

PROBING TIME USE BY GENDER ON SOCIO – ECONOMIC ACTIVITIES:

By
Abeid S. Mussa
Department of Statistics.
University of Dar es Salaam.

Introduction

Time use survey data are vital towards understanding social obligations and also an important input policy analysis. Time use by gender will generate information that may enlighten the roles played in a community. Government officials in various ministries and non – governmental officials may use such information for planning and developing policies in order to improve the welfare of the people to decrease or eradicate ignorance and poverty.

There are two competing views regarding time use by gender in developing countries. From one side, the argument is that social roles, culture and norms dictate a segregation of activities by gender. It is often seemed to be perceived that women are predominantly found doing household chores. Those are the roles society has prescribed to them. Men are supposedly to be involved in income – generating activities. While from the other side social scientists, economists and behavioural scientists argued that both men and women respond to economic incentives and constraints to change their time use (Apps, 2003). Furthermore, a more tempered neoclassical view argues that male – female time use responds to economic changes as much as other behavioural factors such as consumption. However, when contemplating an extreme point of view in this regard, that work activities are divided along the lines of comparative advantage; men are better at market work and women at housework, the social morals, custom and culture still prevail. People often assume that gender roles are fixed in developing countries. However, while it is true, that roles in many developing society are more narrowly defined for women, pressures from modernization are provoking swift changes (Newman, 2001). People often assume that gender roles do not change. As evidence from the cut flower industry in Ecuador, the increased demand for women workers has affected the household allocation of paid and unpaid labour. Though women have increased their time in paid work, their total labour time remains constant, while men increase their share of unpaid labour (ibid). In as much as it is

straightforward to perceive economic changes, opportunities and constraints, it may not be that easy to observe social and moral changes and customary behavioural attitudes. An incline to study time use data based on economic changes has been obvious, but the social and moral changes need to be incorporated as well. An intention is to capture social norms and values (which are still persistent in sub-Saharan Africa,) and as well to get the effect of economic changes; this paper intends to probe time use by gender against socio-economic activities. The difficulty in defining and measuring women economic activity, as a substantial part of women's daily household chores remains officially not documented. Different countries define and measure women's work in diverse way (Oppong, 1994). The focus in this paper is to contribute to a broader definition of work to include household work. The term socio – economic activities (SE-Activities) refers to all those activities which are paid labour or activities which are not paid labour but their roles are so crucial and important, in the household, that they would have been paid labour if social morals, custom and culture were not prevailed. For example, attending to sick relative, daily household chores and looking after children. It is intended to show that the neglect of these data in much of the literature on household behaviour can be traced to unrealistic assumptions on domestic production and the mistaken idea that non–market time can be viewed as leisure.

Time use and Technological balance

It is again a debatable concept when we think of time use and technological balance. Some activities which may or may not be paid work may bring up the idea of time misuse without technological aid. For example the activity of fetching water, especially if the source is at distant, becomes the centre of daily exchange of news and laughter; time misuse or waste. A greater part of time is spent in what is summed up and recorded as fetching water, an activity very much performed by women according to the nature of it and social morals. It is an unpaid home-based production.

Women grow half the food in the world yet own only two percent of the land (Zwart, 2000). For many women in the south, the poorest stricken area in the world and particularly in the sub – Saharan Africa, (SSA), they are the provider of basic necessities for family survival. To this extent, SSA women are de facto managers of the natural resources surrounding them; including soil, water and forests. World Bank estimates that women in sub – Saharan Africa are responsible for 80% of all agricultural production (Mitchell, 1995). Although women make up the majority of food producers in SSA,

they have little or no access to the factors of production. The lack of appropriate farm and household technology is a crucial factor for women who face labour – intensive and time – consuming tasks (Mitchell, 1995). However, this does not mean men are accessible to technology and are involved in less labour – intensive tasks with less time consumed. The argument is for a long time now; men have been much engaged in income – generating activities to an extent of acquiring substantial necessary tools.

However, the aim of this paper is to probe time use by gender on social economic activities as observed from a common platform. That is how the time is used by males and females under same natural conditions and processes, considering all common and essential activities like, sleeping, waking up and eating. The objective here is to find whether the distribution of time use by gender has same pattern on socio – economic activities defined earlier.

Aims and Objectives

It is known that children in developing countries contribute significantly to household labour; they assist in gathering and processing foods and in selling them in the market; they take care of animals; the girls help their mothers care for younger children and also carry water and fuelwood and help cooking; the boys help irrigating, fishing and harvesting. Once they grow up, children are also expected to take care of their parents in old age. Hence that makes explicit the need for data on time family members spend on domestic work as well as on labour supply. This paper, however, desires to probe on time use by gender on adults only (head of household and spouse) with the following aims and objectives.

- To investigate time use by gender on various socio-economic and related activities in the course of a normal day.
- To explore the female's role in community development and in building knowledge about the female's situation.
- To provide time use information to planners, health officials, Community Based Organizations (CBOs) and Non – Governmental Organizations (NGOs) and others, for developing policies geared towards improving the people's welfare.
- To provide time use information for analysing household living standards and confronting poverty.

Hypotheses

Women contribution that has most suffered from neglect and bias include ‘informal sector activities’, ‘home-based production’ and working on ‘family farms’. Based on the definition given earlier the general hypothesis is that women are using more time in socio-economic activities (especially in rural areas). Specific hypotheses are-

- The groups, male and females, (especially in rural areas) experience a great deal of time waste.
- Household living standards and decisions change in accordance to policy variables and economic participatory (especially in urban).

Data Sources, Field work and Data Processing.

The source of data for this paper is the “Time Use Survey” conducted by the Department of Statistics in 2004. The survey covered the whole country that is divided into 22 regions. Two villages were selected from each region, one from the rural area and the other from urban. Samples of households from these villages formed the primary sampling units. Data collected from the heads of households and spouses were processed and analysed in the following three ways.

- Details of main occupying activities in a day.
- Main activity performed a day before,
- Main activity that took most of the respondent’s time last year

The results are discussed hereunder.

Discussion-common platform

When assessing groups that are subjected under comparisons, it is important to compare them on the same platform in order to be fair. Hence to probe time use by gender, it is advantageous to understand the basics of the participants involved, the way in which common activities are occupied. Common activities include, time to wake up, time for lunch and dinner, and time to go to sleep.

This paper will first look at the basic information from the heads of households and spouses on age, location and sex. The heads of households in both, urban and rural location are predominantly males. Their ages concentrate between 30 and 50 years old, while spouses are mostly females, between 20 and 40 years old. This paper will therefore focus on the heads of households and their spouses in probing time use on socio-economic activities. Table 1 below summarizes the age distribution of heads of households and their spouses.

Table 1: Age of Heads of Households and Spouses by Location by Sex.

Age interval	Heads of Households				Spouses			
	Urban		Rural		Urban		Rural	
	Male	Female	Male	Female	Male	Female	Male	female
Below 20	7	3	10	5	45	81	27	44
20 – 29	175	61	130	18	72	452	30	319
30 – 39	374	71	276	36	55	475	36	282
40 – 49	387	90	233	43	46	293	19	202
50 – 59	281	43	171	16	18	112	18	99
60 – 69	133	29	104	20	18	43	7	37
70 – 79	56	23	39	13	6	8	6	11
80 – 89	16	4	9	3	1	0	0	3
90 – 99	25	10	51	12	8	25	2	29
100 and over	0	1	0	0	0	0	0	0
Total	1454	332	1013	166	269	1489	145	1026

The educational status by sex and location is shown in the following tables.

Table 2: Educational Background of Heads of Households and Spouses by Location by Sex

Educational Status	Heads of Households				Spouses			
	Urban		Rural		Urban		Rural	
	Male	Female	Male	Female	Male	Female	Male	female
No Education	57	61	111	53	25	144	16	205
Adult Education	44	10	28	4	0	26	4	28
Primary Grade 4	181	44	160	19	21	137	12	105
Completed Primary	801	157	584	77	135	974	81	636
Secondary 12	247	37	103	9	64	170	26	42
Secondary 12 and Course	52	11	13	3	14	28	5	8
Secondary 14	42	5	4	1	5	4	0	1
Over Secondary 14	29	7	10	0	5	6	1	1
Total	1453	332	1013	166	269	1489	145	1026

The proportions of the heads of households and their spouses for the different educational status by location, that is, urban and rural, do not seem to differ much. The trend is similar in almost all the educational levels. More completed primary in both groups than in any other educational level. There are more with no education in rural than in urban for both groups and adult education is slightly higher in rural for the spouses. Figure 1 and 2 below

show pattern of educational status by location for heads of households and spouses respectively.

Figure 1: Education of Heads of Households by Location

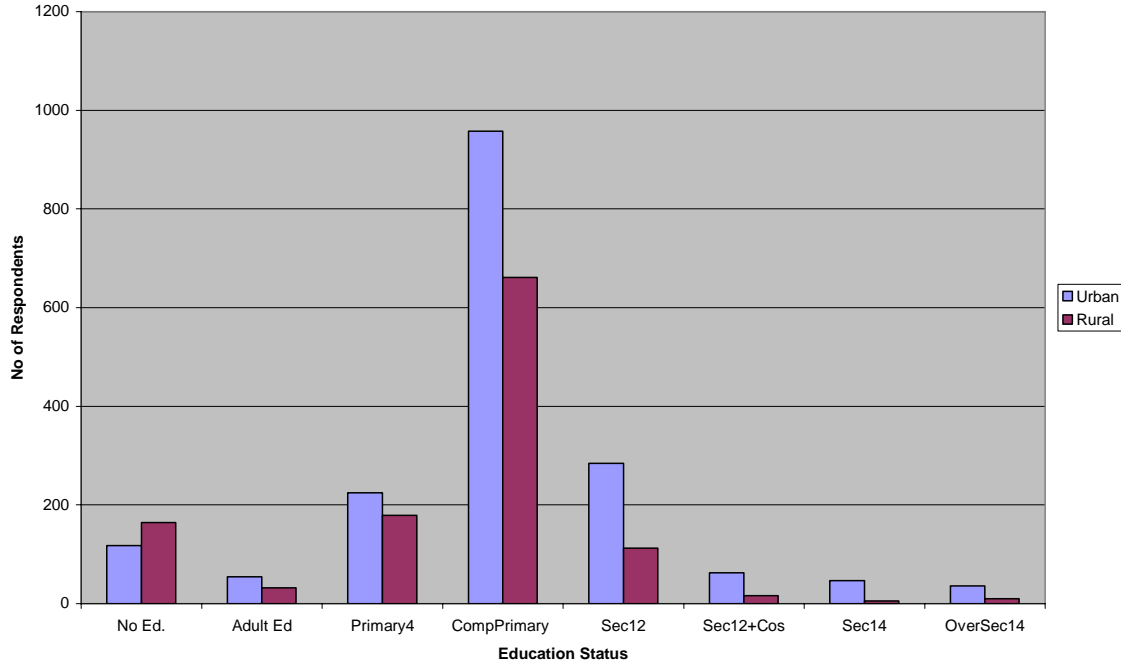
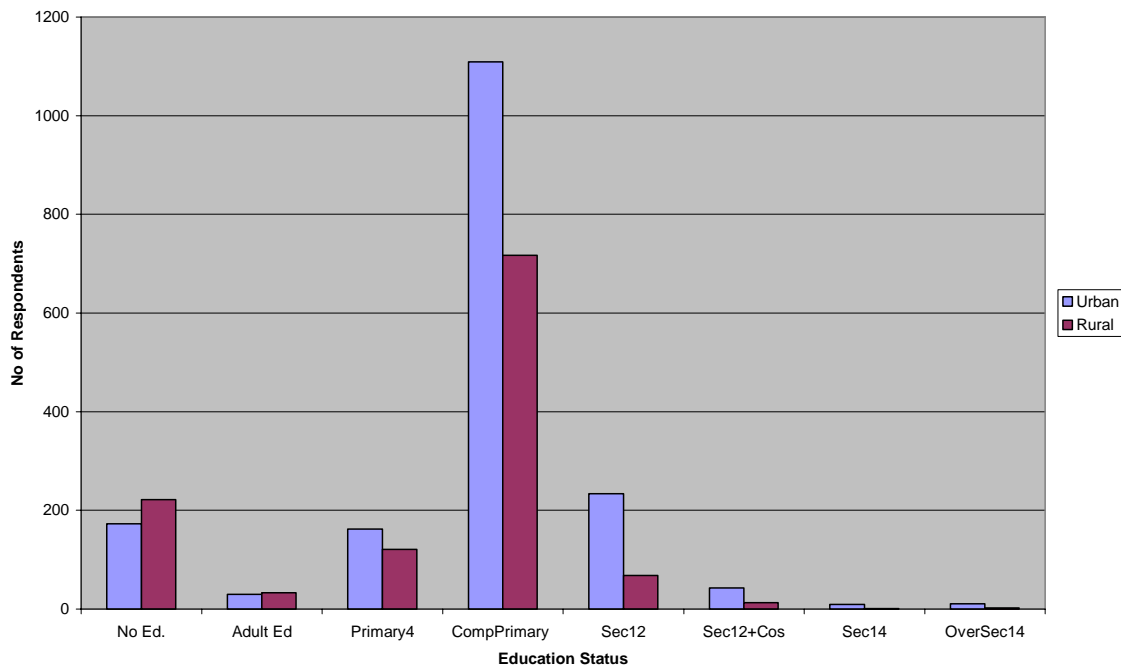


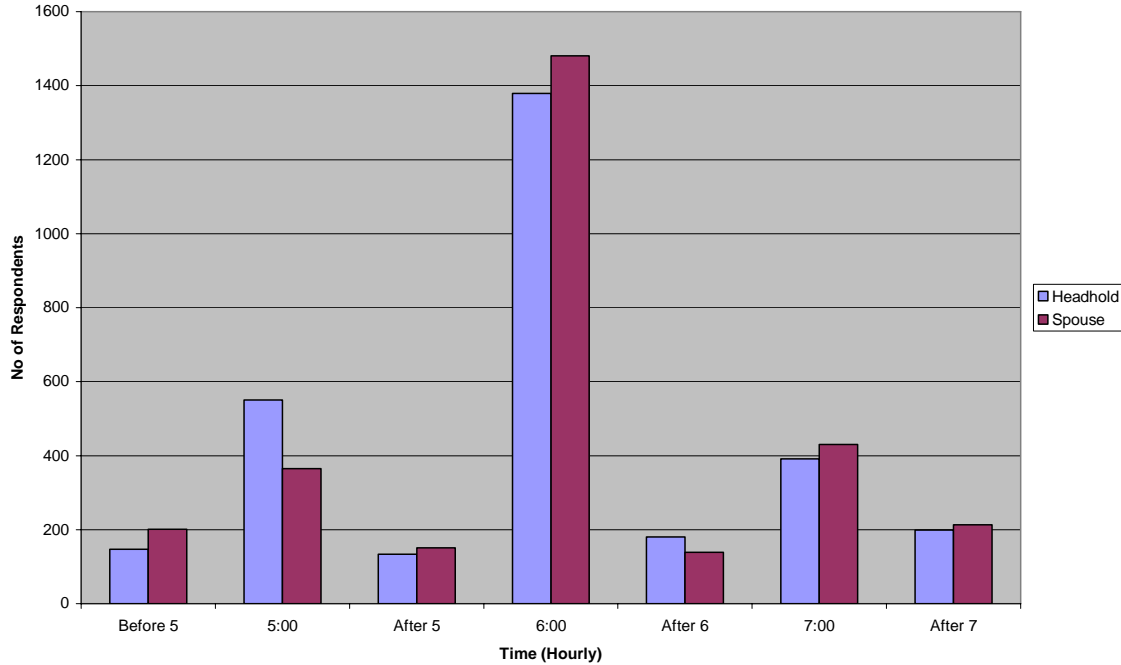
Figure 2: Education of Spouses by Location



Time to wake up has been divided into: Between midnight and before 5:00 hours; At 5:00 hours; After 5:00 hours to just before 6:00 hours; At 6:00

hours; After 6:00 hours to just before 7:00 hours; At 7:00 hours; After 7:00 hours.

Figure 3: Waking up Time of Heads of Households and Spouses



Heads of households and spouses normally wake up between 5:00 and 6:00 hours. At 5:00 hours slightly more heads of households wake up, while at 6:00 hours more spouses than heads of households wake up. Generally, the waking up pattern is similar for both groups.

Time for lunch has been grouped in hourly basis, and the pattern shows almost perfect matching between heads of households and spouses. Same feature is observed for time for dinner. Figure 4 and 5 below show the pattern in which these two activities

Figure 4: Lunch Time for Heads of Households and Spouses

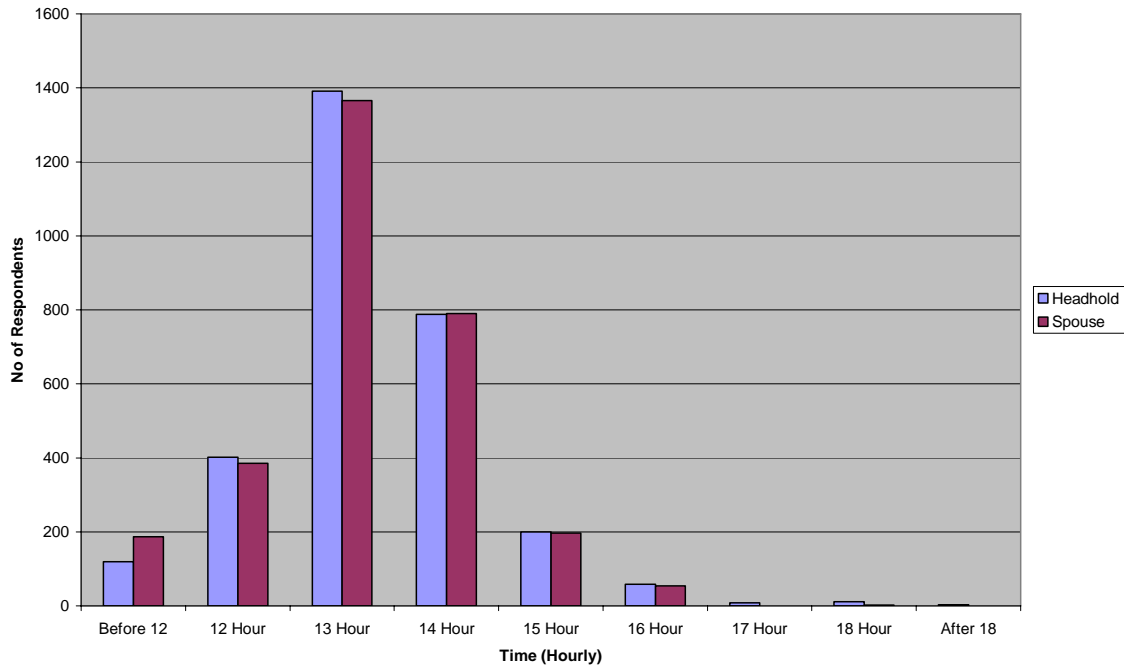


Figure 5: Dinner Time for Heads of Households and Spouses

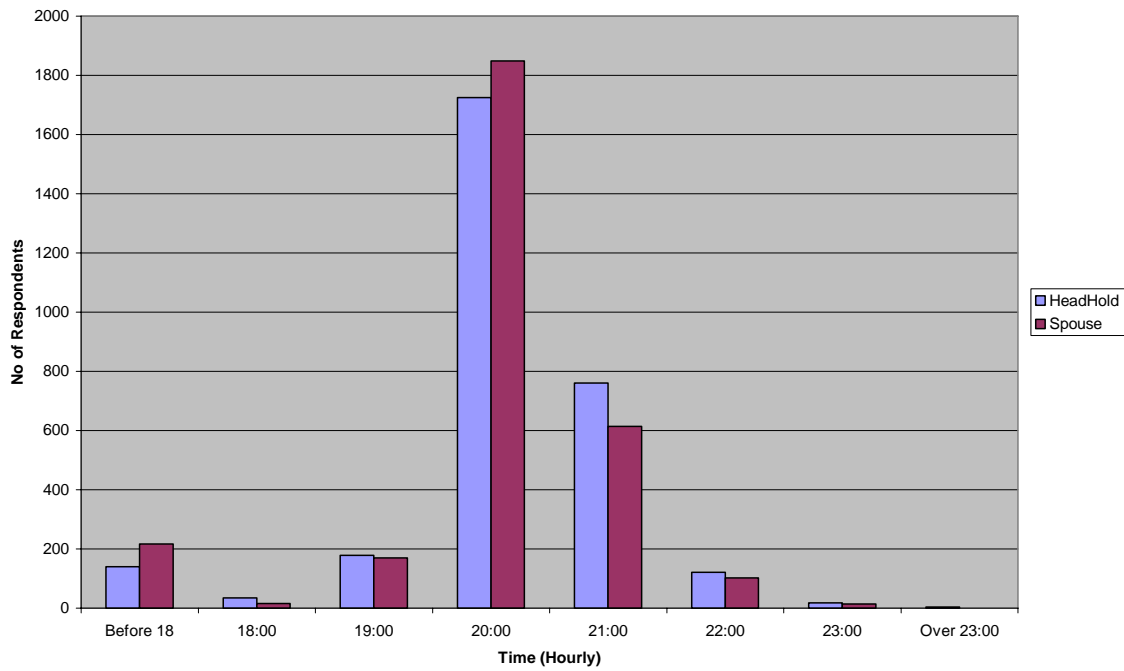
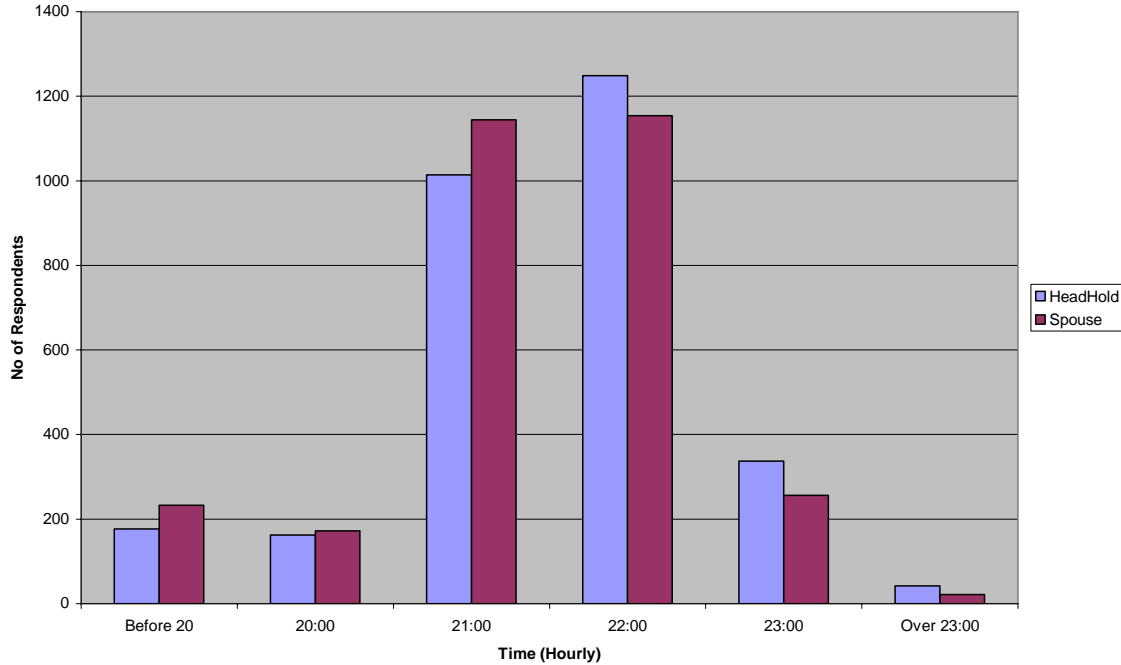


Figure 6 below shows sleeping time distribution from before 20:00 hours to after 23:00 hours. Many spouses seemed to retire earlier than heads of

households. However, again there seemed to be similar sleeping pattern for both groups.

Figure 6: Time To Sleep for Heads of Households and Spouses



Discussion on activities

This paper has divided activities into Non socio-economic (NSE) and Socio-economic (SE). The NSE activities are categorized as Waking up, Brush teeth, Drinking tea, Stay at home, Eat, Rest, Sleep, Walking, Chatting, Listen to Radio/Watch TV, Pray, Entertaining, Visit local club.

Table 3 below gives the details of main occupying activities for this category in a day.

Table 3: Non Socio-Economic Activities of Heads of Households and Spouse by location by sex

	Heads of Households				Spouses			
	Urban		Rural		Urban		Rural	
	Male	Female	Male	Female	Male	Female	Male	female
Wake up	52	7	59	11	2	36	3	47
Brush teeth	5	16	2	4	1	59	1	38
Breakfast	18	6	2	0	2	3	0	1
Stay at home	9	21	4	3	7	139	5	63
Eating	25	9	4	1	5	19	0	2
Resting	16	0	5	3	0	16	0	2
Sleeping	2	0	0	0	0	1	0	1
Walking Around	10	2	2	0	4	1	0	0
Conversation	3	3	1	0	0	1	0	1
Radio/Watch TV	0	2	1	0	0	1	0	0
Praying	6	0	0	0	0	4	0	0
Wash dishes	0	2	0	0	0	2	0	0
Visit local Club	0	0	0	0	0	3	0	0
Reading	6	6	0	0	31	8	8	13
Pastor/Church	2	0	3	0	2	0	0	0
Entertainment	0	1	0	0	1	0	0	0
Total			933	185	334	1253	946	1116

The SE activities are Farming, Fetching water, Cooking stew, Cooking food, Washing clothes, Picking firewood, Normal working, Grazing, Handcraft, Apprenticeship, Washing Dishes, Business, Prepared Student, Grass cutting, Bedding kids, coolie, Reading, Driver, Night watch, Brewing. Table 4 below gives the details of main occupying activities for this category in a day.

Table 4: Socio-Economic Activities of Heads of Households and Spouse by location by sex

	Heads of Households				Spouses			
	Urban		Rural		Urban		Rural	
	Male	Female	Male	Female	Male	Female	Male	female
Farming	208	46	459	86	50	197	71	602
Gardening	3	0	3	1	3	5	1	2
Fetching Water	2	5	1	2	0	15	0	5
Prepare veg/salad	0	0	0	0	0	2	0	3
Cooking	6	27	2	5	0	201	0	76
Washing Cloth	3	28	2	10	0	93	0	22
Firewood	2	0	4	0	0	0	0	0
Poultry	0	0	0	0	1	0	0	0
Working	350	56	142	18	86	126	29	68
Grazing	14	5	19	3	1	18	3	7
Weaving	5	10	1	7	0	6	0	2
Apprenticeship	131	14	59	3	37	31	11	18
Brewing liquor	0	0	0	0	1	5	0	0
Business	340	98	119	27	74	255	31	133
Prepare Students	1	0	1	0	0	2	0	0
Cutting grass	0	0	2	0	0	0	0	2
Bedding children	1	2	0	0	0	1	0	0
Coolie	7	0	2	0	4	0	1	1
Pastor/Church	2	0	3	0	2	0	0	0
Driver	35	0	13	0	16	1	5	6
Security Watch	43	0	21	1	6	2	1	1
Entertainment	0	1	0	0	1	0	0	0
Total	1304	371	933	185	334	1253	946	1116

Table 5 below combines all the occupying main activities of heads of households and spouses in a day.

Table 5: Combined Socio-Economic Activities (and Non) of Heads of Households and Spouse by location by sex

	Heads of Households				Spouses			
	Urban		Rural		Urban		Rural	
	Male	Female	Male	Female	Male	Female	Male	female
Wake up	52	7	59	11	2	36	3	47
Brush teeth	5	16	2	4	1	59	1	38
Breakfast	18	6	2	0	2	3	0	1
Farming	208	46	459	86	50	197	71	602
Stay at home	9	21	4	3	7	139	5	63
Eating	25	9	4	1	5	19	0	2
Resting	16	0	5	3	0	16	0	2
Gardening	3	0	3	1	3	5	1	2
Sleeping	2	0	0	0	0	1	0	1
Walking Around	10	2	2	0	4	1	0	0
Conversation	3	3	1	0	0	1	0	1
Fetching Water	2	5	1	2	0	15	0	5
Prepare veg/salad	0	0	0	0	0	2	0	3
Cooking	6	27	2	5	0	201	0	76
Washing Cloth	3	28	2	10	0	93	0	22
Firewood	2	0	4	0	0	0	0	0
Poultry	0	0	0	0	1	0	0	0
Working	350	56	142	18	86	126	29	68
Grazing	14	5	19	3	1	18	3	7
Radio/Watch TV	0	2	1	0	0	1	0	0
Weaving	5	10	1	7	0	6	0	2
Praying	6	0	0	0	0	4	0	0
Apprenticeship	131	14	59	3	37	31	11	18
Brewing liquor	0	0	0	0	1	5	0	0
Wash dishes	0	2	0	0	0	2	0	0
Business	340	98	119	27	74	255	31	133
Visit local Club	0	0	0	0	0	3	0	0
Prepare Students	1	0	1	0	0	2	0	0
Cutting grass	0	0	2	0	0	0	0	2
Bedding children	1	2	0	0	0	1	0	0
Coolie	7	0	2	0	4	0	1	1
Reading	6	6	0	0	31	8	8	13
Pastor/Church	2	0	3	0	2	0	0	0
Driver	35	0	13	0	16	1	5	6
Security Watch	43	0	21	1	6	2	1	1
Entertainment	0	1	0	0	1	0	0	0
Total	1304	371	933	185	334	1253	946	1116

Non socio-economic activities

The respondents when asked to indicate the first main activity performed a day before, their responses are shown in Figure 7A, B and C below.

Figure 7A: Head of Household Non Socio-Economic Activities

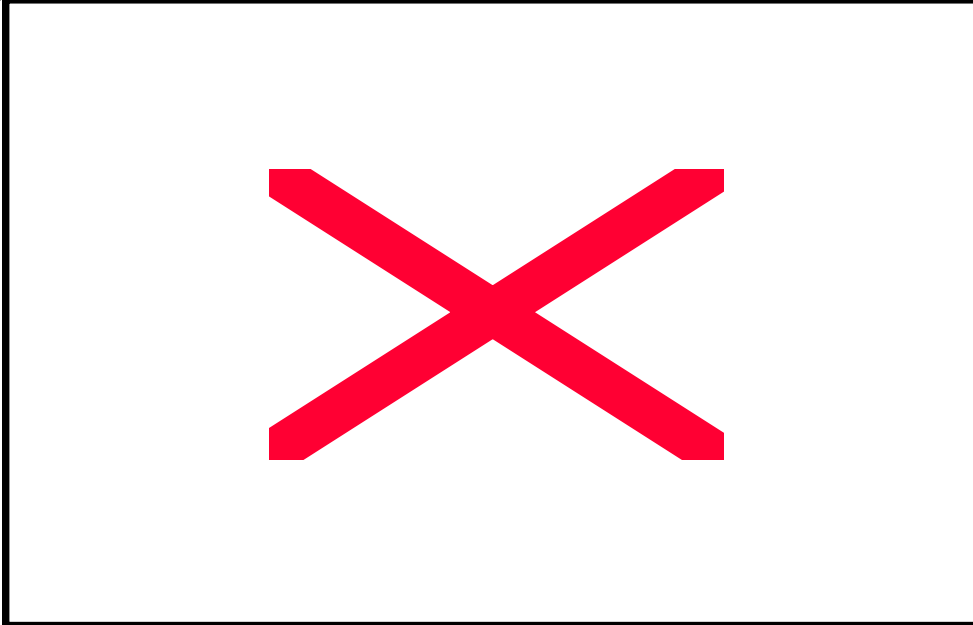
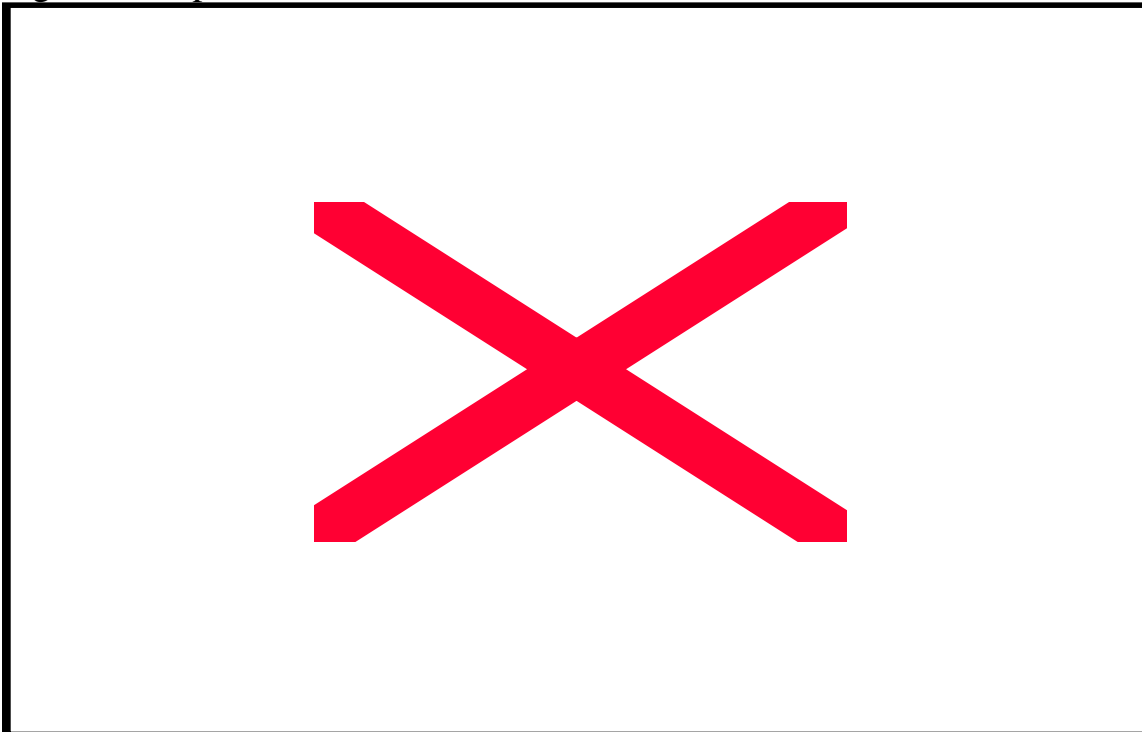


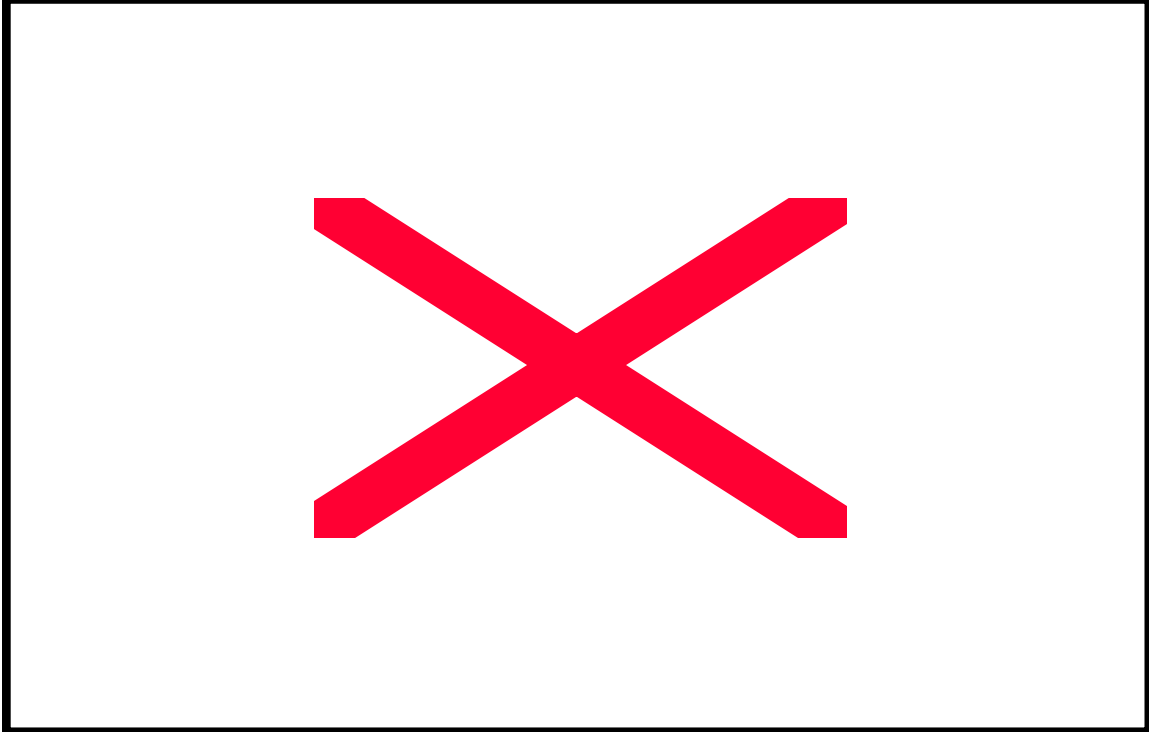
Figure 7B: Spouses Non Socio-Economic Activities



Waking up has been unfortunately recorded as an activity and it seems to be the main NSE activity for the Heads of household. While stay at home, (the

longest bar in Figure 7B), waking up and brush teeth are activities featured most for the spouses. Stay at home featured most (the longest bar in Figure 7C below) when combined as couples.

Figure 7C: Couples Non Socio-Economic Activities



Socio-economic activities

As in the case of non socio-economic activities, when the respondents were asked to indicate the first main activity performed a day before, their responses are shown in Figure 8A, B and C below.

Farming, working, business and Apprenticeship in respective descending order of magnitude, towers other activities for the heads of households. The spouses' activities, also in descending order, are farming and business followed by cooking and working.

Figure 8A: Heads of Households Socio-Economic Activities

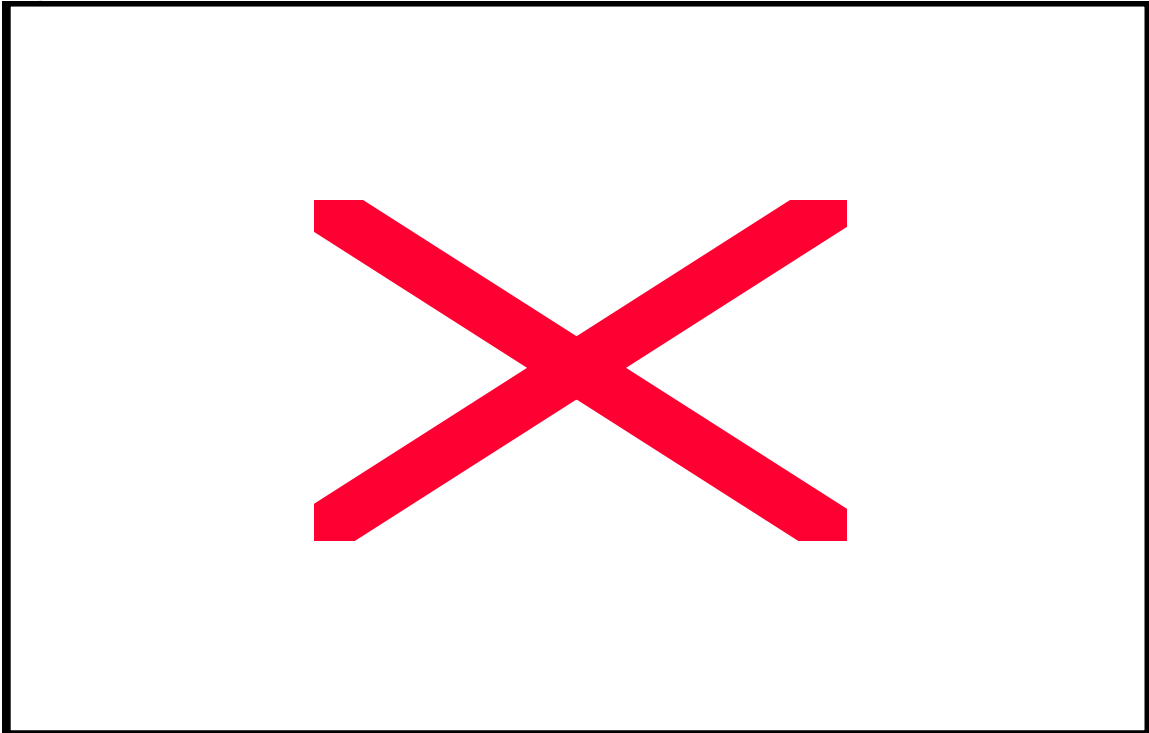


Figure 8B: Spouses Socio-Economic Activities

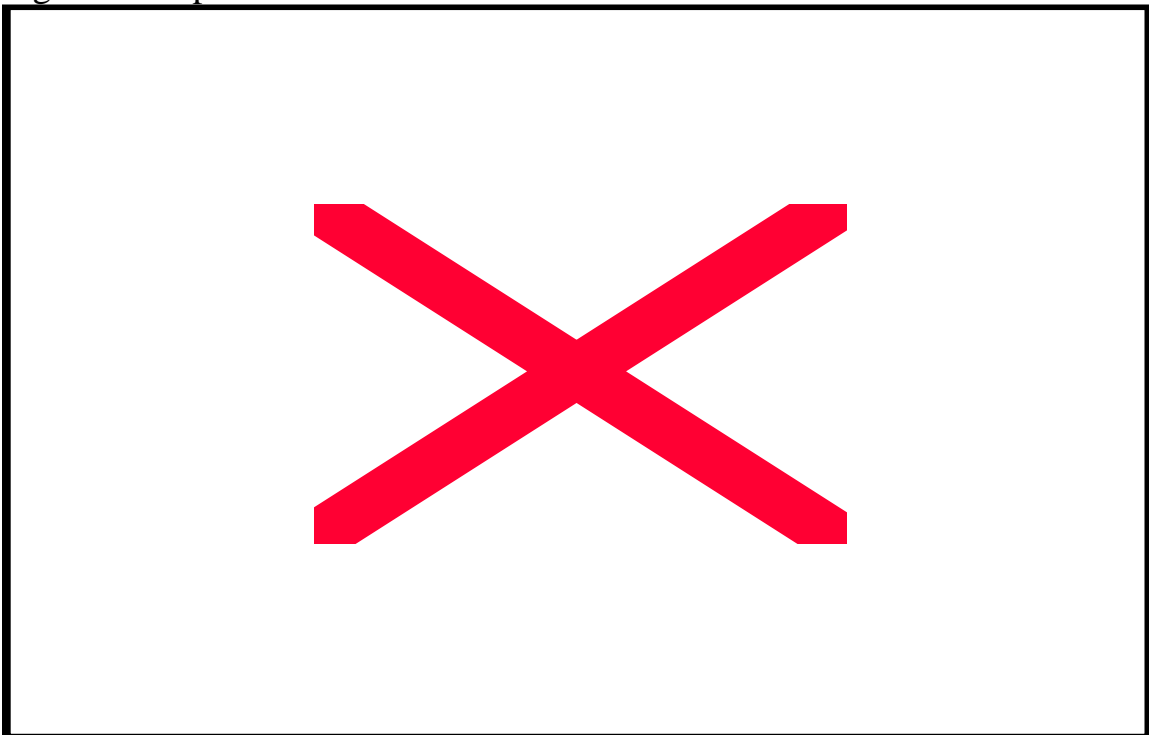


Figure 8C: Couples Socio-Economic Activities

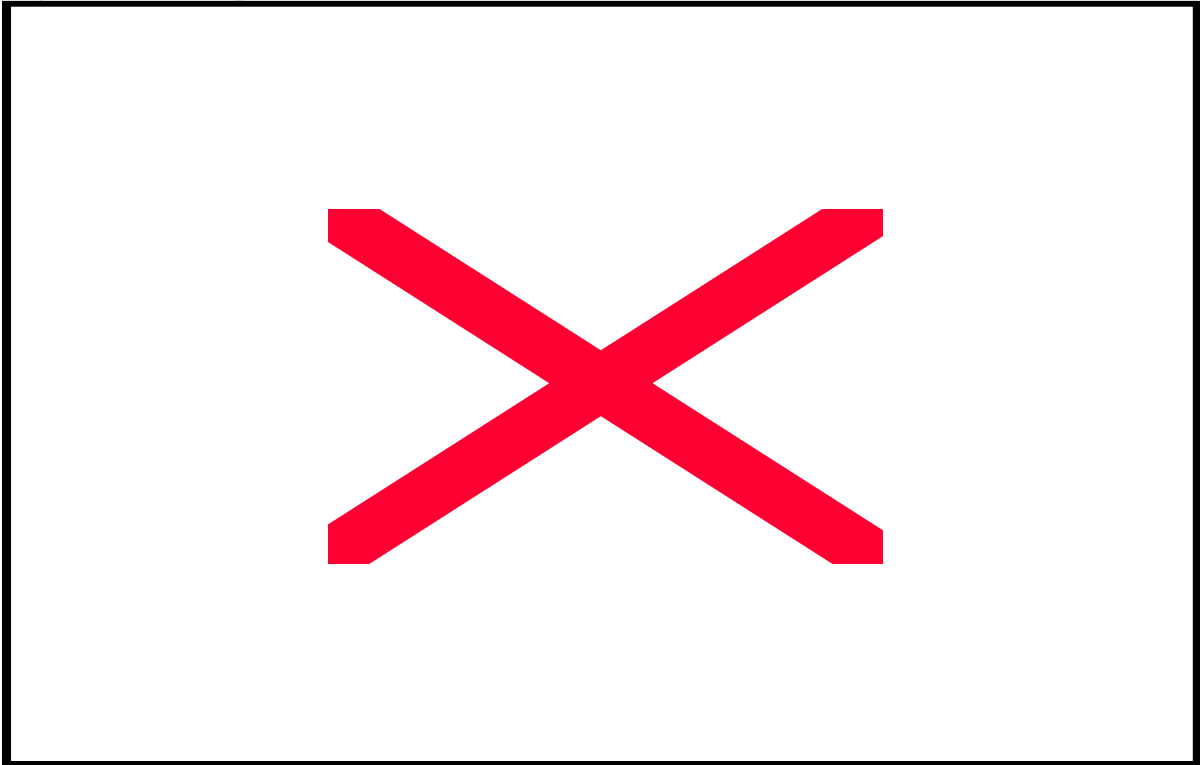


Figure 8C above shows the couples activities in which cooking, farming and business in respective descending order, towers high most for females while farming, business and grazing, in descending order, featured highest for males.

The observations from the figures above are strengthened by the main activities that took most of the respondent's time last year (and the insets for the second most activities) as shown in Figures 9 and 10 below.

Figure 9: Heads of Households Main activity occupied last year

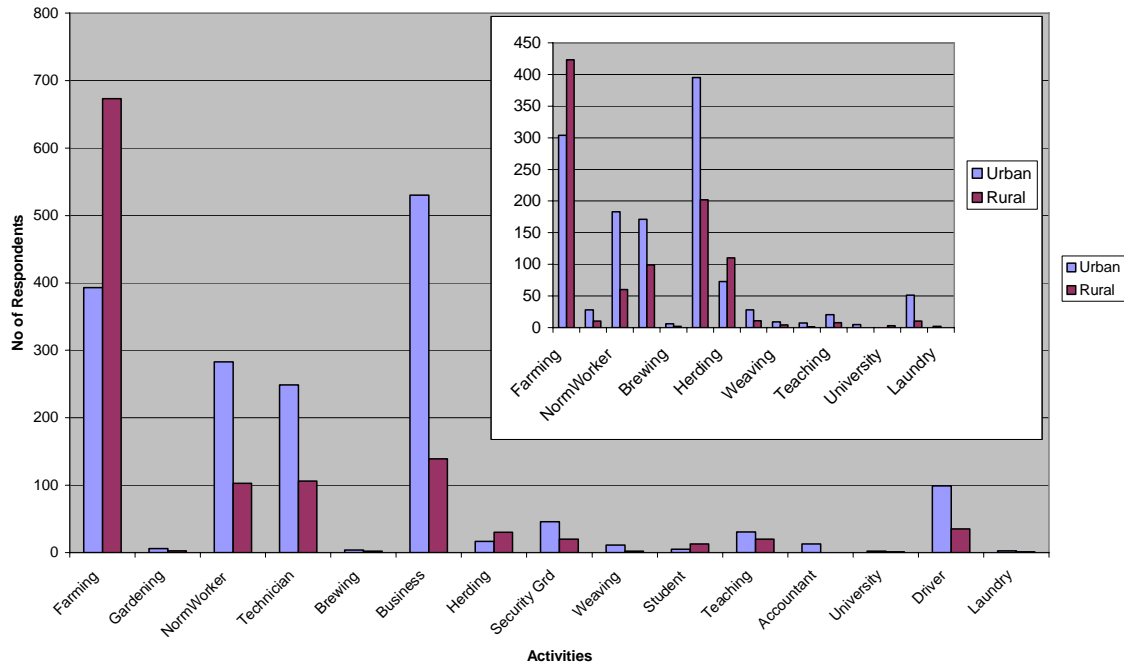
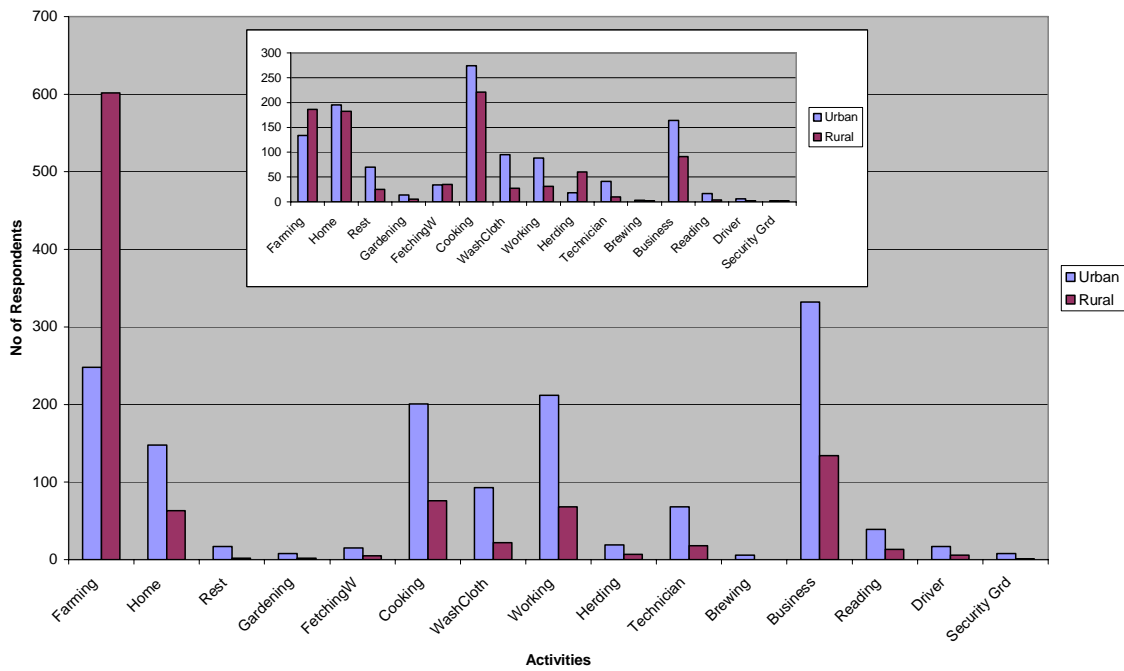


Table 10: Spouse main activity occupied last year



Gender and Decision Making

It has been observed earlier that the trend on educational levels is similar not only by gender but also by location. Hence the way of thinking will also reflect similarities and females may feel comfortable to make their own decisions. When respondents were asked if there was an elder girl who is engaged in an activity which provides her some cash, findings revealed that out of 2980 respondents 637 were engaged in one way or another. The detailed types of activities coded 'working officially or not' are shown in Table 6 below.

Table 6: Type of Activity Performed by an Elder Girl.

Type of Activity	Number	Percentage
Official Work: Employed	105	3.5
Official Work: Self-Employed	258	8.7
Not Official Work: Employed	38	1.3
Not Official Work: Personal	236	7.9
Others	13	0.4
Not Applicable	197	6.6
Total	847	28.4
Missing	2130	71.6
Total	2980	100.0

As for whom is deciding on the use of the earnings from those activities, majority were self decision and decision from the wife then followed by joint decision of wife and husband. It indicates that females do have the power for self decision. Figure 7 shows the strength of female self determination.

Table 7: Decision on the Use of Earnings from an Elder Girl

Decision By	Wife (W)	Husband (H)	Joint H&W	self	Self with associate	Other person	Total
Number	180	25	150	242	8	14	619

Conclusion

Types of activities for socio-economic and non socio-economic are summarized under the following matrix.

Males		
Type of Activity	First Main Activity	Second Main Activity
Non Socio-Economic	1. Resting	1. Resting
Socio-Economic	1. Farming 2. Working 3. Business 4. Apprenticeship	1. Farming 2. Business
Females		
Type of Activity	First Main Activity	Second Main Activity
Non Socio-Economic	1. Staying at home	1. Staying at home
Socio-Economic	1. Farming 2. Business 3. Cooking 4. Working	1. Cooking 2. Farming 3. Business

Staying at home is the main non socio-economic activity featured most for the spouses who are majority females, while resting was the main activity for males. It is argued that staying at home, to some also meant doing some household chores, but since all activities were specified and filled, then staying at home can be simply interpreted as being at home in the state of idleness. Thus the hypothesis that females as well as males experience a great deal of time waste is true. As for main socio-economic activities, farming, working, business and Apprenticeship, in descending order, featured most to males while, in a similar way, farming, business followed by cooking and working featured to females.

The probe concludes that under the specification of types of activities there is supportive evidence that women contribution has suffered from neglect of some activities, like cooking being biased as home-based production. Apart

from cooking and Apprenticeship, gender time use in farming and business is equally utilized by both sexual categories. Business changes household living standards and decision making mechanism. It seems females are prone to make their own decisions. Since the respondents are having same educational status and similar age structure, influence on changes to policy variables and economic participatory (especially in urban) is inevitable.

References

Apps, P. (2003): Gender, Time Use and Models of the Household. Discussion Paper No 796. IZA (Institute of Labour Office), Bonn.

Ilahi, N. (2001): Gender and Allocation of Adult Time: Evidence from the Peru LSMS Panel Data. Paper for The Policy Report on Gender.

Mitchell, J. (1995): Women and natural resource management in sub – Saharan Africa. The Courier, No 154.

Newman, C. (2001): Gender, Time Use and Change: Impacts of Agricultural Export Employment in Ecuador. The World Bank Development Research Group, Poverty Reduction and Economic Management Network.

Oppong, C. (1994): Introduction to Gender, Work and Population in Sub – Saharan Africa. Geneva ILO.

Zarina, I.B. (1999): Methodology for the Study of Time Use by Gender in Latvia. (ed) Parsla Eglite and Inna Bronislava Zarina; Time Use by Gender in Latvia. Institute of Economics: Latvian Academy of Sciences.

Zwart, C. (2000): Thanks to Women in Farming. The Diocese of Oxford Reporter.