

## **Activities over time**

### **Further analysis of the time use survey**

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## Introduction

During 2000, Statistics South Africa (Stats SA) conducted the fieldwork for the first national study of time use in South Africa. Financial assistance for this survey was provided by the Norwegian Agency for Development Cooperation (Norad) and technical assistance was given by Statistics Norway.

The objective of this survey was to discover how different groups of South Africans spend their time so as to assist policy-makers with further insight into the economic and social well-being of different groups. In particular, the survey sought to provide new information about the division of paid and unpaid labour between women and men, and about less-understood productive activities such as subsistence work, casual work and work in the informal sector.

This paper focuses on the activity patterns of individuals at different times of the day, week and year. The overall results of the time use study have already been published as *A survey of time use: How South African women and men spend their time* (Stats SA, 2001). While the first publication reported, among other things, on the total amount of time spent on different activities by different groups, this paper looks at **when** people engage in those activities. Another Stats SA occasional paper focusing on the lives and time use patterns of teenagers is also available.

The study provides an example of how gender statistics extend beyond disaggregation of indicators into the categories of women and men. Gender statistics focus on issues of particular relevance to women and men, and girls and boys, and their different roles and positions in society. For instance the presence of children in the household will have different implications for men and women and how they spend certain parts of their day. This paper is intended to provide gender and other stakeholders with easily understandable information that can be used in gender advocacy and mainstreaming, while at the same time demystifying gender statistics.

## Basic description of the time use study

### *Sample and instrument*

A total of 14 553 respondents aged 10 years or older were interviewed about how they had spent the preceding 24 hours. This sample was selected systematically from all nine provinces of the country and all four types of settlement area. The data thus collected were adjusted through weighting so as to represent the 25 699 people aged 10 years or older estimated to fall within the sample frame. And the sample frame was designed to represent the whole population of individuals aged 10 years and above.

The instrument used for recording information given by respondents was a questionnaire which included:

- a set of preliminary questions relating to the household of which the respondent is a member, and demographic questions relating to the respondent him or herself. The responses to these questions were used for classifying respondents

into groups with particular characteristics, so that the daily activities of different groups might be compared;

- a 24-hour diary divided into half-hour timeslots. This was used for recording what respondents had done during every half-hour on the previous day.

The following extract from a diary shows that it allows up to three activities to be recorded for every half-hour timeslot.

<i>Time period</i>	<i>Description of activities</i>	<i>Code</i>
	<i>1 to 3 activities per time period</i>	
09h00	Prepared food for lunch & put on stove to cook	410
to	Listened to the radio	930
09h30		
09h30	Cleaned the house	420
to	Listened to the radio	930
10h00		
10h00	Cleaned the house	420
to	Listened to the radio	920
10h30		
10h30	Set up stall to sell fruit and vegetables	350
to	Sat and waited for customers	350
11h00		
11h00	Waited for customers	350
to		
11h30		

#### *Fieldwork and coding*

The questionnaire was administered face-to-face by trained fieldworkers, who were also responsible for coding the responses on the questionnaires they had administered. Coding was done in the evening after the fieldwork was completed.

Stats SA used an adapted version of a system developed by the United Nations Statistical Division for coding activities. Activities are organised into ten broad categories distinguished by the first digit of a three-digit code (see Appendix 1). These ten categories of activities can, in turn, be grouped into three broader categories formulated in accordance with the System of National Accounts [SNA]).

1. *SNA production activities* form the basis for calculation of the gross domestic product (GDP) and are generally considered to be 'economic work'. They include paid and unpaid work done in either formal or informal establishments. Therefore subsistence farming and collecting fuel and water for household use, although not usually considered by the layperson to be economic work, are included among SNA production activities.
2. *Non-SNA production activities* are those which produce goods and services but are usually unpaid and are not included in the calculation of GDP. Household maintenance, including shopping, fall into this category, as well as care for

children, the sick, the elderly and disabled in ones own household, and community services and help to other households.

3. *Non-productive activities* are all other activities including eating, sleeping, personal care, leisure, learning, and cultural and social activities. Although not productive, these activities may clearly increase the productive potential of those who engage in them.

## Definitions and concepts

### Establishment

An establishment is an entity with a fixed structure, such as a shop, office, factory or mine, in which production of goods and services is carried out on a regular basis. Commercial farms are also regarded as establishments, as are households which employ domestic workers. Establishments would usually have regular employees working in them.

### Population group

Fieldworkers for the time use survey asked all respondents how they would classify themselves under the apartheid-era population group categories: African, coloured, Indian or white. The fieldworker manual explained that this question was necessary for investigating the impact of the former political system on the lives of respondents in 2000. The two groups discussed in this paper are 'African' and 'non-African'. The non-African group includes coloured, Indian and white individuals.

### Settlement area

For the purpose of sampling, the enumeration areas of South Africa were divided into four strata or types of settlement area, as follows:

- *formal urban settlements*, in which areas with formal houses, flats and other dwellings predominate;
- *informal urban settlements*, in which areas such as 'squatter' camps predominate;
- *commercial farming areas*, which are rural areas in which commercial landholdings predominate;
- *other rural areas*, which largely correspond to previous 'homelands'.

In this paper we group settlements further into (i) urban areas, which consist of formal and informal urban settlements, and (ii) non-urban areas, consisting of commercial farming areas and other rural areas.

### Employment status

In this paper *employed* people refers to all those who said they had engaged in at least one economic activity over the preceding seven days. Respondents were prompted to say whether they engaged in each of the following specific economic activities:

- running any kind of business, big or small, for oneself;
- helping unpaid in a family business;

- doing any work on a household plot, food garden, or kraal;
- catching any fish or wild animals for food or sale;
- doing domestic work for another household for payment in cash or in kind; and
- doing any other work for wage, salary, piecework pay, commission or payment in kind.

Those who said they had done none of these in the previous seven days, but had previously engaged in such an economic activity and would definitely return to it, were also classified as employed.

*Unemployed* people refers to all those who have not worked, but want to, would be able to start work within a week, and have taken action to look for work within the past four weeks. This is the official definition of unemployment used by Stats SA in other publications. All other respondents are then classified as *not economically active*. But in this paper we have grouped unemployed and not economically active together as 'non-employed'.

## **Contents of the following sections**

Section 1 focuses on the daily activity patterns of the whole population on different days of the week and at different times of the year, then on subgroups such as those living in urban and non-urban areas.

Section 2 compares patterns of activities engaged in by women and men throughout the day.

Section 3 focuses on women and compares patterns of activity engaged in by different groups of women.

Section 4 focuses on children and includes descriptions of their patterns of learning and leisure activity throughout the day.

All the graphs in this paper show what percentage of a specified group of people are engaged in a particular activity during every half-hour of the day. The y-axis provides the percentage of people engaged in the activity and the x-axis provides the time of the day.

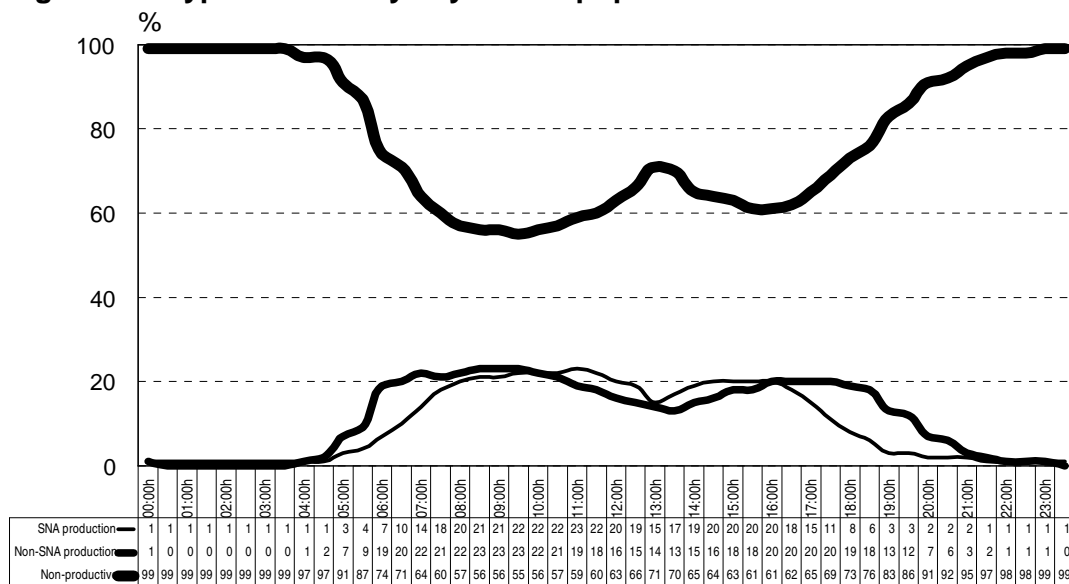
## Section 1: Typical days for the South African population

As seasonal variations might affect patterns of human activity, we conducted the time use survey in three rounds or tranches. The first was conducted in February 2000, the second in June 2000, and the third in October 2000. February is one of the hottest months of the year in South Africa, June is one of the coldest, and October corresponds to early summer.

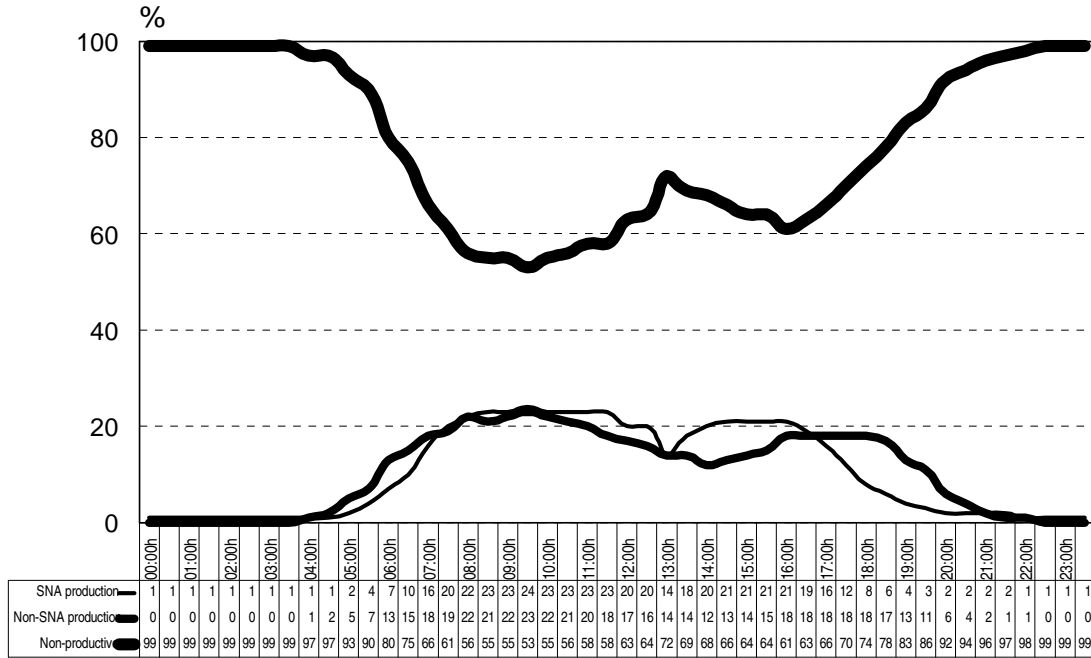
In addition, South Africa experienced the worst floods in many years in February 2000 and we suspected this would also affect activities. However, when we looked at the patterns of activities in different provinces across the three tranches, especially those in the provinces most affected by the floods, namely Mpumalanga and KwaZulu-Natal, we found no significant differences that could be attributed to the floods.

Figures 1 to 3 show the percentage distribution of individuals by SNA category of activity for each half-hour time slot in each of the three seasons. Each line shows the percentage of individuals engaged in that activity at any given time of day. For example, in all three figures the non-productive line (the thickest line) is at 100% between 00h00 (midnight) and 04h00, and the lines representing SNA and non-SNA production activity are at 0%. In other words almost everyone is engaged in non-productive activity – probably asleep. As some people begin to engage in productive activity the other two lines start to rise and the thick line drops accordingly. By 9h30, in Figure 1 (February), under 60% are involved in non-productive activity, while approximately 20% are involved in SNA production and another 20% in non-SNA production.

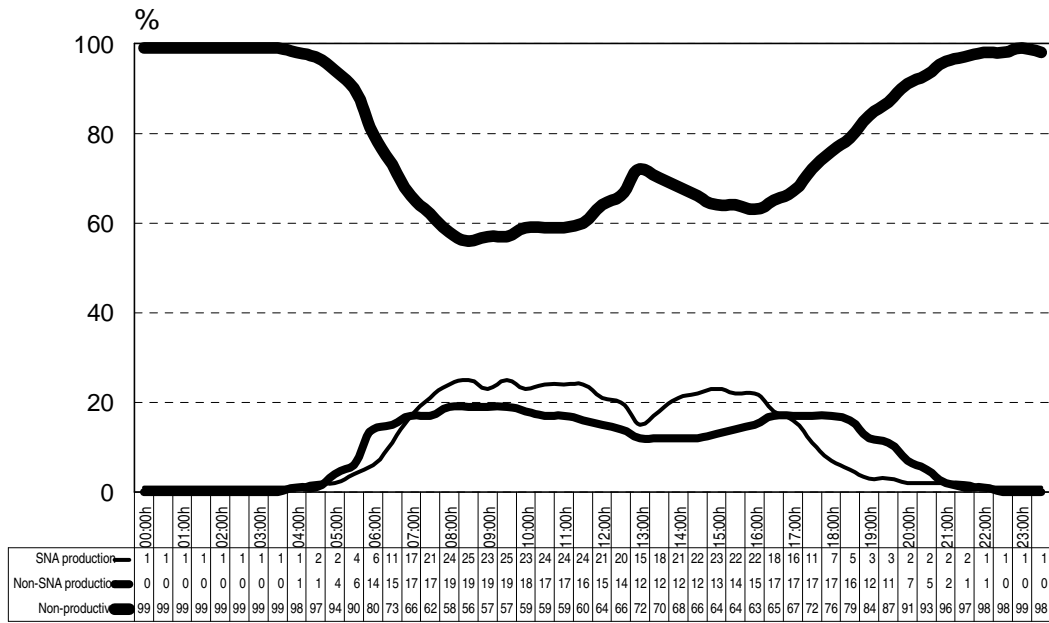
**Figure 1: A typical February day for the population as a whole**



**Figure 2: A typical June day for the population as a whole**



**Figure 3: A typical October day for the population as a whole**

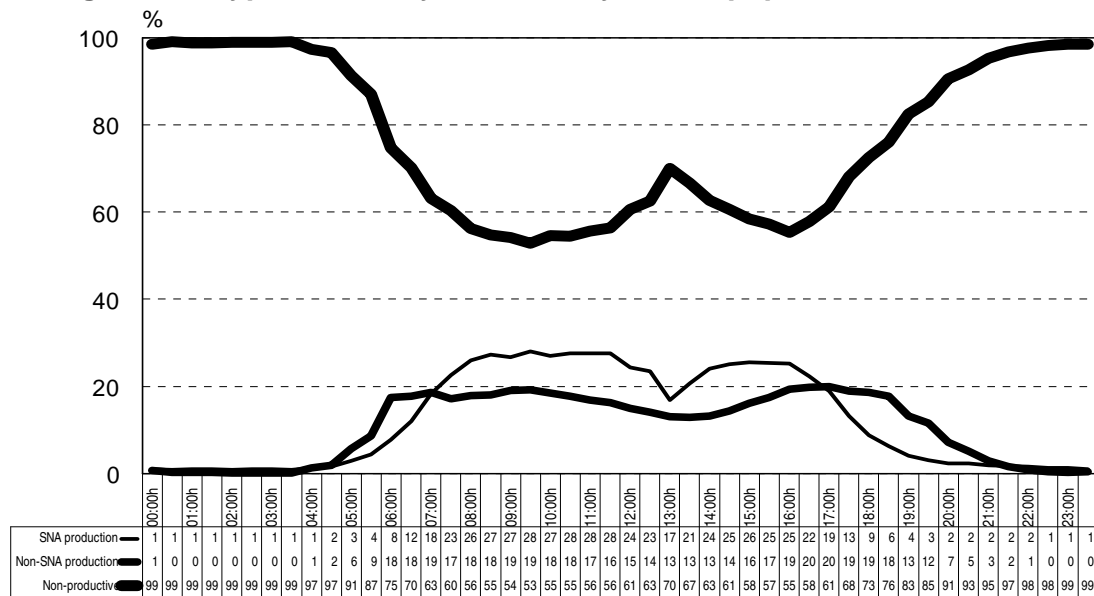




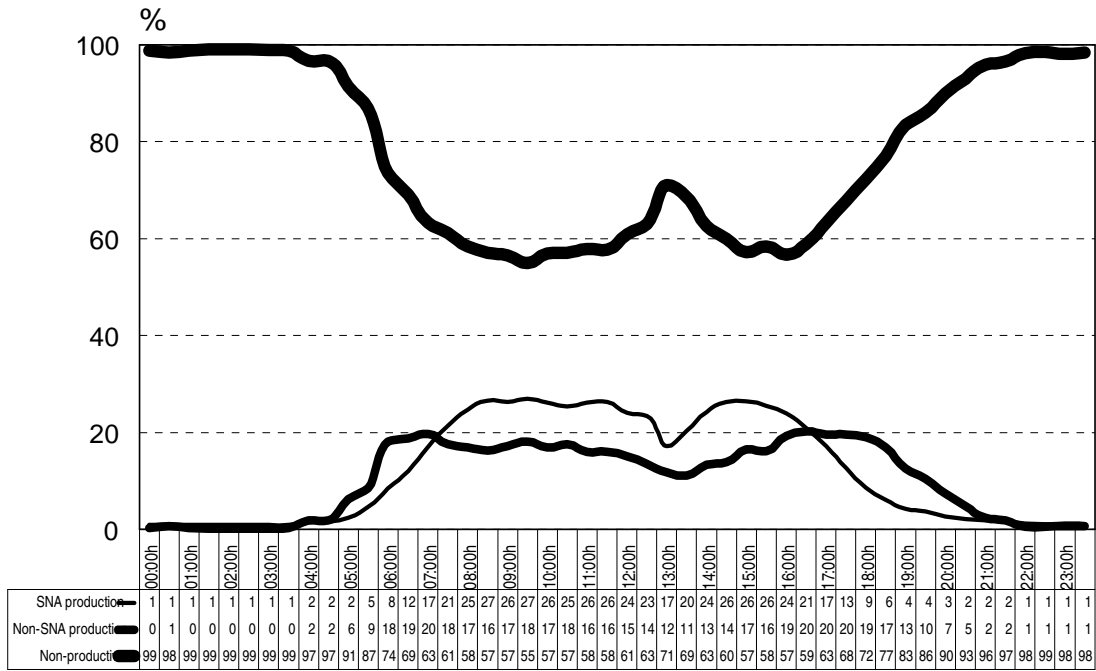
Examination of the patterns of activity showed little seasonal variation.

- As explained above, between 00h00 and about 04h00 almost everyone is involved in non-productive activity, probably sleeping. The same applies after 21h00, when most people are not doing any kind of work.
- The figures for June and October show that between 04h00 and nearly 07h00, which corresponds to the time before adults leave home and go to formal and non-formal work and children go to school, more people tend to be involved in non-SNA than in SNA production activities. This pattern of activity can also be observed in Figure 1 (February), although there it extends to about 10h00. The reason for this slight seasonal variation is unclear.
- All three figures show that between 07h00 and 17h30, more people are engaged in SNA than in non-SNA production activities. This period corresponds to peak working hours. Between 17h30 and 21h30 there is a decline in the number of people involved in SNA production activity. This is when most people will be involved in leisure activities, household maintenance and getting ready for sleep.

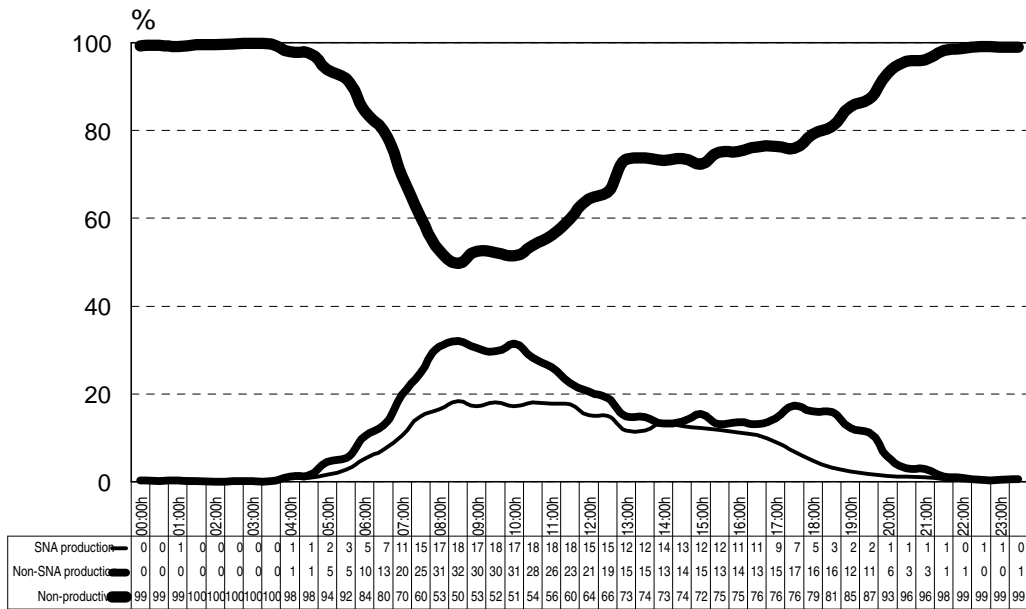
**Figure 4: A typical Monday to Thursday for the population as a whole**



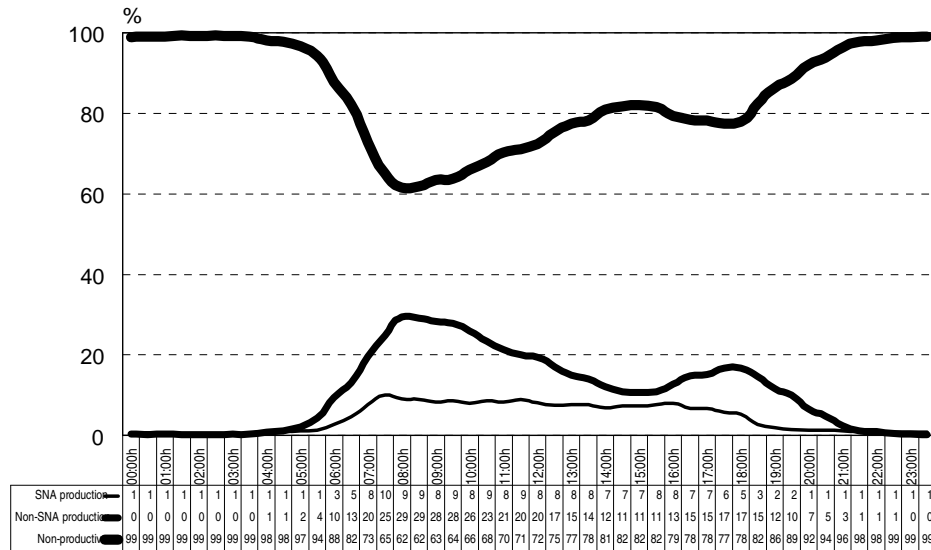
**Figure 5: A typical Friday for the population as a whole**



**Figure 6: A typical Saturday for the population as a whole**



**Figure 7: A typical Sunday for the population as a whole**

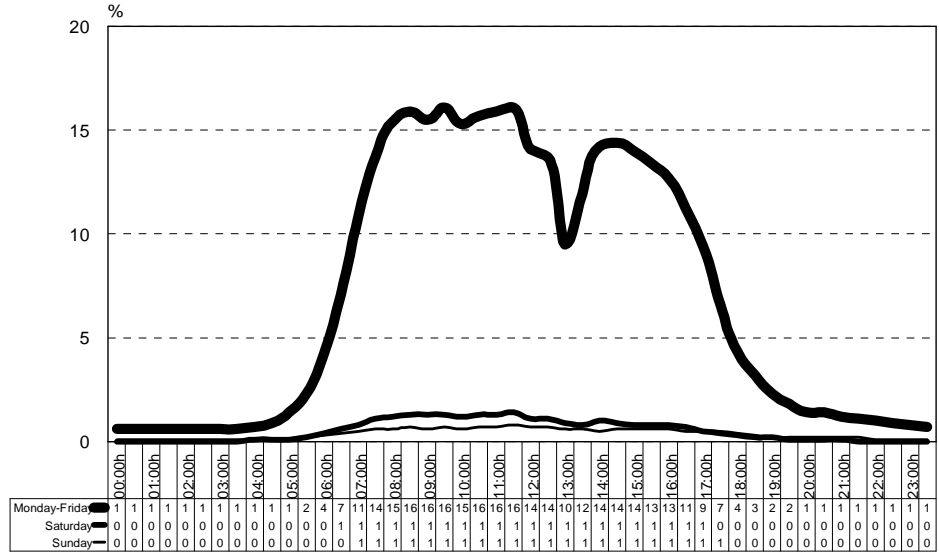


Figures 4 to 7 show the percentages of individuals involved in SNA production, non-SNA production and non-productive activities at all times of day on different days of the week.

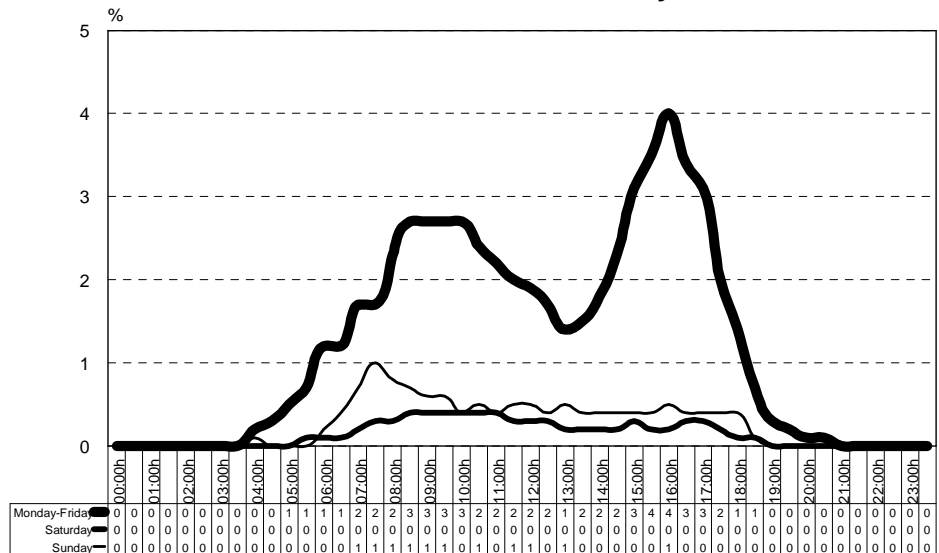
- On Monday to Friday during the peak hours of the day, people are more likely to be involved in SNA than in non-SNA production activities, whereas on Saturdays and Sundays people are more likely to be involved in non-SNA than in SNA production activities;
- On Monday to Friday there is a clear ‘lunch break’ at about 13h00 when the number of people involved in SNA production activities declines and the number involved in non-productive activities increases. This pattern is not seen on Saturday and Sunday.
- Although in other countries Friday activity patterns differ considerably from those of other weekdays, in South Africa the activity pattern for Friday is almost identical to those for Monday to Thursday. Even when the SNA activities are separated into the ten specific categories, the similarity still holds. For instance, mass media and social and cultural activity patterns are similar from about 16h00 on all weekdays. The only difference is that a small percentage of individuals engage in some learning activities from six in the evening on Monday to Thursday but this is not the case on Friday.
- SNA production activity on Saturday differs from that on Sunday. The percentage of people involved in SNA production activity is slightly higher at any given time on Saturday than on Sunday. This indicates that, although there is still some economic work done, people generally have a rest from work on Sunday.
- Levels of non-SNA production activity on Saturday and Sunday are similar to, and sometimes higher than, those for weekdays. This suggests that some people may leave their housework for the weekends.

- On Monday to Friday, non-SNA production activity peaks to almost to the same extent in the morning and early evening. But on Saturdays and Sundays the morning peak is higher than the evening one. This could be attributed to the fact that on Saturday and Sunday people tend to have their main meal at midday, whereas on weekdays they have it in the evening.

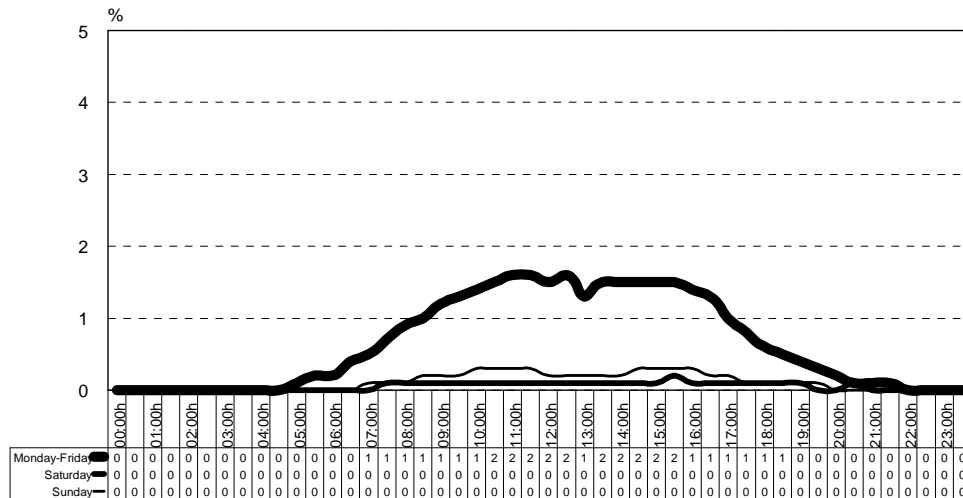
**Figure 8: Percentage of people working in establishments at different times of the day and week**



**Figure 9: Percentage of people engaged in primary production not for establishments at different times of the day and week**



**Figure 10: Percentage of people producing goods and services not for establishments at different times of the day and week**



Figures 8 to 10 allow comparison between the percentage of individuals engaged in:

- work in establishments, which roughly corresponds to formal sector work, but includes paid domestic work (Figure 8);
- primary production not for establishments, which includes subsistence production as well as fetching fuel and water for domestic use (Figure 9); and
- other work not for establishments, which roughly corresponds to informal sector work (Figure 10).

Comparing the three figures shows that a far greater percentage of people are involved in establishment work than in the other two types. But the difference between establishment and other productive work is less during the weekends.

Figure 8, which depicts work in establishments, shows the expected pattern from Monday to Friday. Here the peak work period extends from about 07h30 to 17h00, with a clear 'lunch break' around 13h00.

Figures 9 and 10, which depict primary production not for establishments and other non-establishment production respectively, show a similar peak period, and lunch break, but with a much lower level of activity.

Figure 9 shows two peaks in the Monday-to-Friday pattern of primary production. There is one early in the morning and another around 16h00. These could represent morning and afternoon tasks relating to agriculture, such as taking cattle to the fields, fetching and milking them, and fetching water and fuel for household tasks. The water and fuel collection would be done in both rural and urban informal settings. On Saturdays, there is again a slight morning peak, but no afternoon peak. On Sundays the graph is relatively flat.

Figure 10 shows a lunch break in non-establishment work during the week, as does the Saturday pattern to some extent. The difference between weekdays and weekends seen here is somewhat similar to that in the figure representing establishment work, but the absolute levels are lower.

**Figure 11: A typical day for the population as a whole**

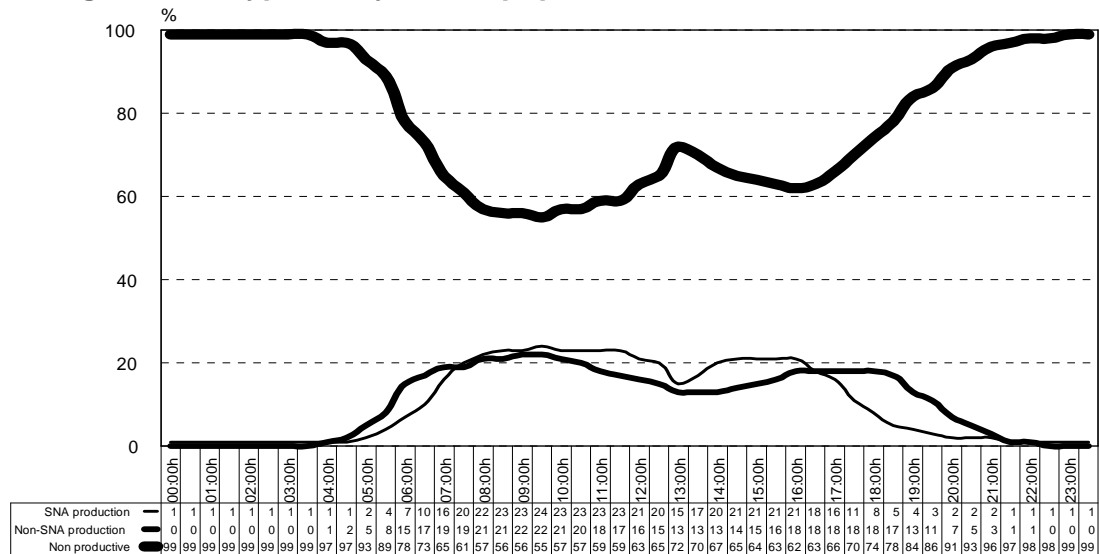


Figure 11 shows the different periods into which a typical day for the whole population can be divided. The overall activity pattern is similar to those discussed for Figures 1, 2 and 3, but it is given here as background for the demographic breakdowns which follow.

- During the period between 22h00 and 04h00 there is little activity other than non-productive activity, primarily sleep.
- During the next period, between 04h00 and about 06h00, when people wake up or get ready for the day, non-SNA production activity such as household maintenance and childcare increases.
- This is followed by a period involving both SNA and non-SNA production activities, although at all times of the day the majority of people are engaged in non-productive activities. Between 12h00 and 14h00, the period of peak productive activity is punctuated by non-productive activities when many people take a lunch break. The percentage of those involved in non-SNA and SNA production then decreases while the percentage involved in non-productive activity increases.
- The evening is characterised by non-productive activity, mainly mass media use and social activity. But there is also some household maintenance during this period.

Figure 12: A typical day for non-Africans

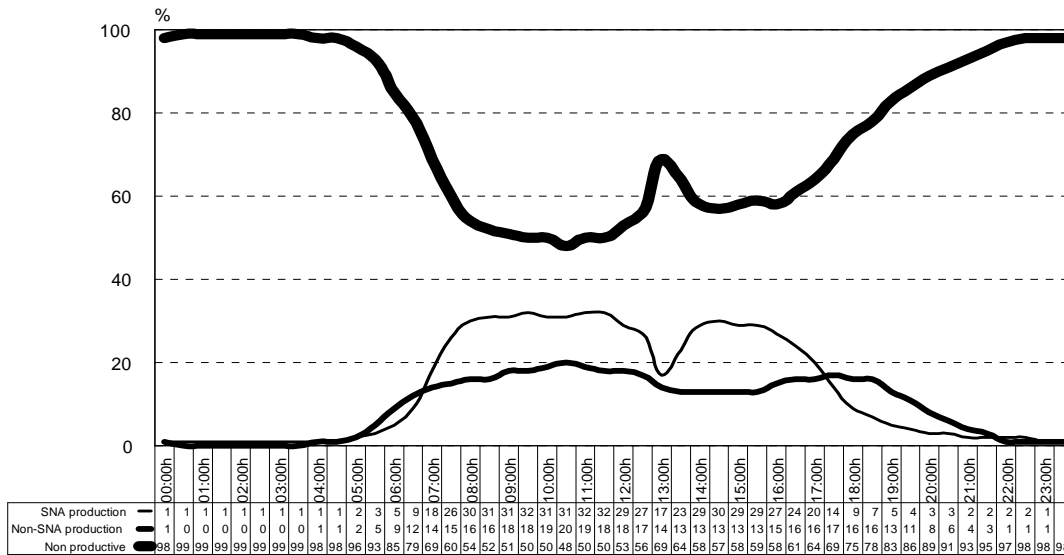
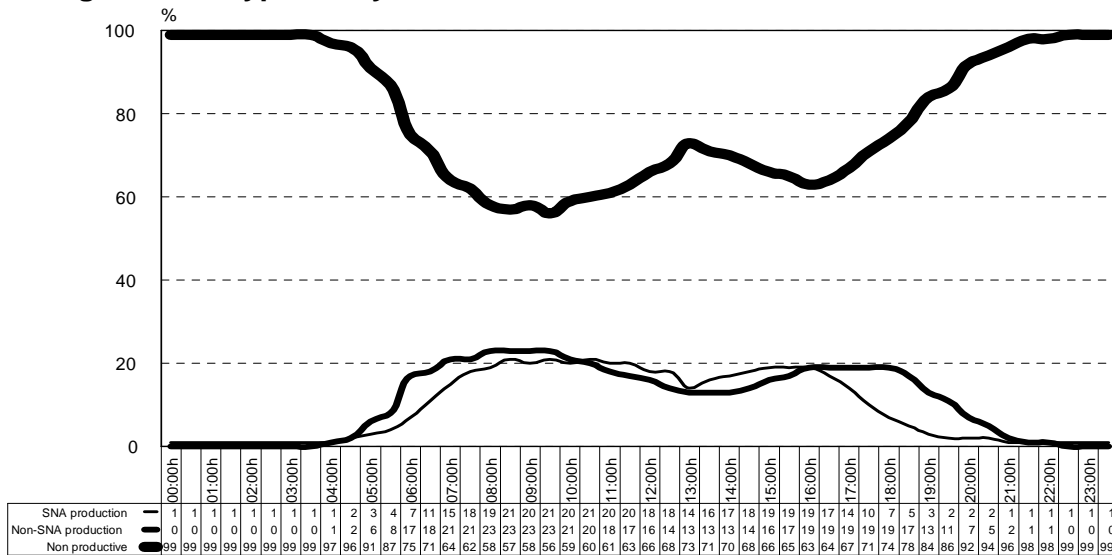


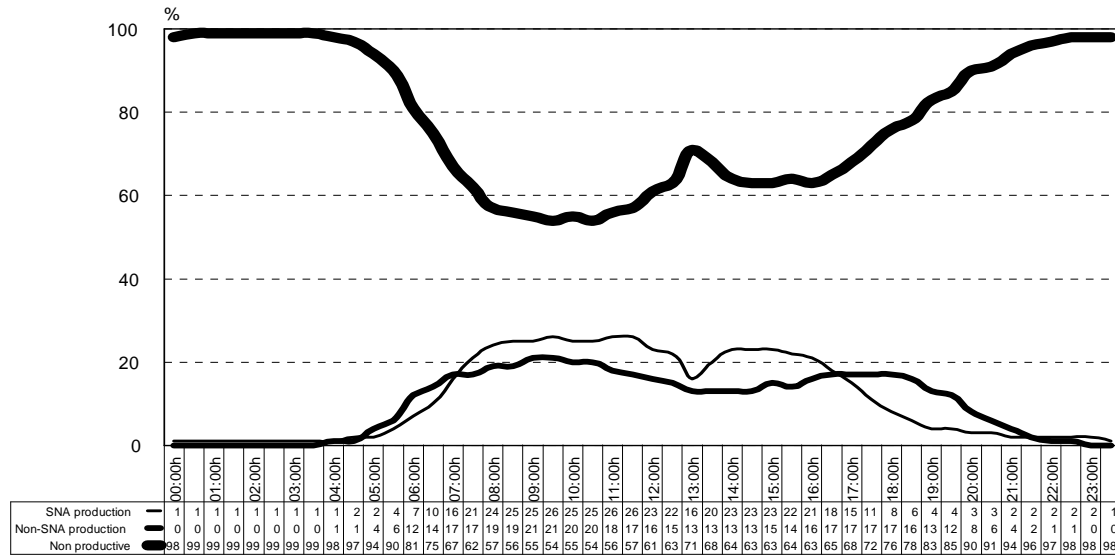
Figure 13: A typical day for Africans



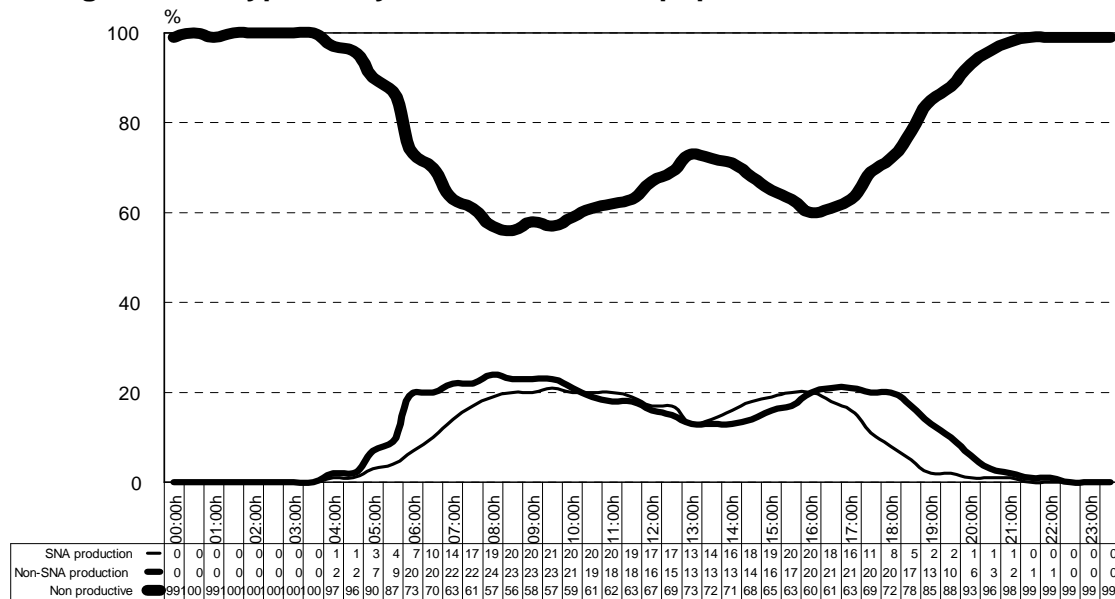
- Non-Africans are more likely than Africans to be involved in SNA production activity during the day. In addition there is a more marked lunch break for non-Africans. These differences could be attributed to the fact that a greater percentage of non-Africans are involved in formal employment.
- During the day, a larger percentage of Africans than of non-Africans are involved in non-productive activities. The non-productive graph for non-Africans goes as low as 50% at around 10h00, while the lowest percentage of Africans involved in non-productive activities is around 60%, about an hour earlier.

- During the main working hours of the day, significantly more non-Africans are involved in SNA than in non-SNA production. In contrast, slightly more Africans are involved in non-SNA than in SNA production.

**Figure 14: A typical day for the urban population**



**Figure 15: A typical day for the non-urban population**

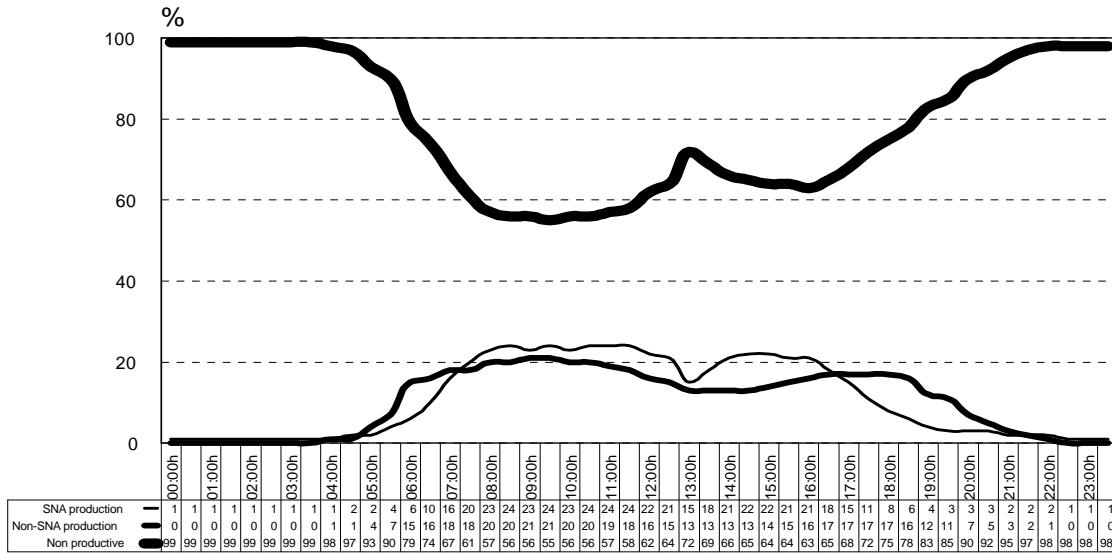


Figures 14 and 15 compare daily activities of people residing in urban and non-urban areas.

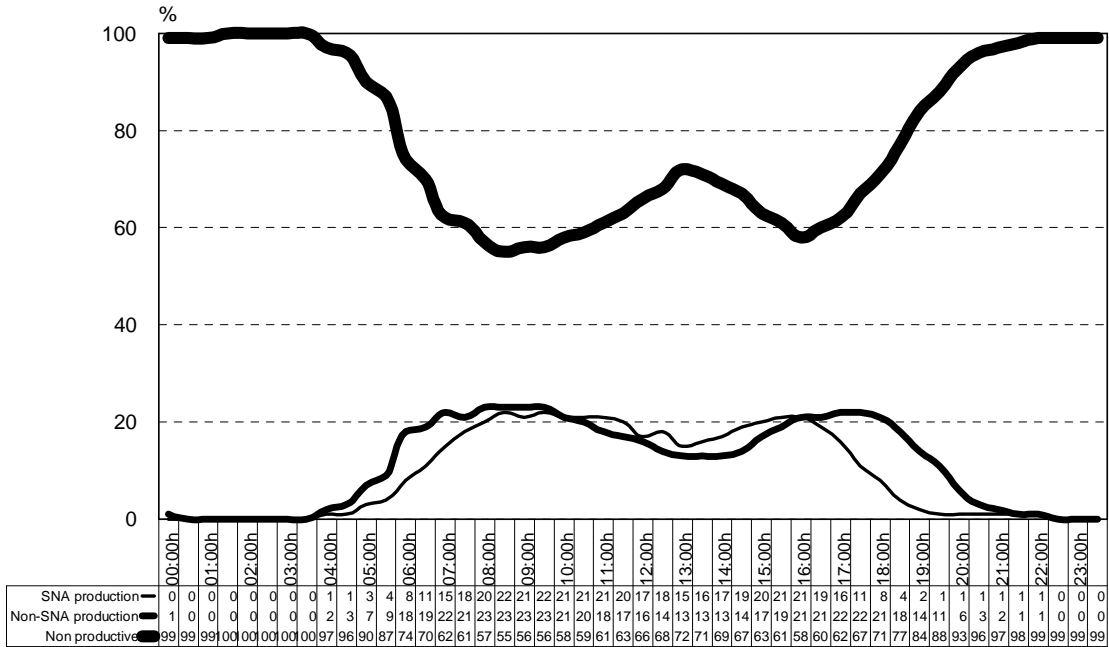
- Productive activity ends earlier for those residing in non-urban areas.
- During peak working hours, more urban people engage in SNA than in non-SNA production activities, whereas the opposite is true for those residing in non-urban areas.



**Figure 16: A typical day for people who use electricity for lighting**



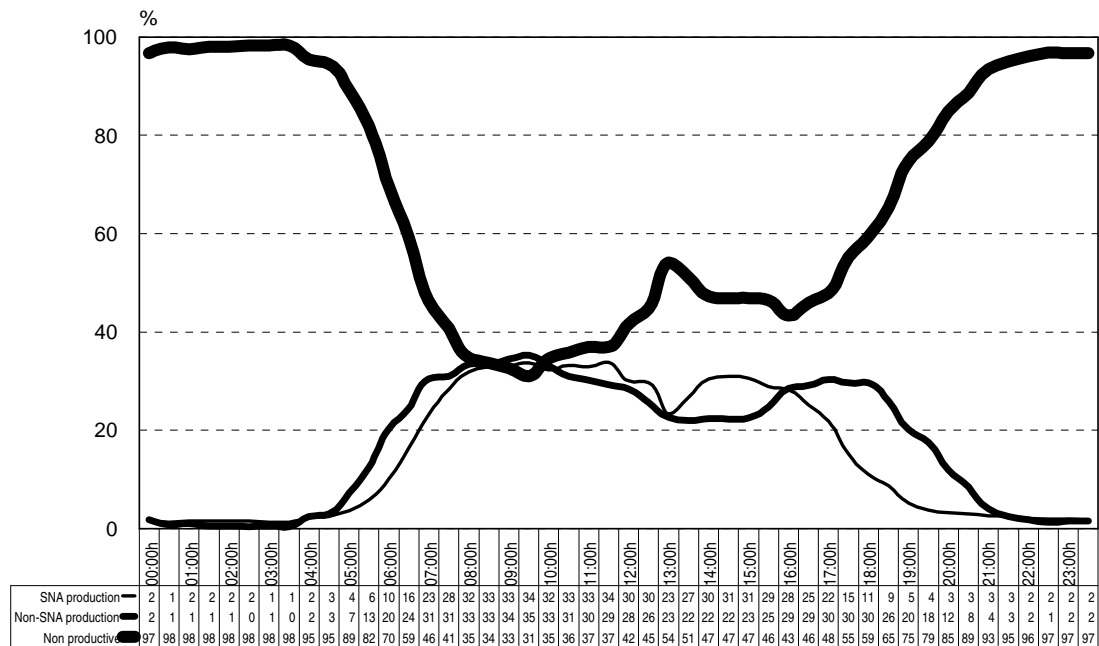
**Figure 17: A typical day for people who do not use electricity for lighting**



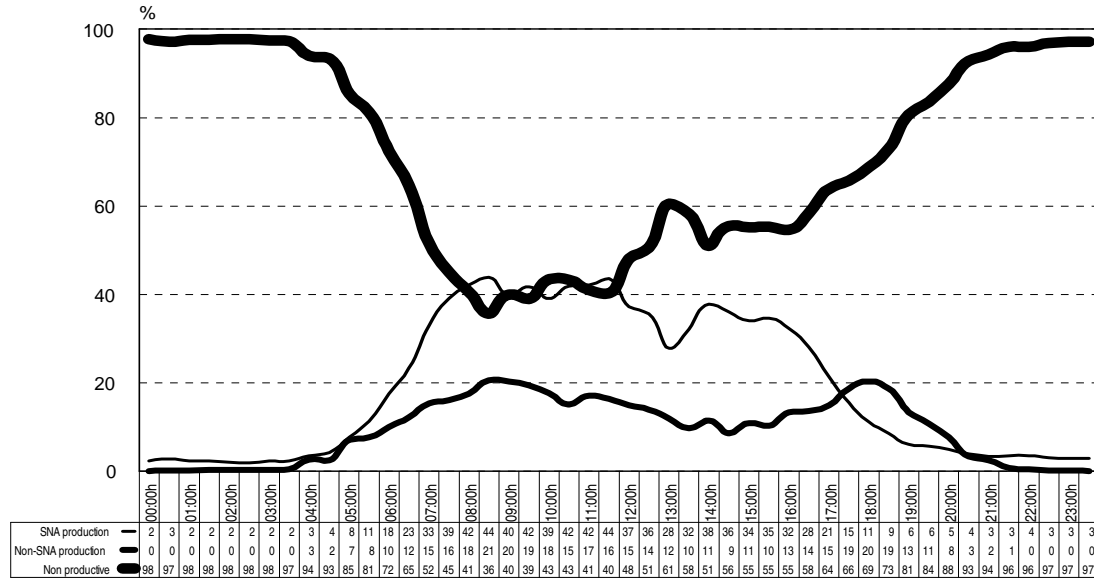
Figures 16 and 17 allow comparison between the daily activity patterns of people living in households that use electricity for lighting and those living in households that use other sources such as gas, paraffin, and candles.

- Productive activity tends to stop slightly earlier for those who do not use electricity for lighting. For example, SNA and non-SNA production tend to stop at about 21h00 for those that do not use electricity and at about 22h00 for those who do. A similar pattern was observed when we looked at people living in households which use electricity for either lighting, heating or cooking.
- The early morning period, when people typically prepare for the day, is slightly longer for those who do not use electricity for lighting. This probably reflects the fact that they are also unlikely to use electricity for heating and cooking and would therefore require more time for preparing their food.

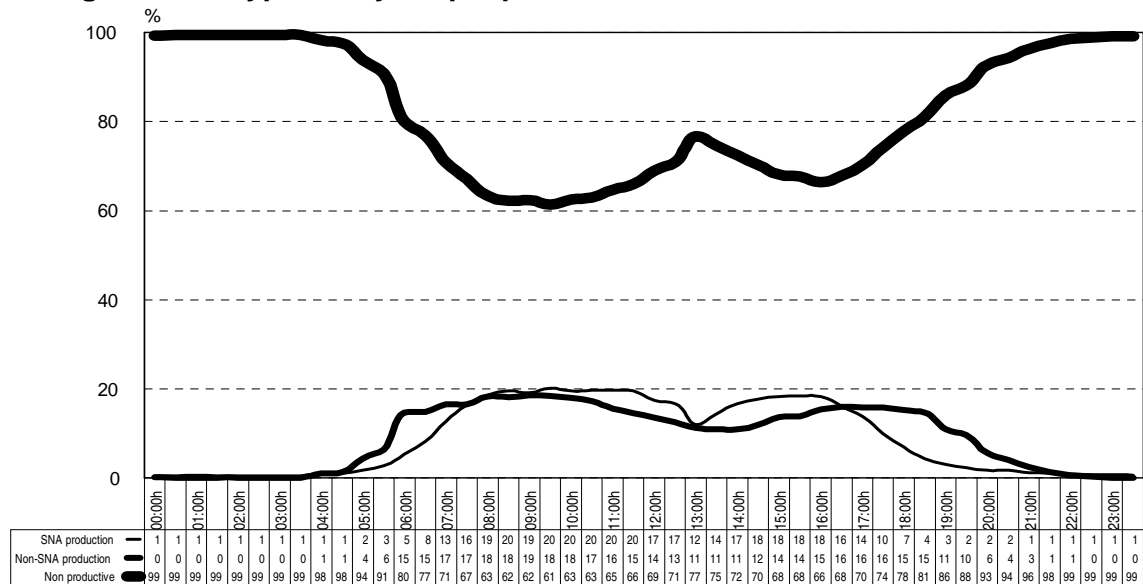
**Figure 18: A typical day for people with children under 7 living in the household**



**Figure 19: A typical day for people with children under 7 living elsewhere**



**Figure 20: A typical day for people with no children under 7**



The presence of young children in the household will affect, among others things, leisure activity, household maintenance activity, and time spent on childcare by older individuals. Figures 18 to 20 show the percentage distribution of individuals by type of activity, according to whether they have children under seven years of age, and if, so, whether the children live with them.

- Individuals with children under seven living with them in the household tend to be less involved in non-productive activities than others. For instance, at about 09h30, only 31% of them are involved in non-productive activities, whereas 36% of those whose children live elsewhere and 61% of those with no children under

seven years are non-productive at this time. Those living with young children presumably have to spend longer on household maintenance and childcare and thus have less time available for non-productive activities.

- The 'lunch break' pattern seen in the typical day for the whole population is minimal for those with young children in the household. Only a small percentage of them are involved in SNA or non-SNA production at lunch time.
- We previously observed that the percentage of people involved in non-SNA production activities was greater than that of people involved in SNA production activities in the period after typical working hours. This pattern is more marked for those living with young children, both as to the percentage to whom it applies and the length of time it lasts. This again suggests that people living with young children spend more time on household maintenance and childcare.

**Figure 21: Percentage of people in different age groups sleeping at different times of day**

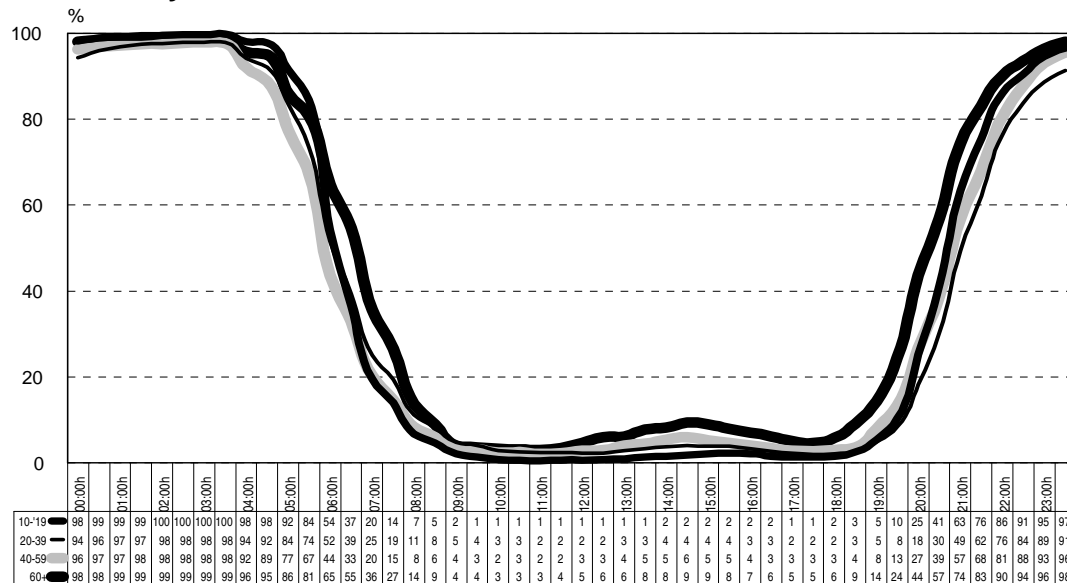
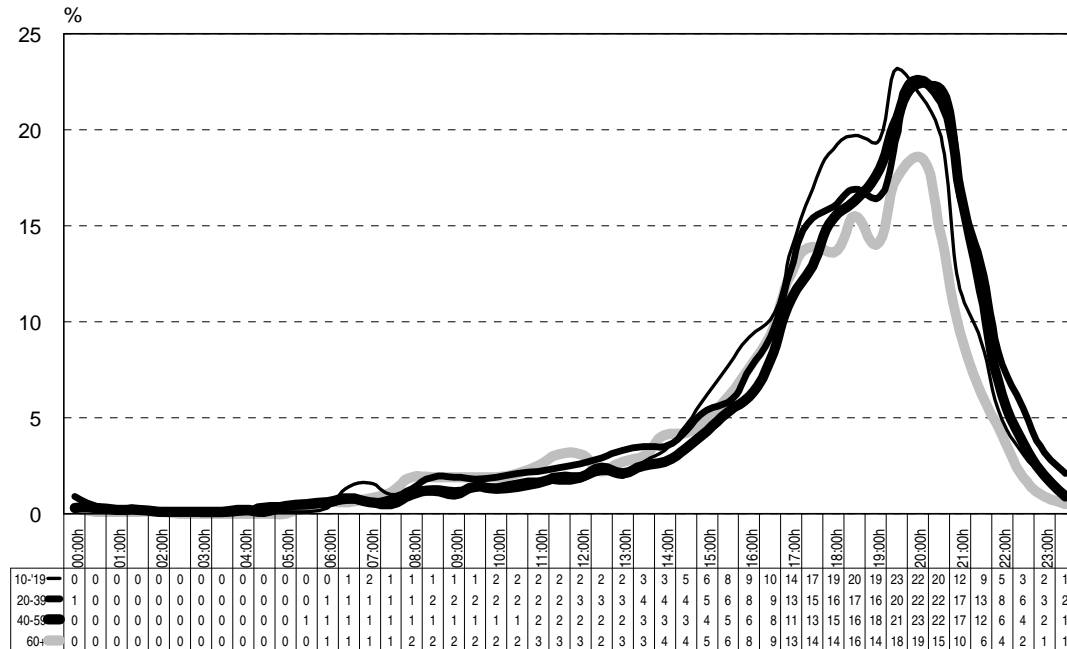


Figure 21 shows the percentage of people of different age groups who are sleeping at any time of the day.

- A small percentage of people of all ages sleep between 10h00 and 19h00. The percentage who sleep during this period is highest among those aged 60 and above, and next highest among those between 40 and 59 years of age.
- For all age groups sleeping mostly takes place between 20h00 and about 07h00. From 20h00 onwards the proportion of those who are sleeping increases to a point where virtually all individuals of any age are asleep, and then from 4h00 this pattern is reversed.

- At around 14h00 there is a slight increase in the percentage of all age groups sleeping. This may indicate that a proportion of the population takes an after-lunch nap.

**Figure 22: Percentage of people in different age groups watching television at different times of day**



The graph in Figure 22 presents the percentage of individuals in each age group watching television at different times of day.

- As expected, virtually no people watch television between 00h00 and 04h30 in the morning.
- More aged people than others watch television during the day. This reflects the fact that children are probably at school and younger adults are working or looking for work.
- The highest percentage of people in all age groups watch television at about 21h00. At this time teenagers (10-19 years) are the most likely to be watching and the aged are the least likely.

## Section 2: Typical days for men and women

Figure 23: A typical day for women

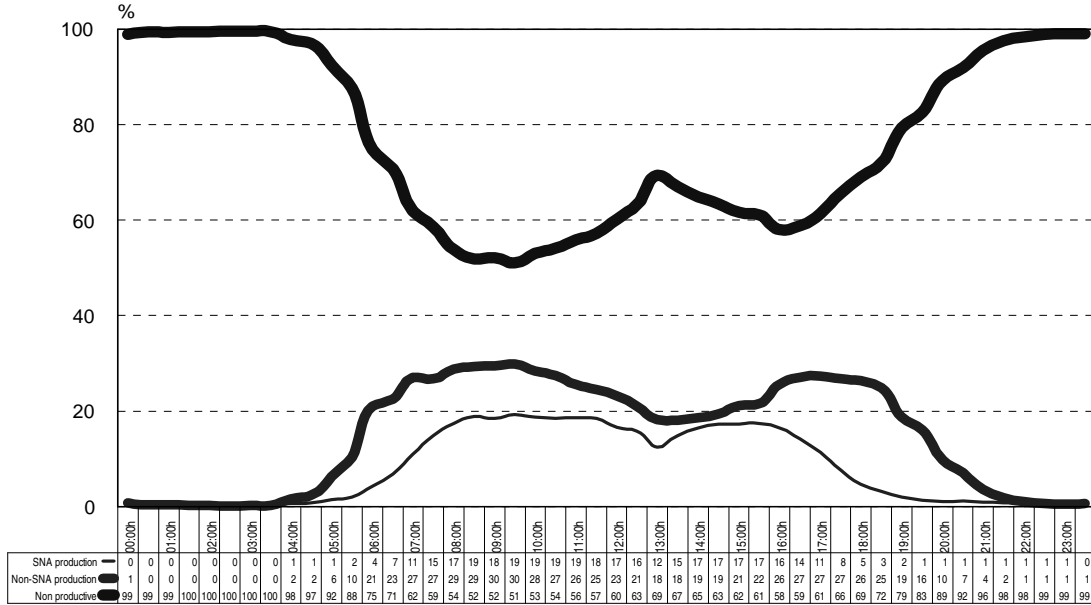
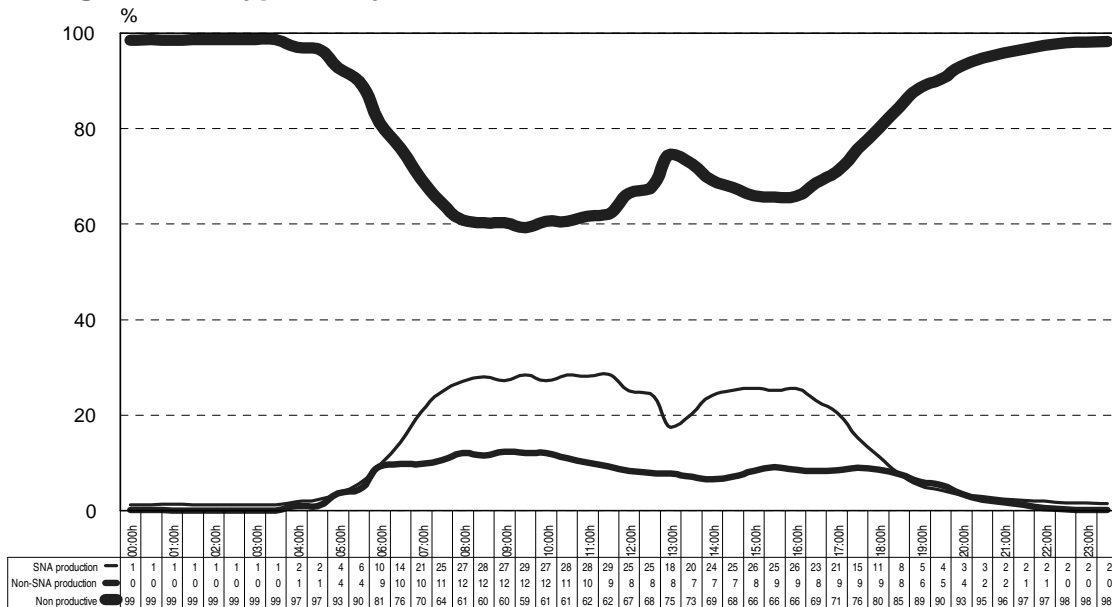


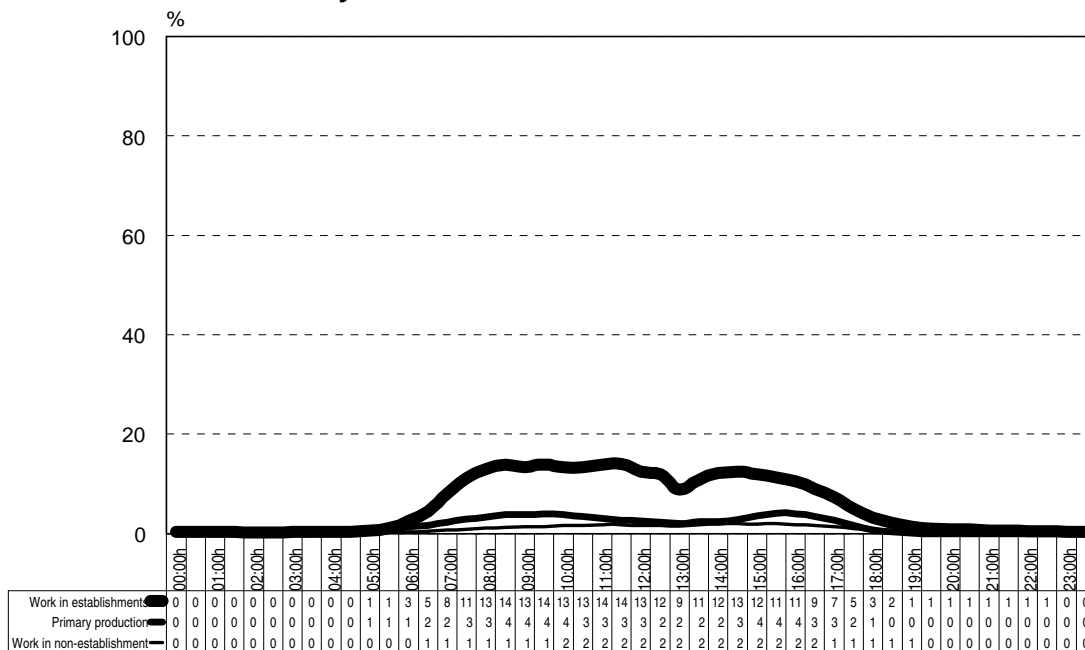
Figure 24: A typical day for men



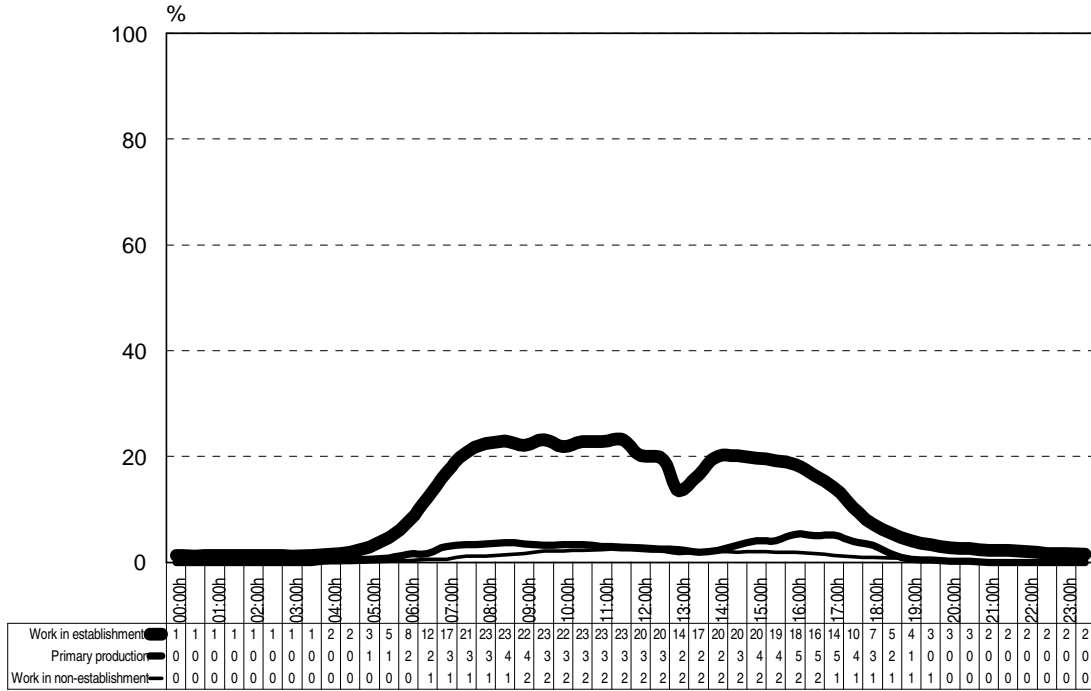
Figures 23 and 24 show what percentage of men and women are involved in different activities at given times of the day.

- The figures show that at midnight almost 100% of all women and men are engaged in non-productive activities, probably sleeping. At 09h00, about 60% of men are engaged in non-productive activities, about 33% in SNA production activities, and the remaining 17% in non-SNA production activities. In comparison, at this time about 55% of women are involved in non-productive activities, less than 20% in SNA production activities, and 35% in non-SNA production activities.
- At any time of the day more than half of all men and women are involved in non-productive activities.
- Throughout the peak hours of the day, that is between about 06h30 and 1800, there are more men involved in SNA production than in non-SNA production activities, while the opposite pattern holds for women.
- Women tend to begin their day slightly earlier than men do. By 04h30, the day has begun for some women, but for men it begins only at 05h00.
- At about 19h00 almost all men are involved in non-productive activities, but a considerable number of women are still involved in non-SNA production. Seven o'clock is the time when many women, employed or not, will be preparing dinner, doing household maintenance chores and caring for others.

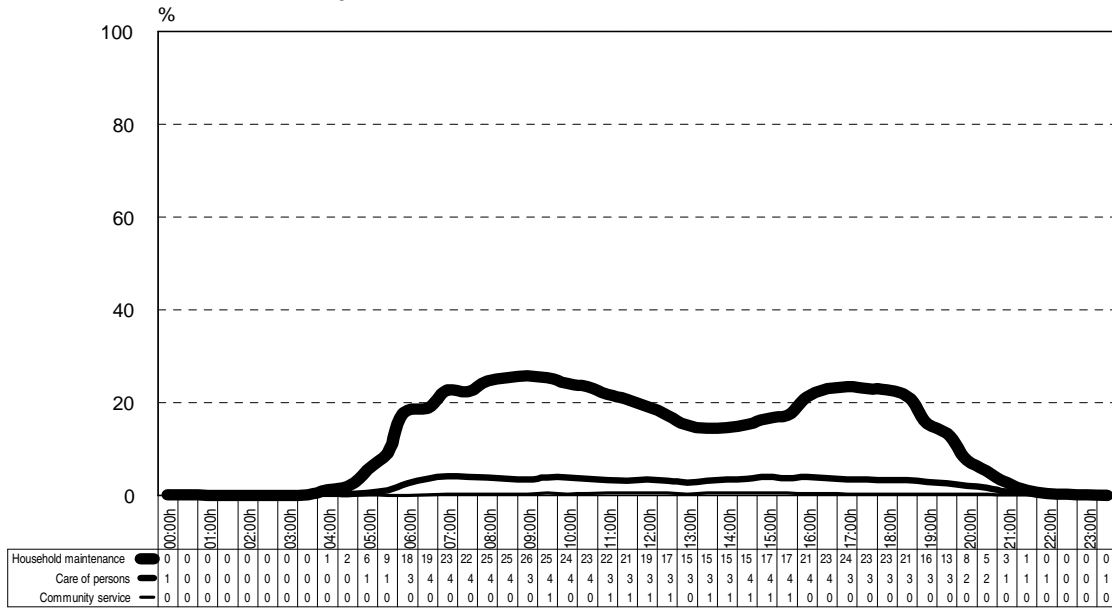
**Figure 25: Percentage of women engaged in SNA production activity at different times of day**



**Figure 26: Percentage of men engaged in SNA production activity at different times of day**

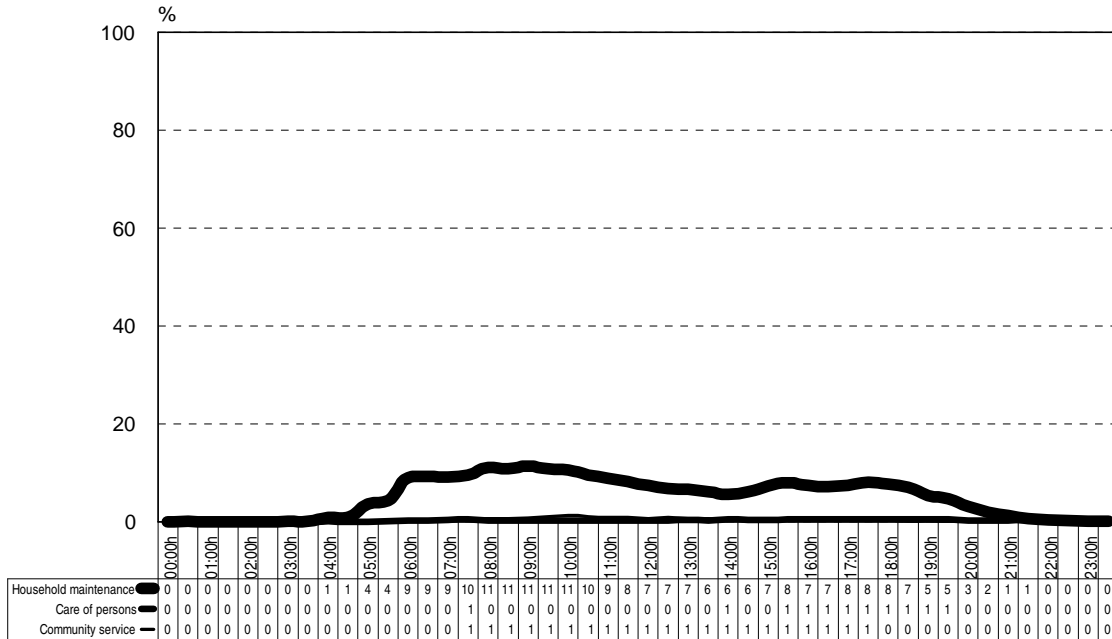


**Figure 27: Percentage of women engaged in non-SNA production activity at different times of day**

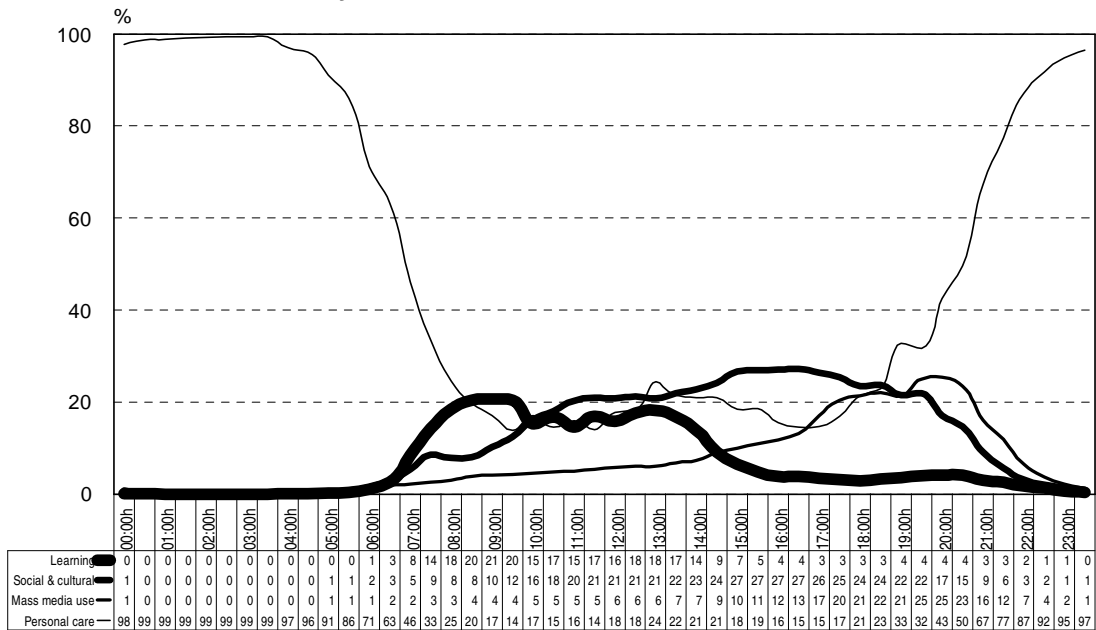




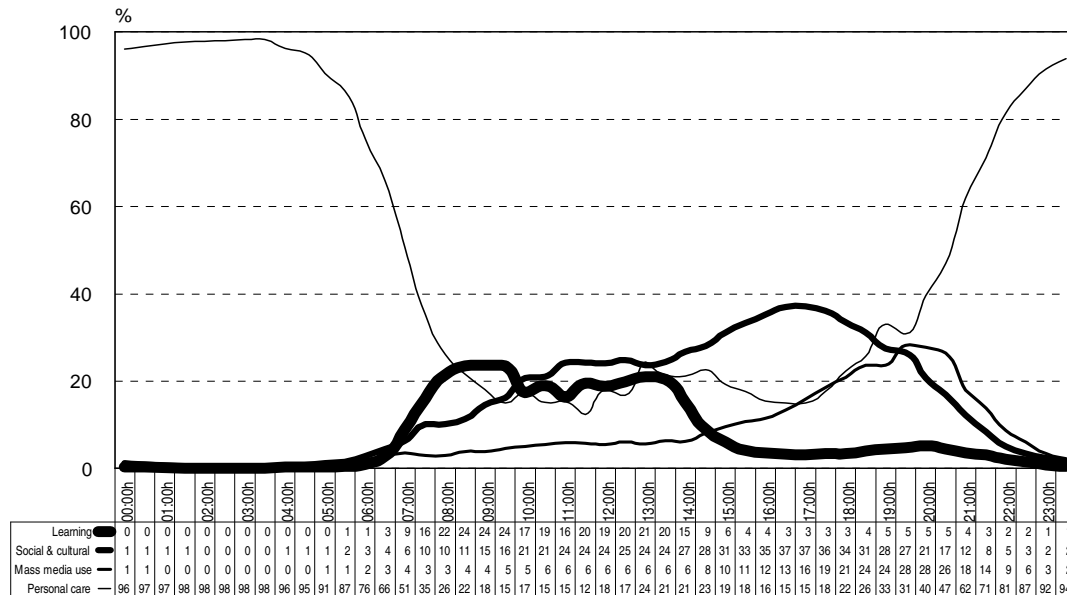
**Figure 28: Percentage of men engaged in non-SNA production activity at different times of day**



**Figure 29: Percentage of women engaged in non-productive activity at different times of day**



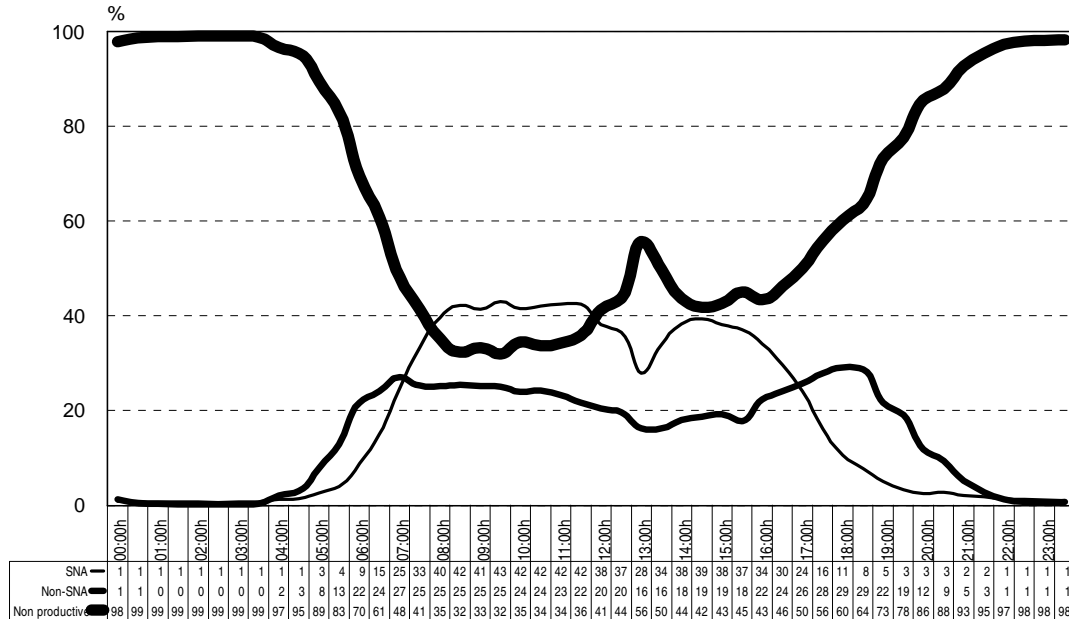
**Figure 30: Percentage of men engaged in non-productive activity at different times of day**



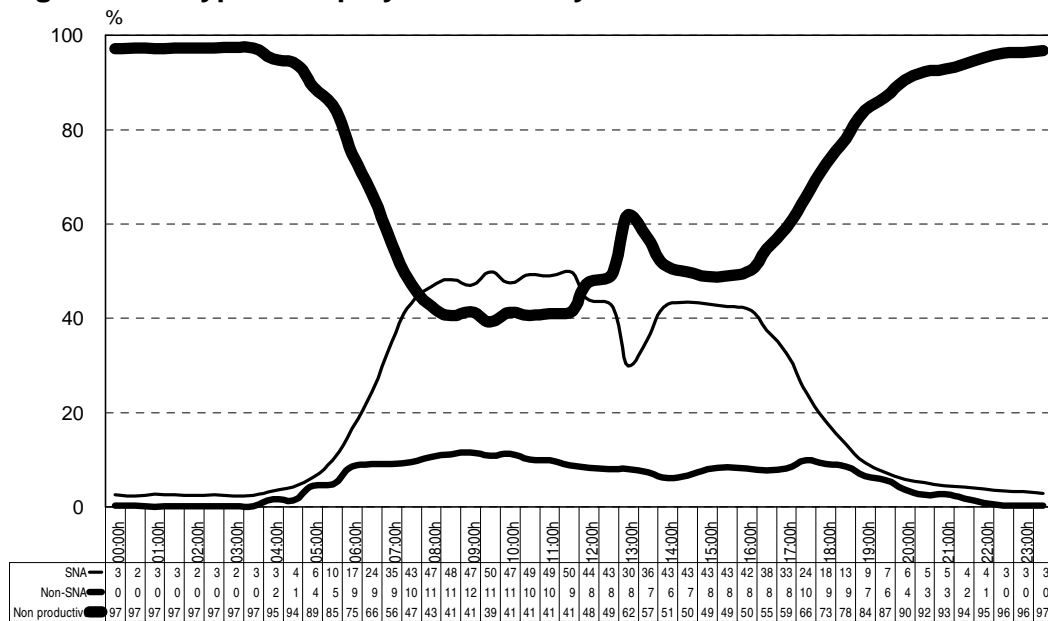
Figures 25 to 30 show what percentage of men and women are involved at any time in the 10 activity categories, grouped into SNA production activities, non-SNA production activities and non-productive activities).

- Between 00h00 and 04h30 men and women engage in little activity other than personal care. Therefore only Figures 29 and 30, which depict non-productive activity, exhibit any real activity.
- Between 07h00 and 18h00 a greater percentage of men than women are involved in working for establishments and a greater percentage of women than men are involved in household maintenance and care of persons. Similar percentages of men and women can be seen working in non-establishments.
- Between 14h30 and 16h30 a greater percentage of both men and women are involved in social and cultural activities than in any other activity. But the percentage of men (about 38%) is higher than that of women (about 27%).
- From 16h30 until about 20h00 most men are involved in personal care, mass media use and social and cultural activities. Only a few of them are involved in household maintenance. At that time most women are also involved in personal care, mass media use and social and cultural activities. However, a substantial percentage are involved in household maintenance activities as well.

**Figure 31: A typical employed woman's day**



**Figure 32: A typical employed man's day**



Figures 31 and 32 illustrate typical days of employed men and women.

- From twelve midnight to about four in the morning, employed men and women are engaged mainly in non-productive activities. However, the graph for men does show some SNA production activity, which perhaps reflects those working on night shift.

- More employed women than men are involved in non-SNA productive activities at any given time of the day. Moreover, at no time of the day does the percentage of employed men involved in non-SNA production activities exceeds the percentage involved in SNA production activities.

The above findings on activity patterns of employed men and women persist even when one separates activities into the 10 specific categories mentioned earlier. For example:

- For some employed women, work in establishments (which includes paid domestic work) begins as early as 06h00, whilst some work until as late as 23h00.
- From about 19h00 a large percentage of employed men are involved in personal care, social and cultural activities, mass media use and some learning. The percentage of men involved in household maintenance at this time is very small. However, during this part of the day a large percentage of employed women are involved not only in personal care, social and cultural activities but also in household maintenance. Few use mass media.
- Although a sizeable proportion of women are involved in personal care and social and cultural activities at this time, some continue with household maintenance activities until about 22h00.

**Figure 33: Percentage of employed men and women engaged in household maintenance at different times of day**

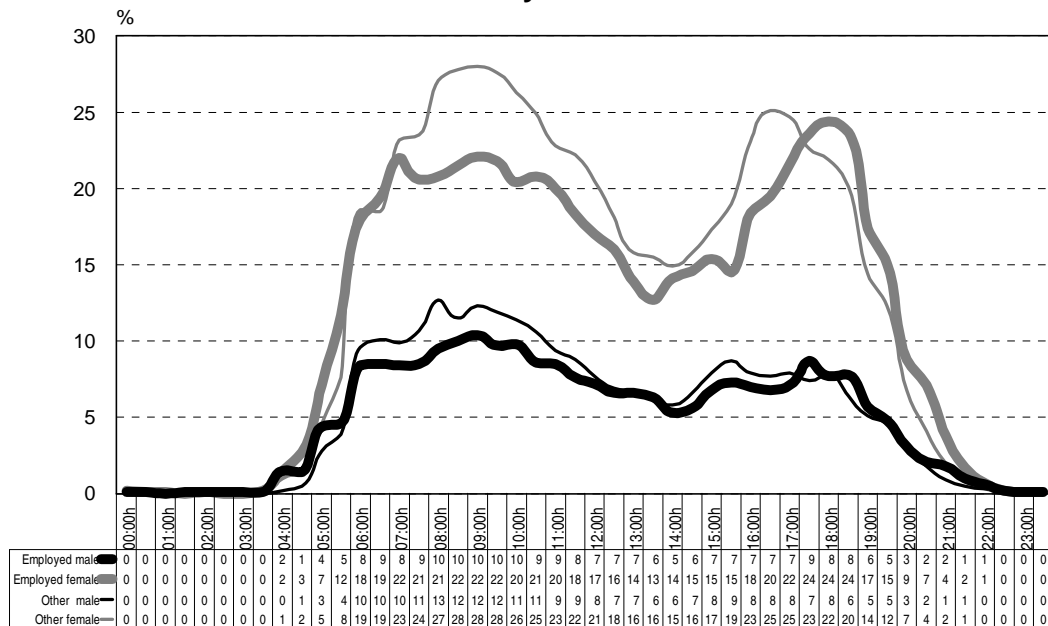


Figure 33 shows what percentages of employed and unemployed men and women are involved in household maintenance at any given time. It indicates that:

- For all employed people, household maintenance does not begin until about 03h30 and ends at about 22h00. These times are very similar for men and women. In addition, throughout the day, women are more likely than men to be involved in household maintenance, regardless of whether they are employed.
- Overall, throughout the day, non-employed women are more likely to be engaged in household maintenance, followed by employed women, non-employed men and employed men. In other words, the likelihood that a person will be engaged in household maintenance depends more on the person’s sex than on whether the person is employed.
- The highest percentage of both men and women are engaged in household maintenance during the morning. Then there is a decline in household maintenance activity between one and two o’clock, which is the time at which most non-productive activity was observed in the preceding analyses.
- Immediately after people start waking up, at about 05h30, and shortly before they go to sleep, are the only times when employed people are more likely than the non-employed to engage in household maintenance. This presumably reflects the fact that employed people are less able to do household maintenance during the day because they are at work.

**Figure 34: Percentage of the total population involved in household maintenance in private and public spaces at different times of day**

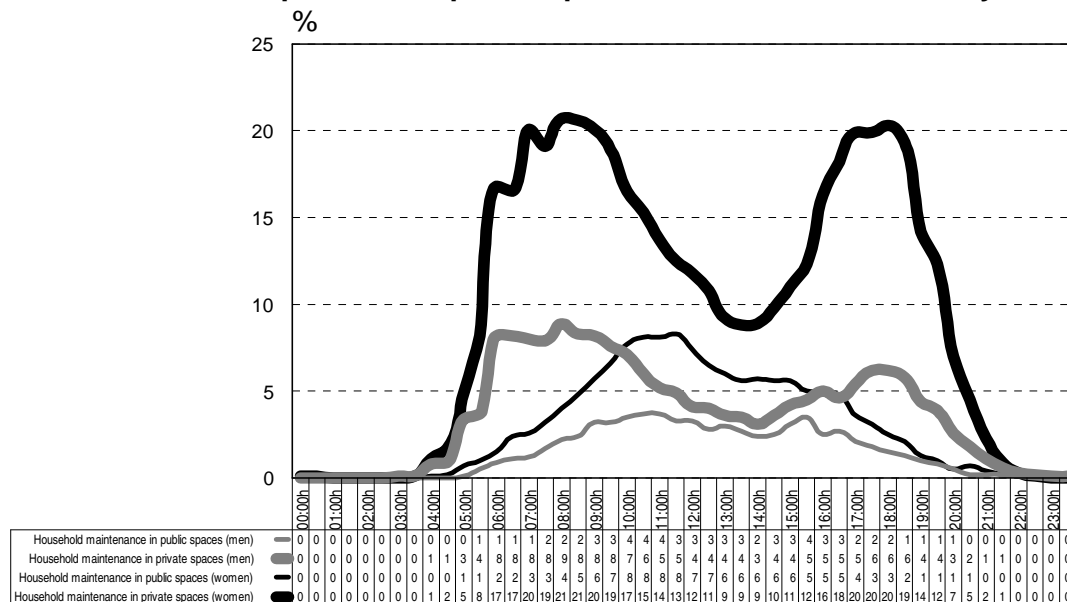


Figure 34 separates household maintenance activities of men and women into those done in private spaces and those done in public spaces. Those done in private spaces are likely to include cooking, serving meals, washing up after meals,

cleaning, care of textiles, do-it-yourself improvements and maintenance, pet care, and chopping wood and heating water not for immediate cooking purposes. Those done in public spaces include accessing government services, travelling and shopping related to household maintenance. This figure indicates that:

- Household maintenance in public spaces peaks in the middle of the day.
- The graph for household maintenance in private spaces is bimodal, with peaks in early morning and early evening when people are more likely to be home.
- Between 03h30 and 20h30 a significant percentage of women are involved in household maintenance in private spaces. This percentage is higher than that of women doing household maintenance in public spaces. It is also higher than those of men involved in household maintenance in either private or public spaces.
- The significant drop in SNA and non-SNA production activity between 13h00 and 14h00 hours observed in previous analyses can also be observed in household maintenance, especially women's household maintenance in private spaces. But there are still more women involved in household maintenance in private spaces than in public spaces and more women than men involved in either type of household maintenance during this period.
- Between 09h30 and 16h30 women are more likely to be involved in household maintenance in public spaces than men in either public or private spaces.

In sum, the preceding discussion indicates that women are more likely than men to be involved in household maintenance, regardless of the nature of the household maintenance activity.

### Section 3: Typical days for women

Figure 35: A typical African woman's day

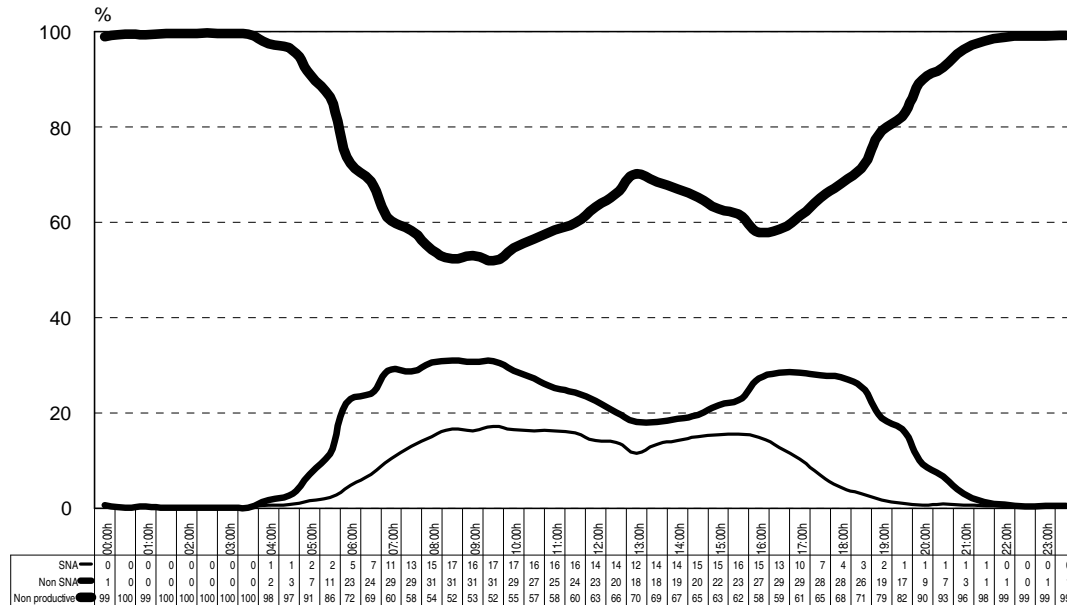
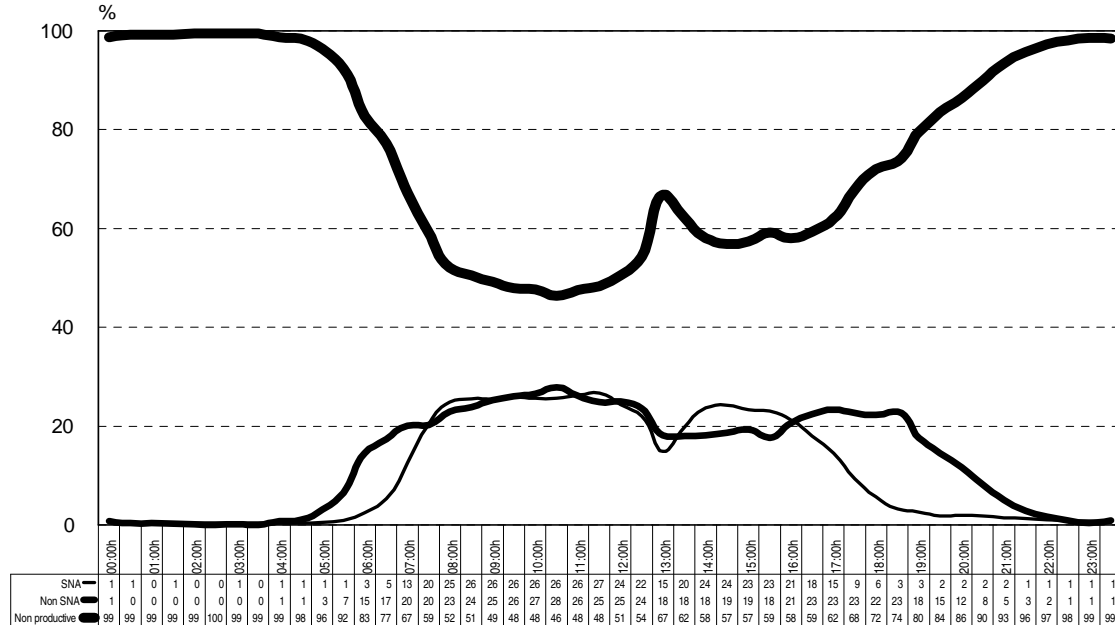


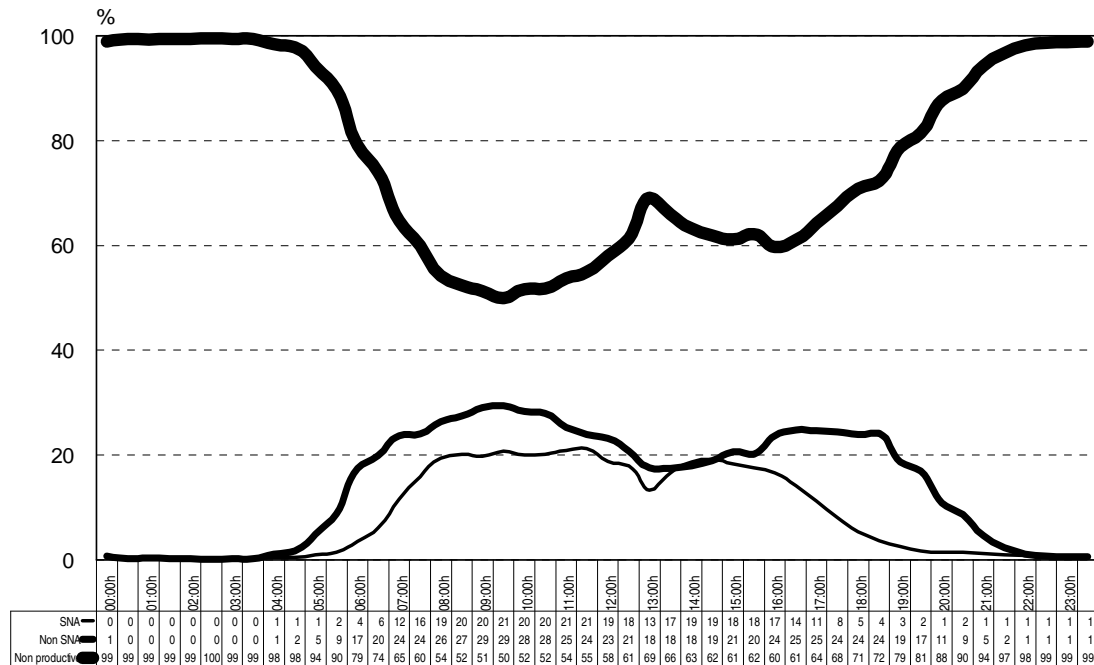
Figure 36: A typical non-African woman's day



Figures 35 and 36 show the percentages of African and non-African women involved in SNA production, non-SNA production and non-productive activities at different times of the day.

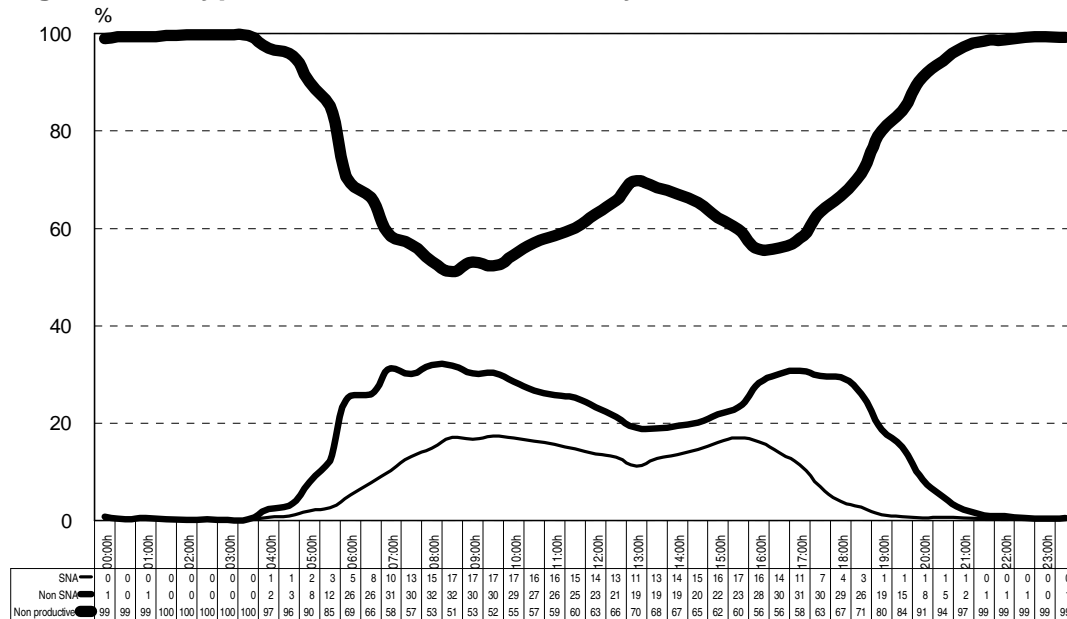
- At any given time women are more likely to be involved in non-productive activities than in any other activity, regardless of their population group.
- At any given time, African women are more likely to be involved in non-SNA than in SNA production activities.
- During working hours, non-African women are more likely than African women to be involved in SNA production activities. There is no timeslot where African women are more likely to be involved in SNA than non-SNA production activities, whereas between 07h00 and 13h00 the percentage of non-African women involved in SNA and non-SNA production activities is almost the same. Moreover between 13h00 and 16h30 there are more non-African women involved in SNA than non-SNA production activities. This probably reflects the higher unemployment rates among African women, and higher rates of non-economic activity. The time use survey found that 58% of African women were not economically active and 8% were unemployed. On the other hand 47% of non-African women were not economically active and 6% were unemployed.
- At about 13h00 the percentage of non-African women involved in non-productive activities increases while the percentage involved in non-SNA and SNA production drops. This probably corresponds with the time when they take their lunch breaks. The same pattern can be observed for African women, but it is not as marked as for non-African women. This probably reflects greater involvement in formal work by non-African than African women, as there is a set lunch break in formal work.

**Figure 37: A typical urban woman's day**





**Figure 38: A typical non-urban woman's day**



Figures 37 and 38 show the percentage of urban and non-urban women involved in SNA production, non-SNA production and non-productive activities at different times of day. They indicate that:

- Both urban and non-urban women are more likely to be involved in non-SNA than SNA production activities between 04h00 and 21h00. However, the difference between the percentage engaged in non-SNA and SNA production activity is larger for non-urban than for urban women.
- Non-urban women tend to begin their (productive) day earlier, at about 04h00, than their urban counterparts, who start at about 05h00. Moreover, the non-urban woman's day tends to end slightly earlier than that of urban women.

## Section 4: Typical days for children

Figure 39: A typical day for children aged 10-14

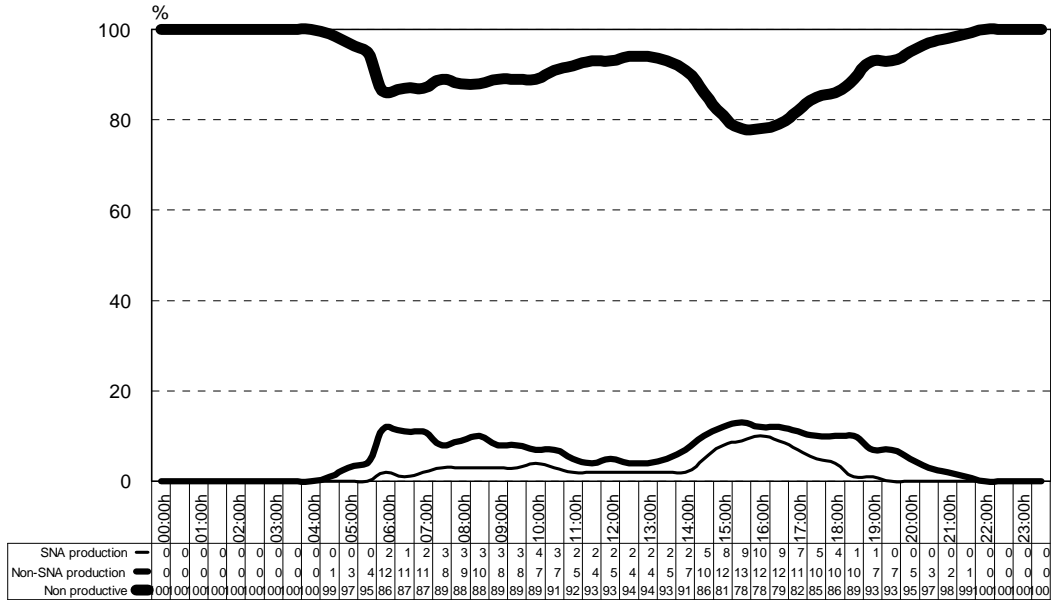
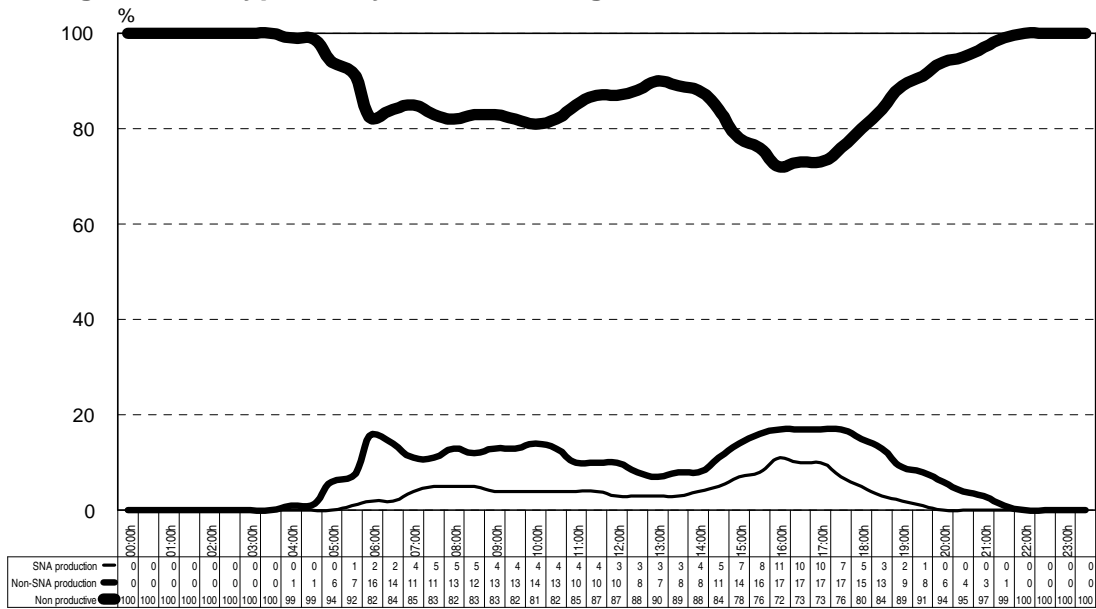


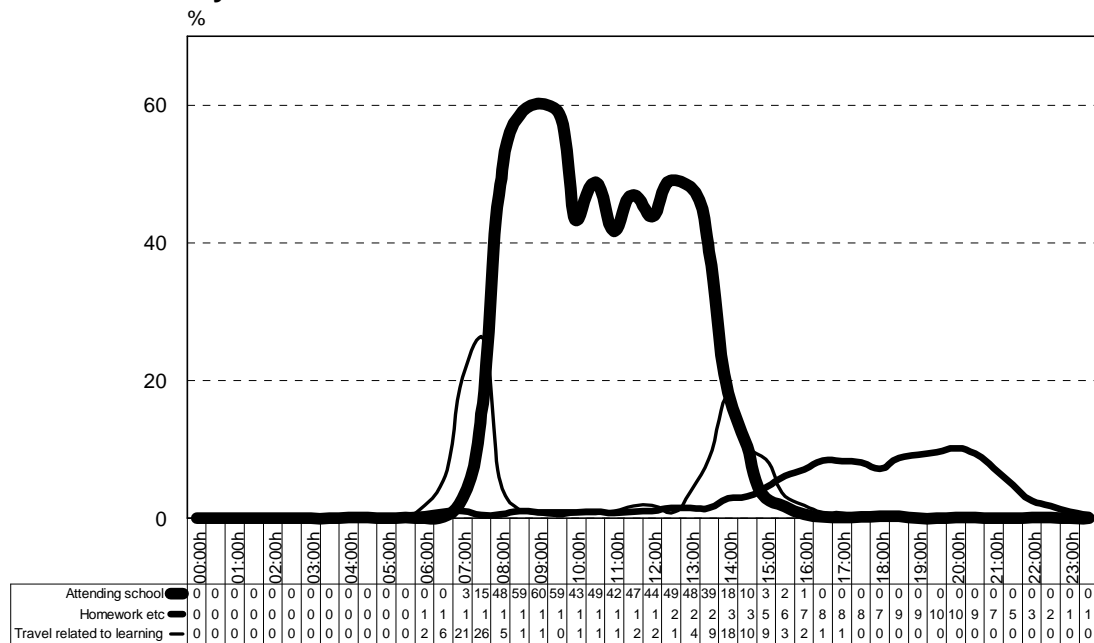
Figure 40: A typical day for children aged 15-18



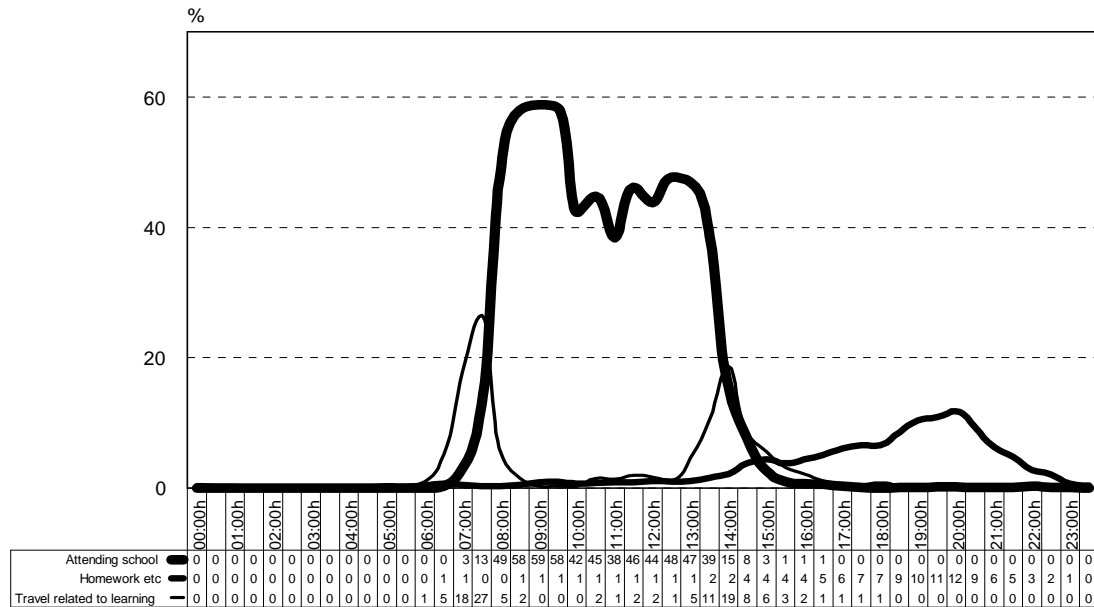
Differences between the activities of younger and older children can be expected. For example, some children aged 15-18 will be working, or looking for work, while all those under 15 years should, legally, be attending school. Figures 39 and 40 show the percentage of children engaged in different activities at different times of the day. They indicate that:

- At any given time, more children in both age groups are engaged in non-productive activities than in productive activities. The activity classification system categorises learning as a non-productive activity, which should account for the high percentage of children who are non-productive in the middle of the day. As expected, the second highest percentage of children are involved in non-SNA production and the lowest percentage are involved in SNA production activities;
- At any given time, there is a slightly higher percentage of 15-18 year olds than 10-14 year olds involved in SNA production activity. Nevertheless, a significant percentage of children aged 10-14 are involved in SNA production, although South African law forbids employment of children under 15 years of age. However, fetching fuel and water are categorised as SNA production, and some of the SNA activity shown on the graph might involve these activities.
- SNA and non-SNA production seem to start for children at about the same time for both age groups, at about 04h30.

**Figure 41: Percentage of girls aged 10-18 engaged in learning at different times of day**



**Figure 42: Percentage of boys aged 10-18 engaged in learning at different times of day**



Figures 41 and 42 focus on the learning activities of boys and girls. It can clearly be seen from these figures that:

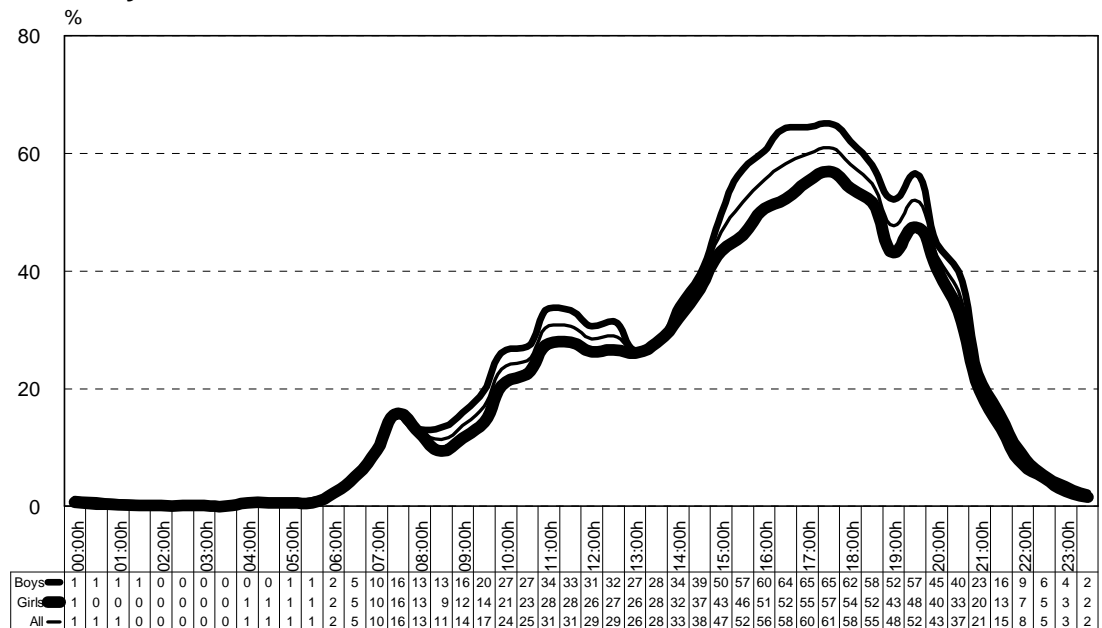
- In the morning period ending at about 06h00, neither girls nor boys engage in any form of learning activity.
- The peak times of travel to and from school show clearly on the graphs at around 7h00 and 14h00, as does the main period spent at school by both boys and girls. At the end of the day there is time for homework or studying.

Although Figures 41 and 42 show that the study patterns of boys and girls are generally similar, when we looked at studying in relation to other activities some differences were found.

After 14h00, more boys are engaged in learning activities than in household maintenance, whereas more girls are involved in household maintenance than in learning. This pattern continues until about 21h00.

Moreover, after 14h00, a significant number of boys and girls are involved in primary production other than for establishments. For boys the percentage is higher than for learning, while for girls it is lower.

**Figure 43: Leisure activities of boys and girls aged 10-18 at different times of day**



Leisure activities include social and cultural activities and use of the mass media. Figure 43 indicates that the patterns of these activities are similar for boys and girls. For example, from 16h00 to 21h30 is when the highest percentages of both boys and girls are engaged in leisure activities. As the figure shows, however, there are some differences:

- At any given time during the day and evening a larger percentage of boys than girls are involved in leisure activities.
- The greatest difference between the sexes can be observed between 16h00 and 20h00, when, as mentioned earlier, girls are more likely to be involved in household maintenance.

## Conclusion

The analysis reveals that a typical day in South Africa can be divided into distinct periods.

During the period between 22h00 and 04h00 there is little activity other than personal care, primarily sleep.

During the next period, between 04h00 and about 06h00, people wake up and get ready for the day, and non-SNA production activity such as household maintenance and childcare increases.

This is followed by a period involving both SNA and non-SNA production activities, although at any time of the day the greatest proportion of people are engaged in non-productive activities. This period of peak production is punctuated between 12h00 and 14h00 by increases in non-productive activity and decreases in both SNA and non-SNA production. This corresponds with a time when many take a lunch break.

The evening is characterised by non-productive activity – mainly mass media use and social activity. There is also some household maintenance during this period.

Patterns of activity on Monday to Thursday were found to be more or less identical to those on Friday. This is different from the experience in many other countries, where Friday activities differ from those of other weekdays. The only difference between Fridays and other weekdays in South Africa is that a small percentage of people engage in some learning activity from six in the evening on the other weekdays but not on Fridays.

Levels of non-SNA production activity on Saturday and Sunday are very similar to, and sometimes higher than, on weekdays. This suggests that some people may leave the housework for the weekends. However, Sunday seems to be the day when fewer people engage in productive activities than on other days.

Non-Africans are more likely than Africans to be involved in SNA production activities. The same is true for urban residents than non-urban residents. These patterns probably reflect the higher levels of formal employment among non-Africans and urban dwellers.

People with children under 7 living in the house spend more time than other people on non-SNA production activities – probably household maintenance and childcare. They are also more likely to start such activities earlier in the day and finish later in the evening.

The analysis further reveals that there are differences in the activities of men and women differ at any given time of day. Women tend to start their day slightly earlier than men do. The day begins at 04h30 for some women, but only at 05h00 for men. In the evening, most men and women are involved with personal care, mass media use and social and cultural activities. A very small percentage of men but a

substantial percentage of women are also involved in household maintenance in the evening.

Comparing different groups of women reveals significant differences between the activities of African and non-African women and those of urban and non-urban women. Some of these differences reflect higher rates of economic activity among non-African and urban women.

The study patterns of boys and girls are generally similar. But the patterns of their learning activities in relation to other activities differ. After school more boys are engaged in learning activities than household maintenance, whereas more girls are involved in household maintenance than in learning. This pattern continues until about 21h00. The leisure activity patterns are also similar for boys and girls, although, at any time during the day and evening, more boys than girls are involved in leisure activities.

This paper substantiates common perceptions of how people as a whole, and men, women, boys and girls, spend certain parts of their day. It also confirms common perceptions of differences between men and women and boys and girls in terms of how they use their time. As most of the findings are what would be expected, especially in South Africa, they attest to the reliability and accuracy of the time use survey data.

## Appendix

### Coding for activity classification system

#### *1. Employment for establishments*

- 111 Wage and salary employment other than domestic work
- 112 Outworkers/home-based work for an establishment
- 113 Domestic and personal services produced by domestic work
- 114 Unpaid employment in an establishment
- 115 Work as employer/self-employed for an establishment
- 130 Working in apprenticeship, internship and related positions
- 140 Short breaks and interruptions in work
- 150 Seeking employment and related activities
- 180 Travel to/from work and seeking employment in establishments
- 190 Employment in establishments not elsewhere classified

#### *2. Primary production activities not for establishments*

- 210 Crop farming and market/kitchen gardening: planting, weeding, harvesting, picking, etc.
- 220 Tending animals and fish farming
- 230 Hunting, fishing, gathering of wild products and forestry
- 236 Collecting fuel, firewood or dung
- 240 Digging, stone cutting, splitting and carving
- 250 Collecting water
- 260 Purchase of goods for and sale of outputs arising from these activities
- 280 Travel related to primary production activities (not for establishments)
- 290 Primary production activities (not for establishments) not elsewhere classified

#### *3. Services for income and other production of goods not for establishments*

- 310 Food processing and preservation activities: grain processing, butchering, preserving, curing
- 320 Preparing and selling food and beverage preparation, baking, confectionery and related activities
- 330 Making and selling textiles, leather and related crafts: weaving, knitting, sewing, shoemaking, tanning, and processing wood
- 340 Building and extending dwellings: laying bricks, plastering, thatching, roofing, maintaining and repairing buildings; cutting glass, plumbing, painting, carpentering, electric wiring
- 350 Petty trading, street/door-to-door vending, shoe-cleaning and other services performed in non-fixed or mobile locations
- 360 Fitting, installing, tool setting, maintaining and repairing tools and machinery
- 370 Providing services for income such as computer services, transport, hairdressing, cosmetic treatment, baby-sitting, massages, prostitution
- 380 Travel related to services for income and other production of goods (not for establishments)
- 390 Services for income and other production of goods (not for establishments) not elsewhere classified



*4. Household maintenance, management and shopping for own household*

- 410 Cooking, making drinks, setting and serving tables, washing up
- 420 Cleaning and upkeep of dwelling and surroundings
- 430 Care of textiles: sorting, mending, washing, ironing and ordering clothes and linen
- 440 Shopping for personal and household goods
- 441 Accessing government service, such as collecting pension, going to post office
- 448 Waiting to access government service
- 450 Household management: planning, supervising, paying bills, etc.
- 460 Do-it-yourself home improvements and maintenance, installation, servicing and repair of personal and household goods
- 470 Pet care
- 480 Travel related to household maintenance, management and shopping
- 490 Household maintenance, management and shopping not elsewhere classified
- 491 Chopping wood, lighting fire and heating water not for immediate cooking purposes

*5. Care for children, the sick, elderly and disabled for own household*

- 511 Physical care of children: washing, dressing, feeding mentioned spontaneously
- 512 Physical care of children: washing, dressing, feeding not mentioned spontaneously
- 52 Teaching, training and instruction of household's children mentioned spontaneously
- 522 Teaching, training and instruction of household's children not mentioned spontaneously
- 531 Accompanying children to places: school, sports, lessons, etc. mentioned spontaneously
- 532 Accompanying children to places: school, sports, lessons, etc. not mentioned spontaneously
- 540 Physical care of the sick, disabled, elderly household members: washing, dressing, feeding, helping
- 550 Accompanying adults to receive personal care services: such as hairdresser's, therapy sessions, etc.
- 561 Supervising children and adults needing care mentioned spontaneously
- 562 Supervising children and adults needing care not mentioned spontaneously
- 580 Travel related to care of children, the sick, elderly and disabled in the household
- 590 Care of children, the sick, elderly and disabled in the household not elsewhere classified

*6. Community services and help to other households*

- 610 Community organised construction and repairs: buildings, roads, dams, wells, etc.
- 615 Cleaning classrooms
- 620 Community organised work: cooking for collective celebrations, etc.
- 630 Volunteering with or for an organisation
- 650 Participation in meetings of local and informal groups/caste, tribes, professional associations, union, political and similar organisations
- 660 Involvement in civic and related responsibilities: voting, rallies, etc.
- 671 Caring for non-household children mentioned spontaneously
- 672 Caring for non-household children not mentioned spontaneously
- 673 Caring for non-household adults
- 674 Other informal help to other households
- 680 Travel related to community services
- 690 Community services not elsewhere classified

*7. Learning*

- 710 School, technikon, college or university attendance
- 720 Homework, studies and course review
- 730 Additional study, non-formal education and courses during free time
- 740 Work-related training
- 780 Travel related to learning
- 790 Learning not elsewhere classified

*8. Social and cultural activities*

- 810 Participating in cultural activities, weddings, funerals, births, and other celebrations
- 820 Participating in religious activities: religious services, practices, rehearsals, etc.
- 831 Socialising with family
- 832 Socialising with non-family
- 833 Socialising with both family and non-family
- 840 Arts, making music, hobbies and related courses
- 850 Indoor and outdoor sports participation and related courses
- 860 Games and other pastime activities
- 870 Spectator to sports, exhibitions/museums, cinema/theatre/concerts and other performances and events
- 880 Travel related to social, cultural and recreational activities
- 890 Social, cultural and recreational activities not elsewhere classified

*9. Mass media use*

- 910 Reading
- 920 Watching television and video
- 930 Listening to music/radio
- 940 Accessing information by computer
- 950 Visiting library
- 980 Travel related to mass media use and entertainment
- 990 Mass media use and entertainment not elsewhere classified

*10. Personal care and self-maintenance*

- 010 Sleep and related activities
- 020 Eating and drinking
- 030 Personal hygiene and health
- 041 Receiving medical and personal care from professionals (including traditional healer)
- 042 Receiving medical and personal care from household members
- 043 Receiving medical and personal care from non-household nonprofessionals
- 048 Waiting for medical and personal care
- 050 Doing nothing, rest and relaxation
- 060 Individual religious practices and meditation
- 080 Travel related to personal care and self-maintenance
- 090 Personal care and self-maintenance not elsewhere classified