalpaiguri and Darjeeling District. Except education and time spent in unpaid activities all the other explanatory variables such as, age of the respondent, landholding pattern of household, monthly income, number of children in the family, household size and Hours spent in leisure activities are the significant factors in determining the hours spent on paid activities either at less than 1 percent or at less than 5 percent level or at less than 10 percent level respectively with positive and negative values of coefficient as shown in Table 5.5 and 5.6.

The results of the multiple regression implies that if the age of the woman is increased by 1 percent then the probability that she would spend more time in paid activities will increase by 0.9880 in Jalpaiguri District and by 0.3916 in Darjeeling District. The positive value of the coefficient shows that increase in age is associated with increase in participation in paid activities. It also implies that greater number of older women participates in paid jobs than younger ones and that, even in households where women are reluctant to participate they will eventually do as they get older for survival of the household. The seniority in age or in generational status would give a woman a higher symbolic rank in relation to men in the family but generally male superiority in the rural family is supported by tradition and man's right to property, prevalent in a patriarchal society.

Education is increasingly becoming a major factor enabling women to break down barriers to some socialization factors giving rise to the division of household labour. The more educated a woman is, the more likely it is she is going to venture into spheres traditionally considered male areas. These factors have important implications for women's empowerment and their ability to contribute to the overall development of not only the household, but also the nation. Education is providing women not merely a source of income; it is a source of power and sense of independence. Once education and economic freedom come together, they activated one of the basic wishes of an individual ... wish for recognition i.e equal status in the society. The level of a woman's education may work in two ways to affect the allocation of her time between the market and the

home. For example, if education increases her productivity at home-work then she would prefer to stay at home but if the opportunity cost of staying at home is greater for an educated woman, then she would prefer to work in the market (Sultana *et. al.* 1994). But the higher level of education of married women indicates that they do not belong to poor households. They come from families that at least hope that their women will get either better jobs or otherwise no job. Women with a lower level of education or no education have work aspirations simply to get paid merely to survive and be independent. Here, for both the district, education is not a significant factor for determining the time spent in paid activities by women though the negative coefficient for education in both the districts supports that more educated women are less involved in paid activities. It is to be understood that for rural women paid activities means field activities for long hours due to shortage of employment opportunities – a phenomenon prevailing in plains or hill areas of West Bengal. This may be the cause for lower participation in the labour force as paid labour in rural areas by more educated women or it can be said that 1 percent increase in the percent of women with high school education will decrease the hours spent in paid activities by 0.1743 or 0.1984 percent in Jalpaiguri and Darjeeling district respectively, as higher educated women are not keen to participate in paid activities, particularly in village areas. This result may vary or be positive if we take into account the urban scenario where higher the education level, higher the scope for absorption in labour market.

Usually, as women actively participate in paid activities, the total income of the household will increase, but the estimated coefficient for income is negative for both Jalpaiguri District and Darjeeling District and it is the most significant variable in determining the hours spent on paid activities by the village women. In Jalpaiguri it is significant at 1 percent level and in Darjeeling at 5 percent level. There can be two implications for the inverse relationship between income and HSPPA: first, as household income increases people's desire for leisure increases as income effect on paid activity is negative i.e. backward bending supply curve effect on female labour namely as wages increases workers prefer more leisure and less participation in the paid market is strong. This also implying that in rural economies, participation in paid activities are mostly by relatively poorer women whose earnings supplement family income for basic sustenance or households with relatively stable income are reluctant to send their female member for

agricultural activities as most of the paid activities in agriculture are field activities. Workers from affluent family or asset rich family are not interested in participating in paid activities of the village economy. Here cultural factors and social norms also act as obstacles that hinder women to participate in the labour market.

Similarly, more household members in a nuclear family connotes more assigned household work for women which increases in a joint family with too many household members, reducing the magnitude of time spent in paid activities. Conceptually, two alternative hypotheses may be postulated about the impact of household size on the mother's work. One is that in larger households, there is a surplus of labour supply within the households and the likelihood of labour force participation of women becomes low with preference to work outside preserved for the males. The other equally compelling argument explaining the mechanics of larger households is that they have more mouths to feed, so women have to be economically active. The first postulate is supported by the result of the Darjeeling district where this factor (size of household) is negatively related with the time spent in paid activities by women whereas the result for Jalpaiguri is showing a positive impact on hours spent by women supporting the second postulate that women has to take on more responsibilities to sustain the extended family size. in a situation where size of household is large enough to sustain her family. In both the cases, however, this factor is significant in determining the influence of size of household on hours spent in paid activities by women.

In a larger households, other family members may support the married women in housekeeping and child-care (though the basic responsibility of housekeeping and child-care is of mothers) and make her free to be employed in economic activities. Such type of support is usually provided by elder daughters and mothers in-law. So the family support system is also important to increase the probability of women's participation in economic activity. Household size and the family system are interrelated concepts. The joint family system and the nuclear family system are prevalent in India. In a joint family system a woman, apart from her husband and children, lives with her in-laws comprising her husbands' parents, grandparents, brothers, sisters and sometimes some other family members. In a nuclear family she simply lives with her husband.

On the other hand, the higher the size of the household, the lower is the probability that the mother obtains work. More precisely, one additional member to the household decreases the probability of married women going out to work. The result supports the findings of Naqvi and Shahnaz (2002 for Pakistan) who concluded that women from smaller households are more likely to go out for work (Lokshin *et. al.*, 2000 for Kenya). This explains that maternal labour force participation depends on, other household members. Our econometric results for Darjeeling district, further indicated that married women from smaller households (nuclear families) are more likely to work. It supports the view that economically active mothers tend to belong to smaller households. The explanation for the lower participation of married women belonging to joint families may be that the pressure of domestic chores is high on women than in nuclear families.

Land holding is an important resource as well as an asset for rural economies. The size of land holding determines the economic status of a farmer, thus, an assetless household is economically deprived and more vulnerable than a resourceful household. Indian economy is predominantly agricultural in nature where the size of land is an important indicator of socio-economic status in rural area. Several empirical researches have shown that size of land has a negative influence on women's participation in the market economy and in decision making process (Dube, 1982). Our results for both the districts also support this finding. Women's workload in case of large landholding farms are concentrated within the homestead rather than on the field because they have to supervise the work of the wage labour working in their field and also have to cook for them. In addition, she has to perform other complementary activities like storing of crops, cleaning and selling them in the village market or to a middleman. For landless families or small and marginal farmers where economic pressure is high, women spent most of their time in field activity whereas spouses of big or middle farmers participate less in remunerated paid jobs compared to the former. Thus, more involvement in paid activities is expected to be found in those households where land is less accessible. Women labour and work role varied considerably according to geographical area, the nature of crops grown and also according to class and caste. Most of the field tasks of upper class farm women owning households are performed by hired female labourers from marginal or small holding families. This result is carried over for both the districts.

Another important factor that determines how much time women are willing to spend on income generating activities is solely determined by their unpaid domestic activities within the household. Though the results of multiple regression for both the districts are not confirming this factor as a significant predictor for hours spent in paid activities but the negative coefficient of these control variables in the two district implies inverse relationship with time spent in paid activities. If they are engaged in paid activities, then it is only but natural that a significant number of their work hours will be concentrated on assigned paid activities, while adjustments are made in work hours required for the fulfilment of unpaid or non-remunerated work. Non-engagement in paid activities would subsequently ensure longer hours of work in unpaid activities. The hours spent in unpaid activities has an inverse relationship with the hours spent in paid activities. We introduce the number of hours of unpaid work of women work in order to test for the substitutability of market work time and unpaid domestic labour time. Neoclassical economic theory considers home production a close substitute to market work (Reuben Gronau, 1986). If, however, the allocation of time between unpaid housework and paid market work is dictated by social conventions in the short run, then the substitution effect may be observed only for men, and women who allocate more time to market work may do so at the expense of their leisure instead of unpaid domestic labour, which is confirmed by empirical studies on gender and time allocation in developing countries (Floro, 1995). This aspects is also substantiated by this study where hours spent on paid activities are negatively related to hours spent on leisure activities for both the district.

The econometric study also show time spent for leisure activities is a significant factor in determining the time spent for paid activities or market activities by women in these districts. In popular discourse leisure is conceived of as free time, time at one's own disposal, or "pure leisure (Bittman & Wajcman, 2000). Women's leisure time is associate with a perception of leisure, lack of obligation or necessity or relative freedom. However, the concepts of leisure differ by gender (Kelly & Freysinger, 2000). So feminist researchers argue that free time is an especially problematic concept for women because the boundaries between unpaid domestic responsibilities and free-time pursuits are often unclear (Griffiths, 1988). The negative association of leisure time with the time spent on paid activities indicates that women have less free time when they get involved in paid activities. That is, time spent in one sphere means less time spent in another. If

commitments to paid labour call for more-time participation, that time must come at the expense of free time. The more hours a woman works for pay, the less free time she has. Time is a metric with a fixed upper limit, and changes in work and leisure should involve a zero-sum trade-off (Jacobs & Gerson, 2001). The more time spent in paid labour on the workday, the less time is spent on leisure at the end of the day and this is evident for both the districts.

The regression results indicated further that the presence of infants in the household has a strong significant negative influence on women's paid activity or decreases maternal labour force participation. It can be stated that the presence of pre-school children (0-6 years of age) reduces time for paid activities but in addition, it can be stated that though younger school children (4-8 years of age) significantly reduces time for paid activities where the presence of older children (9-16 years of age) instead significantly increases time for paid activities and leisure time for the female. Though it is not evident from the result but it has been seen in the study villages that, with the increase in the number of children especially girl child, the women or the mother get the opportunity to devote more time on paid activities by giving partial responsibility to her daughters. Often, presence of elder women within the household also provide similar support her to participate in market activities which could enhance her status manifold and, thereby improve her personal status within the household and society. So, in addition to increasing the number of mothers who work, the government subsidies of low-cost child-care centres and early childhood development programs may increase the future productivity of infants. The increase in labour participation would increase the incomes of poor households and extricate some families out of poverty.

Thus out of eight variables posited as explanatory variables determinant on hours spent in paid activities by women (HSPPA) under study, only six variables which were found to be significant were accepted and rest of the variables such as hours spent on unpaid activities and education of women which showed non-significant relationship are rejected but it is however noteworthy that the two variables which are rejected are found to have strong negative coefficient in the results indicating their associationship with the regressand.

However, women's self perceptions are not the only obstacle to engage in paid work, under-enumeration of women in agriculture is due largely to the reluctance of male farmers, especially big farmers, to report that their wives work outside the home and this is probably true for higher caste groups in India where social status considerations discourage the involvement of women in work outside the home. Participation in the wage labour market is not the same thing as formal labour force participation in agricultural activity: the lower rate of total labour force activity among women derives from the fact that above a certain landholding size, women withdraw from the formal labour force as conventionally defined. This is partly a matter of social prestige, especially in cultures where there is a heavy social premium on the seclusion of women, but it partly reflects an increasing (unrecorded) role of women in agriculture and agriculture-related tasks closer to home. With land and livestock asset accretion, there is more work for women to tend for livestock, cleaning the shed, etc., and less time for outside work. There is a matching correlation, even stronger, between family income levels and the fate of female labour force participation rates; the lower the family income, the higher the rate of female labour force participation, the relationship being much more marked for women than men over almost the entire income range. As Coverman(1983) points out that it is probable that peoples decisions regarding how much time to allocate to labour markets or unpaid family work are made at discrete points in their lives, and it is only at these key decision points that the characteristics of one role constraints or provides opportunities for the other.

There are supply side determinants too such as institutional supports, labour market conditions, minimum wage laws etc., which may have significant effects on determining hours spent in paid activities by women in the selected study region which the study failed to incorporate in this regression analysis.

5.5. Methods of Valuing Unpaid Labour

The monetary valuation of work is a necessary means of turning assumed value into real value that would improve the wellbeing of women, children and their families. The unpaid work should be valued because the consequences of it have been noted and endured long enough. Women are tired of being overworked, unpaid and underpaid.

Unless we value the invisible contribution of women in their household, the status of women and their position in the society will never be recognised as a principal maker of household economy as well as the backbone of running a household. Rural women constitute the invisible work forces which keep the family and the rural economy alive. But they and their labour often go unrewarded or under-rewarded. Monetary valuation of unpaid work is also a key to challenging the system of under valuation of even women's paid work that is a primary reason of women's insecurity or inequality in social life.

Information on paid work usually comes from registers established and maintained by public authorities for policy purposes. The problem with this kind of information is that only paid work is included, rather than the employee's actual work time. Moreover, no official evidence offers the information on employees' workloads, which means that there is no available information on the distribution of work within the population. However, the major drawback of such work registers, and for labour-force surveys as well, is that only paid work is included, thus excluding from consideration unpaid/household work. The implication is that investigations of time-allocation are restricted to include only labour market and ordinary socio-economic factors.

A clear-cut division of household labour in a rural society as we have described preciously in the previous chapter that men's primary roles as family breadwinner are defined outside the household, where transactions have become monetized; on the other hand women's primary roles as housewives and mother are defined within the household, where monetized exchange is of no importance. Consequently, the commodities and services produced and purchased by men in the market are considered as 'economic goods', while these things produced by women and consumed within the household are not. The economic contribution of women in rural economies therefore remains invisible. Even in urbanized industrial economies, homes and work place are spatially separated for female workers. However, in agricultural economies, men and women work together on farms that surround their villages. Outside the farm category, it has been observed that women are generally employed in a restricted range of low paid and low productivity activities, where they are subject to labour market discrimination. Even at home, the long hours they spend in household work also go unrecognized.

Time is one of society's most important economic resources, and yet only a fraction of households time, namely that time spent on market activities, has received attention in labour market or policy prescription. Time spent on unpaid SNA work and housework and child-care has gone largely unnoticed. Shelton reflects that this is primarily because "what goes on in the household is not intrinsically interesting since (1) women do it, (2) it is not in the public sphere, and (3) it is not subject to change through policy" (Shelton 1992). Although these three reasons still (to a large extent) reflect our society in the twenty-first century, some change is taking place in most industrialised countries (Hewitt 1993). According to Becker (1965), commodities are not only produced through the combination of market goods, but also with a certain amount of time. This implies that a household is restricted not only by a budget constraint, but also by a time constraint.

Again significant properties of the goods and services consumed by the population are majorly produced and consumed without undergoing monetary exchange transactions, and as such are provided to the household by unpaid household members who are mostly women. Kuznets had pointed out that housewives services constituted the largest single item excluded from the national accounts. Several surveys have been conducted in different countries of Europe, Asia or Latin America concerning the time spent on and amount of unpaid work including household work. A part of these surveys is devoted to developing appropriate methods for measurement of different categories of work and production done within the household outside the market economy.

The two most commonly used method to value the amount of time spent on unpaid labour are the market replacement cost method and the opportunity cost method (Chadeau, 1992). The market replacement cost method multiplies the number of hours by the wage rate of a market substitute. This version of the market replacement cost method is often called the generalist method. The specialist method is another version of the market replacement cost method. With this method, the value of time spent on unpaid labour is obtained by multiplying the wage rate of a professional with the amount of time spent on the corresponding activity for which this professional is a specialist. Thus, for example, the number of hours spent behind cooking is multiplied by the average wage rate of a cook. The opportunity cost method values the time spent on unpaid labour by multiplying the number of hours by a measure for the forgone profits incurred by not spending that time on another activity. These forgone profits can be quantified in a

multiple ways. The most common approach is to define them with the forgone earnings that an individual faces by not spending that time working in the market. For employed individuals, these forgone earnings are equal to the hourly wage rates they earn. For non-employed individuals, these forgone earnings can be estimated by calculating their potential wages in the market.

Two important questions arise when trying to calculate the hourly wage rate used to value the time spent on unpaid labour: (i) should net or gross wages be used? (ii) should actual or paid working time be used? Unfortunately, for most methods there is no precise prescription, and there is also very little consensus in the prevailing practice. Yet the choice of wage concept is important, since the calculated value is very sensitive to this choice. The market replacement cost methods are, strictly speaking, based on a market substitution perspective, i.e., unpaid labour is valued with the wage rate of some market substitute. The hypothetical situation is one in which all unpaid labour were to be replaced by the market sector. This perspective is taken in this study and then the cost of employing a worker has been used in the calculation, as opportunity cost method prevails to be a reliable one to value unpaid work.

5.6. Opportunity Cost Method in Time-Use Studies

Recognising the true magnitude of unpaid household labour, estimation or the monetary valuation of such work is however deemed imperative to express the value of physical output of households in terms of units of money. For the purpose of economic valuation, value is synonymous with the market value or value is simplified by assuming that an hour of market work and an hour of non-market work have the same value. The work which is not included under system of national accounts or even it is included but not assigned the proper wages or assigned lower wages and the unpaid household work have been evaluated by using replacement cost method in this study. This method values the unpaid work by the equivalent wages of paid worker. The wage rate varies from one region to another depending upon the situation of local labour market and demand – supply condition of labour market in the concerned area. The replacement cost has been estimated with the help of the following formula:

Value = Usual days of engagement in an activity × opportunity cost of activity

Here wages are calculated on the basis of response of the spouses where they were asked to report their opportunity cost or replacement cost for each of the activity. Since women are involved in both unpaid and paid activities, wages for paid labour has been taken into account. Under SNA paid activities wage rates are fixed for males and females. In the context of the study area for the labour engaged in land preparation or crop husbandry, the prevailing wage rate was Rs. 90 for males and Rs 80 for females during the reference year (2006-2007). In construction activities or common infrastructural activities the wage rates were Rs. 140 and Rs.100 for males and females respectively.

In the Extended-SNA or Ex-SNA activities multiple wage rates were prevailing for similar activities, such as cooking for a nuclear family or cooking for an extended joint family, household management and cleaning for a household which is near to urban settlement and a household far from urban setting. Again due to different terrain of plains and hills wage rate varies from one district to another. But the form of labour exchanged system namely Hoori, Parma or Pakhurey in the villages of Darjeeling hills exhibited a different form of labour valuation and researcher personally had to confirm the replacement cost of paid labour for each activity from the household head and due to differences in responses, a mean value has been taken for each activity after considering all the households under study. For some activities like collection of fuel and water, kitchen gardening, post harvest activities, animal husbandry most of the respondents were unable to quote any fixed existing wage rate. However, the researcher herself tried to find out a minimum wage rate for those activities either on the basis of the reports of respondents or from the records of local panchayats of those villages. But the wage rates for different activities differed depending upon the nature of the activities, e.g., wage rates for post harvest activities and tending and grazing animals outside, are generally fixed on the basis of total weekly time spent on those activities, whereas activities under Ex-SNA such as cooking, cleaning, care of elderly or children are fixed on monthly basis.

5.7. Differences in Imputed Value of Unpaid Women's Work in Jalpaiguri and Darjeeling

Initially to get an idea of imputed value of unpaid work, the researcher ascertained from each of the 150 sample households of Jalpaiguri and 100 households from Darjeeling district whether they were usually engaged hired labour for carrying out any unpaid SNA

activity or Ex-SNA. Where response was positive, then on the basis of the wage rate of hired labour the value of that particular activity was measured, but in most of the cases of agricultural households under the survey the respondents failed to report to have hired labour from outside the family members. It was a difficult task for the researcher to locate an adequate number of informed persons who could provide details on the prevailing wage rate for most of the listed activities. Finally, the researcher had to take into account the perceptions of female members to value their unpaid work.

For calculating the value of unpaid work in two different districts, the present study has taken into consideration all the unpaid SNA activities as it is mentioned in the table 5.1 of this chapter and the four unpaid Ex-SNA activities namely, XNA1 cooking and cleaning, XNA2 care of children, XNA3 care of elderly and XNA5 education and tutoring all together. But here XNA4 and XNA6 i.e., participation in community development programme and training programme are not considered since these are the activities which are related to personal upbringing or personal enrichment. The rest 15 activities are either productive or needed for the welfare of the family and directly or indirectly related to the production of goods or services or subsistence economy.

While performing all the activities, mentioned above, the time utilization pattern depends upon the individual's capacity or inherited skill, the study considers the mean time spent for all those activities by women in two districts. The prevailing wages for two districts have been taken into account to measure the total valuation of each unpaid activity. Here one thing needs to be mentioned is that in rural communities some activities are performed daily and some are purely on weekly basis, and hence the study, wage rates imputed for those weekly activities undertaken by individuals has been divided by seven and then used in the study.

Most of the SNA activities that are unpaid and performed by women as part of household work are treated as unpaid family worker. If a worker from outside has been replaced by the household member, then the wage he/she had to charge for that particular work in a day has been taken into consideration to measure the opportunity cost or replacement cost value of that particular unpaid activity in the study.⁵

Initially, mean daily hours spent for unpaid activities by women in the villages of Darjeeling and Jalpaiguri have been taken. The existing wages prevailing in those areas

for these particular activity is also taken into consideration. In the rural economies, every activity has its assigned hours that the worker has to do every day or every week. The wages are paid when the worker fulfil his/her commitment for the assigned work. But for the family worker they are not bound to engage for specific work hours to complete the particular task, they may work 2-3hours for a particular activity in a day as against standard 8-9 hours for the same activity by a hired worker. For this reason, , the study counted the mean working hours on daily basis of unpaid work and multiplying it to the total number of working days required for that particular work again, the total work hours contributed in a month has been multiplied by average wage rate for each hour , and subsequently monthly imputed value for each activity has been estimated. Though the amount of attention and care that the women take of their household cannot be measured by following any kind of technology or methodology, this study tries however to measure the significant contribution of women with the intention of showing the work burden of women in rural household.

The value of unpaid SNA work and Extended-SNA activities undertaken per month by a women has been estimated to vary between Rs 580 to Rs. 676.48 in the two districts. This value may vary from one household to another, as the number of mean hours per worker has been taken here and again the study made this estimate of imputed value of unpaid labour on the basis of women's perception about their wages which may vary also from one village to another.

It is to be noted that there was no disaggregated information that clearly distinguished between the work of a cook, a dishwasher, or even of a nurse or caregiver, which is why it was necessary to use the prices of the group that included such occupations. Regardless of these constraints, the price obtained per hour of work is considered valid for this exercise, since its purpose is not only to produce a traditional economic analysis, but instead to contribute to a broader, more complete view of the economy. Observations made in several studies concerning assigning monetary value to unpaid household work, as well as productivity, may also apply to the measurement of goods produced for personal consumption and other SNA outputs. The objective of national accounting is to report total goods and services produced and consumed, including those obtained at market and nonmarket prices, with high or low productivity.

Table 5.7: Distribution and Imputed value of Unpaid work in Jalpaiguri

Activity Type/ Classification	Existing wage rate for Darjeeling (Daily)	Usual standard working hours assignment in a day for unpaid SNA and Ex-SNA activities.	Average wage assigned for each hour of work	Mean daily hours expended by women on each activity	Usual days of engagement in a month	Total time contribution of women in a month	Total imputed value of unpaid work
A	B	C	D= B×C	E	F	G=E×F	H=D×G
SNA2 Crop husbandry	Rs.60	8 hrs	Rs.7.5	0.07	20	1.46	11
SNA3 Post harvest act	Rs.50	8 hrs	Rs.6.25	1.18	25	29.5	184.4
SNA4 Crop Protection	Rs.10	8hrs	Rs.1.25	0.02	4	0.10	0.13
SNA5 Kitchen gardening	Rs.5	8hrs	Rs.0.625	0.24	8	1.92	1.2
SNA7 Livestock tending	Rs.10	6hrs	Rs.1.67	0.72	25	18.0	30.13
SNA8 Livestock grazing	Rs.10	6hrs	Rs.1.67	0.13	25	3.25	5.41
SNA9 Making dung cakes	Rs.10	2hrs	Rs.5	0.81	8	6.48	32.4
SNA10 Poultry rearing	Rs.12	6hrs	Rs.2	0.22	27	5.95	11.8
SNA11 Water – fuelctn	Rs.10	2hrs	Rs.5	0.41	30	12.4	62
SNA12 Processing & storage	Rs.40	2hrs	Rs.20	0.1	4	0.4	8
SNA14 Well /irrigation const.	Rs.60	8hrs	Rs.7.5	1.06	5	5.30	39.8
XNA1 Cooking & cleaning	Rs.8	6hrs	Rs.1.34	3.03	30	90.9	121.2
XNA2 Childcare	Rs.10	10hrs	Rs.1	1.48	30	44.5	44.5
XNA3 care of Elderly	Rs.8	10hrs	Rs. 0.8	0.75	30	22.7	18.2
XNA5 Education & tutoring	Rs.10	3hrs	Rs.3.34	0.15	20	3.06	10.3
Total							580.40(Rs)

Source: Computed from Primary TA Survey

Table5.8: Distribution and Imputed value of Unpaid work in Darjeeling

Activity Type/ Classification	Existing wage rate for Darjeeling (Daily)	Usual standard working hours assignment in a day for unpaid SNA and Ex-SNA activities	Average wage assigned for each hour of work	Mean daily hours expended by women on each activity	Usual days of engagement in a month	Total time contribution of women in a month	Total imputed value of unpaid work
A	B	C	D= B×C	E	F	G= E×F	H= D×G
SNA2 Crop husbandry	Rs. 50	8 hrs	Rs.6.25	1.43	24	34.32	214.5
SNA3 Post harvest act	Rs. 40	8 hrs	Rs.5	0.98	25	24.5	122.5
SNA4 Crop Protection	Rs. 10	8hrs	Rs.1.25	0.98	4	3.9	4.93
SNA5 Kitchen gardening	Rs. 25	8hrs	Rs.3.125	0.27	8	2.18	6.82
SNA7 Livestock tending	Rs. 5	6hrs	Rs.0.83	0.87	27	23.5	19.57
SNA8 Livestock grazing	Rs. 10	6hrs	Rs.1.67	0.32	27	8.87	14.78
SNA9 Making dung Cakes	Rs.6.50	2hrs	Rs.4	0	4	0.00	0
SNA10 Poultry rearing	Rs. 10	6hrs	Rs.1.67	0.16	27	4.20	7.00
SNA11Water – fuelcltn	Rs.10	2hrs	Rs.5	0.38	30	11.52	57.64
SNA12 Processing & Storage	Rs.10	2hrs	Rs.5	0.13	4	0.53	2.68
SNA14 Well /irrigation const.	Rs. 40	8hrs	Rs.5	0.21	2	0.42	2.11
XNA1 Cooking & cleaning	Rs. 10	6hrs	Rs.1.67	3.14	30	94.32	157.2
XNA2 Childcare	Rs. 10	10hrs	1	1.11	30	33.6	33.55
XNA3 care of Elderly	Rs. 7	10hrs	0.7	0.49	30	14.7	10.29
XNA5Education & tutoring	Rs.8	3hrs	2.67	0.34	25	8.57	22.85
Total							676.48(Rs)

Source: Computed from Primary TA Survey

5.8. Conclusion

The present chapter mainly investigates into the impact of household and socio-economic factors in determining the structure and extent of involvement in paid, unpaid and household work of married cohabitating couples in the study region. In the process, the chapter also captures the labour time allocations and invisible work of women in household chores as mentioned in the model in the previous chapter. Household work appears to be a demanding set of tasks for women that require about the same amount of time regardless of urban, rural, or farm residence. Unless and until we acknowledge the reality that women are doing double duty and respond accordingly, it will be impossible for women to achieve real equality in our society. Women themselves need to value what they do and demand their fair share of reward for their work. Governments need to use their communications, budgetary, and policy-making power to achieve equity between genders.

Although it may seem that the farm household work load is a heavy one, it may actually be the unresponsiveness of unpaid (farm or nonfarm) work to other work demands that creates a unique situation for rural women. It therefore appears that, for rural women, choosing to spend time in paid work is balanced by unpaid work load, but choosing to spend time in household work may be an addition to the total work load. For women, who perform a disproportionate amount of unpaid and household work, the time spent on these tasks constrains them from availing themselves of training and education opportunities and from participating in formal, paid labour which is protected by labour, wage, health, and safety regulations. It thus can affect their health and well-being. Social institutions suffer when the total demands on work time—paid and unpaid—become so great there is no time left for volunteer or civic activities.⁶

These are not only the mentioned factors which affect women's participation in paid activities but men's time allocation pattern also have a significant influence on women's involvement pattern in marketed activities or non-marketed activities. Though women's involvement in labour market are restricted by their household work and unpaid non-productive activities and this further restricts them within the domain of invisible household economy and often they are suffering from lower status in labour market by doing unskilled, low paid activities.. The importance of unpaid and paid work in the

household work regression equations emphasizes the interdependence of the household and market sphere. Since agricultural families are more likely to be geographically separated from some of the market substitutions for production, their reductions in household work time are more likely to be guided by changes in family standards and goals. The trade-offs between paid, unpaid work and the socio-economic indicators affect the farm family's decision to concentrate efforts in household production, off-farm employment, or farm production. Measures of family awareness of the trade-offs would contribute to decision-making theory. The results of this research have implications for organizations and governmental agencies that plan programs for rural people. Again regression study reveals that education of women, income of household, land holding pattern of household and number of children are the most significant factors that negatively impact women's participation in paid activities while age of women, number of family members have a positive influence on women's participation in labour market. Thus this chapter also tested and partially accepted the hypothesis 2, hypothesis 3 and hypothesis 4 of the study. As stated in hypothesis 2, that landholding pattern exerts a negative influence on women's market participation, this result also supports the proposition that women's participation is highly influenced by the size of the land holding, applicable to both the districts. Again, from the strong negative coefficient values for education parameter in the two districts, it may be accepted that literacy of women has a negative influence on women's participation in market economy. Though this is not a significant factor, the study rejects the 3rd hypothesis, treating the present scenario as a special case of rural employment scenario. The 4th hypothesis which states that variations in the unpaid housework of women are, to a large extent, determined by the economic status, socio-demographic characteristics and the division of labour in households is accepted if the results of multiple regression are considered together to show the impacts of exogenous factors on hours spent in paid activities by women. The socio-economic and demographic variables such as income of the household, size of landholding, age of women, household size, number of children are the significant factors for determining the economic status of women. Again, time spent on unpaid household activities and leisure activities may influence women's time allocation pattern or division of work within a household, which has been established from the study. Thus this chapter accepts two hypotheses and rejects one on the basis of the regression analysis.

The results of the imputed value of unpaid labour from the pilot study brings to focus that women themselves need to have a clear perception about the intrinsic value of unpaid work done by them.

The procedure of collecting usual wage rate paid to hired females for undertaking various SNA activities and Extended-SNA activities from the selected sample of households or from informed persons in the selected villages is not likely to provide adequate information. One possibility which deserves consideration in future studies is to identify at the time of listing operations in each sample village of those households who supply part-time/full-time female labour and hire female labour for doing important SNA and/or extended-SNA activities and to select a sample of requisite size for collecting data on wage rates.

End Notes:

1. Questionnaire were structure to collect information regarding time use in paid, productive unpaid and non-productive unpaid activities The survey does not however allow us to observe the actual allocation of time to this within the couple, and we used the perception of the partner's contribution to specific unpaid working activities to more accurately define the model of allocation of unpaid work in the family with reference to: childcare, shopping, cooking, cleaning, everyday management, and more complex management.
2. Prior to the surveys, researcher identified categorized and coded 27 types of activities from the list of activities of Indian Time Use Survey carried out by CSO in 1999. Activities were chosen on the basis of importance of agricultural in the rural areas of Bengal.
4. The unpaid work of women comprised three major activities: meal preparation, cleaning and clothes preparation, and family care. Married women and full-time housewives spend a large amount of time on housework activities. Although these activities often are neither socially acknowledged nor remunerated, it is possible to arrive at specific figures measuring the economic value of housework.
5. Output-based valuation corrects for different productivity levels. For example, two households could spend an equal number of hours cooking meals of similar nutritional value; however if one household has a stove or gas while the other relies on wood fuel, the first household would expend far less time in preparing the meal. Through the input-based approach, the meal of the second household would be assigned a higher value since the estimate is based primarily on time, while through the output-based approach, both meals would be assigned the same value. This is one of the reason to adopt input based method here.
6. While men have compensated for some of the time that women are now working outside the home, women are likely to accommodate increased labour market participation by reducing leisure time and by doing simultaneous activities. Women, thus, increase not only total work hours but also work intensity

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