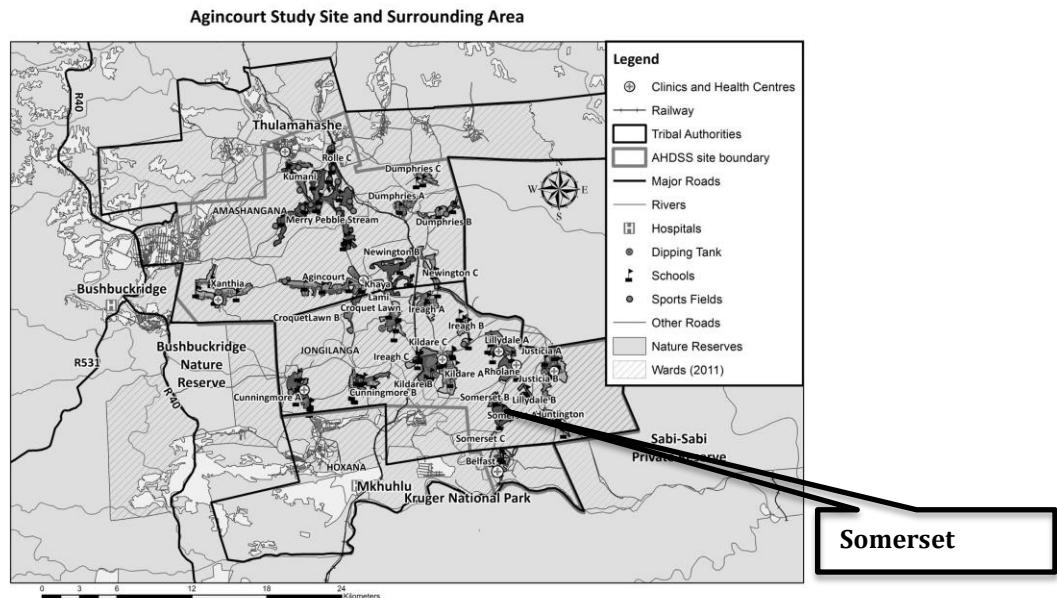


SOMERSET VILLAGE FACT SHEET 2014

This “Fact Sheet” provides basic information on population changes and demographics for Somerset A village. All statistics have been produced from household data collected by fieldworkers from the MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt) and collaborating researchers. Ask the Agincourt LINC (learning, Information dissemination and Networking with the Community) team for more information if needed. There is a fact sheet for each village that is a part of the Agincourt Health and Socio-Demographic Surveillance System (AHDSS) site. The CDF (Community Development Forum) members of each village will each have the fact sheet, the fact sheet is on the website <http://www.agincourt.co.za/index.php/activities/linc/> and you can get it from the LINC office in Agincourt village. The figures provided indicate the trends that are taking place in your village. They can be used to motivate for community development projects and to predict future growth and needs. Whenever you use this information, please reference it as being obtained from MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt).

Villages in the Agincourt Health and Socio-Demographic Surveillance (HDSS) System Research Site in 2014 include:

Agincourt, Belfast, Croquet Lawn, Croquet Lawn B, Cunningmore A, Cunningmore B, Dumphries A, Dumphries B, Dumphries C, Huntington, Ireagh A, Ireagh B, Ireagh C, Justicia, Khaya Lami, Kildare A, Kildare B, Kumani, Lillydale A, Lillydale B, Makaringe, MP Stream, Newington B, Newington C, Rolle C, Somerset, Somerset C, and Xanthia.



1. DEMOGRAPHIC DATA

Demography is the study of human settlements and populations and how they change. Populations change because people are born, they die, they move in and out. This fact sheet will look at births, deaths and migrations of people in and out of Somerset A village. It will also do some comparisons between what is happening in Somerset A and what is happening in the rest of the Agincourt Health and Demographic Surveillance System (HDSS) research site. Smaller places (like villages) show trends that do not always show large change, especially in short time periods. Changes from year to year may be just random fluctuations.

1.1 Village Growth and Population over the Period 1994 - 2014

The numbers shown in **Table 1.1** are calculated according to numbers for the end of June 2014. The numbers are known as mid-year population figures.

Table 1.1: Mid-year Figures of Somerset A village, 1994, 2012-2014

| | 1994 | 2012 | 2013 | 2014 |
|-------------------------------------|-------|-------|-------|-------|
| Households | 655 | 795 | 821 | 830 |
| Population | 4 562 | 4 476 | 4 512 | 4 547 |
| Male | 2 163 | 2 095 | 2 114 | 2 120 |
| Female | 2 399 | 2 381 | 2 398 | 2 427 |
| Children under 5 | 899 | 534 | 523 | 532 |
| Children of school-going age (5-19) | 1 700 | 1 614 | 1 596 | 1 547 |

Table 1.2 shows how many people were living in Somerset A village of different ages in June 2014.

Table 1.2 Mid-Year Population of Somerset A village, 1994, 2013-2014

| Age Group | 2014 | | |
|--------------|--------------|--------------|--------------|
| | Male | Female | Total |
| 0-4 | 266 | 266 | 532 |
| 5-9 | 240 | 268 | 508 |
| 10-14 | 215 | 260 | 475 |
| 15-19 | 271 | 293 | 564 |
| 20-24 | 291 | 297 | 588 |
| 25-29 | 225 | 202 | 427 |
| 30-34 | 150 | 160 | 310 |
| 35-39 | 120 | 138 | 258 |
| 40-44 | 84 | 106 | 190 |
| 45-49 | 71 | 120 | 191 |
| 50-54 | 54 | 71 | 125 |
| 55-59 | 33 | 58 | 91 |
| 60-64 | 45 | 48 | 93 |
| 65-69 | 18 | 39 | 57 |
| 70-74 | 23 | 30 | 53 |
| 75-79 | 8 | 20 | 28 |
| 80-84 | 2 | 32 | 34 |
| 85-89 | 2 | 9 | 11 |
| 90-94 | 1 | 8 | 9 |
| 95+ | 1 | 2 | 3 |
| Total | 2 120 | 2 427 | 4 547 |

You can compare the population structure between Somerset village and the Agincourt HDSS research site (1994 and 2014) by looking at the population pyramids. These pyramids are in **Figures 1.1, 1.2, 1.3 and 1.4** (page 3).

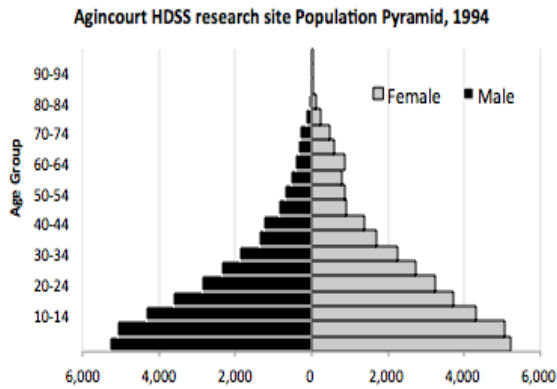
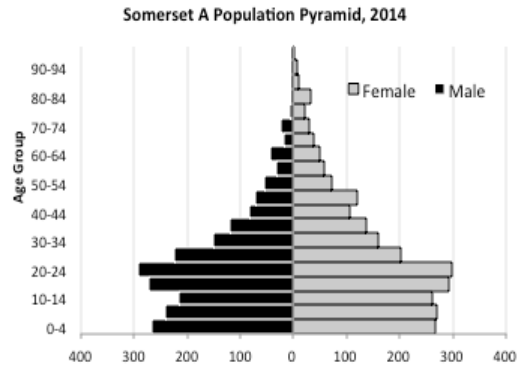
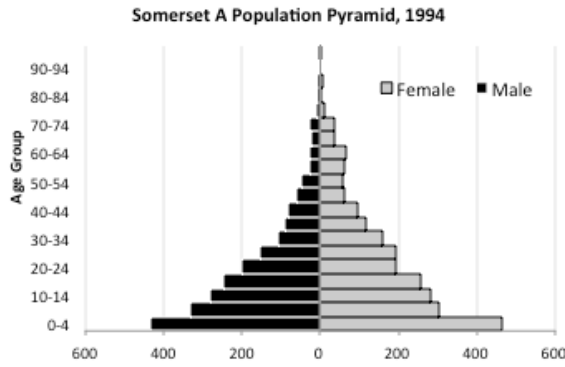
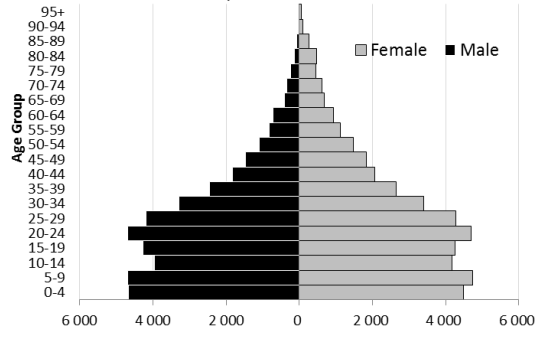


Figure 1.4 Agincourt HDSS research site Population Pyramid, 2014



Take home message: The number of households in Somerset A village has increased since 1994. The population has decreased since 1994. The population structure of Somerset A village follows the structure of the Agincourt HDSS research site.

1.2 Births

1.2.1 Number of Births by Gender

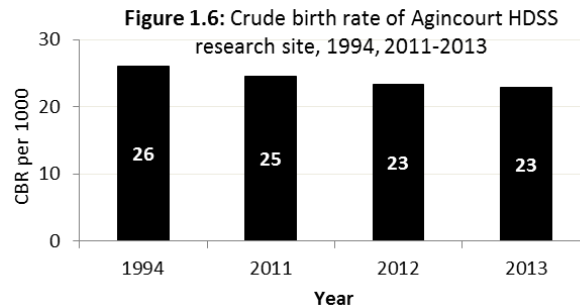
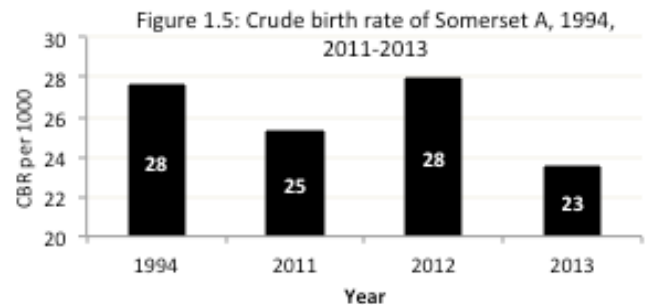
The number of births recorded in Somerset A village is shown in **Table 1.3** below. We can only provide data to the end of 2013. We compared the birth trends in Somerset A village with the rest of the Agincourt HDSS research site in **Figures 1.5** and **1.6**.

| | 1994 | 2011 | 2012 | 2013 |
|----------------------|------|------|------|------|
| Male Births | 67 | 62 | 60 | 50 |
| Female Births | 59 | 51 | 65 | 56 |
| Total Births | 126 | 113 | 125 | 106 |

The numbers of births show an upward trend in Somerset A village. However, in 2013 there was an decrease in the number of births.

1.2.2 Crude Birth Rate

Figure 1.5 shows the crude birth rate in Somerset A village from 1994 to 2013. **Figure 1.6** shows the crude birth rates in the Agincourt HDSS research site from 1994 to 2013.



The crude birth rate is found by comparing the number of babies born to the total population. For example, in **Figure 1.5** above, for every 1000 people living in Somerset A village in the year 2013, 23 babies were born.

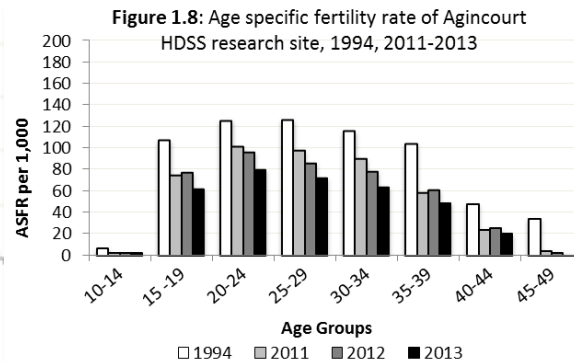
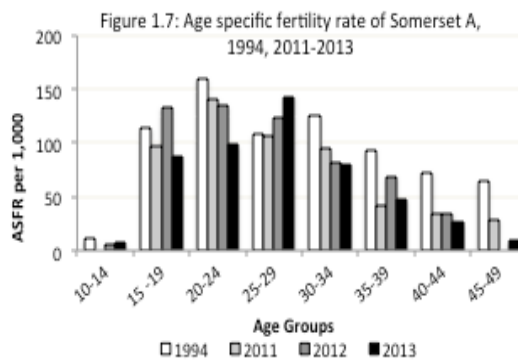
When you compare the crude birth rates in Somerset A village with the crude birth rate for the whole of the Agincourt HDSS research site, they are relatively similar. One difference is, that in 2012 Somerset A had an increase in births and Agincourt HDSS had a decrease.

1.2.3 Births by Mother's Age and Age Specific Fertility Rates

Research within the Agincourt HDSS research site continues to look closely at fertility. **Table 1.4** shows you the number of babies born to mothers of different ages in Somerset Avillage.

| Table 1.4: Births by Age group in Somerset A village, 1994, 2011-2013 | | | | |
|---|------------|------------|------------|------------|
| Age Groups | 1994 | 2011 | 2012 | 2013 |
| 10-14 | 3 | 0 | 2 | 2 |
| 15-19 | 29 | 26 | 37 | 25 |
| 20-24 | 31 | 40 | 35 | 26 |
| 25-29 | 21 | 21 | 26 | 30 |
| 30-34 | 20 | 14 | 12 | 13 |
| 35-39 | 11 | 5 | 9 | 6 |
| 40-44 | 7 | 4 | 4 | 3 |
| 45-49 | 4 | 3 | 0 | 1 |
| Total Births | 126 | 113 | 125 | 106 |

We can also look at trends across the whole site and compare them with Somerset village by looking at **Figures 1.7** and **1.8**.



We find the age specific fertility rate by looking at how many women in a certain age group have had babies in a certain year. For example, if we look at **Figure 1.7**, we can see that in the year 2013 in Somerset A village, for every 1000 women ages 15-19, about 80 of them gave birth.

Take home message: 2013 saw significant decreases in fertility in the 15-19, 20-24, 30-34, 35-39 and 40-44 age groups. However, in the other age groups there were increase in fertility in 2013.

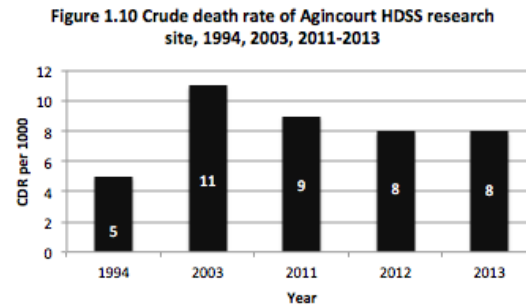
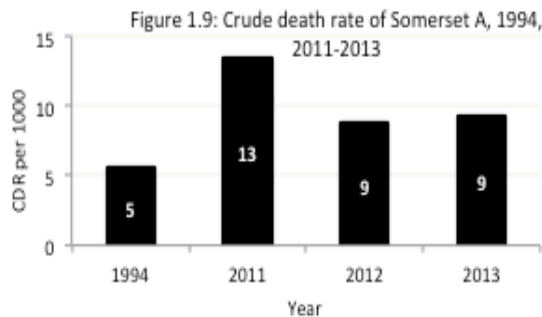
1.2 Deaths

1.3.1 Deaths

The MRC/Wits Agincourt Unit only gives *numbers* of deaths for each age group in each village, not the *cause* of death. The number of deaths occurring is low and if the cause of death is given, then a person's confidentiality may be broken. **Table 1.5** shows the total number of deaths that occurred in Somerset A village in 1994 and from 2011 through to 2013.

| | 1994 | 2011 | 2012 | 2013 |
|----------------------|------|------|------|------|
| Male Deaths | 12 | 29 | 20 | 21 |
| Female Deaths | 13 | 31 | 19 | 21 |
| Total Deaths | 25 | 60 | 39 | 42 |

Figures 1.9 and **1.10** show crude death rates over the same period in Somerset A village and across the Agincourt HDSS research site.



The crude death rate is found by looking at how many people died for every 1000 people living in the population. For example, in 2012 for every 1000 people in the population of Somerset A village, 9 died.

The data shows that the crude death rate has increased greatly from the levels seen in 1994, across the whole population of the Agincourt HDSS research site. However, there is a suggestion that the death rate may be falling. We need to carry on watching these figures to see if this is really a trend. We are beginning to think that there really is a downward trend in death rates, probably because of the increase in ARVs for people with HIV.

1.3.2. Main Causes of Death in the Agincourt HDSS Site in different Age Groups

Table 1.6 shows the top causes of death for different age groups. HIV/AIDS remains the most common causes of death but it is no longer the top cause of death for people who are over 65.

Table 1.6: Top Causes of Death in Age Bands, Agincourt HDSS research site, 1994, 2003 and 2014

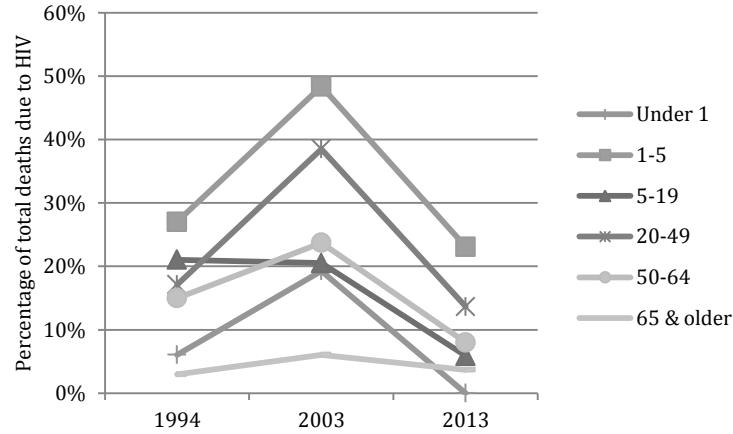
| Age group | 1994 | | | 2003 | | | 2013 | | |
|------------|-------|---|----|-------|---|-----|-------|---|----|
| | Total | Top causes of death | # | Total | Top causes of death | # | Total | Top causes of death | # |
| Under 1 | 33 | Acute respiratory infection including pneumonia | 8 | 83 | Acute respiratory infection including pneumonia | 25 | 41 | Unknown | 6 |
| | | Diarrhoeal diseases | 6 | | HIV/AIDS related | 15 | | Acute respiratory infection including pneumonia | 4 |
| | | Unknown | 6 | | Unknown | 11 | | Neonatal pneumonia | 4 |
| | | Prematurity | 3 | | Diarrhoeal diseases | 10 | | Diarrhoeal diseases | 3 |
| | | Birth asphyxia | 2 | | Neonatal pneumonia | 5 | | Malaria | 2 |
| 1-4 | 37 | Unknown | 12 | 62 | HIV/AIDS related | 29 | 26 | HIV/AIDS related | 6 |
| | | HIV/AIDS related | 10 | | Diarrhoeal diseases | 9 | | Acute respiratory infection including pneumonia | 4 |
| | | Diarrhoeal diseases | 6 | | Acute respiratory infection including pneumonia | 6 | | Malaria | 2 |
| | | Acute respiratory infection including pneumonia | 4 | | Unknown | 6 | | Diarrhoeal diseases | 1 |
| | | Road traffic accident | 2 | | Malaria | 3 | | Pulmonary tuberculosis | 1 |
| 5-19 | 19 | Unknown | 4 | 39 | HIV/AIDS related | 8 | 17 | Unknown | 4 |
| | | Assault | 3 | | Unknown | 7 | | Intentional self-harm | 2 |
| | | HIV/AIDS related | 3 | | Road traffic accident | 4 | | Asthma | 2 |
| | | Acute respiratory infection including pneumonia | 1 | | Pulmonary tuberculosis | 4 | | Reproductive cancers | 1 |
| | | Haemorrhagic fever | 1 | | Assault | 3 | | Other infectious diseases | 1 |
| 20-49 | 76 | Pulmonary tuberculosis | 13 | 335 | HIV/AIDS related | 128 | 271 | HIV/AIDS related | 37 |
| | | HIV/AIDS related | 12 | | Pulmonary tuberculosis | 102 | | Pulmonary tuberculosis | 34 |
| | | Assault | 12 | | Unknown | 23 | | Acute respiratory infection including pneumonia | 29 |
| | | Road traffic accident | 9 | | Road traffic accident | 10 | | Unknown | 17 |
| | | Unknown | 8 | | Intentional self-harm | 9 | | Asthma | 11 |
| 50-64 | 40 | Unknown | 8 | 118 | HIV/AIDS related | 25 | 100 | Asthma | 8 |
| | | HIV/AIDS related | 5 | | Pulmonary tuberculosis | 25 | | Cardiac disease | 8 |
| | | Pulmonary tuberculosis | 5 | | Unknown | 20 | | HIV/AIDS related | 6 |
| | | Digestive cancers | 4 | | Digestive cancers | 7 | | Acute respiratory infection including pneumonia | 6 |
| | | Road traffic accident | 3 | | Acute respiratory infection including pneumonia | 7 | | Pulmonary tuberculosis | 6 |
| 65 & older | 101 | Unknown | 25 | 165 | Unknown | 33 | 163 | Cardiac disease | 22 |
| | | Pulmonary tuberculosis | 21 | | Pulmonary tuberculosis | 24 | | Stroke | 20 |
| | | Digestive cancers | 11 | | Cardiac disease | 15 | | Pulmonary tuberculosis | 12 |
| | | Cardiac disease | 8 | | Chronic obstructive pulmonary disease | 13 | | Acute respiratory infection including pneumonia | 10 |
| | | Stroke | 6 | | Stroke | 9 | | Asthma | 8 |
| Total | 306 | | | 802 | | | 618 | | |

- **Other infectious diseases:** Sepsis, malaria, measles, meningitis and encephalitis, tetanus, pulmonary tuberculosis, pertussis and haemorrhagic fever

1.3.3 A story of HIV

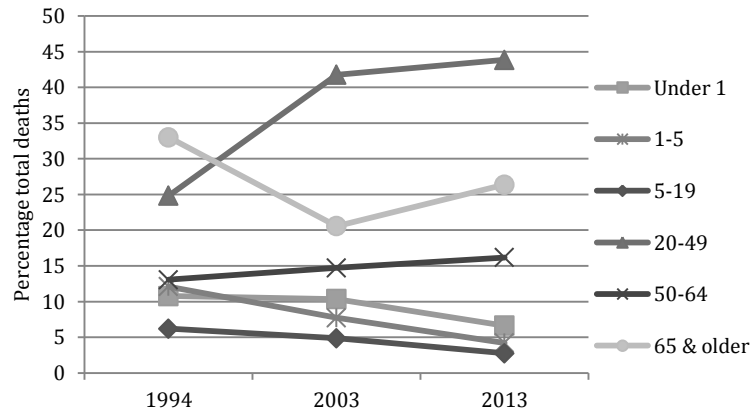
Figure A shows what percentage of deaths were caused by HIV in various age groups.

Figure A: Changes in percentage of total deaths attributable to HIV 1994-2013



The percentage of deaths due to HIV/AIDS is decreasing in all age groups. However, in Figure B, you can see that in 1994, most deaths were in the 65 and older age group, as can be expected. But in 2003, most of the deaths were in the 20-49 year age group. Despite the decrease in rates of HIV and the decrease in numbers of people dying overall, we still have a lot more work to do to reduce the death rates in the 20-49 year olds.

Figure B: Change in percentage of total deaths attributable to age group 1994-2013 whole Agincourt HDSS



Take home message: The total number of deaths in all age groups is decreasing. HIV/AIDS related illnesses continue to be a large cause of death throughout the population. Although, since 1994 the number of deaths due to HIV/AIDS related illnesses has decreased. Other top causes of death in 2013 include pulmonary tuberculosis and different kinds of pneumonia.

1.2 MIGRATION

1.4.1 Permanent migration patterns

Tables 1.7 and 1.8 describe how many people have moved in to Somerset village permanently and out of Somerset A village permanently.

Table 1.7: In-Migrants by Gender in Somerset A village, 1994, 2012-2014

| | 1994 | 2012 | 2013 | 2014 |
|---------------------------|------|------|------|------|
| Male In-Migrants | 113 | 103 | 74 | 40 |
| Female In-Migrants | 149 | 169 | 127 | 82 |
| Total | 262 | 272 | 201 | 122 |

Table 1.8: Out-Migrants by Gender in Somerset A village, 1994, 2012-2014

| | 1994 | 2012 | 2013 | 2014 |
|----------------------------|------|------|------|------|
| Male Out-Migrants | 172 | 112 | 98 | 47 |
| Female Out-Migrants | 189 | 184 | 155 | 81 |
| Total Out-Migrants | 361 | 296 | 253 | 128 |

Take home message: The number of people permanently moving in and out of Somerset village is decreasing. There were more than half as many migrations out of Somerset A in 2013 as there were in 2012. It is important to understand how many people are moving in and out of the village.

2. SOCIOECONOMIC DATA

2.1 Toilets

2.1.1 Location of Toilets

Table 2.1 shows the location of toilets within households in Somerset A Village between 2001, 2007 and 2014.

| Table 2.1: Change in where household toilets are situated in Somerset A village, 2001-2014 | | | | | | |
|---|------------------|----------|---------|-------------|------|---------|
| Year | Total households | In House | In Yard | Other House | Bush | Unknown |
| 2001 | 590 | 0 | 322 | 99 | 169 | 0 |
| 2007 | 658 | 7 | 436 | 84 | 83 | 48 |
| 2014 | 704 | 6 | 554 | 87 | 57 | 0 |

Figure 2.1: Change in where households toilets are situated in Somerset A village, 2001-2014

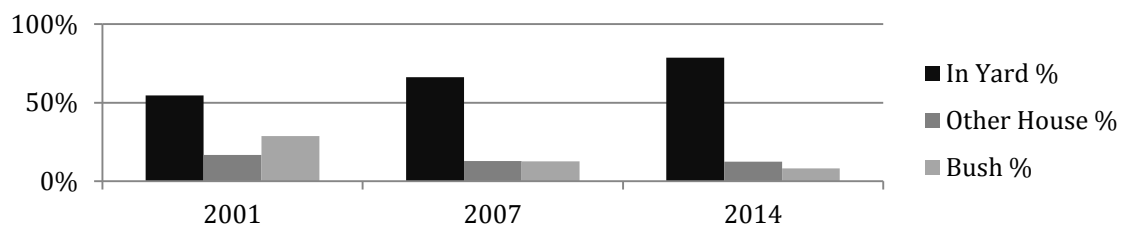
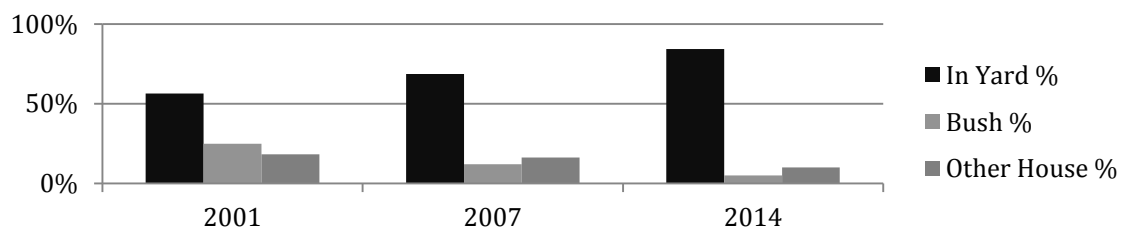


Figure 2.2: Change in where households toilets are situated in whole Agincourt HDSS, 2001-2014



2.1.2 Type of Toilets.

Table 2.2 shows the change in the types of toilets being used in Somerset A village.

| Table 2.2 Change in type of toilets in Somerset A village, 2001-2014 | | | | | | |
|--|------------------|------------|------|-----|--------|---------|
| Year | Total households | Pit Toilet | None | VIP | Modern | Unknown |
| 2001 | 590 | 291 | 268 | 31 | 0 | 0 |
| 2007 | 658 | 443 | 141 | 28 | 0 | 46 |
| 2014 | 704 | 542 | 138 | 16 | 7 | 1 |

Figures 2.5 and 2.6 show the percentage of each type of toilet in Somerset A village and the Agincourt HDSS research site. Data is given for 2001, 2007 and 2014.

Figure 2.3: Change in type of toilets in Somerset A village, 2001-2014

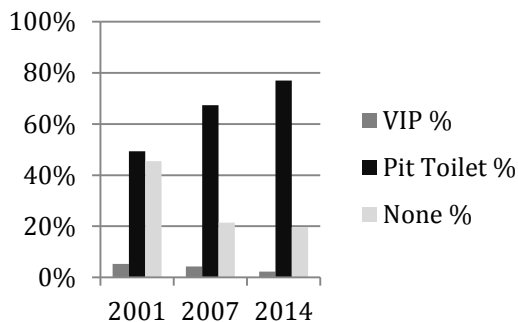
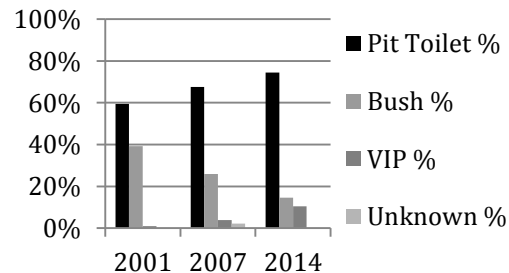


Figure 2.4: Change in type of toilets in whole Agincourt HDSS, 2001-2014



Take home message: The percentage of households with a toilet in Somerset A village reflects that of the Agincourt HDSS research site. The percentage of households with toilets has been going up. More and more households have toilets within the yard of the household. The number of toilets in households in Somerset A village and in Agincourt HDSS research site has been increasing. The percent of pit toilets in Somerset A villages is increasing and the percent of VIP toilets is decreasing. The percent of pit toilets in the whole Agincourt HDSS is increasing and the percent of VIP toilets is increasing as well. Generally, more toilets are appearing in Agincourt HDSS of various types.

2.2 Water.

2.2.1 Source of Water

Table 2.3 shows the changes in the source of water within Somerset A village.

Table 2.3: Change in source of water in Somerset A, 2001-2014

| Year | Total households | Tap in Street | Cement well | Tap in Yard | Tap in House | Truck | Traditional well | Other |
|------|------------------|---------------|-------------|-------------|--------------|-------|------------------|-------|
| 2001 | 590 | 588 | 0 | 1 | 1 | 0 | 0 | 0 |
| 2007 | 658 | 595 | 0 | 8 | 10 | 0 | 0 | 0 |
| 2014 | 704 | 598 | 0 | 104 | 1 | 1 | 0 | 0 |

Figure 2.5 and 2.6 shows this data in percentages, not numbers. Data is given for 2001-2014. Data is shown for Somerset A village and Agincourt HDSS.

Figure 2.5: Change in source of water in Somerset A village, 2001-2014

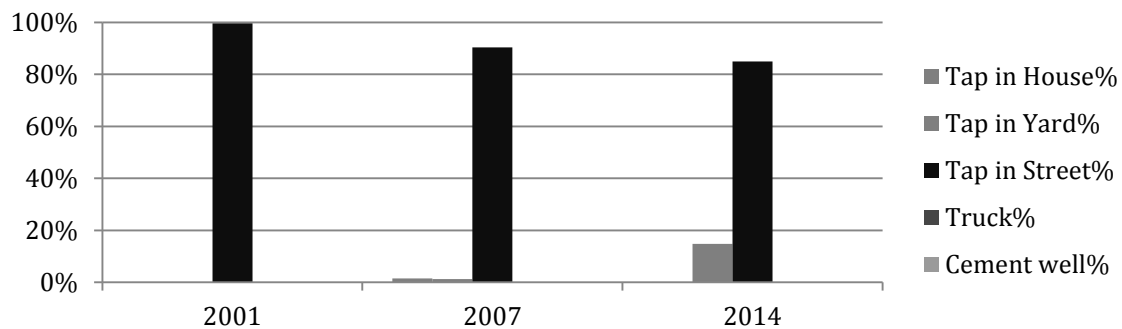
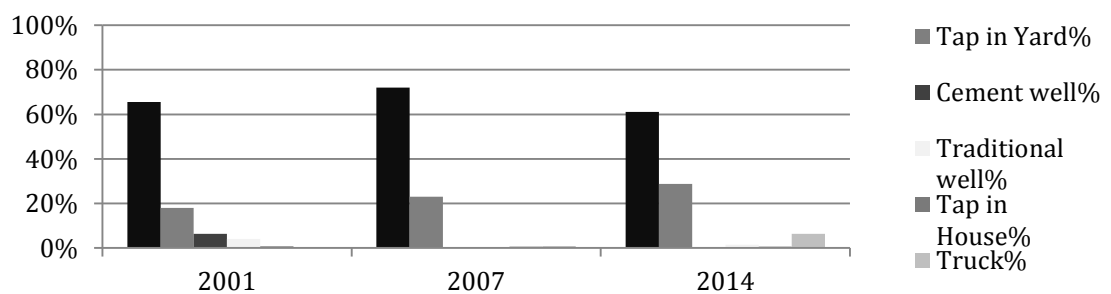


Figure 2.6: Change in source of water in whole Agincourt HDSS, 2001-2014



2.2.2 Availability of Water

Table 2.4 shows the change in availability of water in Somerset A village. The table shows data for the years 2001, 2007 and 2014.

Table 2.4: Change in water availability Somerset A village, 2001-2014

| Year | Total households | Irregular, not every day | Most of the time | Always | Few Hours a Day | Very irregular | Unknown |
|------|------------------|--------------------------|------------------|--------|-----------------|----------------|---------|
| 2001 | 590 | 0 | 576 | 14 | 0 | 0 | 0 |
| 2007 | 658 | 95 | 95 | 410 | 16 | 0 | 42 |
| 2014 | 704 | 196 | 13 | 93 | 398 | 4 | 0 |

Figures 2.7 and 2.8 show this data in percentages, not numbers. The availability of water in Somerset A village can be compared to the availability of water in the entire Agincourt HDSS.

Figure 2.7: Change in availability of water in Somerset A village, 2001-2014

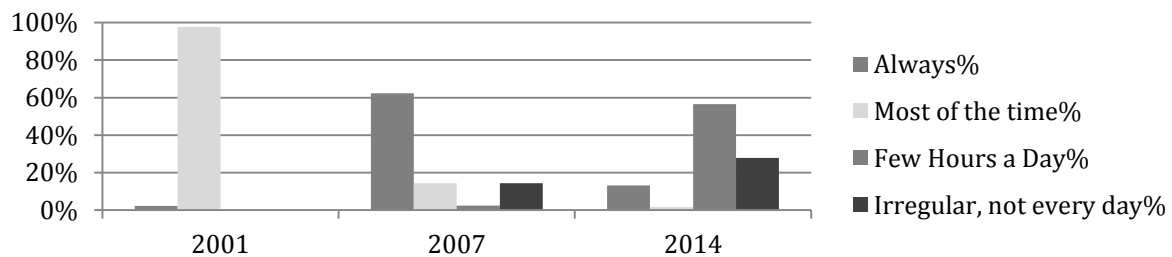
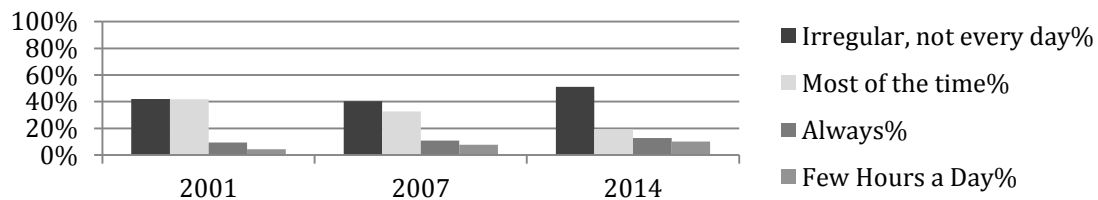


Figure 2.8: Change in availability of water in whole Agincourt HDSS, 2001-2014



Take home message: The source of water in Somerset A village has changed since 2001. The percent of taps in yards has increased. Since 2001, the percent of taps in the street has gone down. The percent of taps in yards has increased in Agincourt HDSS and the percent of taps in streets has decreased. The availability of water in both Somerset A village and Agincourt HDSS has become more irregular since the year of 2001. This means that there is no guarantee that there will be access to water on any given day.