UNEVEN BURDENS? Gender, Time Use and Unpaid Care Work: A Case Study in Matsanjeni Swaziland.

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Abstract

The dissertation explores the differences in time spent by women and men in different activities in Matsanjeni Swaziland. We classify the activities under the Systems of National Accounts (SNA), as SNA activities, non- SNA activities and non Productive activities. The study used a 24 hours time diary to collect data from a sample of 50 respondents, 25 of whom were women and 25 were men. The results show that on average, women and men spend almost equal time doing SNA activities, with men spending slightly more time than women. On the other hand, the results show that women spend a lot more time on Non SNA activities compared to men. Finally, the results show that men spend more time on Non Productive activities compared to women.

Declaration of Originality

This dissertation represents original work by the author and has not been submitted in any other form to another University. Where other people's work has been used, it has been duly acknowledged and referenced in the text.

Signature..... Date.....

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1. INTRODUCTION

The study sets out to explore the time use patterns of women and men in Matsanjeni, Swaziland, a rural community in the Eastern part of the country. It seeks to find out how much time women and men in the target area spend on the Systems of National Accounts (SNA) activities, Non SNA activities and on Non Productive work. SNA activities are those production activities that are within the SNA production boundary and which are included in national GDP calculations. They include activities such as, work for establishments, primary production and services for income and other production.

Non SNA activities are mostly the unpaid household work such as household services, caring for household members and community work.

Non Productive activities are those activities that are performed for oneself and cannot be done by someone else on behalf of another person. Such activities are said to fail the third person test and fall outside the SNA production boundary. They are not included in national GDP calculations. They include activities such as personal care activities like eating and drinking, sleeping, receiving health care, bathing and relaxing; and mass media activities such as listening to radio/ watching television.

The study goes on to investigate how much time is spent by women and men on unpaid household work and how unpaid household work is shared between women and men. Finally the study investigates the differences in time spent by women and men in paid work and how unpaid care work affects participation in paid production.

Most countries of the world have ratified the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW). However, despite such commitments, it has been difficult to eliminate the existing gender inequalities and embrace the principle of equality in terms of life experiences and distribution of opportunities among women and men Balmori (2003: 5). Thus Balmori further notes that, "unequal gender relations

that place women in subordinate position to men still prevail and continue to be the norm rather than an exception" (Balmori: 2003: 5).

This can be attributed to the fact that, according to the United Nations Development Programme (2003: 10), throughout history, society has always given different roles to men and women. For example, in hunter-gatherer societies, men did the hunting whilst women were the gatherers. Similarly, (Budlender: 1999: 5) argues that different societies ascribe clear cut gender divisions of labour to its members. Women are more likely than men to engage in reproductive work such as rearing and caring for children, caring for other household members, cooking, cleaning, and fetching water and fuel (Budlender: 1999: 5). On that note, Budlender, Chobokoane, and Mpetsheni (2001: 3) contend:

> Reproductive work produces something without which the rest of the economy and society would not exist, namely people. The reproductive workers produce a wide range of goods and services. Many of these services have their equivalents in the market economy. For example one can pay for a domestic worker to clean, for a cook to prepare meals, for a nursemaid to look after a child. However, the bulk of these services are provided on an unpaid basis.

On the other hand, men's responsibility is more likely to be doing paid productive work, producing goods and services exchanged in the market (Budlender: 1999: 5). In fact she further observes that "gender hierarchies can be seen in a range of practices such as the sexual division of labour and in ideologies such as acceptable gender roles that are both a result and cause of further unequal power relations between women and men" (Budlender: 1999: 5).

This gender division of labour continues even today in modern societies. It is for that reason that the United Nations Development Programme (2003: 3) observes that the unequal participation of women and men in the labour market shows the social and cultural constructs of gender. They argue that:

> In countries where women have participated to a large extent in the industrial, commercial and public sectors of the formal economy, women still spend more time in unpaid work than they do in paid work. On the other hand, men are engaged more in paid work and receive more of the monetary income than women do. In fact, not only do men still do more of the paid work, in most countries they are paid higher rates per hour than women for the same job (United Nations Development Programme: 2003: 3).

The United Nations (2003: 4) further argues that women settle for different occupations to those done by men, usually less formal and with less pay and low status. On that note, Budlender (2004: 6) argues:

> Overall women tend to be concentrated in economic activities with low earnings, where earnings are irregular, and where there is little protection through labour law and social protection. For example in Africa women often work in unpaid subsistence agriculture, in low paid domestic work as street traders and low paid clerks.

According to SHIES (2002: 80), the level of unemployment in Swaziland is high at around 29% overall. The unemployment rate in the Hhohho region is 20.6%; (21.48% males and 18.57 females). For the Manzini region, 25.52% are unemployed (24.27% males and 26.86% females). The Shiselweni region has the highest levels of unemployment at 52.57% (50.30 males and 55.24 females). For the Lubombo region, the unemployment rate is 25.15% (25.45% males and 24.76% females).

The Swaziland National Draft Gender Policy (2002: 22) notes that in Swaziland the majority of Swazi women are occupying low paying elementary occupations because they either lack the skill or experience to compete in the job market. According to the Swaziland Ministry of Enterprise and Employment (2002: 8), whilst 97% of males in employment were employed under the skilled category, only 3.5% females were employed in the same category in 2002. On that note the United Nations (2003:3) contends that, "Although the wage differentials have narrowed, women still receive less pay than men even in the same occupational category". According to International Labour Organization (1999: 5) "men are reluctant to assume responsibilities that will lower their market income, just as they are reluctant to enter caring occupations that pay less than most male jobs".

It is for that reason that, Budlender (2004: 28) argues that these socio cultural values and norms need to be changed if unpaid care work is to be recognized as socially and economically valuable. These social and cultural constructs of gender roles force women to combine market work with family responsibilities. The United Nations Development Programme (2004: 30) concurs with Budlender (2004) and observes that, "the

disproportionate care responsibilities borne by women and girls in the home negatively impact their ability to access educational and employment opportunities".

The United Nations Development Programme (2003: 8) concludes by noting that:

> Society's perception of what are appropriate roles for men and women can influence the actual disparities in paid and unpaid work. In turn, these differences have an impact on the lives of women and men. Women and men engaged in unpaid work may have fewer chances than their paid counterparts to develop to their full potential. But women, because they are found to spend proportionately more time than men in unpaid work, are likely to have the greater disadvantage.

Over and above unequal participation in the labour market between women and men, is the issue of gender and work in the home, specifically the unequal distribution of work within the home (United Nations Secretariat: 1997: 2). At the moment, women and girls engage in unpaid care work within households, but their work is not counted in national Gross Domestic Product (GDP) calculations; which negatively affects women and their families around the world. Budlender (2004: v) argues that, "unpaid care work is the major contributing factor to gender inequality". Similarly, the International Labour Organization (1999: 3) notes that, "the systematic under-reporting and misrepresentation of women's representation to the economy perpetuate a vicious cycle of inequality between women and men".

However, efforts have begun to measure and compute the value of unpaid work that comprises the care economy through recording the time spent by women on various household and community activities using different methods such as self-reporting diaries, interviews and direct observations (United Nations Development Programme: 2004: 1).

There is also the issue of the informal sector which according to United Nations Development Programme (2003: 6), "has grown and has ushered more women than men into this sector either as self employed or as home based workers under highly exploitative conditions". It is on that note that Chen, Vanek and Carr (2004: ix) argue that, "women are concentrated in the informal economy, earnings and benefits are lower

on average in the informal economy than in the formal economy, and there is a marked gender gap in earnings and benefits within the informal economy". It is for these reasons that according to Budlender, Chobokoane, and Mpetsheni: (2001: 1)

> The Beijing Platform for Action (BPFA) which emerged from the 1995 Fourth United Nations World Conference on Women called for the development of suitable statistical means to recognize and make visible the full extent of the work of women and all their contributions to the national economy, including their contribution in the unremunerated and domestic sectors.

The Beijing Platform for Action (1995: 68) further argues that women's contribution to development is through both remunerated work and a lot of it through unremunerated work. However, the United Nations Development Programme (2003: 3) sadly notes that, "women's contribution to development is seriously underestimated, and thus its social recognition is limited".

1.1. Objective of the Study

The overall aim of the study is to gain evidence of time spent by women and men within households in Matsanjeni on paid work and unpaid work such as household work, parenting, subsistence farming, caring for the sick and people with disabilities and the elderly. Using an independent time use survey, this study will examine how the Swazi people from the target area allocate their time to paid work and to unpaid domestic work. The study will investigate how unpaid care work within households is shared between women and men and why the burden of unpaid work disproportionately falls on women. The study will investigate how unpaid care work within households is combined with time use in production.

Even though this survey was on a small scale, and was an independent case-study at community level, it illustrates a widely found problem, that women tend to be overburdened with unpaid work and that this impacts on their activities in the labour market. It is hoped that this study will be a catalyst for the country to undertake a nationwide survey to explore how Swazi women and men spend their time and how these can feed into policy making that will promote gender equality. The time- use survey will capture both paid and unpaid work which is overlooked in regular surveys. The time use

survey will measure and analyze the time spent by different individuals - women and men, in the rural area (Matsanjeni) Eastern Swaziland - on different activities. It will "increase the visibility of women's work both at home and in the labour market" (United Nations Development Programme: 1996 cited in United Nations 2003: 20).

The time use survey will also help in policy making by revealing the day to day patterns in the lives of women and men in the survey community and how work is shared. Similarly, the United Nations Development Programme (2003: 12) observes:

> Shifts in the market and household economies, changes in roles and responsibilities, and policy decisions have important repercussions in the way time is put to use by women and men. The effects of such changes whether positive or negative will have an impact in household activities with attendant consequences on household members.

1.2. Problem Statement and Justification of the Research

It is a fact that collection of good national data is expensive therefore governments tend to concentrate on collecting data for issues that they view as top priority. Statistics on women and the work they do are frequently neglected or if done, undercounted (International Labour Organization, 1999: 223).

The above scenario applies to Swaziland; the country does not have a labour force survey, nor has it done a time use survey. The only survey that Swaziland has done with regards to labour force is the 2002 Employment Statistics Survey. The limitation of this survey is that, "the employment sought after in the survey is only formal or monetary totally excluding the traditional sector which alone in a country like Swaziland could probably account for more than half of the country's labour force" (Swaziland Ministry of Enterprise and Employment: 2002: iv). However, the present report does not pick up and record all economic activities. The argument is that the available labour force statistics does not attempt to capture all paid and unpaid work that is spent in the production of economic goods and services. This leaves out women who very often are doing unpaid household work; work in the informal sector or in subsistence production activities. This work has remained unrecorded in official statistics of work and

employment. The invisibility of women's labour input has contributed to their apparent lower status in many societies Swaziland being no exception.

There is an extensive literature on the unfair burden that women bear particularly in rural settings in the developing countries, in combining their roles in production and reproduction (BPFA: 1995: 67). However, due largely to the absence of adequate data there is limited empirical research that explores how women combine these roles.

According to the United Nations Development Programme (2003: 3):

> A time use survey is a tool for advancing gender equality by recognizing underlying inequalities and redressing them through a gender analysis of women's and men's paid and unpaid economic activities to achieve better harmonization of family responsibilities.

The time use survey will pinpoint the amount of time women and men in Matsanjeni spend on both paid and unpaid work and leisure activities, showing the gender disparities in the amount of work that women and men do especially around the household. It will also contribute to the formulation of sectoral gender sensitive policies for Swaziland that has so far managed only to formulate the overall national gender policy.

1.3. Research Questions

How do men and women from the Matsanjeni community spend their time?

How much time do women spend in unpaid household chores?

How much time do men spend in unpaid household chores?

How do women combine their role in production and in reproduction?

1.4. Research Design

This is a quantitative study because it attempts to produce numbers on what types of activities are done by women and men and how much time is spent on these activities. The study seeks to find out how men and women from the Matsanjeni area spend their time. This was done through the administration of 24 hours time diaries to 50 people of the area (25 women and 25 men). One day of the week was used for administering the

diaries face to face to the respondents during the month of October. Quantitative statistical methods were used to do the analysis of the results.

1.5. Outline of the Dissertation

The introduction will be followed by the literature review. The literature review chapter can be divided into three broad categories. It has a section on definitions of relevant concepts. For instance, it defines the conventional view of what constitutes productive economic activity in general and the Systems of National Accounts (SNA) in particular. It goes on to define time use surveys. The other section discusses issues such as; the importance of valuing unpaid care work; the negative consequences of underreporting of unpaid work into country's statistical systems; the link between low-paid work and unpaid care work; the importance of time use surveys; the problems associated with time use data; and the background of time use surveys; the methods of data collection; and the purpose and nature of the activity classification for time use. The last section of the literature review gives an example of a developing country (India) that has used its time use survey to undertake further research on some issues of national concern.

The third chapter will be on methodology. It will describe the sampling procedures used; the data collection methods that were used as well as the data analysis procedures. Chapter four will present the results of the field work and interpret the results in relation to the literature that was reviewed in chapter three. The last chapter will present the conclusion and policy recommendations.

2. LITERATURE REVIEW

The literature review starts by defining the conventional view of what constitutes productive economic activity in general and the Systems of National Accounts (SNA) in particular. It goes on to reveal its shortcoming in that it leaves out of its Gross Domestic Product (GDP) calculations unpaid work which is mostly done by women. The next sections will give the definition of unpaid care work; discuss the importance of valuing unpaid care work; show the negative consequences of underreporting of unpaid work into country's statistical systems; explore the link between low-paid work and unpaid care work; discuss the importance of time use surveys; the problems associated with time use data; and the background and definition of time use surveys; the methods of data collection; and the purpose and nature of the activity classification for time use. The last section of the literature review gives an example of a developing country (India) that has used its time use survey to undertake further research on some issues of national concern.

2.1. The Current System of National Accounts and the Conventional Economic Systems

Ironmonger (1999:3) observes that since 1953, the United Nations has sponsored a series of international meetings to develop the rules on how national statistical offices should measure their GDP and Gross National Product (GNP). The latest of such rules is the 1993 Revision to the Systems of National Accounts (SNA). On that note, Budlender (2002: 41) describes the SNA as "the set of figures that are used to calculate Gross Domestic Product (GDP)". In addition, the SNA sets the rules for national accounts and has directed that unpaid care work must not be included in the calculation of GDP. Instead, it suggests that a "satellite account be drawn up parallel to the core national accounts to reflect unpaid care work" Budlender (2002: 41).

Ironmonger (1999: 5) further notes that there has been a lot of criticism levelled against the System of National Accounts for, "failing to include in GDP and GNP estimates the value that is added by productive activities of households for the use of their own

members and that is not sold to other households or firms". Regardless of this criticism the 1993 revision of the System of National Accounts maintained most of the features found in the 1968 System of National Accounts with slight changes. The changes were that water and fuel collection were to be included in the production boundary, which are significant activities in most developing countries. However, like Budlender, Ironmonger (1999: 11) notes that the 1993 revision, which is the latest, did recommend that, "national statistical offices should estimate the non marketed value added by households through what is termed satellite account of household production".

However, UNIFEM (2000: 22) further notes that the 1993 SNA, recommends the inclusion in the GNP calculations of all production of goods, whether intended for sale or for consumption. This revision gives the impression that subsistence production is included within the SNA. In practice, however, the GNP often fails to include household subsistence production because of the failure of questions in census and surveys to cover it adequately. In fact, the SNA continues to exclude the production of services for oneself and for other household members. Thus UNIFEM (2000: 23) asserts:

> It seems reasonable that eating, sleeping, washing and dressing oneself, taking an exercise and engaging in leisure activities are not counted as part of production. But why exclude cooking and cleaning for the family and for community members, looking after children, the sick and elderly people? All of these are productive activities which take up large amount of time and energy on the part of those who perform them.

Archaya (2005:2) concurs with UNIFEM (2000: 23) and argues that, from a gender perspective, GDP calculations are still problematic in that most activities and production classified under services still fall outside the SNA production boundary. She argues that, "goods and services are distinguished on the basis of whether the acts of their production and consumption are separate in time and space or not" (Archaya: 2005: 2). The confusion is brought about by the fact that whilst there is little difference in value added in food processing for the market and cooking for self consumption, the first is in and the second is out of the SNA. Furthermore, and most importantly, in a developing country perspective, the 1993 SNA still retains a stipulation that production considered insignificant from a national point of view may be ignored. The problem again arises for instance:

> In a country where the majority of households are subsistence level producers and where their survival depends on scattered small scale activities- one needs some baseline information to decide what is important and what is not important from a national perspective. Primarily, women and children perform multiple economic activities to support the family, which are often not noticed and so not counted (Archaya: 2005: 2).

Moreover, Colman (1999: 5) notes with concern that conventionally, the household is not even recognized as a unit of economic production. He argues that almost every economics textbook describes the economy as one in which firms produce and households consume. He argues that even though industrialization and economic growth has shifted the productive resources from household to production in the market, nevertheless:

> Despite the shift, household meal preparation, household cleaning and laundry, and servicing the household economy by means of shopping are still today the three largest areas of industrial and service operations in the economy measured on an hourly basis (Colman: 1999: 5).

In addition, UNIFEM (2000: 24) argues that these conventional accounts of how economies work fail to show the significance of care work and the particular way in which unpaid provision of care relates to the market and the state. They imagine economies in terms of market flows between households and enterprises, with households as the supplier of labour and consumer of the goods and services produced by enterprises. They imagine the public sector as:

> An employer of labour and provider of services and social security payments, financed by levying taxes and charges for some services. Labour is treated in this vision as if it were like land-an input that exists without having to be produced, a primary factor of production. (UNIFEM: 2000: 24).

In conclusion, UNIFEM (2000: 21) notes that such conceptions of the way in which economies operate limit the chances for the development of policies to promote women's empowerment and gender equality, because they ignore much of the work that women do in all economies. As a result:

> Women have challenged conventional views and proposed new visions of economic life in which women's activities count, in several senses: counted in statistics, accounted for in representations of how economies work and taken into account when policy is made (UNIFEM: 2000: 21).

2.2. Defining Unpaid Care Work

According to Budlender (2004: 3) unpaid care work refers:

> To tasks such as housework, cooking, and caring for children, old people and sick people where the person doing this work is not paid. The term includes work done for the family as well as what is sometimes called 'volunteer' work, where individuals help out other households or the community more generally.

Similarly, Bruyn-Hundt (1996: 26) defines unpaid work as productive work that is done outside the labour market by individuals for their own households or for others. He argues that these activities are productive in the sense that they utilize limited resources to satisfy human wants. For example:

> Housework, care for children and for sick and old people, do-it-yourself jobs and voluntary community work or work in political or societal organizations, subsistence agriculture, help in family businesses, building the family house, maintenance work, transport services etc have one thing in common: they could, at least in theory, be replaced by market goods and paid services (Bruyn-Hundt: 1996: 26).

If activities pass the third person test, they are distinguished from activities done for oneself such as eating, sleeping and education. Such activities fall outside the definition of unpaid work. On the other hand activities that fail the third person test are those activities that cannot be performed for a person by someone else, for example, eating and taking a bath (Bruyn Hundt: 1996: 11).

Moreover, Budlender (2004: 4) notes that each of the three words making up 'unpaid care work' is important. She argues that, the word 'unpaid' puts emphasis on the fact that the person doing the activity does not get paid for the work. The word 'care' according to her emphasizes that the activity serves people and their well-being. Finally, the word 'work' stresses that the activity has a cost in terms of time and energy. It also emphasizes that, "the activity arises out of a social or contractual obligation, such as marriage or less formal social relationships" (Budlender: 2004: 4).

In addition, Elson cited in Budlender (2002:3) stresses that:

> The term care does not mean that the work is always done willingly, or with love. Whether the work is done willingly depends on the relationship between the caregiver and the receiver and perhaps other people in the family or society. In some cases the care is given unwillingly, because the woman feels forced by psychological, social or even physical pressures (Budlender2002: 3).

2.3. Why Bother to Value Unpaid Care Work

Columbia University (2004: 2) observes that the issue of valuing women's unpaid work first came up during the deliberations of the Committee for the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1991. The committee recommended that, "states collect statistical data on women who work in family owned enterprises without receiving any form of cash payment, social security, or social benefits" (Columbia University : 2004: 2).

After some time, the importance of measuring unpaid work was reaffirmed in the United Nations Beijing Declaration and Platform for Action of 1995; which raised an interest in the various methods of time use data collection. In addition, UNDP (2003: 5) notes that in order to reinforce the call by the BPFA for the recognition and visibility of women's work, particularly in the unremunerated sector, the 1995 Human Development Report added its voice and focused attention on women's contribution to the economic and social development of their own family, community and society.

Hirway: (2005a: 6) advances a number of reasons for the valuation of unpaid work. First she notes that just like economic work, unpaid work contributes to human well being. She argues that:

> In fact, the contribution of unpaid work is fairly comparable with the same of the economic work. If we need an aggregate variable to measure the total wellbeing in any economy, it is important to value the unpaid work and add it to the GDP to get a total measure of wellbeing. The GDP is a limited variable to project the status of well being in an economy (Hirway: 2005a: 6).

Secondly, she notes that the valuation will give visibility to the unpaid work in official statistics (2005a: 7). Similarly, Aslaksen (1996: 65) argues that, "the measurement of unpaid household work is important in order to better understand income distribution as well as to give visibility to women's work and achieve more comprehensive estimates of

the level of economic activity". This according to Hirway (2005a: 7) will offer alternative policy approaches and give a chance to unpaid workers to claim their due share in the state's treasury to improve their conditions in terms of employment, income, social benefits and well being. The valuing of unpaid work will bring out the often ignored fact that:

> Though unpaid work is not exchanged in the market, it is not free. It has a cost, as it uses human capital plus other capital like space, equipments, facilities, etc. Unpaid work is also not unlimited; there is a limit to it. In a strict sense therefore unpaid work is an economic good and it needs to be valued (Hirway: 2005a: 7).

Similarly, Alexander and Baden (2002: 10) argue that the fact that there is no price tag for unpaid care work, and because society does not pay for it, misleads policy makers to assume that there is a limitless supply, that they can have as much as they want. However, they argue that, "there is a limit to unpaid labour. If the suppliers (mainly women) of unpaid labour are pushed too far, and if the burdens placed on them are too heavy, the quality and amount of care they can provide will deteriorate" (Alexander and Baden: 2002: 10). As Palmer (1997) cited in Alexander and Baden (2002: 10) rightly observes, "when the use of unpaid labour begins to affect its quantity or quality, it is no longer limitless gifts from the gods". On that note, Folbre (2005: 4) warns that in fact women's increased participation in the labour force has reduced the time available for non market work contributing to what she terms a 'care deficit'. Folbre (2005: 5) further concurs with Alexander and Baden and argues that something must be done to challenge the notion that virtuous women should offer care for free. She argues that:

> Traditional gender ideology is often used to pin women down to unpaid care work on the grounds that part of the remuneration that women receive is psychological in nature, the inherently feminine pleasure of taking care of others (Folbre: 2005: 5).

Thirdly, unpaid work is a major obstacle constraining the development of women and the poor. Therefore, valuation of unpaid work will "make their contribution visible, highlight the unjust inequalities and justify measures to promote gender equality and poverty reduction" (Hirway: 2005a: 8).

Lastly, Hirway (2005a: 9) notes that the valuation will also help in the process of engendering national budgets, as it will justify larger allocations of budgets to women's development and empowerment. Similarly the United Nations Development Programme (2003: 158) argues that valuation of unpaid work will lead to more resources being allocated for programmes that will reverse gender disparities and create a positive impact on a country's development.

According to Alexander and Baden (2002: 10), in economics, unpaid care work can be seen as a form of public good that involves externalities. An externality can be described as:

> A third-party effect, where the people affected were not the original target of the production. Positive externalities bring a benefit to other people because of the activity of an individual or enterprise which the people who benefit do not pay for. Negative externalities impose a cost on other people which the individual or enterprise who does the activity which results in the cost does not pay for (Alexander and Baden: 2002: 10).

Alexander and Baden's argument is that whilst there are positive externalities accruing to employers because the care and education of children and the feeding and care of the workforce improve the quality of the labour force; there is no payment that accrues to women who are the people who perform the care work part of the production of workers.

They therefore argue that the valuation of unpaid care work "would make such externalities visible in the national accounts." (Alexander & Baden, 2002: 10). In addition they argue that this is important because, although these goods appear to be free, they have an economic cost. They observe that:

> The economic cost is that while women, children, or men are doing this work, they are prevented from doing other things. They are restricted in the other activities they undertake. They are also often restricted in where they can go, in that unpaid care work is often bound to a particular location. The things that did not get done because the unpaid work was done are the 'opportunity cost' (Alexander and Baden: 2002: 10).

Budlender (2002: 34) concludes by noting that there are very few economists and policy makers that have recognized the externalities associated with unpaid care work. In fact, Palmer (1997) cited in Alexander and Baden (2002: 10), makes the point that

"reproduction of the population has been seen as a separate private choice, a family issue with no ramification for the main economy". Similarly, Folbre (2005: 2) notes with concern that, "most economists do not even know that there is something called the care sector unless they are girls".

2.4. Underreporting of Unpaid Work into the Statistical Systems

Ironmonger (1999:3) argues that there are in reality two major parts of the economic system; the market part and the non market part. He notes that the best thing to do is to measure them both separately and to study both parts of the system. However, he warns that:

> For developing countries with relatively large subsistence and informal enterprise sectors it would make sense to consider the economy as comprising three parts, the market formal economy, the subsistence and informal economy; and the household economy. The production and employment in each sector are then measured separately. Only then will the trends and interactions between the sectors be understood properly (Ironmonger: 1999: 3).

Similarly, Archaya (1996: 137) notes that the economy of developing countries may be divided into three parts for measurement purposes – household maintenance (cooking and services); non-market production and market production. She further notes that, "in developing countries, more than half of the means of livelihood is produced in the first two spheres of activities (household maintenance and non-market production)" (Archaya: 1996: 137). On the other hand, in developed countries, even though non-market production may not be very big, but cooking and services take large proportions of human time. In that way, failure to take household production into account means that the process of economic growth itself is measured incorrectly.

According to Beneria (1992) cited in Budlender (2004: 19) undercounting of women's work in labour force statistics and national income accounts occurs in four main areas: subsistence production; informal paid work; domestic production and related tasks; and volunteer work. This is because overall women tend to be concentrated in unpaid subsistence agriculture, in low paid domestic work and volunteer work. That being the case, however, the GDP and GNP calculations often fail to include these activities

because of the failure of questions in censuses and labour surveys to cover it adequately. In the absence of suitable statistical tools to measure and value women's work in these four areas renders their contribution invisible in mainstream accounting systems and leads to their undercounting and underreporting.

On that note, Colman (1999: 4) observes that:

> Because the gross domestic product counts only goods and services exchanged for money, unpaid work is invisible in our measures of progress, and most of the work performed by women is almost unvalued. Although unpaid work is clearly a productive activity, it does not show up in the gross domestic product (GDP), in employment statistics, or in any economic output measure, because money is not exchanged. When we pay for childcare, eldercare and housecleaning, and we eat out, this adds to the GDP and counts as economic growth and progress. When we cook our own meals, clean our own house, and look after our own children, elderly parents or sick relatives, it has no value in our measures of progress.

Thus Ironmonger (1999: 2) argues that, it is apparent that the national accounts and the official statistics of work are vastly incomplete with Gross National Product (GNP) covering about 60% of all valuable production; and labour market employment statistics covering less than 50% of all work performed each week. The gender statistics on labour that is regularly published cover perhaps 75% of men's work and 33% of women's work (Ironmonger: 1999; 2). He emphasizes that:

> Employment statistics cover less than half of all valuable work done in the total economic system. Much of subsistence work and production and all of household work and production escape regular statistical measurement. Consequently, our understanding of the working of the total economic system is gravely limited by this deficiency of data availability (Ironmonger: 1999: 3)

UNDP (2003: 135) concurs with Ironmonger and argues that, "existing statistics in most countries foster and perpetuate gender inequality". They further note with concern that:

> The prevailing statistical analysis in most countries neither count women's unpaid SNA work adequately nor measure women's unpaid non-SNA work. Underestimation of women's SNA work and exclusion of women's domestic work from statistics under-reports women as workers as well as their contribution to national income. This ultimately results in low priority as well as low allocation of resources to women's development in national policies (UNDP: 2003: 135).

In conclusion, Ironmonger (1999: 3) cautions that in order to understand the economy properly, there is a need to know of activities that take place beyond the current,

subjective boundaries of the SNA and of market work. He notes that even though all forms of work and production need to be measured, they are however not the same, and therefore need separate measurement.

2.5. The Link between Low-Paid Work and Unpaid Care Work

The International Labour Organization (ILO) (1995: 3) links women's poverty to their disadvantage in the labour market. They argue that, "overall, women tend to be concentrated in economic activities with low earnings, where earnings are irregular and insecure, and where there is little protection through labour law and social protection" (ILO: 1995: 3). For example, in Africa women often work as unpaid subsistence agricultural workers, as low-paid domestic workers, as street traders, and as low-paid clerks.

ILO (1995: 4) identifies a number of factors which create a certain pattern followed by society. They note that:

> First, society considers reproductive and domestic functions as women's primary roles. This view limits their access to education, training, land and productive assets. It also limits the time available for paid productive work and their choice of income-earning activities. Secondly, society regards men as the main breadwinners, while women's earnings are seen as an extra that the family can do without. Thirdly, women's work is often undervalued. The occupations and sectors which are dominated by women are generally seen as being less important, requiring lower skills, and thus deserving of lower earnings than the occupations and sectors dominated by men.

It is on that note that Budlender (2002: 7) argues that the first and last points are related to unpaid care work. She notes that:

> The first point has a direct link because it is precisely the reproductive and domestic functions which make up unpaid care work. The last point is related because many of the occupations and sectors dominated by women involve work which is similar to the unpaid care work.

For example, in many countries women are concentrated in the clothing and textile industries. In addition, in many countries the jobs which involve work with children are female-dominated. Also, paid domestic work is performed primarily by women (Budlender: 2002: 6). She notes with concern that:

> The fact that these types of work – sewing, child care, and housework – are done 'free' by so many women within their own households, suggests that there are few skills involved – it is something that women, at least, can do 'naturally'; and that the work has low value, because it can be obtained free in other circumstances. The result is low wages and low status (Budlender: 2002:7).

According to UNDP (2003: 137), the results of time use studies in both developed and developing countries reveal that women enter the labour market with a huge burden of unpaid domestic work and domestic responsibilities; which has several implications for their status in the labour market. First of all, women tend to dedicate less time and energy to paid work compared to their male counterparts. Secondly, because of their socialization, women prioritize their domestic responsibilities over the labour market. Also, because women's domestic responsibilities take much of their time, women have less time to develop their skills in the labour market compared to men. Finally they argue that:

> Since domestic responsibilities tend to constrain their on the job skills formation and training, physical mobility and capability to take up additional responsibilities, women workers enjoy relatively lower status in the labour market in terms of skills and productivity of work, wages and salary earned, employment status, occupational diversification and upward mobility(2003: 137).

In addition, UNDP (2003: 137) notes that because of their domestic responsibilities, women often withdraw from the labour market to take care of children, to come back a few years later when their children are grown. However, they note that the problem is that:

> This break in the service goes against their status and job promotion in the labour market. In most cases they find it difficult to re-enter the labour market. They are usually denied equal access to employment opportunities or to upward mobility in the labour market, which implies unequal access of men and women to development opportunities (UNDP: 2003: 137).

2.6. The Importance of Time Use Surveys

According to Al-Asi (2000: 3), time use surveys are mainly carried out to use its results to measure and value unpaid work; which is one of the priority areas identified by the Beijing Platform for Action for improvement of gender statistics and of policy formulation regarding women's work. The Beijing Platform for Action further urges Governments to "conduct regular time use studies to measure unremunerated work and to

improve methods to accurately reflect its value in satellite or other official accounts that are separate but consistent with core national accounts" (Al-Asi, S: 2000: 3).)

Time use data provide detailed information on how individuals spend their time, on a daily or weekly basis. "They reveal the details of an individual's life with a combination of specificity and comprehensiveness not achieved in any other type of social survey" (UNDP: 2003: 11). Furthermore, UNDP (2003: 116) argues that:

> Whether as an independent study or as part of household budget surveys, time use data collection is increasingly being used to measure the production activities of households, which otherwise are not captured in household income and expenditure surveys. These data also provide information on the productive activities of members of the household, revealing the pattern of task sharing among members.

On the other hand, Eisner, 1989 and Ironmonger 1996 cited in UNDP (2003: 108) note that time use data collection and analysis help improve the estimation of economic production and income. They argue that, "by giving a more complete measurement and assignment of the full value of economic production, it provides a better indication of how much a country produces not only for the market but also for society's sustenance" (UNDP: 2003: 110). Furthermore, UNDP (2003: 109) observes that:

> Time use data can supplement other economic and social indicators by providing a complete account of the uses of time by all sections of the community in urban and rural areas, by women, men and children; making visible the dimensions and social impact of paid and unpaid work and leisure. Changes in time use patterns, including the intensity and length of work, reveal national and regional changes in the quality of life of women, children, men and households.

According to UNDP (2003: 110) time use data is an important basis for the formulation of policies that would address development issues including gender equality. Secondly, time use data show the effect of policies on households and people and how work is shared between women and men. Finally, UNDP (2003: 110) notes that time use data fills the gap created by the current labour force statistics in that it does not attempt to capture all paid and unpaid work that is spent in the production of economic goods and services. "Time use data can provide a more complete and better measurement of all labour inputs, both within the household and in the market" (UNDP: 2003: 110). In most cases women are engaged in unpaid work in the informal sector or in subsistence

production activities. This work has remained unrecorded in official statistics of work and employment. UNDP (2003: 11) notes that:

> The invisibility of women's labour input has contributed to their apparent lower status in many societies. Time use data can pinpoint the unpaid work and amount of time women and men spend on both work and leisure activities, offering a key source of data to improve the analysis of gender issues (UNDP: 2003: 11-12)

In conclusion, UNDP (2003: 133) observes that time use data, opens up opportunities for policy formulation, it helps facilitates the making of appropriate choices for public action and establishes development priorities for women and men. (UNDP: 2003: 110).

2.7. Problems Associated with Time Use Data

Not withstanding the importance of time use surveys, there are still some problems associated with the different methodologies used as well as with the implementation of the results of time use data by different countries, especially in the developing world. UNDP (2003: 38) notes that whilst time use data collection is desirable and useful, data processing is often a problem and delays the results. They argue that, "time use data has been described as unwieldy to analyse because of their multidimensional character" (UNDP: 2003: 38).

Similarly, Hirway (1999: 16) argues that because time use data collection is a time consuming, expensive and usually difficult process, they are usually undertaken as small sample surveys which according to her, "raises sampling errors on the one hand and limits the possibility for a detailed breakdown of data on the other hand. Both these reduce the utility of the data" (1999: 16).

Corner (2004: 1) concurs with Hirway (1999: 16) and notes that there is a vast underutilization of time use data in policy processes caused by lack of national capacity in statistical analysis in developing countries. This creates a gap in data analysis and interpretation to feed into national policy making processes. Corner (2004: 1) asserts that:

> Since the collection of time use data of sufficient quality for policy analysis is a complex and necessarily expensive task, many time use data sets are regarded as not meeting the technical standards in terms of coverage, sampling or data collection methods required for policy analysis.

In addition, she notes that the underutilization of time use data also comes about because it addresses policy issues that are not in the mainstream of national policy debates.

Moreover, Hirway (1999: 17) notes with concern that even though several developing countries have collected time use data to improve their workforce statistics; they have not used it productively. She cites several reasons for the underutilization of time use data by developing countries. First, she notes that the fact that time use surveys have not achieved acceptability in mainstream statistics contributes to their not being recognized as standard surveys. Secondly, she notes that time use data therefore lacks the respectability given to other forms of data due to the non standardized methods of collecting it. On that note, Latigo and Neijwa (2005: 5) observe that, "generally, the procedures for conducting the past different surveys, including those for the recent time use studies in Africa, are not standardized so as to allow inter country and intra-country comparisons".

Thirdly, even though countries have collected time use surveys, they find it difficult to "match the time use estimates on workforce with the available workforce classification" (Hirway: 1999: 17). Lastly, Hirway (1999: 17) cites the problems of poor interaction between data users and data producers as a contributing factor that leads to lack of awareness on availability and utility of time use data.

2.8. Background and Definition of Time-Use Surveys

According to Hirway (1999: 1) the first time use surveys were conducted in the early years of the twentieth century with the main objective of understanding people's lifestyle with regards to how they spent their time. Time use surveys were designed to bring out information on the part of life for which no information was available from conventional data sources. Alexander Slazai, the Hungarian Sociologist, was responsible for the development of concepts and methods of time use studies in these early stages. The last decades of the twentieth century saw a new turn in time use studies, "when these studies

were seen as a means of understanding and estimating the contribution of unpaid domestic work to human welfare" (Hirway: 1999: 1). Several feminists groups in industrialized countries used time use surveys "to show the invisible domestic work of men and particularly of women to draw attention to the large contribution of this work made to national welfare" (Hirway: 1999: 1). Canada and Great Britain conducted such surveys in the 1960s, followed by Norway, Bulgaria, Japan, Finland, Hungary, Austria, Australia and many others in the 1970s to the 1990s. (Hirway: 1999: 1)

On the other hand, Hirway (1999: 1) notes that when developing countries joined developed countries on the scene, time use surveys acquired a new focus. She notes that:

> These countries saw that time use surveys could throw useful light not only on unpaid domestic work but also on economic work, which is frequently not captured adequately by conventional surveys in these countries due to conceptual and methodological limitations (1999: 1).

Several developing countries such as India, Nepal, Thailand, Indonesia South Africa, Benin, Mongolia, Palestine, Cuba, Mexico, and many others have conducted time use surveys in the 1990s and after that, with the major objective being to estimate the workforce accurately (Hirway: 1999: 1)

On that note, Columbia University (2004: 15) argues that there has been an evolution of time use data collection from independent case-studies at the community level to projects undertaken at the national level by statistical offices in many countries. They observe that, "currently, there is a growing trend in which many developing countries are experimenting with time use data collection methodologies and conducting pilot time use surveys" (Columbia University: 2004: 15). Similarly, Bittman (2000: 16) observes that, "the collection of time use data has been motivated essentially by an interest in the conditions of human progress and a curiosity about social change, initially as small scale case studies but increasingly as large scale national statistical surveys".

Bittman (2003: 3) defines time use data as, "the quantitative summaries of what women and men do over the course of a day, a week, and across seasons over a year". He notes

that the basic building blocks of time- use data are activity and time. He further observes that time-use data are usually generated from time-use surveys by recording the activities and measuring the time spent on them by individuals. Time spent on an activity is measured in terms of number of minutes or hours in a specified period, ideally a 24- hour day. He notes that "time- use data paints a quantitative picture of who does what and what else does that person do simultaneously during the day; for how long, how often, at what time, in what order, where, with whom, and for whom" Bittman (2003: 3). There are different methods of time use data collection and the next section will look at some of them, their advantages and their disadvantages.

2.9. Methods of Data Collection

According to Bittman (2000: 3), the United Nations is in the process of standardizing time -use survey methodology world-wide. This has been motivated by the fact that:

> Conventional economic statistics capture market transactions but overlook economic contributions outside the market; thereby producing a seriously incomplete picture of the economy of developing nations and disregard the unpaid work of women and men in all societies across the globe (Bittman: 2000: 3).

The United Nations has called upon experts in the field to make proposals on how time use research should be done. This involves developing a minimum standard that indicates adequate methods that will yield data of an acceptable quality.

On the other hand, Bittman (2003:6) acknowledges the difficulty in measuring unpaid care work in that there is no obvious money measure, as the work is unpaid. He argues that "there is no obvious measure of what is produced, because unpaid care work produces intangible services" (Bittman: 2003: 6). The main available option according to him is "to find out if people did any unpaid care work; and how much unpaid care work they did" (Bittman: 2003: 6). Time use surveys are the most common way of implementing this option.

The Columbia University (2004: 3) notes that there are three most important methods for measuring time use, the self-reporting diary method; the interviewer method; and the observation method.

2.9.1 Self-Reporting Diary Method

The self-reporting diary method according to Columbia University (2004:4) "allows individuals to record how they spend their time in their own words". They note that it is mostly used to collect large scale time use information. Random samples of households are taken and one member of the household is randomly selected to report how they spend their time.

Bittman (1999: 7) notes that there are two main types of time use diaries; the 'yesterday' diary in which the respondent is asked what s/he did the previous day, and the 'tomorrow' diary in which the individual is given a diary and asked to fill in activities the following day. The yesterday diary is facilitated by an interviewer and therefore it is most suitable for respondents who are illiterate or have difficulties reading and writing. The main disadvantage of the 'yesterday' diary is that it requires the individual to recall what s/he did the previous day, and therefore might be mired with recall error. The disadvantage of the 'tomorrow' diary is that it requires a respondent to have a certain level of literacy to fill out the diary and also requires that the individual carry the diary with them throughout the day. However, the main advantage of the 'tomorrow' diary is that it eliminates bias induced by recall error.

2.9.2 The Recall Interviewer Method

According to Columbia University (2004: 5) this method allows interviewers to collect relevant data on time use through either face-to-face interviews or computerized telephone surveys. Among these two options, face-to-face interviews are far more common as Canada and the United States are the only countries to have implemented a program of recall interviews on time use via the telephone. They note that "recall interviews are conducted using stylized questions, standardized surveys, or formal questionnaires" (Columbia University: 2004: 5). Furthermore, they observe that the growing reputation of the recall interview method is reflected by the large number of

countries from 1997-2000 that have chosen to incorporate face-to-face interviews into their national time use surveys. These countries include Benin, the Dominican Republic, Finland, Guatemala, India, Lao People's Democratic Republic, Mexico, Mongolia, Morocco, Nepal, Nicaragua, Oman, and South Africa (Columbia University: 2004: 5).

The interview recall method has been commonly used among developing countries for two primary reasons:

> First, lower levels of literacy necessitate face-to-face interviews as a replacement for the self-reporting time diary. Secondly, the recall interview method in developing countries is important because developing country populations are often not used to both formal questionnaires and standard modes of 'time-clock' measurement (Bittman 1999: 6)

Bittman (1999: 7) further notes that one of the major advantages of the recall interview method is that a face-to-face interview may yield more exact information on how the respondent spent all 24 hours of the previous day than a self-reporting diary which may contain omissions for such activities that are considered "non-active" by the respondent such as sleeping. Another advantage of the recall interview method is that face-to-face interviews may be more effective than self-reporting diaries in drawing out a deeper insight into background information from respondents. Similarly, the Columbia University notes that:

> Background information is crucial because it enables the interviewer to determine where an activity occurred, whether other people were present during the activity, the person for whom the activity was done, whether the activity was paid or unpaid, how often the activity occurred, the purpose of the activity, the time of day that the activity occurred (Columbia University: 2004: 7).

2.9.3 Observation Method

According to Columbia University (2004: 12) the observation methods of data collection on time use are planned such that the researcher is on site and records while activities are occurring. Observation has two methods of data collecting: continual observation and random spot-checks. In continual observation, the researcher records all behaviours for an extended period of time, usually one full day. On the other hand when using random

spot-checks, or instantaneous sampling, the researcher arrives unannounced and records behaviours for a short period of time, usually one to two hours.

In addition the researcher may choose to use non-reactive measures. For example, the researcher may take photographs of the subject from a distance in a manner that does not indicate that their behaviour is being recorded. These measures allow the researcher to make observations in a discreet and non-invasive manner, so that the subject is unaware of the presence of the researcher (Columbia University: 2004: 13)

Bittman (1999: 5) cites four advantages of the observation method. The first one is that it is more accurate than other methods, primarily because the results are not biased by subject recall error, as seen in the self-reporting diary and interviewer methods. In addition, the results can easily be normalized because the researchers are not relying on the subjects to interpret their own activities. It allows for the inclusion of activities that the subject may not deem important enough to record in a diary or mention in an interview, which could lead to the under-reporting of activities such as child care (which may not be perceived as work, especially if other simultaneous activities are commanding greater attention). Lastly it does not require literacy or an understanding of Western concepts of time measurement.

On the other hand, Columbia University (2004: 12) notes that the main disadvantage of the observation method is that it is more labour intensive and more expensive than other methods because the researcher must physically travel to the location of the subject and can observe only one household at a time. In addition, the reliability of this method is compromised because subjects may change their behaviour if they know they are being studied.

2.10. Purpose and Nature of the Activity Classification for Time Use

UNDP (2003: 50) observes that the classification of activities can be used to describe what women and men do over the course of any day. One of these classifications is the trial UN International Classification of Activities for Time-Use Statistics. In this

classification, a list of 80 activities is grouped into ten major groups. The Classification is wide-ranging to cover all human activities that could possibly occur in a 24-hour day from the time we wake up to the time we go to sleep. On that note, Columbia University (2004) argues that:

> Activity classification of time use is important for the application of this information to national accounting methods, thus enabling the data to be compared across households, regions, societies, and countries. Activities are generally defined as paid, unpaid, within the System of National Accounts (SNA) production boundary, or outside the SNA-production boundary (Columbia University: 2004: 50).

Hirway (1999: 10) cites India, as an example of a country that has created an activity classification system and used it for its 1998 pilot time use survey. This classification method categorizes activities into nine activity groups: primary production activities; secondary sector activities; tertiary sector activities; household maintenance; management and shopping for households; care of children, elderly and disabled for own households; community services; learning, social and cultural activities; and personal care and maintenance.

In addition, Columbia University (2004: 52) argues that over and above country-level classification, attempts have been made to develop a universal activity classification system to allow for cross-country comparisons. They argue that:

> One such system is the Eurostat activity classification system developed by the European Commission, and has been adopted by 18 countries. It is hierarchical, with a 3 digit code assigned to each activity that represents major categories, sub-categories, and sub-sub-categories. The classification categories differentiate the activities in relation to the production boundaries outlined in the system of national accounts (Columbia University: 2004: 52)

Finally, UNDP (2003: 50) notes that there is the proposed International Classification of Activities for Time Use Statistics (ICATUS) intended to be a standard classification of activities that takes into account all the activities that the general population typically spends time on over the 24 hours of a day. Its main purpose is, "to provide a set of activity categories that can be utilized in producing statistics on time use that are meaningful in relation to the broad range of objectives of national time use studies as well as cross national and cross temporal comparative studies on time use" (UNDP: 2003: 50). ICATUS is meant to serve as a standard for activity classifications for time

use statistics for both developing and developed countries. It develops from existing national and regional classifications, and considers the experiences of both developed and developing countries in constructing and applying activity classifications for collecting and analyzing time use data.

2.11. A Country's Experience: India

This section will give a short account of how one developing country, India, used its time use survey to highlight some important issues.

India was the first country among the developing countries, to carry out a national time use survey. India gained momentum in 1998 to conduct a time use survey because of the need to generate more reliable estimates, both on workforce and national income, as required by the 1993 SNA. The national survey was conducted over a one year period, from July 1998 to June 1999, to take into consideration seasonal variations in activity patterns (United Nations Development Programme: 2003: 189). The pilot survey was conducted by the Central Statistics Office (CSO) in six states from different regions (Pandey: 2000: 1).

The main objectives of the Indian study were:

> To measure the time spent on SNA, extended SNA and non SNA activities by men and women in India; to estimate the total work force/labour force in India as the conventional statistics do not provide accurate estimates; to estimate the value of unpaid work of men and women and to prepare satellite accounts and; to understand the time use of the poor, children and women and understand its implications for planning for their employment and welfare (Pandey: 2000: 4).

The United Nations (2003: 187) observes that India's rural and urban areas are filled with images of women engaged in various economic activities. However, they note that, "due to the failure of national surveys and censuses to capture this reality, women have remained invisible in official data related to work participation and the production process". They note that the national surveys conducted by the National Sample Survey Organization on employment and on women's economic activities, have failed to adequately quantify and value household production. Even other conventional data tools

such as population censuses, labour surveys have equally failed to capture unpaid non market activities that contribute significantly to human life (United Nations Development Programme: 2003: 187).

It is for that reason that Hirway (1999: 2) used the results of the Indian time use survey and did an analysis focusing primarily on the labour force estimates and the time spent by men and women on extended SNA and non-SNA activities.

2.11.1 Major Results

The results clearly show that about 76 percent of men and 63 percent of women in India are engaged in SNA activities though the average number of hours spent by them on this per week is not very high; and that about 46 percent of men and 88 percent of women are engaged in extended SNA activities, the activities that fall in the General Production Boundary. When the time spent on both the activities are considered together, the data show that women bear the major burden of work in the Indian society (Hirway: (1999: 9) In fact she argues that:

> This is clearly a highly unequal division of total work among men and women. This also implies that the women enter the labour market with a disproportionate burden of domestic work on their hands, resulting in women's inferior status in the labour market (Hirway: (nd: 9).

UNDP (2003: 190) concurs with Hirway and concludes by arguing that across the country, men perform longer hours on SNA activities than women. However, rural women and men perform longer hours on SNA activities per week than their urban counterparts. They note with concern that:

> The findings suggest that Indian women, rural and urban, although performing fewer hours on SNA activities, perform a substantially greater number of hours in extended SNA activities, including unpaid household work. Women spend 50.2% of their time in unpaid work compared to men who spend 33% of their time engaged in unpaid work (UNDP: 2003: 190).

On another occasion, Hirway (2005b: 1) has used the Indian time use survey to do an analysis of child labour in India. Her objective was "to understand children's contribution to economic work in terms of time spent on economic activities and to

examine time use pattern of children on unpaid household work, education and learning, play and rest" (Hirway: 2005b: 1).

Hirway (2005b: 1) argues that there is always disagreement surrounding the estimates of child workers in India. Different estimates of child workers for India range from 11.28 million to 100 million. The difficulty in coming out with accurate estimates is caused by both the respondents and investigators who are often biased during conventional socio economic surveys (Hirway: 2005b: 1)

According to Hirway (2005b: 2), 20 percent of boys and girls in the age group 6-14 participate in economic activities, and they spend, on average, about 22 hours per week (3 hours per day) on these activities. Also worthy of note is that children in the age group 6-9 years also participate in economic activities spending on an average, 17 hours on economic work. The results further reveal that of the girls aged (6-14) who take part in economic activities; they spend less time in SNA activities (18.63 hours) as compared to boys (24.27 hours). However, both of them combined spend 21.46 hours a week on SNA activities, which is about 47 percent of time spent by an adult on SNA activities.

In addition, Hirway (2005b: 5) further notes that the results further reveal that:

> Girls (6-14) participating in extended SNA activities spend much more time on extended SNA activities than participant men (including all ages). The girls spend, for example, 13.01 hours on household management, 10.64 hours on community services and 11.17 hours on care activities. The corresponding data for men are 6.76 hours, 7.99 hours and 6.12 hours.

Lastly, she notes that girls (6-14) bear much more burden of total work - SNA and extended SNA work combined - than boys, in terms of the time spent. On average, girls spent about 53.45 hours on work while boys spend 44.54 hours, which is 83 percent of the time spent by girls (Hirway: 2005b: 5).

2.11.2. Lessons Learned

The analysis of the time use survey contributes to the improvement of labour force statistics. It also throws more light on the issue of the distribution of paid and unpaid work by men and women in the Indian society (Hirway: 1999: 18). Similarly, UNDP

(2003: 190) argues that the analysis of statistics related to unpaid work enables practical planning for employment and skills training. They further note that:

> These statistics also enable the realistic mapping of labour intensive and recurring activities mostly done by women and the identification of needed corrective strategies such as water supply schemes, ensuring availability of fodder and fuel and the setting up of child care facilities. Finally, the patterns of child labour can also be identified and corrective action initiated (UN: 2003: 190)

On the issue of child labour, Hirway (2005b: 6) observes that the time use survey data has managed to bring to the fore children's economic and non-economic activities. It has revealed that children's participation in economic activities is much higher than what comes out in conventional statistics. Most importantly it has revealed the gender imbalance in that the contribution of girls is much more than that of boys. He concludes by noting that:

> This burden on children has implications for children's participation in school education. The more than 32 percent "no where" children are largely engaged in economic or in extended economic activities. In the case of girls their low attendance in school is not only due to their economic participation but also due to their responsibility in extended SNA work (Hirway: 2005b: 7).

The remainder of this paper will focus specifically on Swaziland (Matsanjeni) to compare how women and men spend their time in paid and unpaid work through a time use survey.

3. METHODOLOGY

3.1. Population and Sampling

Swaziland has got four administrative regions: Manzini, Hhohho, Lubombo and Shiselweni. Matsanjeni, the target area, is situated in the Lubombo region. Matsanjeni is a rural area in the eastern part of Swaziland (see Appendix A for a map). It is an area under the Swazi Nation Land (land held by the king in trust for the Swazi nation under the administration of a chief). Due to a serious lack of employment opportunities, most of the people in Matsanjeni depend on subsistence farming for their livelihood. According to the Swaziland Household Income and Expenditure Survey (SHIES) (2002: 25), among the working classifications, the most vulnerable are those in subsistence agriculture with a poverty incidence of 77%. Furthermore, SHIES (2002: 26) notes that the Shiselweni region has got the highest unemployment rate in Swaziland, of 53% and a poverty rate of 69%. The majority of households were constructed traditionally at 54%; whilst 46%of households were built with bricks. The respondents' water sources are flowing water or streams at 34%; springs at 24%; and wells at 22%. Only 2% of households where respondents live use electricity for lighting. None reported the use of electricity for both cooking and heating. The majority of respondents use firewood for heating and cooking 96% and 98% respectively.

Table 1 shows the unemployment and poverty rates for the four administrative regions in Swaziland.

Table 1

Region	Unemployment Rate (%)	Poverty Rate (%)
Hhohho	20	49
Manzini	26	56
Shiselweni	53	69
Lubombo	25	58

The population for the study is Swazi women and men who reside in Matsanjeni. The area has got about 212 households and about 1300 individuals. The sample consisted of fifty (50) people, 25 males and 25 females above the age of 18 years who were randomly selected to form the sample survey. In the age category 18 – 28, there were 5 respondents (10%). In the age category 29 – 39 years, there were 7 respondents (14%); in the 40 – 49 years category there were 14 respondents (28%); and finally, in the 49 years and above age category there were 24 respondents (48%). The 50 respondents were randomly selected from a group of about 200 community members who had converged at the community meeting centre in response to a call by the European Union Micro Projects for purposes of the research. Fifty percent female respondents (25) and fifty percent male respondents (25) were targeted and the questionnaire and diary administered to them through a face to face interview. Since the primary objective of the study was to get some impressions of the gendered nature of time use from the sample, getting a representative sample was not an important requirement. The results therefore are not representative of the general time use patterns of the people of Matsanjeni. The survey collected three categories of data; household information, individual information and the individual's time diary for the day. Men and women respondents were selected randomly and asked what activities they had performed from 4:00a.m the previous day to 4:00a.m of the day of the interview. The survey was carried out in October 2005 which is an activity free month; therefore seasonal trends are not likely to affect the data.

3.2. Data Collection Method

This is a quantitative study because it will attempt to produce numbers on the types of household activities done by women and men and how much time is spent on each activity by each group. To collect the data, a gender sensitization workshop was organized in collaboration with the European Union Micro project which preceded the collection of the data. The collaboration between the European Union Micro project and the researcher was convenient in that the European Union Micro Project is already working in the area. The European Union already has an existing relationship with the area's authorities, as well as with the people which facilitated the organization of the one

day meeting. The meeting was organized without the cumbersome bureaucracy of going through the chief to see the subjects which may have taken between one to six months. A week before collecting the data, the researcher organized and trained eight research assistants on the data collection techniques. The one day training session was meant to familiarize the research assistants with the research tool and to clarify issues that might not be clear to them. The day started at 9:00hrs with the researcher conducting a gender sensitization workshop for about two hours; which was followed by the administration of the time use diaries by the researcher and the research assistants. Data was collected, via the recall method, through individual interviews and the use of 24 hours time diaries. The diary was administered face-face to the respondents through an interview rather than asking them to fill it in themselves. The advantage of administering the questionnaires face to face in an area like Matsanjeni is that, since Matsanjeni is a rural area it is likely to have high levels of illiteracy among the population. To promote comparability, the diary was administered in SiSwati even where the person was literate and numerate.

The study used a 24 hour diary, divided into half hour slots, as the core instrument to record activities. In each slot, a maximum of three activities could be recorded. The diary was administered face to face to the respondents by means of an interviewer asking them about what they had done the previous day thus known as the 'yesterday diary' (United Nations Development Programme: 2004: 5). This method allows for the clarification of unclear issues that may arise between the interviewer and the informant. Also the interviewer is able to probe where s/he thinks the respondent might be omitting some crucial information. The fact that the diary is open ended, allows the interviewer deeper insight into human behaviour (United Nations Development Programme: 2004: 5). The disadvantage of the yesterday diary is that it requires the individual to recall what they did the previous day therefore can be mired with recall error (United Nations Development Programme: 2004: 5).

In addition to the diary, the questionnaire contained some standard questions on the household. Respondents were asked to provide basic information about the households in which they live, and before the administration of the diary, the respondents were asked

for basic demographic information about themselves such as age, sex, and work situation. Bittman (2000: 11) underscores the importance of the questionnaire and argues that, "the content of this questionnaire is often as critical to the interpretation and analysis of time - use as the diary".

The questionnaire is provided in Appendix C.

A number of problems were experienced by the researcher in the process of preparing for the field and in the field during the data collection process. Matsanjeni is remotely situated about 2 hours drive from the researcher's place of residence. That being the case, the organizers of the data collection workshop at Matsanjeni (the European Union Macro projects community developers) did not have access to telephones. It required that for the preparatory process the researcher drives to and from Matsanjeni at least three times before the actual day of administration of the diary. But still with so much shuttling between Matsanjeni and Manzini, there were still communication breakdowns experienced such that the researcher and her assistants went to Matsanjeni two times with the intention of data collection and found that the people were not there; and only the third time were we able to run the workshop and administer the diaries.

During the administration of the time diaries, respondents would digress and enumerate their endless problems which made it difficult to finish the interviews on time. Also because respondents were asked about activities they had performed the previous day, a lot of probing was necessary to help them recall what they did which was also time consuming.

3.3. Data Analysis Procedures

The survey has allowed for three activities per half hour, but will give each of these activities equal importance. In allowing for multiple activities, the survey has catered for both sequential activities – those done one after the other within the period, and simultaneous activities – those done at the same time. In order to obtain a fuller

understanding of simultaneous activities, the survey used two different methods of assigning minutes to activities. Where there is only one activity in half an hour, 30 minutes was assigned to that activity. Where there are two or three activities in a half hour which were performed sequentially, one after the other each activity was assigned 10 to 15 minutes. However, when two or more activities are performed simultaneously, 15 minutes will be assigned to each activity.

According to Budlender etal (2001: 23), the advantage of assigning 15 minutes is that the total minutes per person per day then sum to 24 hours. The disadvantage of this approach is that it can give the impression of less time being spent on an activity than in reality.

SPSS was used for data analysis. Analysis for descriptive statistics was done through running frequencies and cross tabulations for different variables. Average time spent on different activities by gender was also calculated on SPSS. Since the sample for the survey was small, for the diary analysis Non Parametric Tests 2 Independent Samples tests (Mann Whitney) were used to test if the difference in the average time spent by women and men in doing the different activities was statistically significant or not.

The activity coding list is provided in appendix B.

4. DATA ANALYSIS

4.1 Introduction

- The data analysis section will first present the description of respondents and their general characteristics; followed by a presentation of the overall time use patterns under the three broad categories of SNA, Non SNA and Non Productive work. Thereafter, the specific time use patterns of different activities under each category will follow. Under this section, frequencies will be run to determine the activities people are generally engaged in, and then specifically focus on what activities men and women are engaged in. The average time spent by gender in all activities will be the major focus for reporting. Finally statistical tests will be run to determine the statistical significance of the differences in average time spent by women and men on activities. Also, a section that will examine in more detail the time use patterns of different activities will be presented; and then a conclusion.

4.2. Description of Respondents – General Characteristics

The sample consisted of fifty (50) people, 25 males and 25 females above the age of 18 years who were randomly selected to form the sample survey. The majority of the respondents (24%) reported not to have been to school at all, whilst 12% of the respondents reported to have been up to grade 12 at school; and 14% of the respondents reported to have undertaken some form of training after leaving school.

Table 2 shows the age profile for the respondents. It shows that the highest percentage of respondents is in the age category of "49 and above"; this is distantly followed by those in the age group "40 – 49"; followed by those in the age category "29 -39". The least percentage of respondents is in the age category of "18 – 28 years".

Table 2 – Age Profile of Respondents

Age Category	No. of Cases	Percentage Cases
18 – 28	5	10.0
29 – 39	7	14.0
40 – 49	14	28.0
49 and above	24	48.0
Total	50	100

Table 3 show the type of households where respondents live. It shows that of the total sample, 46% of the respondents lived in brick houses whilst 54% lived in traditional houses. This is an expected outcome as the sample area is a rural area in a region with the highest poverty rates in Swaziland at 77%. (Income and Expenditure Survey: 2002: 25). Probably, most people build traditional houses because they are affordable compared to modern houses.

Table 3 – Type of household for respondents

Type of Household	Number of Cases	Percentage
Brick	23	46
Traditional	27	54
Total	50	100

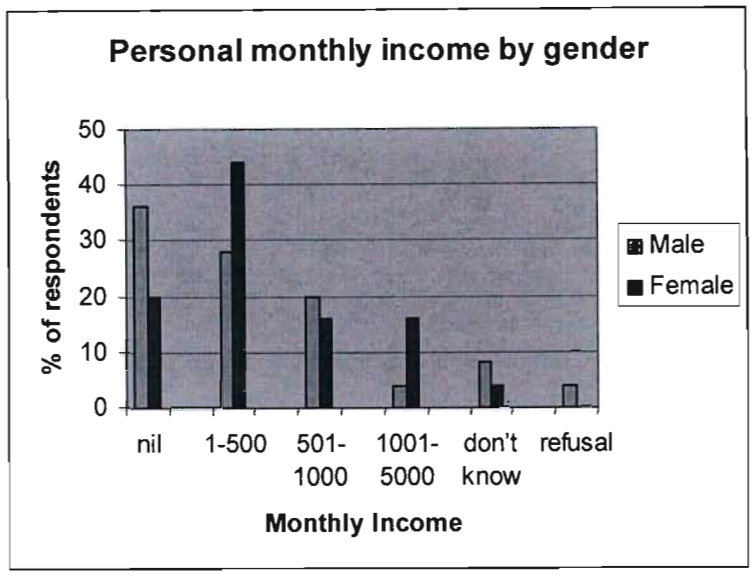
Respondents in the sample were engaged in different types of work. To find out the kind of work that respondents were engaged in, they were asked to indicate the kind of activities they did in the last seven days. Table 4 shows that the majority of respondents (52%) were engaged in small businesses such as handwork, farming, grass mat making and petty trading; followed by those who were engaged in gardening for subsistence and for sale at 38%; whilst only 24% were in employment and worked for wages and salaries. Of the 52% respondents who reported being engaged in businesses for themselves, 54% are males whilst 46% are females; and of the 22% respondents who reported doing activities for wages and salaries, 55% were males whilst 45% were females.

Table 4 – Activities undertaken by respondents in the last seven days, Percentage

Activity	Yes	No
Do any kind of business for yourself	52	48
Help unpaid in family business	0	100
Work on a household plot, food garden or kraal	38	62
Catch any fish or wild animals for food or sale	0	100
Domestic work for another household to be paid in cash or in kind	2	98
Work for a wage or salary	22	78

The personal income for respondents ranges from those who reported a zero income to those who reported to be earning five thousand emalangeni (E 00–5000) per month. Figure 1 below shows that more men than women reported not having personal income at 36% and 20% respectively. It further shows that there were more women than men who reported to be earning in the region of E1 – E500 at 44% and 28% respectively. This could be because when it comes to business ventures, men tend to be choosy and will not settle just for any business. Meanwhile, women in the sample were doing a lot of petty trading and moving from house to house selling their wares, which generated some income for them regardless of the amount. On the other hand, there were more men than women who reported to be earning in the region of E501 – E1000. Finally, and surprisingly, more women than men reported to be earning between E1001 - E5000 at 16% and 4% respectively. This could be because Siteki which is the closest town that is accessible to Matsanjeni is relatively small with only limited public sector employment possibilities. Siteki has only one hospital and a few schools. The women in the sample who fell under this income category are nurses and teachers employed in these female dominated public sector professions. Men generally migrate to major cities for jobs conceived as 'male jobs'.

Figure 1 – Personal monthly income by gender



The majority of the people who formed the sample survey were married at 70%; followed by those who were never married at 14%. The widowed and the divorced/ separated were at 10% and 6% respectively.

Table 5 shows the distribution of respondents in all activities under the SNA, Non SNA and non productive categories by gender. It shows that out of the 9 respondents (18%) who reported doing work for establishments, 5 were males (56%) and 4 were females (44%). This shows that there are more men than women in the sample who reported working for establishments. Even though there are more men who reported doing work for establishments, it is important to note that for a traditional Swazi rural area, some women were venturing into paid employment.

The table further reveals that of the 23 respondents who reported having undertaken primary production activities (subsistence production), 15 were males (65%), and 8 were females (35%). It could be that there are more men than women in the sample who fall under this category because a major activity in this category is cattle rearing, and

according to Swazi law and custom women do not own cattle, thus this activity is dominated by males.

The table also show that of the 17 respondents (34%) who reported having been involved in services for income and other production, 29% are males whilst 71% are females. This category consist of activities such as food processing and preservation activities; preparation of food and beverages for sale; making and selling textile, leather and related craft; petty trading, door to door trading etc. It could be that there are more women in this category because of the nature of the activities which are an extension of the activities regarded as 'women's' activities by society.

Furthermore, the table shows the distribution of respondents in Non SNA activities by gender. It shows that of the 36 (72%) respondents who reported having done household services, 12 are males (33%) and 24 are females (67%). This reveals the uneven burdens of household chores on women. It further shows that out of the 10 (20%) respondents who reported that they had cared for household members only 1 was a male (10%), and 9 were females (90%). This further reveals that out of the 50 who formed the sample survey in Matsanjeni there is a gendered division of labour, and taking care of household members is mostly done by women.

Finally the table shows that under the category of community work, 83% males reported having done community work whilst only 17% females reported having done community work. It is worth noting though that the males who reported having done community work are men of high standing in society. They reported attending to community meetings where they made major decisions on the administration of the community. This further reveals the gender disparities in issues of equal participation of women and men in decision making processes in the sample.

On the Non Productive work category, the table reveals that all respondents were engaged in the Non productive activities (100%). Whilst 100% engaged in the first activity of personal care; for the activity 'mass media' 44% men reported to have been

listening to the radio or watching television whilst 56% women reported having done the same activity.

Table 5 – Participation of respondents in all activities under SNA, Non SNA and Non Productive categories by gender

Activity	No. of Males	% of Males	No. of Females	% of Females
SNA				
Work for establishments	5	56	4	44
Primary Production	15	65	8	35
Services for income	5	29	12	71
Non SNA				
Household services	12	33	24	67
Care for household members	1	10	9	90
Community Work	5	83	1	17
Non Productive				
Personal Care	25	100	25	100
Mass Media	4	44	5	56

4.3. Overall Description of Time Use Activities

The results presents information for the valid cases (those who reported to have done that particular activity) unless otherwise stated. Table 6 shows the number of respondents by gender engaged in the overall SNA, Non SNA and Non Productive categories and the mean minutes per day spent on each activity. It shows that for SNA category, equal numbers of men and women (21) spent time on SNA activities. It shows that whilst men reported to have spent 447 minutes (31% of their time) on average on SNA activities, women reported to have spent 432 minutes on average on SNA activities (30% of their time). The fact that women in the sample are equally involved in SNA activities as men

shows a positive trend and it is breaking the stereotype that relegates women as men's dependants.

Meanwhile, the table shows a different trend for Non SNA activities. It shows that there are more women than men who reported that they are engaged in this category (12men and 24 women – only one women is not engaged in unpaid work activities). It shows that women spend more than double the time spent by men in non -SNA activities. Women spend on average 343 minutes which is 24% of their time; whilst men spend an average of 147 minutes which is 10% of their time. This indicates that women carry the burden of unpaid care work into the labour market where they have to compete with their male counterparts who are at an advantage because they are free of the burden of unpaid care work. This leads to the overworking of women and this has negative consequences on their lives. Almost all respondents reported to have done unproductive activities with men spending on average 934 minutes (69% of their time) whilst women reported to have spent 730 minutes (51% of their time) on this activity. With the burden of Non SNA work falling largely on women; men are more likely to have more free time to themselves for Non Productive activities.

A non parametric test 2 independent sample (Mann Whitney test) was run to test the null hypothesis that the differences in average time spent by women and men in these three categories of work (SNA, Non SNA and Non Productive) are equal. This test will determine if the difference in average time spent by gender on these categories of work is statistically significant. The results are presented as footnotes of table 6.

Table 6 – Number of respondents engaged in SNA, Non SNA and Non Productive categories by gender, and mean minutes per day spent on each activity

	Male (minutes)	Number of valid cases	Female (minutes)	Number of valid cases
Category				
SNA[1]	447	21	432	21
Non SNA[2]	137	12	343	24
Non Productive[3]	934	25	730	25

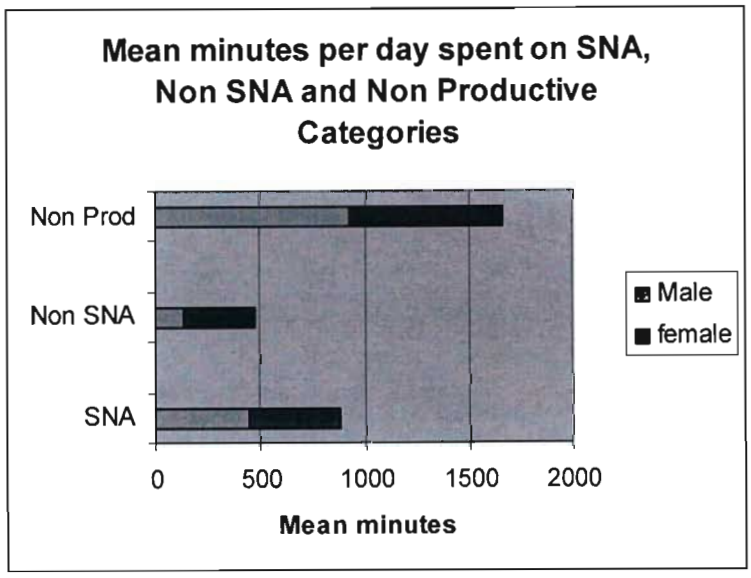
1. Mean Rank male = 21.40; mean rank women = 21.60; U = 218.50; p = 0.960, and because p>0.05, we can therefore conclude by accepting the null hypothesis that the average time spent by women and men in SNA activities is equal. This means that the difference in average time spent in SNA activities is not statistically significant. Seeing no statistical significance between the time spent by women and men in SNA activities is an encouraging trend showing the potential of women to fully engage in SNA activities which for a long time were mostly dominated by males.

2. Mean rank males = 11.46; mean rank females = 22.02; U = 59.50; p = 0.004, and p<0.05, in this case we reject the null hypothesis that the average time spent by women and men in Non SNA activities is equal. There is a statistically significant difference between the time spent by women and men in Non SNA activities, with women spending more time. The conclusion that can be drawn is that women are overburdened with unpaid care work; and since they participate equally with men in SNA work, they therefore carry the burden of unpaid work into the production sphere which gives them unfair competition with their male counterparts.

3. Mean Rank males = 32.32; mean rank women = 18.68; U = 142.00; p = 0.001, and p<0.05, we reject the null hypothesis that the average time spent by women and men in non productive activities is equal. The same conclusion as above can be drawn that there is a statistically significant difference between the time spent by women and men in non productive activities. Men spend more time in this activity than women. The conclusion to be drawn here is that since men do not have the burden of unpaid care work, they have more time to themselves doing non productive activities.

The categories in table 5 are summarized in figure 2 below. Figure 2 show the mean number of minutes spent by males and females in the three categories of SNA, Non SNA and Non productive work.

Mean Minutes per day spent on SNA, Non SNA and Non Productive Categories



4.4. Specific Time Use Patterns on Different Activities

Table 7 shows the general distribution of respondents in all the activities under each category of SNA, Non SNA and in Non productive activities, as well as the average time in minutes they have spent on each activity. For SNA activities, the table reveals that out of the total of 50 respondents, only 9 people (18%) were employed in establishments. This generally reveals that there are low levels of engagement in employment for establishments for both males and females in the sample. Those who were engaged in work for establishments spent an average of 653 minutes on them.

The table also shows that there are 23 people (46%) who were engaged in primary production activities which are not for establishments. These activities include crop farming, animal farming, fishing and hunting wild animals. The 46% respondents who reported to be engaged in primary production spent an average of 243 minutes on them. Lastly, on SNA activities, the table reveals that 17 people (34%) out of the total sample

of fifty respondents were engaged in services for income and other production of goods not for establishments. Such services include food preparation for sale, making and selling hand craft, petty trading and others. Of those who reported to be engaged in services for income, the average time spent on this activity is 413 minutes.

For the Non SNA activities, the table shows that 36 respondents (72%) reported to have done the "household services" activity. Such activities include cooking, serving and washing up; cleaning of dwelling and surroundings; fetching water; fetching wood; doing laundry and many other related household chores. The average time spent by respondents in this activity is 238 minutes. The table further reveals that 10 respondents (20%) undertook the activity of caring for household members. These include activities such as physical care of children, the sick and elderly members of households. Those respondents, who reported to have taken care of household members, spent 128 minutes on average. For the activity on community work, the table shows that 6 respondents (12%) were engaged in it; and they spent an average of 335 minutes in community work.

For the non productive category, the table shows that all respondents reported that they engaged in non productive activities. These activities include sleeping; eating and drinking; personal hygiene (bathing and related activities); seeking health care; relaxing and mass media. The table further reveals that they spent an average of 832 minutes in this activity.

Table 7 – Participation rate by gender in all activities under SNA, Non SNA and Non Productive activities, and average time spent on each activity in minutes

Activity	Mean of all cases	No. of valid cases	Mean of valid cases	Median	Mode	Standard deviation	Range
SNA							
Work for Establishments	118.00	9 (18%)	653.00	600.00	570.00	125.30	900
Primary production	112.00	23 (46%)	243.00	180.00	90.00	184.86	675
Services for income	140.00	17 (34%)	413.00	420.00	360.00	218.54	810
Non SNA							
Household Services	172.00	36 (72%)	238.00	195.00	90.00	188.97	750
Care for household members	26.00	10 (20%)	128.00	60.00	30.00	124.75	300
Community Work	40.00	6 (12%)	335.00	345.00	120.00	145.02	540
Non Productive	832.00	50 (100%)	832.00	780.00	780.00	220.32	870

Table 8 further disaggregates the information in table 7 above by gender and presents the average time spent by women and men on each activity. It shows that the average time spent by men in work for establishments is 702 minutes and 592 minutes for women. This shows that men in the sample spend more time on average than women in work for establishments. However, it is still surprising that, contrary to traditional patterns of life which sees males as breadwinners and females as homemakers, the women in the sample were involved in work for establishments. Even though this is a positive trend; it means that women carry their burden of unpaid care work into the labour market where they have to compete with their male counterparts who are at an advantage because they are free of the burden of unpaid care work. This leads to the overworking of women who are forced by circumstances to engage in double roles.

The table further reveals that for the activity primary production (subsistence production), the average time spent by men is 272 minutes, and women spend an average of 188 minutes in primary production. This shows that men in the sample spend more time on

average in subsistence production than women. For this category males dominated both cattle farming and gardening. The table also shows that for the activity services and other production of goods, men spend an average of 360 minutes, and women spend an average of 435 minutes. This means that women in the sample spend more time on average in the category services and other production of goods compared to men. This category includes activities such as food processing and preservation, preparation of food and beverage for sale, petty trading etc which are extensions of 'women activities' within the household.

Table 8 further reveals the average time spent by gender in Non SNA activities. It shows that for all three activities in this category, women spend more time than men doing them. In the activity household services, men spend an average of 134 minutes, and women spend an average of 291 minutes in this activity. This shows that women in the sample spend almost twice their time in providing unpaid domestic services within the household. For the activity "caring for household members", the average time spent by men on this activity is 30 minutes and the average time spent by women in the same activity is 138 minutes. This again shows that women in the sample reported to have spent more time caring for household members than men. It shows that the burden of care is on the women who spend almost four times more of their time caring for household members.

For the community work activity, the table reveals that the average time spent by men is 318 minutes and women spent an average of 420 minutes. This shows that females in the sample spend more time on average doing community work compared to males. Community work is voluntary and unremunerated which adds on the burden for women's unpaid work.

The table shows the average time spent by gender in Non Productive activities. It shows that men in the sample spend more time on average sleeping than women (men 566 minutes and women 513 minutes). This is probably because most of the women reported that they get up much earlier than men to do the household chores before they would

venture out to their gardens and to do some of their hand work for sale. Men on the other hand would get up a little later to bath, eat and go out to do their subsistence production work.

Furthermore, men spent an average of 135 minutes on health care activity (going to hospital) whilst women did not report to have gone to hospital at all. This shows that men in the sample spend more time taking care of their health needs compared to the women in the sample. However, it is worth noting that the average time spent in this activity is very low for both sexes, especially considering the fact that HIV/AIDS leads to high rates of morbidity. This has implications for the burden of unpaid care work on women who have to take care of the sick family members.

Also, the table shows that women in the sample spend more time on average listening to radio and watching television than men (81.67 minutes and 63.75 minutes respectively). This could be because as the survey has shown that whilst men venture out and do primary production activities outside the home; women are mainly engaged in domestic work within the households and thus have time to listen to the radio whilst doing other activities.

To determine whether the time differences reported by women and men when doing these different activities are statistically significant, a non parametric test (2 independent samples (Mann Whitney test) was run. The results are reported as footnotes of Table 8.

Table 8 – Mean time spent on different activities of the activity coding list by gender

Activity	Males (Minutes	Females (Minutes)	All (Minutes)
SNA			
Work for establishments	702	592	653
Primary production[1]	272	188	243
Services and other production	360	435	413
Non SNA			
Household services[2]	134	291	238
Caring for household members	30	138	128
Community work	318	420	335
Non Productive			
Sleeping	566	513	540
Eating and drinking	89.35	46.00	72.24
Personal hygiene	39.50	42.27	40.95
Health care	135	-	135
Relaxing	274	237.86	259.71
Listening to radio[3]	63.75	96.00	81.67

1. Mean rank men = 12.90; mean rank women = 10.31; MW = 6.650; p = 0.413. The null hypothesis that average time spent by women and men in primary production is equal can be accepted on the basis that p>0.05. The conclusion is that the difference in average time spent in primary production is not statistically significant.

2. Mean rank men = 12.13; mean rank women = 21.69; MW = 67.50; p = 0.009. The null hypothesis that average time spent by women and men in household services is equal can be rejected on the basis that p<0.05. The conclusion therefore is that the difference in average time spent in household services by women and men is statistically significant.

3. Mean rank men = 4.00; mean rank women = 5.80; MW = 6.000; p = 0.413. The null hypothesis that the average time spent by women and men listening to the radio is equal can be accepted since, p> 0.05. The conclusion to be made is that the difference in average time spent by women and men listening to the radio is not statistically significant.

The survey has confirmed that the burden of unpaid care work still falls largely on women. Table 9 shows the average time spent by gender on unpaid domestic household chores. It shows that in all the activities apart from cleaning and upkeep of dwelling and surroundings as well as maintenance and small repairs; women spend more time on average than men doing them. For the cleaning and upkeep of dwelling activity, males in the sample spend more time in this activity (140 minutes for men and 67.50 minutes for women) because there are a lot of males who reported clearing and sweeping the yard as their activity, but not cleaning the house.

The activity of maintenance and small repairs involves fixing the fence, maintenance and renovation of houses which are mostly male dominated activities hence they spend twice their time doing this activity compared to women (420 minutes for men and 210 minutes for women). The rest of the results in the table clearly show that women in the sample are overburdened with household chores and caring for household family members.

Meanwhile, men reported not to have done some of the activities such as maize pounding, sorting, mending and washing clothes, and physical care of the sick, the disabled and elderly members of the households. This means that they were an exclusive domain for women in the sample.

Finally, it is interesting to note that for the activity of fetching water, men spent an average of 30.00 minutes and women spent an average of 48.75 minutes. It is encouraging to see that men in the sample spend some time fetching water which is seen as women's role in most societies. However, it is worth noting that the average time spent by both groups on fetching water is quite low considering the fact that from the sample there was no respondent that reported to have piped water within the homestead. For all of the respondents, their sources of water were outside their dwellings (springs, wells, dams).

A non parametric test, 2 independent sample (Mann Whitney) was done to determine if the differences in average time spent by women and men in unpaid household chores were statistically significant. Results are reported as footnotes to table 9.

Table 9 – Mean time in minutes spent on unpaid household chores by gender

Activity	Males (Minutes)	Females (Minutes)	All (Minutes)
Cooking, Serving and Washing up[1]	37.50	163.57	143.40
Cleaning and upkeep of dwelling and surroundings[2]	140.00	67.50	87.27
Maintenance and small repairs within the household[3]	420.00	210.00	262.50
Fetching Water	30.00	48.75	45.00
Pounding maize at home or in the community milling machine	0.00	45.00	45.00
Sorting, mending and washing clothes	0.00	114.00	114.00
Chopping wood, lighting fire and heating water not for immediate cooking purposes	38.75	39.38	39.25
Physical care of children: washing, dressing and feeding	30.00	70.71	65.63
Physical care of the sick, disabled, elderly household members.	0.00	300	300

1. Mean rank males = 4.25; mean rank females = 16.67; MW = 7.000; p = 0.006. This result means that the null hypothesis that women and men spend on average an equal amount of time on cooking serving and washing is rejected because $p<0.05$. The conclusion therefore is that the difference in time spent by women and men in cooking, serving and washing is statistically significant.

2. Mean rank men = 7.17; mean rank women = 5.56; MW = 8.500; p = 4.97. The result means that the null hypothesis that on average women and men spend equal amounts of time doing the cleaning and upkeep of surroundings is accepted, since $p>0.05$. In conclusion therefore, the average time spent by women and men in this activity is not statistically significant.

3. Mean rank men = 4.00; mean rank women = 2.00; MW = 0.000; p = 0.500. The result means that the null hypothesis that the average time spent by women and men on maintenance and small repairs within the household is equal is rejected because $p<0.05$. In conclusion, the average time spent by women and men in maintenance and small repairs within the household is statistically significant.

According to Birks and Buurman (2000:16) simultaneous activities are when people are engaged in several activities at the same time. For instance, cooking a meal while listening to the radio and keeping an eye on children.

Table 10 shows the average time spent on simultaneous activities by gender. It shows that men spend less time on average doing simultaneous activities compared to women (20 minutes and 84.55 minutes respectively). This could be as the survey has shown that since women are fully engaged in productive activities, without easing their unpaid domestic chores, they find themselves having to juggle with two or more activities at the same time in order to be able to satisfy both the demands for productive and for non productive work.

The Mann Whitney test was done to determine if indeed the average time reported to be spent by women and men in doing simultaneous activities is statistically significant. The results are reported as footnote to table 10.

Table 10 – Mean time in minutes spent on simultaneous activities by gender

Activity	Males (Minutes)	Females (minutes)	All minutes
Simultaneous activities[1]	20.00	84.55	64.38

1. Mean rank males = 5.10; mean rank for women = 10.05; MW = 10.500; p = 0.48. The result show that the null hypothesis that the average time spent by women and men on simultaneous activities is equal is accepted, since $p>0.05$. The conclusion therefore is that the difference in time spent by women and men in simultaneous activities is not statistically significant.

4.5. Examining Time Use Patterns in more Detail

This section will go further and report on the durations of time spent by respondents on different activities and the implications thereof.

Table 11 determines the relationship in the duration of time spent doing shopping between people who owned refrigerators and people who did not own refrigerators. It reveals that out of the 16% of respondents who reported that they have refrigerators in their homes; only one person reported spending 270 minutes (highest duration spent) in shopping. This could be that the person was shopping in bulk to store the perishables in the refrigerator. The table further reveals that out of the 84% respondents who reported not to own refrigerators, one respondent reported spending 30 minutes doing shopping whilst another reported spending 180 minutes in shopping. This could mean that the respondents without refrigerators spend less time shopping because they have no storage facility for their perishables and therefore have to replenish them time and again.

Table 11– Time spent in shopping by those who either own or do not own refrigerators in minutes

Activity & Time Spent	Ownership of Refrigerator		Total
	Yes	No	
Shopping for personal and household goods			
30 minutes	0	1	1
180 minutes	0	1	1
270 minutes	1	0	1
Total	1	2	3

In a similar way, table 12 determines the duration in minutes of time spent by women and men in work for establishments. It shows that women tend to spend the less time durations in work for establishments than men. This is true for the 510 and 600 minutes durations where there are more women than men (no men: 1 woman and (no men: 2 women respectively). For the longer time durations, there are more men than women doing work for establishments, for example there is 1 man and no woman for both the 810 and 900 minutes time slots.

Meanwhile, the shorter time durations spent by women on work for establishments has several implications. First, he study confirms that whilst 24% males reported to have worked for a salary/wage (in the last seven days), only 20% females reported to have worked for a salary or a wage. In addition, when women enter the labour market they are not relieved of their unpaid household chores, they prioritize their domestic chores to the detriment of their upward mobility in the job market.

Table 12 – Duration of Time Spent in Work for Establishments by Gender in Minutes

Activity and Time	Male	Female	Total
Employment for Establishments			
510	0	1	1
570	2	0	2
600	0	2	2
660	1	1	2
810	1	0	1
900	1	0	1

Table 13 determines the duration of time spent by women and men in household services. It shows that men in the sample tend to use the shorter time durations doing household services for example six men compared to 2 women spent between 15-60 minutes in household services. But, as the time increases, the number of men who does household

services decreases. For example, between the time slots 210 minutes – 330 minutes seven women reported to have done household services whilst two men did household services.

In addition, for the 510 minutes – 750 minutes duration, no men reported to have done household chores whilst four women reported to have done household chores for that long. This shows that not only a few men engage in household services, but they also use the shorter time durations engaged in household services. And also that as the duration of time spent in household services increases, the number of men engaged in such activity declines.

Table 13 – Duration of Time Spent in unpaid domestic work by Gender in Minutes

Activity and Time Spent in minutes	Male	Female	Total
Household services			
15 – 60	**6**	**2**	**8**
90 – 180	**3**	**7**	**10**
210 – 330	**2**	**7**	**9**
390 – 495	**1**	**4**	**5**
510 – 750	**0**	**4**	**4**
Total	**12**	**24**	**36**

Table 14 shows the duration of time spent by gender in water collection. It shows that whilst there are few men who reported to be collecting water, they also tended to use the shorter time slot for this activity. For example the only two men who reported to have fetched water used the 30 minutes slot; whilst 3 women reported to have collected water using the 60 – 120 minutes slots.

Table 14 – Duration of time spent by gender in collecting water

Time	Male	Female	Total
30	2	5	7
60	0	2	2
120	0	1	1
Total	2	8	10

Table 15 establishes the relationship between the distance of water from the dwelling and the time spent in collecting water. It shows that the mean minutes per day spent fetching water increased with the distance from the source. For example those who were less than 100 metres from the source of water spent an average of 30 minutes, while those who were 1 km or more away from the source of water spent an average of 50 minutes per day on this activity.

Table 15 – Distance of water from the dwelling and mean minutes spent in collecting water.

Distance	Mean time	Number of cases
Less than 100 metres	30.00	2
100 metres – less than 200 metres	30.00	3
500 metres – less than 1km	75.00	2
1km or more	50.00	3
Total	**45.00**	**10**

4.6. Conclusion

In conclusion, the survey has shown that for some activities, there are differences in the average time spent by women and men in different activities; and in other activities there are no differences.

The survey has shown that for the sample survey, there are equal numbers of women and men participating in the overall SNA category. It has also shown that men in the sample

spend slightly more time on average in overall SNA activities than women in the sample (447 minutes for men and 442 minutes for women). In addition, the Mann Whitney test was used to ascertain if there was a statistically significant difference in the average time spent by the two groups (women and men) in this category. The result show that the difference in average time spent by women and men in the overall SNA activities is not statistically significant.

The survey has further revealed the differences in time spent by women and men in the three activities under SNA activities. It has shown that men in the sample spend more time than women in work for establishments with an average of 702 minutes; whilst the average time spent by women in the same activity is 592 minutes. It has also shown that again men in the sample spend more time than women in the activity primary production (subsistence production), an average of 272 minutes for males and 188 minutes for women. The two instances above show that men in the sample still retain their positions as breadwinners for their families. Finally, for SNA activities, the survey has shown that women spend more time than men in the activity services for income and other production with an average of 435 minutes for women and 360 minutes for men. Worth noting is that the activities under services are an extension of women's roles from the domestic sphere.

For the Non SNA category, the survey has revealed a different trend with women spending on average more time on virtually all the activities under this category. The survey has shown that from the sample, there are more women (67%) than men (33%) who participate in overall Non SNA category. The survey has further revealed that women in the sample spend almost double the time of men doing Non SNA activities. Whilst men reported to have spent on average 137 minutes in the overall Non SNA category, women reported to have spent on average 343 minutes. In order to ascertain the statistical significance of the difference in time spent by women and men in Non SNA activities, a Mann Whitney test was done; and the results show that there is a statistically significant difference between the average time spent by women and men in the overall Non SNA category. Women spend more time than men.

The survey has also revealed that for the activity household services, women in the sample spend more time on average than men doing this activity (134 minutes for men and 291 minutes for women). Again for the activity care for household members, women in the sample spend more time than men; with the average time spent by men being 30 minutes whilst that for women was 138 minutes. For the activity community work, the survey has shown that women in the sample spend more time than men on average. Men reported to have spent 318 minutes in community work and women reported to have spent 420 minutes in the same activity. In all three instances, this explicitly shows the burden of unpaid work on women in the sample.

For the Non Productive work category, the survey has revealed that all women and men participate equally in the overall non productive work category. The survey has also revealed, however, that there are differences in the time spent by women and men in non productive work. It has shown that in the overall non productive category, men in the sample spend more time on average than women in the sample (934 minutes for men and 730 minutes for women). A Mann Whitney test was done to determine if the difference in the average time spent by women and men in Non Productive work was statistically significant. The results show that there is a statistically significant difference in the time spent by the two groups in non productive work. Men enjoy more time doing non productive activities for themselves.

5. CONCLUSION AND POLICY RECOMMENDATIONS

5.1 Conclusion

The conclusion will summarize the important findings from the study. The study confirms that the study area (Matsanjeni) still, like most societies, ascribes clear cut gender roles to women and men. For example the study shows that the responsibility for household chores falls directly on women; whilst men venture out of the household and are responsible for productive work such as work for establishments, and subsistence production.

The study reveals that in the study area, both women and men undertake productive work. However, the social and cultural constructs of gender roles compel women to combine market work with family responsibilities. This therefore means that women enter the labour market with a huge burden of unpaid domestic work and domestic responsibilities. In that case, because women's hands are full of household chores, they tend to dedicate less time and energy to paid work compared to their male counterparts. Also, because of the way that women were socialized, they prioritize their domestic responsibilities over the labour market. This robs them of the opportunity to develop their skills and capabilities in the job market thus remaining in lower positions with lower pay. It can therefore be concluded that women are still entangled in the domestic sphere with less time to venture and perform maximally in the market economy. However, the study further reveals that women in the sample spend more time on average than men in income generating activities. It can be concluded that even though this is a positive trend, the income generating activities tend to be small scale and do not evolve to big businesses that would be beneficial to women and their families.

The study reveals that women spend more time than men in all the three work categories under the Non Productive category (household services, caring for household members and community work). Therefore from the study, it can be concluded that women spend more time in unpaid work than men. This has implications for their well being and

development, more so because unpaid work is undervalued in society and not given the prominence and support that it deserves.

The study further reveals that men spend more time on Non Productive work compared to women. It can be concluded that women because they have to handle both paid and unpaid work, they are left with very limited time for personal activities. Men on the other hand when they are not engaged in paid work have free time that they use for relaxing, listening to radio or even going to drinking spots for drinking sessions.

The study further shows that men spend more time than women in the category work for establishments. It can be concluded that men still have better opportunities in the labour market compared to women because women have the disadvantage of bringing the burden of unpaid work into the labour market. This gives men better chances to secure high paying jobs with greater responsibility; and also to be considered for promotions because their first priority is the labour market whilst women's priority is the domestic work.

In addition, the study also reveals that women spend more time than men in community work. It can be concluded that community work is the responsibility of women because it is unremunerated, voluntary, and it is an extension of domestic work done for other people who are outside the family. On the other hand, men perform the kind of community work that gives them status such as attending community meetings where they make key decisions on the governance of the community.

In conclusion, the study has brought to the fore the uneven burdens of unpaid care work on women which has a spill over effect and negatively affects their full participation in the labour market.

5.2. Policy Recommendations

Even though there has been some degree of gender sensitization in Swaziland by the government agent responsible for gender, the challenge for the government is to focus on the area of time use for women and men. There is need for the collection and analysis of time use data at national level. This will provide detailed information on how individuals spend their time, on a daily or weekly basis and can reveal the level of task sharing among family members. The time use survey will further reveal the burden of unpaid care work that falls on women, thus contributing to greater awareness and appreciation of women's role in society. In order for women's economic contribution to be recognized in Swaziland, the time use data can be valued, and the results used to lobby policy makers to intervene with positive policies that will address the social, cultural, economic and institutional environment in which paid and unpaid work takes place. Sensitization of men to increase their participation in household chores is necessary and it is likely to increase women's involvement and productivity in paid work.

In addition, since the issue of gender is a crosscutting issue it cannot therefore be handled by only the government agent responsible for gender issues. The government ministry responsible for gender issues needs to establish a strong relationship with the Central Statistics Office and to organize training workshops for the statisticians in order to promote the integration of a gender perspective into national statistics.

It is a tendency of most governments, the Swazi government being no exception, to focus all their development efforts and endeavours in the urban areas of their countries totally neglecting the rural areas. The study area is a rural area with low levels of development characterized by lack of electricity, running water and other technological advancements. The study has shown that women spend long hours doing household chores such as fetching water, caring for children, the elderly and the sick members of households. It is recommended that the government take appropriate steps to reduce this burden on women. This could be by bringing electricity and water closer to the people, providing childcare facilities and providing free or subsidized health care services to the people so that they can access health care facilities thus easing the burden of care on women.

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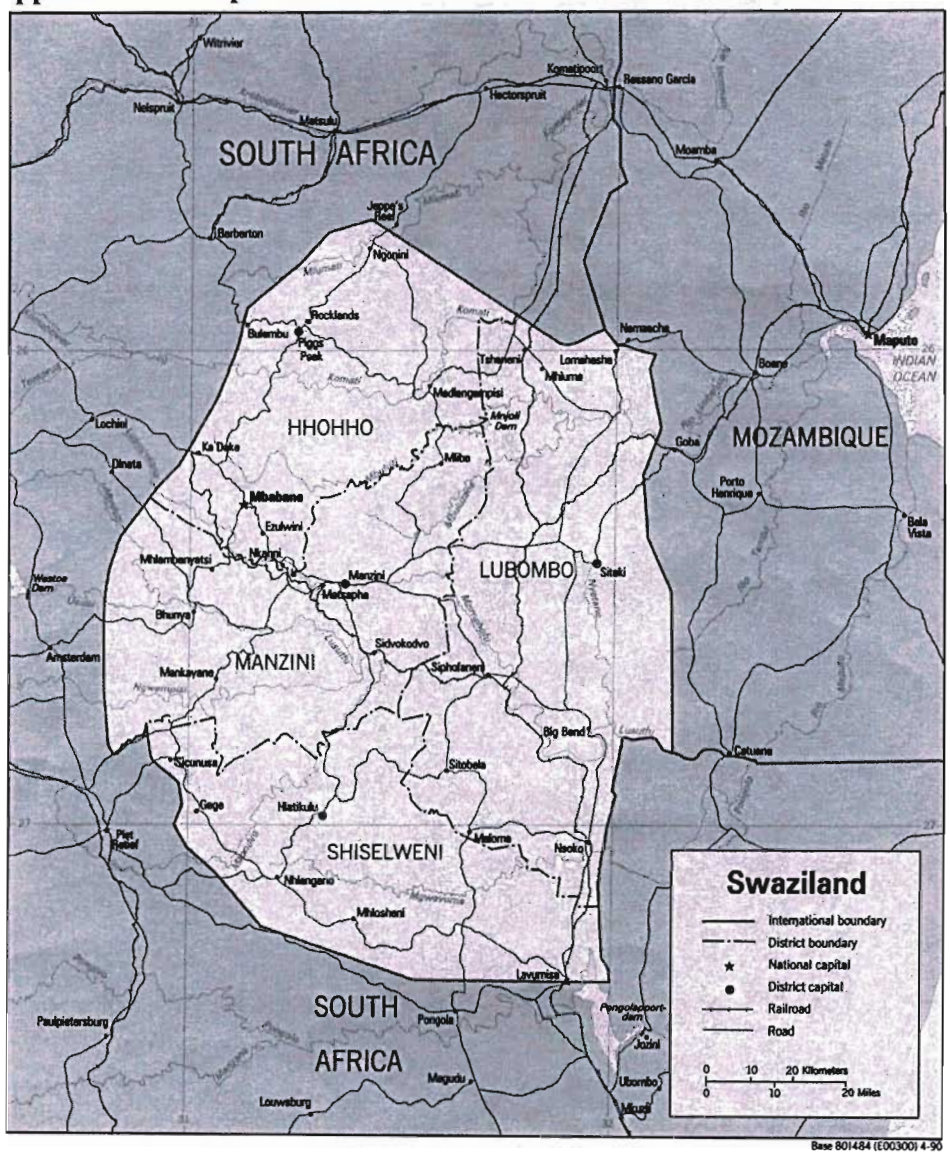
Appendix A – Map of Swaziland[1]



[1]Matsanjeni is in the Lubombo region around Siteki.

Appendix B – Activity Coding List

CODE	ACTIVITY
1.	**Household Services**
01	Cooking, serving and washing up
02	Cleaning and upkeep of dwelling and surroundings
03	Maintenance and small repairs within the household
04	Shopping for personal and household goods
05	Fetching water
06	Fetching firewood
07	Pounding maize at home or in the community milling machine
08	Sorting, mending and washing clothes
09	Ironing clothes and ordering clothes
10	Chopping wood, lighting fire and heating water not for immediate cooking purposes
11	Travel related to provision of unpaid domestic services
2.	**Caring for household members**
12	Physical care of children: washing, dressing, feeding
13	Teaching, training and instruction of household children
14	Accompanying children to places such as schools
15	Caring for spouse
16	Physical care of the sick, disabled, elderly household members: washing, dressing, feeding, helping
17	Supervising children and adults needing care
18	Travel related to unpaid care-giving services to household members
3.	**Personal care activities**
19	Sleeping
20	Eating and drinking
21	Personal hygiene (taking a bath)
22	Health care (in hospital for own purposes)
23	Travel related to personal care activities
24	Relaxing
25	Listening to radio/watching television

CODE	ACTIVITY
4.	**Employment for establishments**
26	Wage and salary employment other than domestic work
27	Domestic and personal services produced by domestic work
28	Work as employer/self employed for establishments
29	Working in apprenticeship, internship or in related field
30	Seeking employment and related activities
31	Travel related to employment for establishments
5.	**Primary production**
32	Crop farming and market/ kitchen gardening: planting, weeding/ harvesting
33	Tending animals and fish farming
34	Hunting, fishing and gathering of wild products
35	Travel related to primary production activities
6.	**Services for income and other production of goods**
36	Food processing and preservation activities: grain processing and butchering
37	Preparation of food beverage for sale, i.e. baking and related activities
38	Making and selling textile, leather and related craft: weaving, knitting, sewing, shoe making, tanning and wood products
39	Building of extensions of dwelling: brick laying, plastering, thatch, maintaining and repairing buildings, cutting grass, plumbing, doing carpentry, electric wiring.
40	Petty trading, street door to door, shoe cleaning and other related services
41	Provision of services for income such as computer services, transport, hairdressing and cosmetic treatment, baby sitting, massages and prostitution
42	Travel related to services and other production of goods
7.	**Community Work**
43	Attending traditional wedding
44	Attending community meetings

Appendix C – Questionnaire and Diary

Section 1 – Household Questionnaire

Record Time for starting: (in hours and minutes).

1.1. At home what type of dwelling does your family occupy?

01	**Brick house**
02	**Traditional dwelling, huts, structures made of traditional material**

1.2. At home do you have any of the following?

Yes	No	
1	**2**	**A vacuum cleaner**
1	**2**	**A refrigerator**
1	**2**	**A telephone (including cellular phones)**
1	**2**	**An electric or gas stove**
1	**2**	**A television**
1	**2**	**A radio**
1	**2**	**A car**
1	**2**	**A clock**
1	**2**	**A washing machine**

1.3. What is the main source of energy/fuel for your household for cooking, heating and lighting?

Heating	Cooking	Lighting	
1	**1**	**1**	**Electricity**
2	**2**	**2**	**Gas**
3	**3**	**3**	**Parrafin**
4	**4**	**4**	**Wood**
5	**5**	**5**	**Coal**
6	**6**	**6**	**Candles**
7	**7**	**7**	**Animal Dung**
8	**8**	**8**	**Solar Energy**
9	**9**	**9**	**Other – Specify**
0	**0**	**0**	**None**

- ***If any of the answers to above are 4 or 7, continue. Otherwise go to Q1.6.***

1.4. How far is the wood/dung from the dwelling?

1	Less than 100 m
2	100 m – less than 200 m
3	200 m – less than 500 m
4	500m – less than 1 km
5	1 km or more

1.5. Are the persons who usually collect wood/dung?

1	Mostly males (men and boys)
2	Mostly females (women and girls
3	Equally males and females

1.6. What is the household's main source of water?

01	Piped (tap) water in dwelling (go to Q1.9)
02	Piped (tap) water on site or in yard (go to Q1.9)
03	Public tap
04	Water carrier/tanker
05	Borehole on site (go to Q 1.9)
06	Borehole offsite/communal
07	Rain water-tank on site (go to Q1.9)
08	Flowing water/stream
09	Dam/Pool/Stagnant water
10	Well
11	Spring
12	Vendor (person selling water)
13	Other – specify

1.7. How far is the water source from the dwelling?

1	Less than 100 m
2	100 m – less than 200 m
3	200 m – less than 500 m
4	500m – less than 1 km
5	1 km or more

1.8. Who are the persons who usually collect water?

1	Mostly males (men and boys)
2	Mostly females (women and girls
3	Equally males and females

1.9. From which of the following sources does your household usually receive money? (*Answer yes for all which applies).*

1	2	Wages/Salaries
1	2	Earnings from own business or farm
1	2	Private pension
1	2	Investments
1	2	Remittances from members of the household
1	2	Private maintenance (from ex-spouse/mother or father of your children
1	2	Other – specify

1.10. Which one of the above sources usually provide the most money for your household? (choose only one source).

1	Wages and salaries
2	Earnings from own business or farm
3	Private pension
4	Investments
5	Remittances from members of the household
6	Private maintenance (from ex-spouse/mother or father of your children)
7	Other – specify

1.11. What is the total monthly income of your household? (including all sources?

1	E0 – E399
2	E400 – E799
3	E800 – E1 199
4	E1 200 – E1 799
5	E1 800 – E2 499
6	E2 500 – E4 999
7	E5 000 – E9 999
8	E10 000 or more
9	Don't Know
10	Refusal

1.12. Who is responsible for doing most of housework?

1	Mostly males (men and boys)
2	Mostly females (women and girls)
3	Equally males and females

Section 2 – Demographic Questionnaire

2.1. How old are you? (age in completed years)

	Age in completed years

2.2. Is the person male or female?

1	**Male**
2	**Female**

2.3. What is the highest school grade/standard you have passed?

0	**None**
1	**Grade 1**
2	**Grade 2**
3	**Grade 3**
4	**Grade 4**
5	**Grade 5**
6	**Grade 6**
7	**Grade 7**
8	**Grade 8/Form1**
9	**Grade 9/Form 2**
10	**Grade 10/form 3**
11	**Grade 11/form 4**
12	**Grade 12/form 5**

2.4. Have you completed studies after leaving school? (Only include courses of at least six months duration)

1	**Yes**
2	**No**

2.5. What is your current marital status?

1	**Never married**
2	**Married or living together as husband and wife**
3	**Widowed**
4	**Divorced or separated**

2.6. In the last seven days did you do any of the following activities?

Yes	No	
1	2	Do any kind of business, big or small for yourself
1	2	Help unpaid in family business
1	2	Do any work on a household plot, food garden or kraal
1	2	Catch any fish or wild animals for food or sale
1	2	Do domestic work for another household for payment in cash or kind
1	2	Do any work for a wage or a salary

2.7.
(If worked in the last seven days) what kind of work did you do in the last seven days?

(If not working in the last seven days) what kind of work did you do in your last work activity?

(If never worked) write never worked
[Write the person's occupation or job title i.e car sales person, fruit and vegetable seller

2.8. What were your main tasks in this work activity?

2.9. Were you

1	Working for private households as paid domestic worker, security guard or gardener
2	Working for someone else for pay in cash or in kind
3	Working for yourself or for your family in a business/household plot with only family workers
4	Working for yourself or for your family in a business/household plot employing non family workers

2.10. What is your personal main source of income to meet your daily needs?

1	Wages and salaries
2	Earnings from own business or farm
3	Private pension
4	Investments
5	Remittances from members of the household
6	Private maintenance (from ex-spouse/mother or father of your children)
7	Other – specify
8	No personal income

2.11. What is your usual total monthly personal income from all sources?

1	No personal income
2	E1 – E500
3	E501 – E1000
4	E1 001 – E5000
5	E5 001 – E10 000
6	E10 001 plus
7	Payment only in kind
8	Don't know
9	Refusal

2.12. Do you usually wear a watch or have a clock with you?

1	Yes
2	No

SECTION 3 – DIARY

Time Period	Description of Activities	Code	Same time?	Location1	Location 2
	Activities 1 -3		Yes/No		
0400hrs			1 2		
To			1 2		
0430hrs			1 2		
0430hrs			**1 2**		
to			**1 2**		
0500hrs			**1 2**		
0500hrs			1 2		
To			1 2		
0530hrs			1 2		
0530hrs			**1 2**		
to			**1 2**		
0600hrs			**1 2**		
0600hrs			1 2		
to			1 2		
0630hrs			1 2		
0630hrs			**1 2**		
To			**1 2**		
0700hrs			**1 2**		
0700hrs			1 2		
To			1 2		
0730hrs			1 2		
0730hrs			**1 2**		
To			**1 2**		
0800hrs			**1 2**		
0800hrs			1 2		
to			1 2		
0830hrs			1 2		
0830hrs			**1 2**		
To			**1 2**		
0900hrs			**1 2**		
0900hrs			1 2		
To			1 2		
0930hrs			1 2		
0930hrs			**1 2**		
To			**1 2**		
1000hrs			**1 2**		
1000hrs			1 2		
to			1 2		
1030hrs			1 2		

Time Period	Description of Activities	Code	Same time?	Location1	Location 2
	Activities 1 -3		**Yes/No**		
1030hrs			1 2		
To			1 2		
1100hrs			1 2		
1100hrs			**1 2**		
To			**1 2**		
1130hrs			**1 2**		
1130hrs			1 2		
To			1 2		
1200hrs			1 2		
1200hrs			**1 2**		
To			**1 2**		
1230hrs			**1 2**		
1230hrs			1 2		
To			1 2		
1300hrs			1 2		
1300hrs			**1 2**		
To			**1 2**		
1330hrs			**1 2**		
1330hrs			1 2		
To			1 2		
1400hrs			1 2		
1400hrs			**1 2**		
To			**1 2**		
1430hrs			**1 2**		
1430hrs			1 2		
To			1 2		
1500hrs			1 2		
1500hrs			**1 2**		
To			**1 2**		
1530hrs			**1 2**		
1530hrs			1 2		
To			1 2		
1600hrs			1 2		
1600hrs			**1 2**		
To			**1 2**		
1630hrs			**1 2**		
1630hrs			1 2		
To			1 2		
1700hrs			1 2		

Time Period	Description of Activities	Code	Same time?	Location1	Location 2
	Activities 1 -3		Yes/No		
1700hrs			1 2		
To			1 2		
1730hrs			1 2		
1730hrs			**1 2**		
To			**1 2**		
1800hrs			**1 2**		
1800hrs			1 2		
To			1 2		
1830hrs			1 2		
1830hrs			**1 2**		
To			**1 2**		
1900hrs			**1 2**		
1900hrs			1 2		
To			1 2		
1930hrs			1 2		
1930hrs			**1 2**		
To			**1 2**		
2000hrs			**1 2**		
2000hrs			1 2		
To			1 2		
2030hrs			1 2		
2030hrs			**1 2**		
To			**1 2**		
2100hrs			**1 2**		
2100hrs			1 2		
To			1 2		
2130hrs			1 2		
2130hrs			**1 2**		
To			**1 2**		
2200hrs			**1 2**		
2200hrs			1 2		
To			1 2		
2230hrs			1 2		
2230hrs			**1 2**		
To			**1 2**		
2300hrs			**1 2**		
2300hrs			1 2		
To			1 2		
2330hrs			1 2		

Time Period	Description of Activities	Code	Same time?	Location1	Location 2
	Activities 1 -3		Yes/No		
2330hrs			1 2		
To			1 2		
0000hrs			1 2		
0000hrs			**1 2**		
To			**1 2**		
0030hrs			**1 2**		
0030hrs			1 2		
To			1 2		
0100hrs			1 2		
0100hrs			**1 2**		
To			**1 2**		
0130hrs			**1 2**		
0130hrs			1 2		
To			1 2		
0200hrs			1 2		
0200hrs			**1 2**		
To			**1 2**		
0230hrs			**1 2**		
0230hrs			1 2		
To			1 2		
0300hrs			1 2		
0300hrs			**1 2**		
To			**1 2**		
0330hrs			**1 2**		
0330hrs			1 2		
To			1 2		
0400hrs			1 2		

3.1. Date of the day for which activities are recorded (this is the day before today).

Day	Month	Year

3.2. What were you doing yesterday morning between 4 o'clock and half past four?
(Fill in activity in first line for time period)

3.3. What else were you doing during that period?
(Fill in activity on the next two lines for the time periods)

3.4. *(If more than one activity mentioned)* : Did you do the activities at the same time or one after the other? *(Fill I same time column).*

3.5. Where were you when you did the activity? *(Fill in location column).*

N.B

- ***Repeat these questions for each half hour period. Description of activity, same time and location columns to be filled whilst still with respondent. Activity codes to be added at the end of the interview.***

- ***Probe for more activities if activities took much longer than you would expect***
- ***Activities that normally follow each other seem to be missing***

3.6. Did you spend any time during the day looking after children?

1	**Yes, not mentioned all the time (go back and fill in child care activity**
2	**Yes, already mentioned all the times**
3	**No**

Record time for finishing: (in hours and minutes)

N.B. Adapted from the South African Questionnaire for the 2001 time - use survey