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CONTRIBUTIONS TO BOOKS

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JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

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INTERROGATING DIVISION OF LABOUR IN BENGAL USING TIME USE METHOD

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ABSTRACT

The participation of women in productive uncounted activities has always been visibly lower than that of men, whether in rural or urban areas. However, in the view of gender researchers, also reiterated by the National Commission on Labour, the economic contributions made by women as a labour category are grossly underestimated. Undervaluation of women's work also manifests itself in persisting wage-disparity, differential access and control over resources, lack of equivalence in infrastructural support, and above all through disparity in gender work burdens. Nevertheless, despite its obvious productive and social worth, much of women's work remains invisible within national accounting and census frameworks, emphasising their urgent need for redesign. The methodology of Time Allocation Surveys [TAS], or time-use analysis as these are more popularly called, overcomes many of the lacunae in conventional labour data collection and research, which disfavour women. Such surveys capture the segmentation of the working day by men and women between paid and unpaid work activities. The paper examines the economics of rural work and gender divisions of labour between men and women within the rural households, based on a recent time allocation survey of poor rural households engaged in agriculture and allied activities in six villages located in Alipurduar and Darjeeling district in northern part of West Bengal.

KEYWORDS

system of national accounts, division of labour, time allocation, autonomous activities, paid and unpaid work.

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1. INTRODUCTION: FOUNDATIONAL ISSUES

Economic work, by definition, is usually measured as the contribution of an individual worker, the division of labour that supports it arises from interrelated decisions made within a mutually-dependent labour group, such as a society or family. The household thus functions as the basic social unit that allocates labour time towards production and consumption, and household production thus involves the collective generation of goods and services by the household, combining capital assets such as land, tools & implements and skills held or controlled by certain members with the unpaid labour contributed directly and indirectly by other members to support the production process (Ironmonger 2001). The variety of gender-based activities that support household production indirectly thus include preparation of meals, cleaning & maintenance of homes, care for children and the elderly etc. Unlike rural households, those located in urban areas can also purchase the labour time to be expended on such support activities from the labour market, maximising their time-utility by choosing combinations of market-produced and home-produced goods and services, subject to availability and time constraints (Bryant 1995). The theory of the allocation of time by the family (Becker 1965) proves meaningful to this context, where household members are seen to make three decisions about where to allocate their time: i.e. to wage-work, household production or to leisure.

Despite the crucial responsibilities they undertake within the household, women are generally pushed into subordinate roles as agents of production, based on the perception that the labour time devoted by them to domestic work is not directly 'productive' (Patnaik & Debi 1991). In rural households, the economic contributions made by women are more visible, since they often assume earning roles besides functioning as home-makers. Even then, control over the resulting family income is generally surrendered to their partners because they lack autonomy. When unpaid women's work supports home-based production, the earnings that accrue from it are ultimately surrogated by the males. Additionally, in situations where such male earnings provide inadequate support the rural household, women are compelled to secure subsistence for their family by selling their wage-labour below its reproductive cost, i.e. by undertaking arduous work that lengthens their working day, sacrificing rest and leisure.

Several conceptual difficulties in dealing with the household division of labour also arise because of the narrow economic definitions of work. Since economic work implies economically productive participation through activities that lead to the direct production of goods and services for consumption or exchange, activities undertaken by women within the household, such as cooking, laundering, childcare and livestock tending which do not result directly in the production of visible economic goods and services do not fall within the purview of this definition, and are therefore treated as optional or subsidiary activities for the purpose of national accounts. As can be surmised, this fallacy arises from treating work as a purely individual function, disregarding the interdependence of work within the family group. The contribution of women to unremunerated and therefore immeasurable work within the household is productive in the sense that it extends the opportunities for other members of the family to participate directly in productive and remunerated work.

In India, where three-fourths of the rural population still draws sustenance from agricultural livelihoods, rural women comprise half of the paid and unpaid labour force. More than 30 million women participate currently in the rural workforce, two-thirds of them as agricultural labourers, and one third in animal husbandry, in the production of craftwork and related activities (Census 2001). Rural women play an important role at virtually all stages of crop production, ranging from land preparation to harvest & post-harvest activities, while in animal husbandry, their activities range widely from care of livestock and grazing & fodder collection to the processing of all livestock products. Although generally unremunerated when performed within the household, such rural activities are also classified socially as women's work.

The present study documents the gender dimensions of work in rural West Bengal through an empirical survey of rural households. Since conventional survey methodologies are unable to measure and value invisible women's work, the alternative methodology of time use surveys is adopted. This also entails fundamental alterations in the definitions of women's work.

2. METHODOLOGY AND UTILITY OF TIME USE STUDIES

The methodology of time use studies originally evolved around the need for measuring the intra-household division of labour in developed Western countries, where workers are largely involved in market-based activities. Inadequacy of data on women's participation in unpaid household activities in India leads to gross underestimation of their role in the labour force. The Census and NSS definitions of work differ substantially. Census sources identify workers on the basis of engagement in 'any productive work for which remuneration is paid and which is market related' while the NSSO extends this to engagement in any 'economically meaningful activity', thus including women's household activities such as livestock rearing, fodder collection, and agricultural processing, etc., and unpaid services rendered by them during farm and home production within the sphere of economic work NSS estimates of women's workforce participation are therefore consistently higher than Census enumerations of their work participation. Neither definition is however fully capable of capturing the nuanced nature and extent of women's work participation, since the vast range of activities through which women produce goods and services for family and home-consumption are excluded. Such activities which rest on the unpaid services of women lead to the reproduction of labour power within the household. Women's work within the informal and subsistence sectors and in domestic and voluntary activity is therefore subject to serious undercounting in Indian labour statistics (Hirway 1999). Besides

improving the overall accuracy of employment statistics, the alternative methodology of time allocation studies throws considerable light on the distribution of paid and unpaid work between men and women in different livelihood spheres, and is thus especially useful in estimating the value of household production. The logical apparatus employed by Gary Becker in his theory of the allocation of time (Becker 1965) is particularly useful for understanding the phenomenon of labour force participation. Under this, if more goods and services can be acquired by a household member through an extra hour of employment in market work than could be produced by her or him through an extra hour of unpaid home-based work, the individual will opt to join the labour force and use the income thus earned to purchase the required goods and services. This has now come to be known as the *production substitution effect* (Bryant 1995). However, since time allocation is a collective decision within the household, the decision of one household member to participate in market work may be accompanied by matching increase in participation of other household members in home-based work, as the household seeks to optimise time allocation between market and non-market work in order to secure the largest accessible bundle of goods and services. This reasoning in fact explains why the domestic work burden of women in the household increases continuously as its menfolk participate increasingly in market work. Marxist theoreticians have thus acknowledged that formal labour markets are supported significantly by the household production system which aids the reproduction of labour by the working class (Gibson-Graham 1993).

Time use surveys in India were first conducted on an experimental basis by the Central Statistical Organisation [CSO] in 1998-99 in six selected states, under a new activity classification where 154 activities were identified and categorised into three groups covering:

- activities under the narrow definition of economic work, which are included under the *System of National Accounts* [SNA];
- non-market activities extending beyond the narrow definition of remunerative work that support home consumption, which have been included since 1993 in the *Extended System of National Accounts* [XNA];
- all other activities excluded under SNA and XNA definitions that lead neither to production or household consumption, but are needed for reproduction of labour power by the household are known as *Non -System of National Account* (Non-SNA or NNA). The System of National Accounts classified the human activities as either economic or non-economic (Bhatia 2002).¹

The present study thus seeks to quantify the allocations of labour time by rural households between different forms of economic and non-economic activity and to determine the underlying gender divisions of labour, following the methodology of time use studies. Use of labour time as a numéraire attribute is particularly useful when workers are known to perform a combination of wage-work and unremunerated home-based household work, since the alternative valuation of work solely by means of the earnings derived would render the latter forms of activity invisible even if these involved significant outlays of labour time.

3. STUDY PROFILE AND PRELIMINARY RESULTS

In order to deepen the understanding of women's work within rural households in West Bengal, the present study sought to extend the time use methodology to identify the determinants of gender work profiles and the exercise of autonomy by women workers and to uncover the underlying gender division of labour within rural families. A stratified four-stage sampling design was adopted for the study, with districts as the first unit, blocks as the second stage unit, villages as the third stage unit and households as the fourth and ultimate survey unit. The study thus covered six sample villages located in Alipurduar 1 & 2 blocks in Alipurduar district and three villages in Kalimpong I block of Darjeeling district in northern West Bengal, which were chosen on the basis of

- agrarian characteristics*, where a vast proportion of the rural workforce drew its livelihoods from agriculture;
 - rural location*, with the sample villages being selected from areas in the interior located at least 50 km away from urbanised settlements;
 - gender work profiles*, with a significant proportion of rural women being engaged in agricultural activities.
- The six locations thus chosen for the time allocation survey were the villages of Chaprarpar, Chandijhar and Salkumarhat in Alipurduar district; and Bong Khasmahal, Kalimpong Khasmahal and Samalbong Khasmahal in Darjeeling district from which a total sample of 250 rural households were surveyed during the study². The structured questionnaire designed for the study was administered to rural household heads and their spouses in order to collect information on daily time use by men and women in the study villages. The departure made here from the methodology of the preceding West Bengal study (Banerjee 1985) which had collected information on time allocations by all household males and females, was necessitated by the need to avoid unintentional gender biases within the small data sample arising from heterogeneities within the gender composition of the different families. Hence the survey collected time use information from 250 rural households, from individual women as well as their partners. Collection of qualitative information from both spouses ensured the intuitive capture of decision-making relationships within rural families that are important determinants of the intra-household division of labour.

As evident from Table 1, the study villages under Alipurduar district are agrarian in nature and are largely dependent on agriculture. The major agricultural crops raised there of rice and jute cultivation is mostly rain fed. The agrarian character of the study region is borne out by high rates of participation in agricultural activities. In all the three villages, the proportion of workers involved in cultivation and agricultural labour activities exceeded the corresponding district averages, except in Chaprarpar where few women cultivators exist and rural women participate largely in agricultural labour activities. Since labour demands in this rainfed region were highly seasonal, a large number of agricultural labourers were also drawn in from outside during the peak harvesting season. Rural women, therefore, participated in agricultural work in largely marginal capacities, and at other times, also engaged in subsidiary activities such as *beedi* binding, sewing and quilt-making to support family incomes during the season of agricultural slack. Such work are generally carried out informally in household groups, where girl children assisted older women by performing several unpaid tasks associated with such activities. Because of its seasonal nature, women's work of this kind went largely unrecorded. Main work opportunities in the study villages were few and were largely availed by men.

TABLE 1: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF VILLAGES SELECTED FOR TIME ALLOCATION SURVEY VIDE CENSUS 2011

Attributes	Chaprarpar	Chandijhar	Salkumarhat	Alipurduar District
Total Households	957	1096	1393	868326
Total Population	4018	4615	5952	3872846
Total Males	2103	2393	3090	1983064
Total Females	1915	2222	2862	1889782
Gender Ratio (Females per 1000 males)	911	929	926	953
Average Household-size	4.2	4.2	4.3	4.5
Overall Literacy %	74.6	71.7	66.0	64.5
Male Literacy %	78.5	76.8	71.5	70.4
Female Literacy %	70.3	66.3	60.1	58.3
Work Participation Rate %	37.9	36.4	43.1	39.1
Male Cultivators %	25.5	26.0	30.4	18.1
Male Agricultural Labourers %	11.3	13.7	34.8	18.1
Female Cultivators %	8.8	8.5	22.8	6.0
Female Agricultural Labourers %	25.5	25.6	52.5	19.8

Source: Census 2011: Primary Census Abstract

Darjeeling district is famous for its tea industry but Kalimpong division is known for its agricultural activities including floriculture and horticulture. Majority of the people rely on perform agricultural activities and follow traditional method of cultivation. Most of the farmers reported that the season for the agricultural activity begins with the harvesting of paddy, usually during the month of November-December and lasts till late August of the next year. During this period both men and women have to work for six to seven hours in the field and during planting the paddy seedlings they have to work for nine to ten hours a day. For, weeding purposes of the crop they work for approximately six hours a day.

TABLE 2: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF VILLAGES IN DARJEELING DISTRICT SELECTED FOR TIME ALLOCATION SURVEY *VIDE* CENSUS 2011

Attributes	Bong Khasmahal	Samaibong Khasmahal	Kalimpong Khasmahal	Darjeeling District
Total Households	818	393	1833	391234
Total Population	4220	2050	8881	1846823
Total Males	2096	1033	4340	937259
Total Females	2124	1017	4541	909564
Gender Ratio (Females per1000 males)	1013	985	1046	970
Average Household-size	5.16	5.22	4.85	4.72
Overall Literacy %	78.6	75.4	79.4	71.2
Male Literacy %	82.35	81.80	84.01	76.57
Female Literacy %	75	68.83	74.98	65.74
Work Participation Rate %	41.94	43.37	38.04	37.02
Male Cultivators %	9.27	17.44	9.30	8.00
Male Agricultural Labourers %	16.61	33.86	13.17	5.90
Female Cultivators %	8.59	10.01	4.59	3.14
Female Agricultural Labourers %	17.01	22.05	14.06	3.75

Source: Census 2011: Primary Census Abstract

Most of the women are functionally literate and their status in the family as well as in the society as a whole is satisfactory to them. They do have some liberty in family decision making, in the pattern of expenditure, schooling of their children and attending social and religious ceremony as well. Majority of the women do not have any jobs and likewise no source of income of their own. Most of them are involved in their field as family helper. They also work as agricultural labour in their own land as well as on other peoples' fields. In exchange, some receive wages, alternatively, labour hours are also being exchanged because production system in this region is also depends on different modes of exchange of labour. Two types of labour exchange forms are discernible in Kalimpong; one is 'Hoori' and the other is 'Parma'.³

Along with the above two types of labour exchange, there is also another mode of labour exchange. In this type, the worker known as 'Pakhurey' or tenant who rents land from the landlord in certain terms and condition. Here the tenant is given the right to hold the land for a certain period of time and cultivate along with utilizing other resources of the land, such as, fire-woods, fodder, water etc. of the land. The tenant is entitled to have half of the total production of his cultivation i.e. an equal distribution of total yield between the tenant cultivator and the landlord. The above form of labour exchange ensures partial non monetisation of production and labour economy with cash exchanges being maintained at a minimum level. This mode of labour exchange in this district also gives the concept of women's income saving attributes in rural households of agriculture in the form of wage labour. However, marketable surplus is low on account of the subsistence agriculture, transactions in the market economy remain at its minimum.

4. ANALYTICAL FRAMEWORK: LABOUR TIME COMMITMENTS BY WORKERS TO SNA, EXTENDED-SNA AND NON-SNA WORK IN AGRICULTURE

The questionnaire designed for the present study of time allocation survey covered 27 forms of field and household activity usually performed by residents in the study region, comprising a mix of SNA, extended SNA and non-SNA activities listed in the table 3 and table 4. Since these includes activities performed on seasonal as well as regular daily basis, the survey captured time allocations made by respondents towards both primary and subsidiary occupations, as well to other home-based work and leisure-time activities.

TABLE 3: AVERAGE LABOUR TIME COMMITMENTS BY RURAL WORKERS TO SNA, EXTENDED SNA & NON-SNA ACTIVITIES

(Analysis of variational patterns (Alipurduar District))

Activity type	Activity	Weekly Mean hours spent by Rural Families	Weekly Mean hours spent by rural Women	Standard Diviation	Weekly Mean hours spent my Rural Men	Standard Diviation
SNA1	Land preparation	58.73	23.73	14.5	35	12.2
SNA2	Crop husbandry	6.95	0.51	5.61	6.44	3.46
SNA3	Post-harvest activities	9.47	8.26	7.48	1.21	16.1
SNA4	Crop protection	5.22	0.18	7.22	5.04	5.08
SNA5	Kitchen gardening	2.28	1.68	2.96	0.60	8.92
SNA6	Market sales & purchases	4.94	0	0	4.94	11.7
SNA7	Livestock tending	5.76	5.06	5.11	0.7	15.8
SNA8	Livestock grazing	1.91	0.91	4.03	1	2.06
SNA9	Making dungcakes	5.67	5.67	2.78	0	0
SNA10	Poultry rearing	1.54	1.54	3.20	0	0
SNA11	Water & fuel collection	3.08	2.89	9.58	0.18	12.5
SNA12	Processing & storage	3.29	0.7	3.80	2.59	4.12
SNA13	Dwelling construction	9.35	0.7	0	8.65	15.6
SNA14	Well/Irrigation construction	9.24	7.42	3.38	1.82	6.26
SNA15	Common infrastructure	11.71	2.87	5.89	8.84	6.03
SNA16	Making handicrafts	2.66	1.63	17	1.02	12.1
SNA17	Market purchases & sales	0.65	0.28	4.04	0.37	0
XNA1	Cooking & cleaning	21.21	21.21	8.79	0	0
XNA2	Childcare	11.7	10.38	8.19	1.4	0
XNA3	Care of elderly	5.29	5.29	4.75	0	0
XNA4	Community work	2.54	1.09	9.86	1.44	10.7
XNA5	Education & tutoring	1.63	1.07	3.65	0.56	4.21
XNA6	Training programmes	0.79	0.60	3.10	0.18	0
NNA1	Leisure	5.11	2.56	6.73	2.54	12.6
NNA2	Personal care	2.59	2.59	3.47	0	0
NNA3	Social conversation	5.83	4.25	6.77	1.58	5.33
NNA4	Rest & relaxation	83.2	41.16	8.55	42	9.76

Source: TAS Survey data

The SNA activities performed by members of the rural households included the usual activity set associated with crop agriculture, including pre and post-harvest activities as well as the market activities associated with crop cultivation. However, given the limited extent of landholding among families and their consequent economic dependence on wage-work, not all of these were necessarily performed by respondents as subsistence activities on their own account. Instead, the time

allocations made towards these activities included labour services rendered against wage payments as hired agricultural labour, as well as the same services performed by respondents on their own account on self-cultivated lands.

A second subset of SNA activities includes subsidiary livelihood activities usually associated with home production, including the time devoted to livestock husbandry and to the collection of domestic fuel, agricultural processing and storage for home consumption, and construction activities, as well as the production of artisanal craft items for home consumption and market sale.

Once again, these included enterprise activities as well as services rendered against payment to other households, for instance in the commissioned construction of wells and dwellings by workers with the requisite artisanal skills, and the construction and management of local irrigation systems and village infrastructure, including earthworks, embankments and minor roads. The listed XNA activities included time allocations towards several unpaid domestic activities in which women play a major part, including cooking, cleaning and care-giving, educational & tutoring services, as well as community-work in the villages by respondents working as part of a group. The NNA set includes activities which are personal in nature, including social contact hours, leisure, rest & recreation and personal care.

TABLE 4: AVERAGE LABOUR TIME COMMITMENTS BY RURAL WORKERS TO SNA, EXTENDED SNA & NON-SNA ACTIVITIES

Analysis of variational patterns (Darjeeling District)

Activity type	Activity	Weekly Mean hours spent by Rural Families	Weekly Mean hours spent by rural Women	Standard Diviation	Weekly Mean hours spent my Rural Men	Standard Diviation
SNA1	Land preparation	30.75	14.26	8.24	16.49	8.13
SNA2	Crop husbandry	20.26	10.01	5.71	10.25	6.23
SNA3	Post-harvest activities	13.16	6.86	4.44	6.3	4.63
SNA4	Crop protection	14.68	6.91	3.48	7.77	4.29
SNA5	Kitchen gardening	3.43	1.91	1.29	1.52	1.01
SNA6	Market sales & purchases	7.65	3.73	3.03	3.92	2.81
SNA7	Livestock tending	11.38	6.09	3.56	5.29	4.58
SNA8	Livestock grazing	3.41	2.3	8.83	1.11	10.17
SNA9	Making dungcakes	0	0	0	0	0
SNA10	Poultry rearing	1.83	1.09	1.71	0.74	1.01
SNA11	Water & fuel collection	4.7	2.69	1.45	2.01	1.59
SNA12	Processing & storage	1.57	0.94	1.10	0.63	0.87
SNA13	Dwelling construction	7.07	0.62	2.97	6.45	3.19
SNA14	Well/Irrigation construction	5.53	1.48	1.11	4.05	2.87
SNA15	Common infrastructure	7.45	2.16	1.74	5.29	1.48
SNA16	Making handicrafts	2.02	1.2	0.67	0.82	3.79
SNA17	Market purchases & sales	0.17	0.01	0	0.16	2.82
XNA1	Cooking & cleaning	23.47	22.01	4.53	1.46	4.21
XNA2	Childcare	10.45	7.83	4.98	2.62	2.94
XNA3	Care of elderly	5.31	3.43	3.29	1.88	1.87
XNA4	Community work	14.23	7.19	1.96	7.04	1.73
XNA5	Education & tutoring	5	2.4	2.10	2.6	2.64
XNA6	Training programmes	0.1	0	0	0.1	0
NNA1	Leisure	10.01	5.77	1.98	4.24	2.05
NNA2	Personal care	13.07	6.86	1.07	6.21	0.84
NNA3	Social conversation	10.45	5.69	2.20	4.76	1.97
NNA4	Rest & relaxation	11.24	5.81	1.99	5.43	2.23

Source: TAS Survey data

The patterns of time allocation by rural men and women from the respondent households across the 27 SNA, extended SNA and non-SNA activities that they routinely participate in over the standard reference week are represented in the tables 3 and 4⁴. Divergent work patterns were observed between women and men. Women's work spread over a much larger number of activities, compared to men's work which remained focused towards a few. Women's time commitments also showed greater variability across rural households in comparison to the time allocations to a few primary activities made by men where variability is less, except in a few widow-headed households and households where the spouses were absent for other reasons, and women bore the brunt of the work. Another broad pattern that emerges from the data which indicates that women's labour time commitments tend to be lower in rural households where the work involvement of menfolk is lower, and increase as men's time allocations increase. However since rural women participate in more diverse activities compared to men, such changes in time allocations tend to be interdependent rather than independent and the activity choices of rural men thus influence time allocation by women. As summarised in Table 5 and 6, which shows collective time allocations by all rural workers to different activity categories over the standard timeframe of a week, sharp divergence exists in gender-work profiles in the study region. The tasking patterns implied within the tables show that rural women workers in Alipurduar district participate in many more activities than male workers, 15 of which are activities in the SNA category and six in the XNA category. Male workers in comparison participate in 15 activities on the whole, whereas for Darjeeling district both men and women are participating in almost all the activities equally. Work participation by rural women is thus far more diversified in Alipurduar district than that of rural men. However, much more time on the whole is committed by male workers to the ten SNA activities they are principally involved in, the bulk being allocated to land preparation. However, it may also be noted that not all activities are undertaken simultaneously by all respondent families in the course of a day⁵. Several of them are seasonal in nature while many others are skilled or specialised in nature which is undertaken by fewer numbers of rural households..

TABLE 5: WEEKLY TIME COMMITMENTS TO DIFFERENT ACTIVITY CATEGORIES IN RURAL ALIPURDUAR

SUMMARY RESULTS

Activity-type	Weekly hours committed by Rural Women	Total Women's Activities	Weekly hours committed by Rural Men	Total Men's Activities	Weekly hours committed by all Rural Workers	Total Activity
SNA Activities	57.11	15	78.44	10	130.48	17
Extended SNA Activities	37.19	6	6.40	2	43.59	6
Non SNA Activities	12.77	4	6.41	3	19.18	4

Source: TAS Survey data

TABLE 6: WEEKLY TIME COMMITMENTS TO DIFFERENT ACTIVITY CATEGORIES IN RURAL DARJEELING

SUMMARY RESULTS

Activity-type	Weekly hours committed by Rural Women	Total Women's Activities	Weekly hours committed by Rural Men	Total Men's Activities	Weekly hours committed by all Rural Workers	Total Activity
SNA Activities	62.25	16	72.8	16	135.05	17
Extended SNA Activities	42.88	6	15.7	6	58.58	6
Non SNA Activities	24.13	4	20.64	4	44.77	4

Source: TAS Survey data

Although women workers do not participate actively in crop husbandry, primary market activities and construction activities in which male workers specialise, they share responsibilities for all other SNA activities and even work independently in some. Of these, the most important in terms of daily time commitments by women include livestock rearing, water & fuel collection, and production of handcrafted items for home consumption as well as sale. Such SNA activities which are independently carried out by women may be termed *autonomous*, since they are accomplished irrespective of whether they are shared by men, and without being affected by the participation of women workers in other activities. These independent activities are largely of an income saving or supplementing nature. Although the autonomous participation of women in these diversified SNA activities limits the time they can freely commit to other economic forms of wage-work, women's time commitments to these are of an essential nature and important to the basic survival needs of rural households. Thus it can be said from the division of work pattern that women's 'committed time' in rural households are much higher than their 'contracted time' or 'necessary time' or 'free time'⁶ Following Ester Boserup's analysis (Boserup 1970), these SNA activities in which rural women participate autonomously could conceivably be classified as market-oriented home production rather than as domestic work, since they facilitate subsistence production by rural households. Skill-based activities autonomously undertaken by women, such as the production of craftwork, also directly embody the value of women's work which enhances the intrinsic valuation of the finished products, whether made for home consumption or market sale. When these are sold, such products directly supplement the incomes of rural households. Men's autonomous SNA activities, in contrast, are polarised around a more limited set of field activities, construction skills and market trade. However, since all these are core economic activities in rural regions, they place men in a dominant economic role. This also effectively reinforces the proposition encountered elsewhere in the literature that rural women's work remains invisible and is largely unpaid, although women participate and contribute substantially to the rural production process, for instance in surveys on women in agriculture and productive work undertaken in northern and western India, where rural women were seen to do a vast amount of the work necessary for supplementary income generation through the growing of vegetables, food preservation etc. (Bardhan, 1983).

Within the extended SNA group of activities, household cooking & cleaning, childcare and care of elderly are activities solely undertaken by women, some women also participate in rural training programmes. Although participation in community work and in the education and tutoring of children is shared, rural women on an average devote much more time to the latter activity compared to their partners. In the NNA group, rural women report approximately the same amount of rest and free leisure time as rural men. However, they also allocate a certain amount of time every day to leisure-time activities such as personal care and social interaction, which most men do not report separately. Aggregate time allocations by rural women are thus weighted towards home production activities in the SNA group, as well as to XNA and NNA activities. However, a point that is significant to this context is that women's domestic XNA activities have to be undertaken without fail everyday on a continuing basis, unlike several SNA activities of men which are periodic or seasonal. Thus the diversity of women's work and the variety of autonomous tasks they are required to perform each day invariably limit the time they can afford to spend in rest and relaxation throughout the year.

Analysis of cumulative time allocations by rural households in the study region is equally revealing. Although the aggregate number of hours per week expended on SNA activities by rural women is slightly short of similar time commitment by rural men, the time cumulatively devoted to SNA and XNA activities by women greatly surpasses the aggregate time committed to these activities by men. This is primarily due to the extra time that women commit to XNA activities, within which the largest single unit is the performance of daily domestic chores like cooking and cleaning. Rural women thus shoulder the heaviest part of the work burden within the home, while rural men engage primarily in large-scale field activities that require the periodic application of physical strength, e.g. earthwork, construction and land preparation, crop husbandry and crop protection etc. However, other field activities that require sustained effort and endurance, like fetching fuel and water, livestock and poultry rearing, and post-harvest activities like threshing, winnowing, etc. are assigned mainly to women. Other activities that involve direct economic transactions, e.g., market sales & purchases of primary agricultural items and other produce, are largely monopolised by men folk in rural households.

Significantly, the autonomous activities carried out by rural women include a large proportion of home production activities which produce visible inputs for household consumption or market sale. These include post-harvest and craft activity in the marketable segment, and livestock and poultry rearing, fuel & water collection and the making of dung-cakes in the activity segment that generates substantial savings and home consumption benefits for the rural household. In terms of women's time allocations, livestock tending and dung-cake manufacture require significant time commitment every day. Daily cooking & cleaning and childcare are autonomous household activities to which every rural woman has to devote a substantial part of her day. Rural women spend time on personal care autonomously, very often; this is accompanied by the washing of utensils and clothes, which is not recorded separately among women's activities. It would also appear that the large number of unpaid and household activities to which rural women have to allocate time autonomously limits the time they can commit autonomously to economic activities in paid group. Work-sharing by men is limited to unpaid activities, and by and large does not extend into the rural household.

5. CONVERGENCE AND DIVERGENCE IN SPOUSES' PERSPECTIVES ON WOMEN'S AUTONOMY IN VILLAGES

In the present study region, depending on their structure of assets holding and skills, the principal livelihoods of the rural households comprising the sample depended on a variety of land-based and non land-based economic activities. Most households cultivated at least a small amount of land, either on ownership or tenancy basis, while the relatively assetless and land-poor households depended more on wage-based activities. A certain proportion of rural households also practices artisanal or agricultural trade, which increased their relative involvement in market-based activities. Although activities like livestock and poultry rearing and artisanal work supplemented income and consumption in most rural households, their economic importance was relatively higher among the poorer households where these activities gave women a supplementary economic role. Thus women's labour time allocations were at least partially conditioned by the economic status of the households, and therefore by the livelihood choices made by rural men. However, regardless of the amount of time they were able to commit towards such SNA activities, all rural women also made extensive time commitments to XNA activities within the household. It was not visible immediately from the data whether the time women devoted towards these activities which they usually performed autonomously led to the displacement of their labour time from other economic activities. Another potential form in which labour substitution could affect the participation of rural women in economic activities adversely would occur if the activity choices and time allocations made by rural men directly determined the labour time commitments of women to SNA and XNA activities. While in the first instance, the participation of women in economic work would be determined by the autonomous time allocations to other XNA activities, it would be determined cross-dependently in the second instance by the activity choices made by their male partners resulting in strong gender divisions among labour.

Stress was therefore laid during the analysis of survey data on evaluating the impact resulting from men's activity choices and time allocations upon the time spent by women in household and economic activities. This was based on the reasoning that the livelihood choices made by menfolk as the heads of rural households have a more primary role in determining women's work activities, rather than vice-versa. Interdependencies between the activity choices and time allocations of men and women respondents were extracted in the form of the cross-correlation coefficients in the Women-Men cross-correlation matrix in Tables 7 and 8, which summarises the gender dependency characteristics between rural men's and women's labour time allocation. The tables however excludes three of the 27 SNA, XNA and NNA activities, where men's activity choices and time allocations have no impact whatsoever on the labour time committed by rural women, though other nine activities of men also have very less or negligible impact on labour time commitments of women. The group of autonomous rural women's activities, comprising seven in the SNA category, four in the XNA category and one in the NNA category for which cross-correlation between men's and women's time allocations is either zero or insignificant are listed separately in Table 9 below.

Three orders of interdependency between men’s and women’s activities and time allocations may be discerned in the cross-correlation tables, which are analysed below, citing appropriate examples of each:

- (a) In the first case, the order of interdependency is direct and higher time allocations by rural men in core activities like land preparation expectedly increase the time that has to be committed by women to post-harvest, processing & storage activities, as a consequence of greater cropping activity by the rural household. However, this reduces the time that can be expended by women on care of the elderly, community activities and their own rest and relaxation. Despite such exigencies, rural women still have to allocate substantial time towards other supplementary SNA activities like livestock tending and poultry rearing. Time allocation towards autonomous women’s activities like cooking & cleaning and other household work nevertheless remains high. Increased time expended by rural men on primary market trade in agricultural inputs and produce similarly increases the time expended by rural women on market-oriented SNA activities like post-harvest, processing & storage, as well as livestock & poultry rearing and kitchen gardening. However, since these women must autonomously expend a considerable part of their time on domestic XNA activities, the time available to them for rest and recreation is limited.
- (b) In the second case, the order of interdependency between rural men’s and women’s activities is inverse in nature. Increasing time allocations towards certain men’s activities like dwelling construction substantially reduce the time that rural women can devote to other group activities like the development of common infrastructure and community work, but increases the time consequently available for rest and relaxation.
- (c) In the third case, where increasing time commitments to certain activities by rural men are gender neutral and have limited impact on women’s time allocations, the activity choices made by men and women are largely autonomous rather than interdependent. This applies, for instance, to the time committed by rural men towards the construction of wells and irrigation systems, which are essentially periodic activities in which rural women play no part.

TABLE 7: INTERDEPENDENCE PATTERNS BETWEEN RURAL MEN’S AND WOMEN’S ACTIVITIES W-M CROSS-CORRELATION MATRIX: GENDER-INTERDEPENDENT ACTIVITIES (ALIPURDUAR)

	SNA1	SNA2	SNA3	SNA4	SNA5	SNA7	SNA8	SNA9	SNA10	SNA11	SNA12	SNA13	SNA14	SNA15	SNA16	SNA17	XNA1	XNA2	XNA3	XNA4	XNA5	XNA6	NNA1	NNA2	NNA3	NNA4
SNA1	0.401	-0.185	0.505	-0.155	0.004	0.136	-0.060	0.438	0.043	-0.090	-0.111	0.090	0.222	0.048	0.012	-0.044	-0.064	0.055	0.079	0.119	0.043	-0.082	-0.020	0.109	0.045	0.033
SNA2	0.165	-0.171	0.657	-0.111	0.102	0.315	0.056	0.355	0.018	-0.046	-0.037	0.130	0.079	-0.110	0.039	-0.041	-0.027	0.151	0.118	0.182	0.115	0.001	-0.065	0.123	0.101	-0.043
SNA3	-0.188	0.094	-0.086	-0.023	0.141	-0.122	0.190	0.193	0.005	-0.060	0.568	-0.023	-0.077	-0.046	0.058	0.087	-0.141	-0.108	0.118	-0.048	-0.073	-0.045	0.092	-0.134	-0.048	-0.090
SNA4	-0.014	-0.162	0.506	-0.085	0.106	0.323	-0.129	0.424	0.064	0.085	0.141	-0.085	0.016	-0.172	-0.013	-0.012	-0.005	-0.033	0.108	0.000	-0.042	-0.115	-0.001	0.065	0.038	0.103
SNA5	-0.093	0.224	-0.063	-0.022	-0.035	0.045	0.031	0.200	-0.094	-0.080	-0.056	-0.022	-0.074	-0.045	0.014	-0.030	0.174	-0.099	0.162	-0.046	-0.071	-0.044	-0.085	-0.115	-0.014	-0.110
SNA6	-0.055	0.083	0.214	-0.060	0.192	0.049	-0.085	0.156	0.158	0.041	0.399	-0.060	0.000	-0.122	0.222	0.047	-0.220	-0.071	0.036	-0.072	0.068	0.017	0.102	-0.045	-0.050	-0.352
SNA7	-0.118	-0.037	0.062	-0.019	-0.002	-0.141	0.506	-0.014	0.246	0.045	-0.049	-0.019	-0.065	-0.039	0.038	-0.026	-0.073	-0.120	-0.136	-0.040	0.033	-0.038	0.021	-0.126	0.028	-0.179
SNA8	-0.013	-0.115	0.314	-0.060	0.043	0.083	-0.034	0.287	0.095	-0.095	-0.046	-0.060	0.161	0.030	0.069	0.013	0.060	0.039	0.026	-0.070	-0.061	-0.070	-0.033	0.177	0.070	0.085
SNA9	-0.081	0.231	-0.065	-0.010	-0.042	0.027	-0.028	-0.047	0.052	0.007	0.219	-0.010	-0.032	-0.019	0.021	-0.013	0.046	0.030	0.111	-0.020	-0.030	-0.019	-0.037	-0.062	-0.010	-0.067
SNA11	-0.081	-0.018	-0.065	-0.010	-0.042	-0.070	0.187	0.029	0.144	0.386	-0.024	-0.010	-0.032	-0.019	-0.019	-0.013	0.141	-0.085	0.111	-0.020	-0.030	-0.019	-0.037	-0.062	-0.054	0.006
SNA12	0.022	-0.002	0.527	-0.065	0.036	0.312	0.021	0.494	0.278	-0.118	0.208	-0.065	-0.124	-0.132	0.250	0.070	-0.036	0.156	0.099	0.127	0.079	-0.002	0.039	0.289	0.180	0.069
SNA13	0.246	-0.097	0.088	-0.050	-0.145	0.028	-0.148	0.053	-0.172	-0.052	-0.129	-0.050	0.148	0.225	-0.028	0.079	-0.023	-0.029	0.165	-0.106	-0.071	0.058	-0.066	-0.030	0.084	-0.012
SNA14	0.332	-0.104	0.034	-0.054	-0.131	-0.113	-0.113	-0.089	-0.186	-0.090	-0.138	0.216	0.195	0.257	-0.105	-0.073	-0.279	0.104	0.014	-0.113	0.046	0.050	-0.149	0.137	0.094	0.029
SNA15	0.318	-0.101	0.043	-0.053	-0.125	-0.103	-0.110	-0.071	-0.181	-0.122	-0.135	0.219	0.201	0.261	-0.103	-0.071	-0.259	0.116	0.024	-0.111	0.051	0.053	-0.144	0.146	0.090	0.017
SNA16	-0.157	-0.036	0.075	-0.019	-0.082	0.137	-0.055	0.002	0.051	-0.068	-0.047	-0.019	0.237	-0.038	-0.036	0.373	0.090	-0.125	0.011	-0.039	-0.059	-0.037	-0.072	0.041	-0.106	-0.034
SNA17	-0.013	-0.026	0.101	-0.014	0.313	0.106	0.113	-0.066	-0.057	-0.049	-0.035	-0.014	-0.046	-0.027	-0.026	-0.018	0.015	0.123	0.158	-0.028	-0.043	-0.027	0.090	-0.089	-0.077	0.138
XNA2	-0.006	-0.010	0.112	-0.058	-0.096	-0.004	-0.018	-0.016	0.034	0.002	-0.099	-0.058	-0.005	-0.046	-0.040	-0.078	-0.081	0.041	0.005	-0.096	0.036	-0.071	0.020	-0.005	0.138	-0.031
XNA4	-0.099	-0.061	-0.028	-0.032	0.170	0.216	-0.093	0.119	-0.051	-0.098	-0.048	-0.032	0.052	-0.064	-0.019	-0.043	0.050	0.071	0.072	0.115	-0.102	0.497	-0.036	0.061	0.069	0.073
XNA5	-0.226	-0.058	-0.117	-0.030	-0.018	0.124	-0.061	-0.250	0.115	-0.111	-0.078	-0.030	-0.034	-0.062	-0.049	-0.041	0.008	0.041	-0.091	-0.064	-0.071	-0.060	-0.091	0.045	-0.108	-0.059
XNA6	0.029	-0.037	-0.022	-0.019	0.092	0.005	-0.057	0.134	-0.082	0.142	-0.049	-0.019	0.455	-0.039	-0.038	-0.026	-0.111	-0.142	-0.137	-0.040	-0.062	-0.038	-0.075	0.042	-0.110	0.012
NNA1	-0.204	-0.077	0.022	-0.040	-0.065	0.082	-0.077	0.010	-0.129	-0.028	-0.102	0.014	0.137	-0.081	-0.078	-0.054	-0.179	-0.118	-0.087	-0.075	0.380	-0.079	0.479	0.154	-0.042	0.081
NNA3	0.108	-0.087	-0.085	-0.045	-0.150	0.019	-0.132	0.088	0.001	-0.129	-0.115	0.154	0.324	-0.091	-0.088	0.029	-0.040	0.001	-0.236	-0.095	-0.144	-0.089	-0.175	0.006	-0.152	-0.033
NNA4	-0.074	0.117	0.139	0.115	0.066	0.040	-0.059	0.079	-0.133	-0.058	-0.117	-0.043	-0.128	0.040	0.240	0.120	0.006	-0.171	0.063	0.014	0.104	-0.098	0.156	0.053	-0.010	0.344

Source: TAS Survey data for Jalpaiguri

Note: Interdependencies between men’s and women’s labour time commitments are indicated by cross-correlation coefficients in the matrix. Vertical relationships represent the influence of men’s time allocation to an activity on women’s time allocations to different activities. Negative coefficient values imply that increasing time commitment by men to a given activity have a displacing effect on labour time allocation by women for the given activity-pair. Positive coefficient values indicate that men’s time allocations enhance women’s labour time commitments for the given activities. Activities with zero cross-correlation coefficients in which rural men and women participate autonomously are excluded from the matrix and listed separately in Table 9.. Since the column-wise impact of men’s activity choices on women’s time allocations diverges from the converse row-wise impact of women’s activity choices on men’s labour time commitments, the cross-correlation matrix, by definition, is asymmetric.

TABLE 8: INTERDEPENDENCE PATTERNS BETWEEN RURAL MEN'S AND WOMEN'S ACTIVITIES W-M CROSS-CORRELATION MATRIX: GENDER-INTERDEPENDENT

ACTIVITIES (DARJEELING)

	SNA1	SNA2	SNA3	SNA4	SNA5	SNA6	SNA7	SNA8	SNA10	SNA11	SNA12	SNA13	SNA14	SNA15	SNA16	SNA17	XNA1	XNA2	XNA3	XNA4	XNA5	NNA1	NNA2	NNA3	NNA4
SNA1	0.825	0.704	0.616	0.309	-0.078	0.572	0.228	0.193	0.148	-0.008	0.309	0.005	-0.004	-0.255	0.256	-0.077	0.336	0.388	-0.023	0.173	0.141	-0.163	0.168	0.511	0.718
SNA2	0.719	0.784	0.753	0.352	-0.074	0.537	0.184	0.165	0.202	0.057	0.233	-0.017	-0.111	-0.180	0.288	-0.067	0.272	0.280	-0.141	0.109	-0.031	-0.153	0.168	0.536	0.612
SNA3	0.654	0.706	0.832	0.406	-0.025	0.538	0.185	0.192	0.342	0.174	0.323	-0.007	-0.139	-0.204	0.292	-0.070	0.258	0.324	-0.148	0.190	-0.005	-0.061	0.258	0.556	0.550
SNA4	0.236	0.282	0.449	0.701	0.004	0.267	0.286	-0.008	0.366	0.336	0.165	0.107	-0.059	-0.020	-0.106	-0.085	0.161	0.183	-0.094	0.331	-0.013	0.114	0.198	0.328	0.340
SNA5	-0.104	-0.106	-0.035	0.018	0.787	0.069	-0.007	0.039	0.162	-0.023	-0.052	-0.200	-0.146	0.037	-0.133	0.033	0.091	0.006	-0.141	-0.037	0.015	0.064	0.091	-0.069	-0.014
SNA6	0.550	0.477	0.424	0.262	0.008	0.576	0.268	0.172	0.160	0.153	0.271	0.003	-0.062	-0.193	0.010	-0.107	0.404	0.529	0.001	0.257	0.164	-0.120	0.272	0.320	0.557
SNA7	0.327	0.139	0.181	0.258	-0.113	0.350	0.709	-0.022	-0.011	0.379	0.121	0.093	-0.114	-0.056	0.041	0.037	0.253	0.415	0.063	0.256	0.315	0.095	0.064	0.285	0.384
SNA8	0.288	0.259	0.366	0.250	-0.098	0.302	0.240	0.087	0.194	0.336	0.088	0.079	-0.174	-0.107	0.268	-0.024	0.094	0.264	-0.003	0.293	0.232	0.181	0.106	0.503	0.198
SNA10	-0.115	-0.145	-0.023	0.013	0.240	-0.124	-0.125	-0.087	0.559	-0.073	-0.072	0.014	-0.059	-0.064	-0.119	-0.066	0.083	-0.078	-0.115	-0.073	0.005	0.000	-0.029	0.016	0.013
SNA11	0.061	0.044	0.197	0.085	-0.041	-0.004	0.317	-0.075	-0.080	0.581	0.023	-0.253	-0.197	-0.086	-0.120	-0.001	0.149	0.310	0.021	0.048	-0.102	0.054	0.013	0.035	0.024
SNA12	0.313	0.268	0.309	0.217	0.042	0.233	0.026	0.109	-0.024	0.106	0.885	0.034	0.088	-0.158	0.183	-0.053	0.057	0.294	0.022	0.091	0.006	-0.093	-0.036	0.250	0.320
SNA13	0.170	0.022	0.007	0.037	0.055	0.213	0.171	0.073	0.271	-0.053	0.146	0.181	0.118	-0.015	0.062	-0.013	0.085	0.221	-0.019	0.317	0.452	0.423	0.333	0.165	0.293
SNA14	0.514	0.547	0.616	0.464	-0.203	0.458	0.312	0.069	0.387	0.255	0.246	0.218	0.065	-0.105	0.221	-0.036	0.191	0.286	-0.133	0.498	0.213	0.228	0.367	0.638	0.529
SNA15	0.133	0.094	0.157	0.038	0.035	0.131	0.150	0.023	0.307	0.085	0.165	-0.066	-0.098	-0.010	0.026	0.032	0.031	0.165	-0.167	0.357	0.265	0.418	0.277	0.225	0.270
SNA16	0.116	0.008	0.050	0.025	-0.023	0.285	0.104	-0.004	0.143	0.150	0.175	-0.109	0.007	-0.064	-0.105	-0.035	0.193	0.205	0.012	0.087	0.002	-0.115	0.185	0.066	0.190
SNA17	-0.050	-0.073	-0.043	-0.073	-0.041	0.057	0.043	-0.056	0.030	0.170	0.118	0.056	-0.093	-0.084	0.146	-0.017	0.051	0.047	-0.068	0.143	0.154	0.121	0.017	0.206	0.047
XNA1	0.226	0.190	0.153	-0.015	0.010	0.194	0.021	-0.067	0.000	0.131	0.176	-0.094	0.003	-0.148	0.027	-0.042	-0.070	0.200	-0.011	-0.150	0.044	-0.064	-0.056	0.174	0.240
XNA2	0.049	0.056	0.081	-0.036	-0.053	-0.119	-0.015	-0.064	0.062	-0.040	0.073	-0.203	-0.097	-0.264	-0.031	-0.070	-0.045	0.498	0.113	-0.031	0.270	-0.083	0.042	0.131	0.121
XNA3	-0.021	-0.153	-0.085	-0.057	-0.124	-0.104	-0.054	0.010	-0.103	0.034	0.045	-0.197	-0.069	-0.154	-0.102	0.103	-0.015	0.116	0.751	-0.163	0.169	-0.116	-0.043	-0.052	0.089
XNA4	0.217	0.151	0.209	0.083	0.029	0.211	0.166	0.023	0.229	0.184	0.044	-0.018	-0.028	-0.124	0.028	0.036	0.152	0.326	-0.041	0.600	0.286	0.252	0.503	0.325	0.286
XNA5	0.130	-0.011	0.038	0.030	-0.056	0.153	0.078	-0.045	0.014	0.083	-0.124	-0.021	-0.318	-0.178	0.032	-0.022	0.098	0.283	0.189	0.069	0.577	0.170	0.116	0.078	0.132
XNA6	0.118	0.070	0.071	0.079	-0.112	0.215	0.108	-0.032	-0.066	0.297	0.282	0.226	-0.094	-0.075	0.306	-0.010	0.110	0.101	-0.075	0.312	0.323	0.295	0.010	0.549	0.204
NNA1	-0.158	-0.202	-0.083	-0.079	0.076	-0.045	0.154	-0.111	0.073	0.201	-0.058	-0.051	-0.122	0.003	-0.103	-0.010	-0.031	0.098	0.046	0.290	0.394	0.548	0.215	0.092	-0.053
NNA2	0.139	0.160	0.216	-0.033	-0.023	0.111	-0.014	-0.050	0.072	-0.021	-0.010	-0.058	-0.068	-0.082	0.053	0.045	0.029	0.203	-0.007	0.394	0.221	0.122	0.490	0.267	0.151
NNA3	0.516	0.546	0.522	0.243	-0.241	0.346	0.232	0.034	0.278	0.167	0.168	-0.012	-0.087	-0.166	0.203	-0.035	0.231	0.334	-0.126	0.442	0.251	0.136	0.327	0.786	0.583
NNA4	0.728	0.640	0.486	0.283	-0.126	0.486	0.189	0.181	0.252	-0.065	0.285	-0.014	0.034	-0.109	0.149	-0.058	0.363	0.388	-0.039	0.253	0.387	-0.089	0.222	0.594	0.885

Source: TAS Survey data for Darjeeling

Note: Interdependencies between men's and women's labour time commitments are indicated by cross-correlation coefficients in the matrix. Vertical relationships represent the influence of men's time allocation to an activity on women's time allocations to different activities. Negative coefficient values imply that increasing time commitment by men to a given activity have a displacing effect on labour time allocation by women for the given activity-pair. Positive coefficient values indicate that men's time allocations enhance women's labour time commitments for the given activities. Activities with zero cross-correlation coefficients in which rural men and women participate autonomously are excluded from the matrix and listed separately in Table 9. Since the column-wise impact of men's activity choices on women's time allocations diverges from the converse row-wise impact of women's activity choices on men's labour time commitments, the cross-correlation matrix, by definition, is asymmetric.

As cross-correlation analysis shows, such activity by rural men to extend the reach of irrigation, for obvious reasons, has a mildly positive impact in increasing the time committed by women towards land preparation and kitchen gardening but is essentially neutral in most other respects.

TABLE 9: W-M ZERO/ INSIGNIFICANT CROSS-CORRELATIONS: AUTONOMOUS WOMEN'S ACTIVITIES

- SNA3 Post-harvest activities
- SNA7 Livestock tending
- SNA9 Making dungcakes
- SNA10 Poultry rearing
- SNA11 Water & fuel collection
- SNA16 Making handicrafts
- SNA17 Market purchases & sales
- XNA1 Cooking & cleaning
- XNA2 Childcare
- XNA3 Care of elderly
- XNA6 Training programmes
- NNA2 Personal care

Source: TAS Survey data

6. CONCLUSION

The study established that division of labour within a rural household has created a hierarchy of paid and unpaid work, pushing rural women into subordinate social and economic positions by making their work invisible. The time use methodology proved particularly effective in capturing the working roles of rural women and making their dual labour contributions to economic and subsidiary household activities strongly visible. The study further confirms that women's contribution is larger than men in terms of time allocation for both Alipurduar and Darjeeling from household's maintenance to various agricultural activities and women participate mostly in unpaid Extended SNA activities or SNA activities which are non-remunerative while men labour force participate in remunerative SNA activities.

Alternative methodologies based solely on the quantification of rural women's earnings have unable to perceive these roles, and therefore relegated rural women to the subordinate position of unpaid domestic workers, and this shows the dominance of gender ideologies. However, such undervaluation of women's contributions to the rural household is not merely ideological alone. Both Census and NSSO definitions of year round work, as currently applied in India are unable to recognise the full extent of rural women's workforce participation which, like agriculture, is seasonal by nature. The study also bears out the main conclusions of rural research based on the food chain, which show that labour application by men and women in agricultural households is often sequential rather than simultaneous. While the labour contributed by rural men towards land preparation and crop protection & husbandry initiates the agricultural production chain, women's labour contributions to post-harvest activities and processing & storage enter the production chain at a later point, and do not secure equivalent recognition or economic rewards despite contributing significantly to the value of the agricultural product (Kabeer, 1990).

Besides their foundation in gender specialisation within the agricultural production chain, existing gender divisions of labour in rural areas are also determined by rural property rights systems, particularly land-holding, and by differential access of rural men and women to other productive resources (Holmboe-Ottesen *et al.*, 1989). Rural landlessness further restricts women's resource access and makes them especially vulnerable to seasonalities in rural labour demand. While rural men can compensate for landlessness by increasing the time they expend on wage-work, rural women cannot make similar adjustments because of the additional burden of domestic work that they carry within their homes. Rural poverty, therefore, pushes women disproportionately by increasing their workload without expanding their reward.

The acceptance of gender structures by rural women reflects the livelihood insecurities they have to confront with, despite contributing substantial amounts of labour time to the survival of poor rural families. More complex issues arise, however, when such problems have to be redressed. In theory, agricultural growth would appear to offer a solution because it increases rural labour demands and wage-rewards. In practice however, the relation between agricultural progress and women's economic rewards is not so direct. The new economic opportunities generated by agricultural progress are more easily availed by men who do not have to carry an additional domestic workload. In this case, the rural gender structures can become further entrenched if increased participation by men in wage-based activities requires that their labour contributions to livestock rearing, processing and other home-based production activities be substituted by equivalent labour contributions from women, as is often the case. New cropping practices that replace subsistence crops by cash crops can fundamentally alter the rural production chain by doing away with the post-harvest and processing activities in which rural women had specialised. Such problematic issues also emphasise that the transformation of social and economic situations of rural women cannot be accomplished solely by economic means. More fundamental transformations in gender structures through socio-legal means, for example, through fundamental changes in land-titling and inheritance systems must also be initiated to induce more equitable distribution of economic and gender rights.

NOTES

1. 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 or structure of agricultural houses and the existing work patterns in the rural areas of Bengal.
2. According to the Census of 2011, in the six villages under consideration, 90 percent of the total families were found to depend wholly or partly on agriculture.
3. Hoori, Parma and Pakhurey are special form of labour exchange, which is common in the hills of Darjeeling. During peak season, certain number of households of the same locality or sometimes from the nearby village forms a group and works alternatively within the group during the whole season. This form of labour exchange is known as 'Hoori'. A band of workers comes together with one another (either male or female) from each participating household and they use to work simultaneously in the farmland of members' household only. Here nobody is paid in terms of money but a barter system follows through exchange of labour. The literary meaning of 'Hoori' is storm. 'Parma' is another form of labour exchange, in place of wage payment. But in this case, no group is formed, here individual household use to help each other during cultivation. But in this form of exchange of labour, total time commitments are handled as one working day. The owner of any farmland (where a person has worked as a labour) have to send one or two labourer or sometimes even they themselves have to go to other person's farmland to work for a day or two depending upon the number of days that the person have worked earlier in their field. This type of labour exchange is done between two households only.
4. Husbands' and wives' mean weekly hours in SNA, Extended-SNA and Non-SNA activities are derived from primary respondent's and spouse's answers to a question on the researcher self-enumerated questionnaire asking for the approximate number of hours per week normally spent on 27 predetermined activities. In rural households, some of activities are done only once a week and to maintain the parity between daily task and weekly task, mean weekly hours has been taken as a standard.
5. In order to reduce missing data, the mean was substituted for missing values on weekly hours, education, and income.
6. Harvey and Mukhopadhyay (2007) make use of a more meaningful term, that of "committed" time, which refers to total time undertaken to maintain one's home and one's family. They identify "four main time categories: *contracted time*, *committed time*, *necessary time*, and *free time*." *Contracted time* is time that, by agreement, has been set aside to undertake paid work or education. One is obligated by the nature of the employment or educational contract to allocate time to these activities as appropriate. *Committed time* refers to time undertaken to maintain the family. *Necessary time* is time required to maintain oneself in terms of eating, sleeping, bathing, etc. *Free time* refers to the remaining time that is left when contracted, committed, and necessary time is subtracted from 24-hours of the day.

REFERENCES

1. Banerjee, Nirmala (1995). 'Women's Employment and All That', Paper presented at the FES-UNDP Workshop on 'The Human Development Report 1995: The Structural Context for Empowering Women in India', 12-13 December, New Delhi
2. Bardhan, Kalpana (1983). 'Women's Work, Welfare and Status', *Economic and Political Weekly*, 20(5):2261-2269
3. Becker, Gary S. (1965) 'A Theory of the Allocation of Time', *Economic Journal*, 75(299):493-517
4. Bhatia, Rajesh (2002). 'Measuring Gender Disparity: Using Time Use Statistics', *Economic & Political Weekly*, 37(33):3464-3469
5. Blumberg, R.L. (1978). *Stratification: Socioeconomic and Sexual Inequality*, W.M. Brown & Co., Dubuque, Iowa
6. Boserup, Ester (1970). *Women's Role in Economic Development*, Allen & Unwin, New York
7. Bryant, W. Keith (1990). *The Economic Organization of the Household*, Cambridge University Press, New York
8. Clark, Colin (1967). *Population Growth and Land Use*, St. Martin's Press, New York
9. Gibson-Graham, J.K. (1993). 'Waiting for the Revolution, or How to Smash Capitalism while Working at Home in your Spare Time'. *Rethinking Marxism*, 6(2):10-24
10. Harvey, A.S., and A. Mukhopadhyay (2007). When Twenty-Four Hours is not Enough: Time Poverty of Working Parents.' *Social Indicators Research* 82(1): 57-77.
11. Hirway, Indira (1999). 'Estimating Work Force using Time Use Study Results and its Implications for Employment Policy in India', Proceedings of the UNESCAP-CSO International Seminar on Time Use Studies, 7-10 December, Ahmedabad
12. Holmboe-Ottesen, Gerd, Ophelia Mascarenhas & Margareta Wandel (1989). 'Women's Role in Food Chain Activities and the Implications for Nutrition', Nutrition Policy Discussion Paper no.4,
13. Ironmonger, Duncan (1997): 'National Account of Household Productive Activities', Paper presented at the Conference on *Time Use, Non-Market Work and Family Well-being*, 20 November, Bureau of Labour Statistics, Washington DC
14. Ironmonger, Duncan (2001). 'Household Production and the Household Economy', Research Paper Number 833, Department of Economics, The University of Melbourne, Melbourne

15. Kabeer, Naila (1990). 'Women, Household Food Security and Coping Strategies', in UN (1990): *Women and Nutrition*, ACC/SCN Symposium Report, Nutrition Policy Discussion Paper No.6, World Health Organisation [WHO], Geneva
16. Patnaik. S.C. & S. Debi (1991). 'Women's Economic Contribution'. in R.K. Punia (ed) (1991): *Women in Agriculture: Their Status and Role*, vol. 1, Northern Book Centre, New Delhi, pp.31-41
17. Shimray, U. A. (2004): 'Women's Work in Naga Society: Household Work, Workforce Participation and Division of Labour', *Economic & Political Weekly*, 39(17):1698-1711

WEBSITE

18. <http://eprints.unimelb.edu.au/archive/00000059/01/759.pdf>

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