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Executive Summary

Demographic and Health Surveys (DHS) are nationally-representative household surveys that provide data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition (MEASURE DHS, Macro International Inc 2007). Since 1988, the government of Zimbabwe through the Central Statistical Office with partners has carried out such Demographic Health Surveys in 1988, 1994, 1998 and 2005/6. The Zimbabwe Demographic Health Survey (ZDHS) currently represent the widest regular data set on a range of health and demographic trends and are thus an invaluable source of information on social conditions. The areas covered fall within the health and policy priorities for the Ministry of Health and Child Welfare Zimbabwe and the commitments Zimbabwe has made to the Millennium Development Goals (MDGs).

This study was implemented by the TARSC within its Community Based Research and Training Programme to better understand the trends emerging from these surveys. It aimed to analyze the key demographic and social indicators across three of the four DHS surveys (1994, 1999 and 2005/06) undertaken in Zimbabwe. The analysis was implemented through a desk review using the published DHS reports for the three years, 1994, 1998, and 2005/6 using indicators selected for analysis on the basis of their presence across the three rounds and relevant to major policy goals.

The trends from analysis of the three rounds of ZDHS surveys reported here indicate mixed progress and gaps in meeting the MDG goals, and point to areas for greater policy attention (See Table 5 on page 27).

Behind the aggregate evidence of changes in social conditions the evidence from the three rounds of demographic and health surveys highlights that the country continues to experience inequalities in wealth across rural and urban areas, and in social outcomes across different economic groups. Urban-rural differences have persisted across the twelve years across a range of social indicators, including access to safe water, women and children’s nutrition, access to contraception, access to radios and televisions, infant mortality, fostering of children and women’s participation in decision making. Rural households and women who take on a large share of the burdens of social caring, do so under conditions where their own social development is lagging. This pattern of rural – urban inequality remains a persistent and determining feature of social conditions in Zimbabwe, and a major challenge to be addressed in any social and economic policy.

At the same time, the evidence presented in this report suggests that urban poverty has increased and that major deficits have grown around some areas of social development at a much wider, national level, including in safe sanitation levels, immunization, child stunting and wasting and maternal mortality. In all these areas ZDHS data suggests that movement has been made away from rather than towards the MDG goals.

The ZDHS evidence over the twelve years thus sends a strong signal for social policy in Zimbabwe to be directed by two major principles: universality and equity, ie providing the whole population with access to good quality services according to needs and preferences, regardless of income level, social status, or residency ensuring that those with greater social needs obtain a greater share of the resources for social services to meet these needs. Aiming for aggregate improvements in performance is essential to reverse declines that have occurred widely across all social groups and move towards MDG goals. At the same time, this needs to be done in a way that allows for redistribution within the system, and for financial protection of poor people.
Generally, this implies addressing inequalities by income, place of residence, gender and women’s education in areas where universal coverage is progressing, such as in access to secondary school and higher education, or quality of ante-natal care. The need to avoid generalization and have more specific, focused evidence on different areas of social investment is evident from the DHS data, and the ZDHS surveys are an important evidence base for dialogue on social policy. Areas that have not followed “the usual” trends across wealth, area or education include infant mortality rates, and child stunting and wasting.

Further the ZDHS data suggests some important weaknesses that need to be addressed to achieve universal coverage and equity, such as the quality of primary education and the barriers to transition to secondary schooling, or the gap between the relatively high and improving levels of ANC coverage and the low and falling levels of delivery at health facilities. Addressing such questions appears, from the ZDHS evidence, to raise issues of cost barriers, and of access to good quality services in the public sector, that make the links across different services (child spacing, ANC, nutrition during pregnancy, deliveries, child survival, HIV prevention and treatment) to increase public health effectiveness and streamline and reduce the time and costs of seeking care, particularly for poor households. The evidence also points to a demand for specific focus to be given to groups with high levels of vulnerability and weak service access, such as barriers to service access in rural adolescent females.

There are areas where gain has taken place, such as in child mortality, even though further progress is needed to meet the MDG target. Evidence of falling HIV prevalence post 1998 provide momentum to improvements in this and other areas of social development. How can the gains of declining HIV prevalence be quickly consolidated to make even more rapid improvements in infant and child mortality?

Evidence from the 1980s suggest that even in conditions of economic insecurity, Primary Health Care (PHC) approaches can make significant differences to child survival. The evidence on increasing undernutrition, and declining immunization coverage signal however a reversal post 1994 on implementation of PHC policies that needs to be addressed. Further the fall in HIV cannot be taken for granted and needs to be consolidated through universal coverage of prevention, treatment and care services. Evidence in the ZDHS of shortfalls in coverage of services to consolidate this decline, despite high knowledge in the population, thus raises concern, particularly given that shortfalls were greatest in those in the lowest wealth quintile or those who had no education.

The ZDHS provides interesting evidence of improvement in rural women’s employment after 1999 and of an increase in women’s participation in decision making in both rural and urban areas. Both need to be further explored, for the nature and impact of these changes, especially in the context of wider increases in poverty and falls in social development.

This report is only a partial analysis of the ZDHS data, given that we did not access the raw data and used only a sample of indicators that could be tracked across the three rounds. Yet it highlights the significant wealth of evidence in this database. In the current context of conflict and polarization, such population databases provide an important resource for framing positions and responses, particularly if they are to be responsive to need and based on principles of equity and universality. Making databases like the ZDHS available, encouraging their wider use through research calls and publication would be important to enhance the uptake of these valuable sources of evidence, to inform social policy that is a product of social dialogue and evidence.
1. Background

Demographic and Health Surveys (DHS) are nationally-representative household surveys that provide data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition (MEASURE DHS, Macro International Inc 2007). DHS surveys cover various areas of demography, family and child health, education, gender issues, nutrition and HIV and AIDS. The surveys use a mix of tools, including questionnaires, biomarker data including testing for HIV infection and geographic information. All survey data is presented nationally and sub-nationally, and the sample of households is generally representative at national, residence (urban-rural) and provincial level, although not to district level. Enumeration areas are generally drawn from Census files.

Since 1988, the government of Zimbabwe through the Central Statistical Office with partners has carried out such Demographic Health Surveys in 1988, 1994, 1998 and 2005/6 as part of the Zimbabwe National Household Survey Capability Programme (ZNHSCP). Prior to this Zimbabwe implemented Intercensus Demographic Surveys (ICDS) to obtain data on population parameters including fertility and mortality, to serve as a pilot study for the next census. The data are intended to “furnish programme managers and policymakers with detailed information on levels and trends in fertility; nuptiality; sexual activity; fertility preferences; awareness and use of family planning methods; breastfeeding practices; nutritional status of mothers and young children; early childhood mortality and maternal mortality; maternal and child health; and awareness and behaviour regarding HIV and AIDS and other sexually transmitted infections” (CSO, MacroInternational 2007 p.xix). The 2005-2006 Zimbabwe Demographic and Health Survey is the most recent and was implemented by the Central Statistical Office (CSO) from August 2005 to March 2006. The 2005-06 ZDHS is the first ZDHS survey to collect information on malaria prevention and treatment and domestic violence. The 2005-06 ZDHS is also the first survey in Zimbabwe to provide population-based prevalence estimates for anaemia and HIV.

The ZDHS currently represent the widest regular data set on a range of health and demographic trends and are thus an invaluable source of information on social conditions. The period covered by these surveys (1988-2006) includes periods of policy shifts (e.g., the introduction of economic structural adjustment of the early 1990s, the land reforms of the early 2000s), and social challenge (e.g., HIV and AIDS, food insecurity, conflict, out-migration) that make the regularity of the DHS a rich and important source of evidence on demographic and health trends.

The areas covered fall within the health and policy priorities for the Ministry of Health and Child Welfare Zimbabwe as enunciated most recently in the 1997-2007 ten year National Health Strategy (MoHCW 1997). The policy elements and targets in these areas in this strategy include

- Population growth rate balanced with socio-economic development, with the aim of reducing the fertility rate, population growth rate, crude birth rate and the crude death rate.
- Increasing, access, affordability, acceptability and appropriateness of health care, with increased funding for PHC and resources re-directed from secondary and tertiary levels to Primary Health Care

The areas monitored also fall within the commitments Zimbabwe has made to the Millennium Development Goals (MDGs), particularly those relating to human development and health, where targets have been set to achieve the MDGs. As Table 1 below shows, mid-way to the MDG end date, the country still has gaps to close to achieve these aggregate targets.
Table 1: Reported Summary of progress on MDGs, Zimbabwe, 2004

<table>
<thead>
<tr>
<th>MDG Target</th>
<th>Indicator</th>
<th>Level</th>
<th>Target 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Eradicate Extreme Poverty and Hunger</td>
<td>% population below total consumption poverty line</td>
<td>80%</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>Prevalence of children under age 5 underweight</td>
<td>20%</td>
<td>7%</td>
</tr>
<tr>
<td>2. Achieve Universal Primary Education</td>
<td>Net enrolment in primary education</td>
<td>93%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>% children enrolled in Grade 1 who reach grade 7</td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td>3. Promote Gender Equality &amp; Empower Women</td>
<td>Ratio of % total in gender enrolled - girls to boys in primary education</td>
<td>90:96</td>
<td>Parity</td>
</tr>
<tr>
<td></td>
<td>Ratio of girls to boys enrolled in secondary education</td>
<td>40:42</td>
<td>Parity</td>
</tr>
<tr>
<td></td>
<td>Ratio of girls to boys in tertiary education</td>
<td>30:70</td>
<td>Parity</td>
</tr>
<tr>
<td>4. Reduce Child Mortality</td>
<td>Under 5 mortality rate / 1000 live births</td>
<td>101</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>% children vaccinated against measles</td>
<td>71%</td>
<td>90%</td>
</tr>
<tr>
<td>5. Improve Maternal Health</td>
<td>Maternal mortality / 100 000</td>
<td>695</td>
<td>174</td>
</tr>
<tr>
<td></td>
<td>% births attended by skilled personnel</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>6. Combat HIV/AIDS Malaria &amp; Other Diseases</td>
<td>HIV prevalence in pregnant women aged 15-24 years</td>
<td>24%</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>Incidence of clinical Malaria / 1000</td>
<td>122</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>TB incidence / 1000</td>
<td>399</td>
<td>121</td>
</tr>
<tr>
<td>7. Ensure Environmental Sustainability</td>
<td>% rural households with access to safe water</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>New urban housing units per year</td>
<td>20 000</td>
<td>250 000</td>
</tr>
</tbody>
</table>

Source: Government of Zimbabwe 2004

This study was implemented by the Training and Research Support Centre (R Loewenson, S Shamu) within the Community Based Research and Training Programme to better understand the trends emerging from these surveys. It aimed to analyze the key demographic and social indicators across three of the four DHS surveys implemented (1994, 1999 and 2005/06) undertaken in Zimbabwe. The analysis identifies common indicators consistently tracked over the three surveys to support analysis of trends over the past twelve years in relation to household characteristics, fertility, child and maternal health and HIV and AIDS.

2. Methods

The analysis was implemented through a desk review using the published DHS reports for the three years, 1994, 1998, and 2005/6 publicly available from the Central Statistical Office and at the DHS site: [http://www.measuredhs.com/aboutsurveys/search/search_survey_main.cfm?SrvyTp=country](http://www.measuredhs.com/aboutsurveys/search/search_survey_main.cfm?SrvyTp=country). The indicators from the three demographic surveys carried out in 1994, 1999 and 2005/06 were identified and tabulated, and indicators selected for analysis on the basis of their presence across the three rounds and relevant to major policy goals. As in all surveys, limitations exist in the reliance on data based on recall and on individual responses, with potential for personal biases. As cross sectional surveys the ZDHS do not follow up the same individuals and households which makes them less reliable for trend analysis than panel data sets that follow exact cohorts of individuals and households over time. The data provides evidence of associations across parameters. This does not necessarily imply causality. For example, an association between low rates of contraception use and low education levels does not mean that one causes the other. The absence of district level analysis in the ZDHS limits the level of disaggregation of the data. While wealth quintiles give some indication of asset poverty, the wider definition of deprivation relating to land and other social determinants is not presented, limiting cross tabulations on these dimensions of poverty.
3. Findings

3.1 Demographic trends: Population growth, household size and fertility

Background data indicates that Zimbabwe’s population has grown, although the population growth rate has fallen over time. The fall in the population growth rate could be attributed to outward migration and the mortality due to AIDS, with falling life expectancy reported between 2003 and 2005.

Table 2: Demographic data, Zimbabwe, 1994-2006

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions)</td>
<td>10.4</td>
<td>11.8</td>
<td>11.6</td>
<td>11.6</td>
<td>11.87</td>
<td>12.9</td>
<td>13.0</td>
<td>13.2</td>
</tr>
<tr>
<td>Population growth rate %</td>
<td>2.2</td>
<td>2.5</td>
<td>1.1</td>
<td>0.6</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fertility rate</td>
<td>3.8</td>
<td>4.0</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>61(a)</td>
<td>55(b)</td>
<td>43</td>
<td>43</td>
<td>37</td>
<td>37.2</td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>

(a) 1990  (b) 1995


As shown in Figure 1, the age distribution of the population has not changed significantly across the period, although the share under the age of 15 years is marginally lower. The population is still skewed towards the younger age groups.

Figure 1: Distribution of population, by age group, 1994-2006

The average household size has marginally decreased between 1994 and 2006 (see Figure 2) towards an average of 4.1. Households were asked about their ideal family size and the mean ideal number of children fell from 4.3 to 3.8 over the period (Figure 3). As shown in Figure 2, rural household size has fallen, while urban household size has risen, after an initial fall in 1999. It would appear from the evidence that there has been a net rural to urban migration. This trend towards urbanization is a common phenomenon in the region, reflecting perceptions of improved employment, income and service opportunities in urban areas. An increase in female headed households overall, particularly in urban
areas, suggests that out-migration of men from the country and mortality due to AIDS may also be leading women to move to urban areas where they can obtain security through own employment or extended families (Figure 4). It suggests that women do not find similar security in rural areas, where their individual rights over land and access to employment are weaker, and further suggests that rural community safety nets may be becoming weaker. This is a matter for further research.

Figure 2: Average Household Size, by Residence, 1994-2006

Figure 3: Ideal number of children for women age 15-49, by residence and education, 1994-2006
The ideal number of children is correlated with education levels and residence. More educated households and those in urban areas tend to have smaller ideal family sizes, although the fall in ideal family size in rural areas has been as marked as in urban areas. It is not clear to what extent income underlies both these trends as a determinant of family size. Other factors that may also be associated with residence and education are the control women have over decisions on family size and contraception, which as discussed later remains lower in rural areas, and the continued contribution of children to household agricultural labour in rural areas. While these trends are shifting, there has been little progress in closing the gap between rural and urban areas or between education groups. Identifying determinants of these inequalities and closing the gaps continue to be an important issue for research and policy.

**Figure 4: Female headed household, by residence, 1994-2006**

![Figure 4: Female headed household, by residence, 1994-2006](image)

The demand on community safety nets and particularly households has nevertheless grown significantly, with a substantial increase after 1999 in the share of foster children in both urban and rural areas (See Figure 5).

**Figure 5: Households with foster children, by residence, 1994-2006**

![Figure 5: Households with foster children, by residence, 1994-2006](image)
This would coincide with the period of shift of the HIV epidemic to an AIDS epidemic (from infection to mortality). Nearly 40% of rural households have foster children, and nearly a quarter of urban households, indicating the high level of community caring taking place through extended families. What is not measured and would be important to know from future DHS surveys are the numbers and distribution of child headed households and children not absorbed by families as a group with extremely high levels of vulnerability.

Figure 6 shows that there has been a fall in the fertility rate over the period in age groups older than 20-24 years, with an overall decline in fertility rates from 4.29 to 3.8. The largest decline overall occurred between 1994 and 1999. It would appear that the 25-35 year age group had the greatest fall in fertility rates in that period, carried forward as an age cohort effect into the 30-39 year age group 6 years later in 2005/6. The 20-24 year age group is the most fertile group.

Figure 6: Age-specific fertility rates, 1994-2006

While the decline in fertility took place across both urban and rural areas between 1994 and 1999, in the later period to 2006 the decline was limited to the urban areas and fertility rates in rural areas remained static (Figure 7). While falling fertility in urban areas follows a trend of limiting family size with urbanization, increased costs of children, access to child spacing services and improved social status of women, it is not clear why this trend was not maintained in rural areas. The reasons for the differential in the trend would need to be further explored. One factor contributing to this differential appears, from evidence shown in Figure 8, to be the increase in median age at first birth in urban areas across the period, not sustained after 1999 in the rural areas. While rural areas have over the years had lower age at first birth, it is not clear why a positive trend towards delaying this stopped after 1999 in rural areas. Again the determinants of this need further exploration. The consequence is that young rural women are vulnerable to pregnancy and maternal health problems at an earlier age, with increased risk of morbidity and mortality and reduced capacity to copy. At least half of young rural women experience these issues before they are out of their teens.
Figure 7: Total Fertility rates, by residence, 1994-2006

Figure 8: Median age at first birth for women 25-49 years, by residence, 1994-2006

Figure 9 confirms this worrying picture. In urban areas the increase in adolescent fertility from 1994 to 1999 was reversed, while in rural areas, it has continued to increase, with over a quarter of girls aged 15-19 mothers or pregnant with their first child. The social and economic determinants of this trend need to be identified and acted on, as the consequences for the health and wellbeing of both the girls and their children are significant and potentially long term.
Providing access to child spacing services provides women with a means to regulate both the number of children and, as importantly for health, the time interval between births. Various government policies over the period set a target of increasing the contraceptive prevalence rate to 55% of married women.

Achieving this depends on both male and female partners knowing available contraceptive methods, being able to exercise choice over use of contraception, and accessing available services to provide contraception. The table below shows that both women and men know either one or more specific contraceptive method, with knowledge of most important methods above 90%, except for IUD, implants and male and female sterilization. Knowledge of these methods is both low and has fallen over the period, except for knowledge of implants, which has risen. It would appear that information has focused on selected methods.

Table 3: Knowledge of contraceptive methods among currently married women and men age 15-49 years, 1994-2006

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th></th>
<th></th>
<th>Men</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Any method</td>
<td>98.8</td>
<td>98.7</td>
<td>99.3</td>
<td>99.9</td>
<td>99.7</td>
<td>99.8</td>
</tr>
<tr>
<td>Modern Method</td>
<td>98.5</td>
<td>98.5</td>
<td>99.2</td>
<td>99.7</td>
<td>99.7</td>
<td>99.8</td>
</tr>
<tr>
<td>Pill</td>
<td>97.9</td>
<td>97.6</td>
<td>98.4</td>
<td>98.9</td>
<td>98.0</td>
<td>97.7</td>
</tr>
<tr>
<td>Condom</td>
<td>94.6</td>
<td>94.2</td>
<td>95.6</td>
<td>98.9</td>
<td>98.3</td>
<td>98.9</td>
</tr>
<tr>
<td>IUD</td>
<td>74.2</td>
<td>70.2</td>
<td>61.2</td>
<td>65.8</td>
<td>52.4</td>
<td>48.2</td>
</tr>
<tr>
<td>Injectibles</td>
<td>87.4</td>
<td>92.5</td>
<td>94.6</td>
<td>81.2</td>
<td>85.3</td>
<td>89.4</td>
</tr>
<tr>
<td>Implant</td>
<td>16.1</td>
<td>27.8</td>
<td>47.9</td>
<td>16.1</td>
<td>15.3</td>
<td>32.4</td>
</tr>
<tr>
<td>Female Sterilization</td>
<td>75.0</td>
<td>63.5</td>
<td>50.0</td>
<td>83.7</td>
<td>59.7</td>
<td>55.7</td>
</tr>
<tr>
<td>Male Sterilization</td>
<td>47.3</td>
<td>42.8</td>
<td>34.7</td>
<td>53.4</td>
<td>46.0</td>
<td>48.1</td>
</tr>
</tbody>
</table>

Figure 10 shows that the desire to limit child numbers has increased in general, across both rural and urban areas, more so in urban areas. There is a positive correlation between education levels and the desire to limit children and the desire to limit has generally grown across all education groups. Limiting child numbers is not the only reason to use contraception, as birth spacing is another reason. The level of nearly half of...
married women with this demand is thus likely to be an undercount of real demand. This raises the question of how this demand for contraception translates into uptake.

**Figure 10: Currently married women who want no more children, by residence and education, 1994 to 2006**

There is a reasonable correspondence between demand for contraception in married women and use, and use of modern methods has generally increased and of traditional methods has fallen (Figure 11). As Figure 12 shows, the increase has been sustained across all education and residence groups, with one exception, although women with lower education and rural residence have lower use. This sustained increase in use of modern methods, even during a period of economic difficulty from 42% to 58% signals that contraception has remained reasonably affordable and accessible. With use of traditional methods falling, it would be useful to explore the features of the system that have generally allowed increased demand to translate into increased use.

**Figure 11: Percentage of currently married women age 15-49 using a contraception method**
However, the singular fall in use of modern contraception post 1999 in those with no education is of particular concern, given the increased demand in this group shown in Figure 10. This shortfall in access over demand merits further investigation to more clearly identify who this group are, and the reasons for the shortfall.

Figure 12: Use of modern contraception by currently married women, by residence and education, 1994-2006

One factor may be the shift in sources of modern contraception. While it remains dominated by the public sector, there has been a steady reduction in public sector access and increase in access through private facilities over the decade (Figure 13).

Figure 13: Source of modern contraception, 1994-2006

While this may reflect wider changes in health service use and access, and shortfalls in contraceptive supplies at public clinics, the provision of contraception through private services is more expensive and less subsidized than in public services, and not
necessarily offered as part of the package of primary health care services. Medical aid societies reimbursing spending in the private sector have not in the past reimbursed for contraception, but have more recently begun to do so. For the lowest income women, including those with no education, this may lie behind the fall in use noted post 1999, despite increased demand, as cost and availability barriers undermine access. This would need to be further explored, together with the extent to which private services in both rural and urban areas offer contraception as part of a package of reproductive health services. This area of inequity, or mismatch between need / demand and supply of services needs to be explored and responses developed.

3.2 Socio-economic trends: Education, employment, living conditions and social participation

Previous figures already point to the significance of education in health and demographic outcomes. A significant body of literature not cited here makes links between education and health outcomes, including uptake of health services, particularly for females.

Figure 14 shows that education levels for both male and females have generally improved over the period, with a fall in no and primary education and a rise in secondary and higher education. As Figure 15 shows, the fall in primary education is not a real fall in enrolment but a fall in share, due to rising secondary and higher education shares. In fact, absolute enrolment in primary education has increased, while it has fallen in secondary education, across both males and females. Enrolment in primary schooling by 2006 is closer to the target of 100% set for the MDGs, although parity has not yet been achieved between boys and girls at different levels of education, according to the ZDHS data. In the 2006 ZDHS educational attainment was higher among the population in the highest wealth quintile.

**Figure 14: Education levels by gender, 1994-2006**
Zimbabwe has had a past mismatch between rising levels of education and falling levels of formal employment. Employment is a vital means for economic growth to translate into household income and to support service uptake. A growth in poverty is in part related to falling employment opportunities, as well as inequalities in access to productive resources.

In the 2006 ZDHS, information on household assets was used to create an index representing the wealth of the households. Using this, the ZDHS found that almost all of the urban population is represented in the fourth and highest wealth quintiles (98%) while about 60% of rural households are in the lowest and second wealth quintiles. There is thus a relatively wide inequality in wealth between rural and urban areas.

In terms of changes over time, the Second Poverty Assessment Study Survey (MPSLSW 2003) found that the proportion of households below the Total Consumption Poverty Line (TCPL), had increased from 42% in 1995 to 63% in 2003. Poverty had however increased more rapidly in urban areas in 2003. While rural areas still had more poor people (71%) compared to urban areas (61%), urban poverty had increased more rapidly. Poverty has remained higher in female headed households (MPSLSW 2003).

Women’s employment is thus likely to be a reasonable indicator of the link between economic indicators and household health. Figure 16 shows the change in women’s employment in the 12 months prior to the survey. This remained constant between 1994 and 1999, but increased sharply in 2006. The change is significant and needs explanation. It is not specified in the report whether there was a re-classification of “employment” in this later survey, or whether this is a real positive shift. The growth in employment has been more marked in rural areas, less in urban areas, suggesting some shift in the gap between these areas. The surveys also showed a trend towards a fall in the percentage of women in skilled non-agricultural employment in rural areas (18.4% to 9.6%), more marked in urban areas (27.5% to 12%). The fall in skilled employment may relate to the wider environment of enterprise closures and falling formal job prospects. It would appear that the growth in economic opportunities for women have been weaker in urban areas than rural after 1999, even though overall they are still higher in urban areas. What is less clear and needs
further investigation is the quality and security of the employment opportunities for women.

**Figure 16: Women's employment in the 12 months preceding the survey, by residence, 1994-2006**

Various government policies over the period set a target of increasing access to safe water and sanitation (Zimbabwe Equity Gauge 2001). The MDG goals set targets of 100% rural access to safe water and sanitation by 2015, and 250,000 new housing units a year, although as shown earlier, there remain shortfalls on this target.

Figure 17 shows that while urban areas largely have access to safe water, with some improvement over the 1999-2006 period, rural areas have had low and not improving access to safe water in the period.

**Figure 17: Households with access to water and sanitation, by residence 1999-2006**
Safe sanitation levels have fallen markedly over the period in both rural and urban areas. The 2006 ZDHS reports that most households (87%) do not treat their drinking water, particularly in rural areas, and those who do generally boil their water. This is a major public health problem and a risk for disease outbreaks such as cholera and diarrhoea. The falls may be linked to population movements into urban areas, and new settlements, as well as the increased cost to households and communities of construction of these services. Given the critical importance of safe water and sanitation for public health, environmental health is a major policy and investment priority for the country.

While safe living environments and service availability is an important determinant of health outcomes, uptake of services and resources also depends on the extent to which people are informed and able to influence decisions.

Media can play a role in disseminating information and radios and televisions are also symbols of households assets. Increased possession by households of these assets could be reasonably assumed to have a positive effect on informing people, including on available services. As Figure 18 shows, notwithstanding an overall increase in radio ownership in 1999, ownership of radios has remained static and of televisions has fallen since the 1994 survey. While costs of televisions may be a barrier, there has also been report of households selling such disposable household goods for income to meet more fundamental needs. The decline in the ownership of radios has particularly occurred in rural areas, cutting these communities off from a vital form of communication.

**Figure 18: Households with radio or television, by residence, 1994-2006**
The surveys suggest that women’s participation in decision making has shown some increase in rural and urban areas, so that women, who have the primary role in practices for household health, are better able to use resources for health. What was less clear and needs further investigation are the domains of decision making, and how far this covers household spending, health practices and use of services, particularly given the general perception of male dominated decision making.

Figure 19: Womens participation in decision making, by residence, 1999-2006
3.3 Trends in child health

Child health outcomes are an important signal of socio-economic and human development, health status and quality of life. Child health is a key area of policy performance for the Ministry of Health and Child Welfare and for the achievement of the Millennium Development Goals. Ministry policies over the period have set out to:

- Reduce child morbidity, mortality, and disabilities, particularly the infant neonatal and child mortality rate
- Increase immunisation coverage, to 90% of children under 12 months completing primary immunization, elimination of neonatal tetanus and poliomyelitis and reduction of diphtheria and pertusis

As shown in Table 1 earlier, the MDG targets set out that by 2015:

- Prevalence of children under age 5 underweight should be reduced to 7%
- Under 5 mortality rate reduced to 34/1000 live births, and
- Percent children vaccinated against measles increased to 90%.

Figure 20 shows that for neonatal, infant, child and all under 5 year mortality, after an initial increase noted in the 1999 survey, mortality has fallen by 2006, particularly child mortality. The rate of 82/1000 live births is however still significantly higher than the MDG target of 34/1000 live births. It would be important to assess which interventions have been associated with the decline post 1999, given the greatest decline noted in the 1-5 year age group, including the extent to which access to therapies for prevention of mother to child transmission have contributed. It would also be important to disaggregate the major causes of the increase between 1994 and 1999, which would appear to have been highest in the first year of life.

Figure 20: Early childhood mortality rates for the five years preceding the survey, 1994-2006

KEY:
The rates of childhood mortality are defined as follows:
- Neonatal mortality: the probability of dying within the first month of life
Infant mortality: the probability of dying between birth and the first birthday
Child mortality: the probability of dying between age one and the fifth birthday
Under-five mortality: the probability of dying between birth and the fifth birthday.

The 2006 ZDHS report notes “Additional analysis is needed to investigate the recent pattern of early childhood mortality in Zimbabwe before a conclusion is reached that mortality has declined over the period between the 1999 and 2005-06 ZDHS surveys”. (CSO, MacroInternational 2007 p112). The report points to reporting errors during the surveys and excess mortality among mothers as possible factors affecting the outcomes.

Figure 21: Infant mortality rates for the ten years preceding the survey, by residence and Mother’s education

Infant mortality rates have stagnated in urban areas, and declined after an increase in 1999 to a lower level in 2006 than in 1994 in rural areas. Overall infant mortality rates for mothers with no education or primary education have fallen, while those for mothers with secondary education have risen. This is counter the expected trend and needs to be further investigated to understand the basis for the increase.

Various factors affect child survival outcomes, including nutrition, access to and uptake of primary health care services and prevention and treatment for HIV. In this analysis of the ZDHS we examine trends in child immunization and nutrition outcomes to assess their contribution to the pattern observed. Information on HIV and AIDS is discussed later.

While the indicator is slightly different (ie measures vaccination in children 12-23 months) the DHS data suggest that goal of 90% immunization in children under 12 months was closer to achievement in 1994 than by 2006 (Figure 22). The proportion of children 12-23 months vaccinated fell for all types of vaccines between 1994 and 2006, with an increasing share of children in this age group not receiving any immunisation. While the years of mass vaccinations by the Ministry of Health could have fallen outside the months preceding the survey years, immunization is generally provided through primary care services, and a falling access signals declining rates of availability of or access to these
health facilities. It also indicates that falling immunization rates could be contributing to mortality risk.

**Figure 22: Children 12-23 months vaccinated, 1994-2006**

Figure 23 shows that while the decline occurred in both urban and rural areas, and across all categories of education status of mothers, the decline was higher in rural areas and in women with no education. In the 2006 ZDHS, as the wealth quintile rises, the proportion of children who have never been vaccinated declines, although 20% of children in the highest wealth quintile have still never been vaccinated. This trend not only indicates a significant negative trend in vaccination, but also flags an area of inequity where mothers with greatest levels of poverty and health need are likely to have experienced greatest barriers to health service access.

**Figure 23: Children 12-23 months who received all vaccines any time before the survey, by residence and mother’s education, 1994-2006**
Stunting is defined as low height for age and is a measure of chronic or long term undernutrition. A child is said to be stunted if he/she is below minus 2 the standard deviation from the NCHS reference population in terms of height-for-age. Figure 24 indicates that there has been an increase in child stunting since 1994 in both urban and rural areas, with one in three children under 5 years stunted by 2006. The most significant increase in stunting has (unusually) been in children of women with secondary education. It would appear that nutritional stress is relatively widespread from this data, with further inquiry needed on how undernutrition is affecting not only children in the poorest homes, but also in children from other economic groups.

Figure 24: Stunting in children under age five, by residence and mother’s education (WHO Child Growth Standards), 1994-2006

Wasting is defined as low weight for height and is a measure of acute or recent undernutrition. A child is said to be wasted if he/she is below minus 2 the standard deviation from the NCHS reference population in terms of weight for height. The pattern of wasting is different to that of stunting, with greater nutritional stress in households where mothers have no education, and relatively static levels of wasting after the increase between 1994 and 1999.

Figure 25: Wasting in children under five years, by residence and mother’s education (WHO Child Growth Standards), 1994-2006
Overall undernutrition has remained at between 15 and 20% over the three DHs surveys, higher than the 7% of underweight children aimed at in the MDG goals.

3.4 Trends in womens health

Women’s health is an area of national and international policy focus, with commitments made to MDG goals to

- Reduce the maternal mortality rate by 40% and ensure that maternal mortality and morbidity statistics for various districts and provinces not exceed those of the entire nation by over 20%.
- Increase the proportion of pregnant women with access to ANC to 95%.
- Increase the proportion of deliveries performed by trained attendants to 80%.
- Ensure that 95% of all maternal deaths are reported within one month of their occurrence, and
- Reduce the proportion of pregnant women with iron deficiency anaemia to less than 15% of all pregnancies.

Womens health has links to child survival and reflect quality of and access to health services.

Ante-natal care is important for promoting health and early detection of risk in pregnancy. In general, it is accepted that four visits is ideal, and as shown in Figure 26, the majority of women achieve this target. The level achieved has fallen marginally over the three survey rounds, and while the MDG target of 95% of women do access ANC, 24% less than target attend the desired number of visits. The quality of this care is also important. For example the 2006 ZDHS found that women with higher education and in higher wealth quintiles were more likely to receive information on the signs of pregnancy complications than women with no education or a primary education and who are in the second and lowest wealth quintiles (CSO, MacroInternational 2007).

**Figure 26: Number of ANC visits for the most recent birth for women giving birth in the past 5 years, 1994-2006**
There was a significant increase in delivery at a health facility and in assistance by skilled birth attendants between 1994 and 1999, with a similarly significant decline between 1999 and 2006. Assisted deliveries by 2006 are below the MDG target of 80%, although this was nearly attained in 1999.

This is the inverse of the trend in ANC visits, which fell in 1999. It's unclear why these two indicators, which one would expect to be directly related, are in fact inversely related. Delivery is a more costly service than ANC so the fall in delivery post 1999 may relate to cost barriers. In fact the 2006 ZDHS reported that mothers in the highest wealth quintile are twice as likely to give birth in a health facility as mothers in the lowest wealth quintile (94% compared with 46%, respectively), further pointing to the likelihood of cost barriers.

This pattern of a rise in health service uptake to 1999 and then a fall thereafter is not unique to maternal health services. As shown in Table 4, the health seeking behaviour of patients in both the urban and rural areas for the years 1994, 1999 and 2004 shows that generally there was a decline in use of services after 1999. For women and men this was most marked in terms of not visiting a facility altogether, although the larger decline was in use of private services and there shift towards use of public facilities and away from use of private services. This was more marked in urban areas, perhaps corresponding with the increase in urban poverty noted earlier.
Figure 27: Place of delivery and person assisting at delivery for the most recent birth for women giving birth in the past 5 years, 1994-2006

Table 4: Health service use by ill persons in the previous month by facility, Rural and Urban, Labour Force Survey (LFS) 1994, 1999 and 2004

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</thead>
<tbody>
<tr>
<td>Public Health</td>
<td>44.8</td>
<td>48.0</td>
<td>59.0</td>
<td>53.4</td>
<td>67.7</td>
<td>61.8</td>
<td>51.7</td>
<td>62.0</td>
<td>59.7</td>
<td></td>
</tr>
<tr>
<td>Private Clinic</td>
<td>24.7</td>
<td>18.0</td>
<td>8.1</td>
<td>2.87</td>
<td>3.3</td>
<td>5.1</td>
<td>7.1</td>
<td>7.5</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>Traditional Healer</td>
<td>0.7</td>
<td>1.0</td>
<td>0.9</td>
<td>1.16</td>
<td>0.0</td>
<td>1.6</td>
<td>1.2</td>
<td>1.8</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Faith Healer</td>
<td>*</td>
<td>*</td>
<td>2.1</td>
<td>*</td>
<td>*</td>
<td>4.1</td>
<td>*</td>
<td>*</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Other Healers</td>
<td>1.4</td>
<td>2.2</td>
<td>0.5</td>
<td>2.4</td>
<td>2.0</td>
<td>0.7</td>
<td>2.1</td>
<td>2.1</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Not visited</td>
<td>28.4</td>
<td>30.8</td>
<td>29.4</td>
<td>40.2</td>
<td>24.9</td>
<td>26.7</td>
<td>37.9</td>
<td>26.6</td>
<td>28.7</td>
<td></td>
</tr>
</tbody>
</table>

Total percent 100 100 100 100 100 100 100 100 100

Source: CSO 2006
Note: in 1994 and 1999 LFS faith healers were combined with other healers.

For those not visiting a facility, by 2004 about a quarter of people felt treatment was not necessary and nearly half many treat themselves at home (Table 5). While these factors remained relatively constant over the period, cost has grown as a barrier, suggesting that greater attention now needs to be given to promoting uptake in vulnerable households most affected by cost barriers.

Table 5: Health facility uptake (*) by rural and urban area, 1994-2004

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</thead>
<tbody>
<tr>
<td>Facility too far</td>
<td>1.7</td>
<td>0.6</td>
<td>5.8</td>
<td>6.8</td>
<td>3.6</td>
<td>2.3</td>
<td>6.1</td>
<td>2.6</td>
<td>4.9</td>
</tr>
<tr>
<td>Treatment not necessary</td>
<td>20.1</td>
<td>21.7</td>
<td>26</td>
<td>26.8</td>
<td>24.8</td>
<td>15</td>
<td>25.8</td>
<td>23.8</td>
<td>23.2</td>
</tr>
<tr>
<td>Cannot Afford</td>
<td>31.9</td>
<td>29</td>
<td>22.7</td>
<td>17.7</td>
<td>10.8</td>
<td>24.8</td>
<td>19.8</td>
<td>16.8</td>
<td>23.3</td>
</tr>
<tr>
<td>Home Treatment</td>
<td>40.2</td>
<td>44.5</td>
<td>44.3</td>
<td>40.7</td>
<td>50.1</td>
<td>47.4</td>
<td>40.6</td>
<td>48.3</td>
<td>47.4</td>
</tr>
<tr>
<td>Other/ Not Stated</td>
<td>6.1</td>
<td>4.2</td>
<td>1.3</td>
<td>8</td>
<td>10.7</td>
<td>10.7</td>
<td>7.7</td>
<td>8.5</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Total Percent 100 100 100 100 100 100 100 100 100

Source: CSO 2006

(*)Percent distribution of persons who fell ill during the month preceding the survey but did not visit a health facility by reason for not doing so and by rural and urban.
Womens health, like that of children is affected not only by pregnancy and delivery care, but also by nutrition, infection, sexual and reproductive health, and other social and economic determinants. Nutrition during pregnancy is particularly important as it affects development of the child, with low birth weight a consequence of poor nutrition at this time. For example the 2006 ZDHS reported that newborns perceived by their mothers to be very small or small were 50% more likely to die in their first year, especially during the neonatal period, than those perceived as average or larger in size (CSO, MacroInternational 2007).

Women’s nutrition is measured in terms of their Body Mass Index (BMI) calculated by dividing the woman’s weight and her height in metres squared (If a woman’s BMI is below 18.5, she is considered to have a chronic energy deficiency, if BMI lies between 25 and 29.9, she is considered overweight, and if the BMI lies above 30.0, she is considered obese). For both rural and urban areas and for all categories of women’s education except the highest education level, there has been an increase over the decade in the share of women with chronic energy deficiency based on their BMI (See Figure 28). Rural women, and women with lower levels of education generally have poorer nutritional status.

**Figure 28: Percent of women age 15-49 with a low BMI (<18.5kg/m2), by residence and education, 1994-2006**

As the level of ANC visits and deliveries at health facilities has fallen, maternal mortality rates have also risen to a level of 555/100 000 in 2006. Hence rather than reducing maternal mortality by 40% as set in the MDG target, maternal mortality has increased by 96% since 1994 (See Figure 29).
3.5 Trends in HIV and AIDS

The AIDS epidemic has been one of the most critical determinants of health outcomes in Zimbabwe in the past decade.

As pointed out in the 2006 ZDHS “Much of the current information on national HIV prevalence in Zimbabwe derives from surveillance of HIV in special populations, such as women attending antenatal clinics, individuals enrolled in research studies and youth. However, these surveillance data results do not provide an estimate of the HIV prevalence among the general population” (CSO, MacroInternational 2007).

For the first time the 2005/6 DHS included HIV testing of a representative sample of women age 15-49 years and men 15-54 years. A test result was obtained for 70 percent of all ZDHS respondents who were eligible for testing, higher for women and rural areas than for men and urban areas. The adult HIV prevalence observed in the 2005-06 ZDHS was 18%. Among women age 15-49, the HIV rate was 21%, compared with 15% among men age 15-49. Using data from antenatal clinic surveillance and mathematical modeling, the estimated adult prevalence of HIV was 20.1% in 2005, and the ZDHS data is relatively close to this estimate. As this was the first year this was implemented, there is no trend data for this. Figure 30 shows however the trend data from other sources, indicating that HIV prevalence peaked between 1996 and 1998, and declined between the second and third ZDHS.
Figure 30: Trends in HIV and AIDS Prevalence

Source: Ministry of Health and Child Welfare 2005

The 2006 ZDHS also found that

- 81% of men and 74% of women have never been tested for HIV
- 46% of women who gave birth during the two years prior to the ZDHS received HIV counseling and 28% were offered, accepted, and received the result of an HIV test during antenatal care. Women were less likely to report receiving testing during antenatal care if they were in the lowest wealth quintile (8%) or had no education (9%).
- 60% of women and men who had a sexually transmitted infection (STI) or STI symptoms sought advice or treatment from a clinic/hospital/private doctor or other health professional (CSO, MacroInternational 2007).

The three rounds of ZDHS provide strong evidence that knowledge of what HIV and AIDS is not a major barrier to responses to the epidemic, in both women and men. Knowledge is high across different residence and education groups (See Figure 30). As the statistics in the 2006 ZDHS round indicate, improving service availability and uptake, especially for the poorest communities, is now the major concern, with measures to ensure uptake in disadvantaged communities.

Figure 30: Knowledge of HIV and AIDS in adults 15-49 years, by residence and education, 1994-2006
4. Discussion and conclusions

The trends from analysis of the three rounds of ZDHS surveys reported here indicate mixed progress and gaps in meeting the MDG goals, and point to areas for greater policy attention (See Table 5).

Table 5: ZDHS trends in relation to MDGs, 1994-2006

<table>
<thead>
<tr>
<th>MDG Target</th>
<th>Indicator</th>
<th>Target 2015</th>
<th>ZDHS trend 1994-2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eradicate Extreme Poverty and Hunger</td>
<td>Prevalence of children under age 5 underweight</td>
<td>7%</td>
<td>Child undernutrition has remained at between 15 and 20% over the three DHS surveys, two to three times the level aims at for the MDG.</td>
</tr>
<tr>
<td>Achieve Universal Primary Education</td>
<td>Net enrolment in primary education</td>
<td>100%</td>
<td>The ZDHS did not measure this indicator but does show progress in population levels of primary school education, with levels above 90% for all males and females. For younger age cohorts enrolment is near universal.</td>
</tr>
<tr>
<td>Promote Gender Equality &amp; Empower Women</td>
<td>Ratio of girls to boys enrolled in primary education</td>
<td>Parity</td>
<td>The ZDHS did not measure this indicator but does show progress in parity for primary school education, particularly younger age cohorts.</td>
</tr>
<tr>
<td></td>
<td>Ratio of girls to boys enrolled in secondary education</td>
<td>Parity</td>
<td>The ZDHS did not measure this indicator but does show greater progress over the period in secondary school education levels for females compared to males, suggesting some closing of the gender gap.</td>
</tr>
<tr>
<td></td>
<td>Ratio of girls to boys in tertiary education</td>
<td>Parity</td>
<td>The ZDHS did not measure this indicator and shows limited progress over the period in tertiary education levels for females relative to males.</td>
</tr>
<tr>
<td>Reduce Child Mortality</td>
<td>Under 5 mortality rate / 1000 live births</td>
<td>34</td>
<td>After an initial increase to 1999, neonatal, infant, child and under 5 year mortality fell by 2006, particularly child mortality. The rate of 82/ 1000 live births is still higher than the MDG target.</td>
</tr>
<tr>
<td></td>
<td>% children vaccinated against measles</td>
<td>90%</td>
<td>DHS data suggest that goal was closer to achievement in 1994 than by 2006, especially for rural areas, women with no education and lower wealth quintiles.</td>
</tr>
<tr>
<td>Improve Maternal Health</td>
<td>Maternal mortality / 100 000</td>
<td>174</td>
<td>Maternal mortality rates have risen steadily by 96% over the period to a level of 555/100 000 in 2006.</td>
</tr>
<tr>
<td></td>
<td>% births attended by skilled personnel</td>
<td>100</td>
<td>There was a significant increase in delivery at a health facility and in assistance by skilled birth attendants between 1994 and 1999, with a similarly significant decline between 1999 and 2006. Assisted deliveries by 2006 at 68.5% are below the MDG target. In 2006 mothers in the highest wealth quintile were twice as likely to give birth in a health facility as mothers in the lowest wealth quintile.</td>
</tr>
<tr>
<td>Combat HIV/AIDS Malaria &amp; Other Diseases</td>
<td>HIV prevalence in pregnant women aged 15-24 years</td>
<td>16%</td>
<td>HIV prevalence has fallen post 1998 and the adult HIV prevalence observed in the 2005-06 ZDHS was 18%, close to the MDG target. Among women 15-49yrs, the HIV rate was 21%, compared with 15% in men 15-49yrs.</td>
</tr>
<tr>
<td>Ensure Environmental Sustainability</td>
<td>% rural households with access to safe water</td>
<td>100</td>
<td>Access to safe water, in urban areas is high (92.7%), while rural areas have had low and not improving access to safe water in the period.</td>
</tr>
<tr>
<td></td>
<td>% rural households with access to safe sanitation</td>
<td>100</td>
<td>Safe sanitation levels have fallen markedly over the period in both rural and urban areas, with 58.1% urban households having flush and blair toilets and 23.7% rural households by 2006.</td>
</tr>
</tbody>
</table>
Behind the aggregate evidence of changes in social conditions the evidence from the three rounds of demographic and health surveys highlights that the country continues to experience inequalities in wealth across rural and urban areas, and in social outcomes across different economic groups.

By 2006 almost all of the urban population is represented in the two highest wealth quintiles (98%) while about 60% of rural households are in the two lowest wealth quintiles. This major difference that has persisted across the eight years is associated with urban-rural differences in a range of social indicators. For example, while urban areas largely had access to safe water, access in rural areas was low and not improving. Women and children’s nutrition, access to contraception, access to radios and televisions, infant mortality, women’s participation in decision making were all poorer in rural than urban areas. Rural areas take on a greater burden of the social consequences of poverty, with fewer resources for it. While households in all areas have taken on foster children, this is more common in rural areas, with nearly one in two rural households having foster children, compared to nearly one in four urban households. (The ZDHS does not record the numbers and distribution of child headed households and children not absorbed by families, which would be important in future rounds). Yet rural households have a greater share of the more economically insecure female headed households, with lower prospects for income in better quality jobs. Women, who take on the major share of the burdens of social caring, do so with little social investment and while their own health declines. The DHS data shows, for example, a reported increase over the decade in the share of women with chronic energy deficiency based on their body mass index, especially in rural women, and women with lower levels of education.

This pattern of rural –urban inequality remains a persistent and determining feature of social conditions in Zimbabwe, and a major challenge to be addressed in any social and economic policy.

At the same time, the evidence presented in this report suggests that urban poverty has increased and that major deficits have grown in some areas of social development at a much wider, national level. Safe sanitation levels were reported to have fallen markedly in both rural and urban areas since 1994, with progress away from rather than towards the MDG goal. The DHS data suggest that the MDG goal on immunization was closer to achievement in 1994 than by 2006. Child stunting and wasting were both reported to have increased since 1994 in both urban and rural areas. Ownership of radios has remained static and of televisions has fallen since the 1994 survey. Maternal mortality rates have risen steadily by 96% over the period to a level of 555 / 100 000 in 2006.

The ZDHS evidence over the eight years thus sends a strong signal for social policy in Zimbabwe to be directed by two major principles: universality and equity. Universality sets a goal where the whole population of a country has access to good quality services according to needs and preferences, regardless of income level, social status, or residency. It is an absolute concept in relation to population coverage (100%) with the same scope of benefits extended to the whole population. Equity implies that those with greater social needs obtain a greater share of the resources for social services (and vice versa) within systems based on solidarity and cross subsidy (support from better off and wealthier to worse off and poorer). Aiming for aggregate improvements in performance is essential to reverse declines that have occurred widely across all social groups and to move towards MDG goals. At the same time, this needs to be done in a way that allows for redistribution within the system, and for financial protection of poor people. Equity in the distribution of spending and resources means that specific attention needs to be paid to the wider inequalities that will undermine coverage and benefit in the most disadvantaged groups from any broad investments made, and measures put in place to encourage availability, access and use of services in these groups.
These inequalities vary across the different parameters and need specific, deeper
evidence to attune social investments to the specific areas of need. Generally, inequalities
by income, place of residence, gender and women’s education persist across a number of
social development indicators. Primary school enrolment is nearly universal, however this
aggregate masks differentials in access to secondary school and higher education by
gender, area and wealth. Most women attend ante-natal care for the four visits targeted,
but quality of ANC varies, and information on the signs of pregnancy complications is
reported to be more likely to be provided to more educated women in higher wealth
quintiles than to their less educated, poorer counterparts, who probably need it more.

The need to avoid generalization and have more specific, focused evidence on different
areas of social investment is evident from the DHS data, and the ZDHS surveys are an
important evidence base for dialogue on social policy. Some indicators have not followed
“the usual” trends. For example, infant mortality rates have stagnated in urban areas, but
have fallen in rural areas. Infant mortality rates for mothers with no education or primary
education have fallen, while those for mothers with secondary education have risen. Child
stunting and wasting were both reported to have increased since 1994 in both urban and
rural areas, although the patterns are different. The increase in stunting has (unusually)
been reported to be greater in children of women with secondary education, while wasting
has increased more in households where mothers have no education. The reasons for
these more unusual trends, if valid, are not clear and need to be explored.

The ZDHS data suggests some important weaknesses that need to be addressed to
achieve universal coverage and equity. For example, the nearly universal enrolment in
primary school falls significantly by secondary school, pointing to a major area of social
deficit in the quality of primary education and the barriers to transition to secondary
schooling. This is already well recognized in Zimbabwe. Perhaps less widely recognised is
the significant gap between the relatively high and improving levels of ANC coverage and
the low and falling levels of delivery at health facilities. The DHS data raises questions that
need to be addressed of why health services were able to sustain ANC coverage after
1999, but not delivery at a health facility or assistance by skilled birth attendants.

Addressing such questions appears to raise issues of cost barriers, and of access to good
quality services in the public sector. High cost barriers and poor access to or poor quality
of public services appear from the data to particularly disadvantage poor people. In a
context of falling access to maternity services, mothers in the highest wealth quintile were
twice as likely to give birth in a health facility as mothers in the lowest wealth quintile,
pointing to the likelihood of cost barriers for lower income groups. Despite knowledge of
contraceptive methods and desire to limit child numbers increased across both rural and
urban areas, women with lower education and rural residence were not able to translate
this demand into contraceptive uptake. This pattern of service use reflects a wider decline
in service uptake after 1999 found in other surveys, with greater levels of self treatment
and cost barriers reported. One factor contributing to this differential appeared to be the
steady reduction in public sector services as a source of contraception with an increase in
access through private facilities over the decade, raising cost and availability barriers for
lowest income groups. What could not be assessed but is equally important, is how far
both private and public sectors make the links across different services (child spacing,
ANC, nutrition during pregnancy, deliveries, child survival, HIV prevention and treatment)
to increase public health effectiveness and streamline and reduce the time and costs of
seeking care, particularly for poor households.

Again equity is an important issue within policy decisions on service provisioning. Specific
focus needs to be given to groups with high levels of vulnerability and weak service
access. After a fall in the fertility rate between 1994 and 1999, only urban areas continued
to show a continued decline, and fertility rates did not improve in rural areas. One factor
contributing to this differential appears to be a high level of adolescent fertility, but with
rural-urban differences after 1999. While adolescent fertility fell after 1999 in urban areas, it rose in rural areas, with over a quarter of rural girls aged 15-19 mothers or pregnant with their first child. The determinants of this rise and barriers to service access in rural adolescent females is a key focus for health and social policy attention.

There are areas where gain has taken place, and in these cases policy attention needs to be focused on consolidating gain and dealing with unequal benefits from the progress. After an initial increase reported in the 1999 survey, neonatal, infant, child and under 5 year mortality has fallen by 2006, with particular improvements in child mortality. This decline, based in part on a fall in HIV prevalence post 1998, is an important health gain, but at 82 child deaths per 1000 live births is, however, still significantly higher than the MDG target of 34/1000 live births. How can the gains of declining HIV prevalence be quickly consolidated to make even more rapid improvements in infant and child mortality?

Evidence from the 1980s suggest that even in conditions of economic insecurity, primary health care (PHC) approaches can make significant differences to child survival. Improving child nutrition and providing access to prevention and care services within the community and clinics supported by district referral services is key. The evidence on increasing undernutrition, and declining immunization coverage signal that there was a major reversal post 1994 on the policies that had secured Zimbabwe’s child health gains in the 1980s, despite policy commitments to PHC. Making the investments and changes to organise health services around PHC and to strengthen nutrition in women and children is perhaps the most important focus of health policy to build rapid progress in family and child health.

As raised above, there is one area where evidence signals major positive gain, that will provide momentum to future social development, if sustained. The 2006 ZDHS report of adult HIV prevalence at 18% confirms (and is lower than) estimates of adult HIV prevalence of 20.1% from antenatal clinic surveillance, with falling HIV prevalence post 1998. The sources of this decline can be tracked to a range of determinants, which may differ by areas and age group, including HIV related mortality, out migration, and behavioural change. Antiretroviral treatment (ART) and prevention of mother to child transmission (PMTCT) will in the future also be a determinant of HIV prevalence. Zimbabwe’s health and demographic indicators plummeted with the AIDS epidemic. Falling HIV prevalence can thus have a significant positive benefit on these indicators. However the fall in HIV cannot be taken for granted and needs to be consolidated through universal coverage of prevention, treatment and care services. The ZDHS presents evidence of alarming shortfalls in services to consolidate this decline: For example, HIV testing is an entry point for other prevention and treatment services. While knowledge of AIDS is high across all areas and groups, there was still low coverage in 2006 for HIV testing. Although women in antenatal care and maternity services were more likely to report having been tested, this was less likely if they were in the lowest wealth quintile or had no education.

Improvement in economic indicators, particularly for the poorest households and for women also has relevance to future progress in social development indicators. The report in the 2006 ZDHS of an increase in women’s employment after 1999, particularly in rural areas is an interesting finding. So too is the report of an increase in women’s participation in decision making in both rural and urban areas. Both need to be further explored, especially in the context of wider increases in poverty and falls in social development. The increase in employment was not in the generally higher paying skilled non-agricultural jobs, and the nature, quality or security of this employment was not clear. What has been the nature and impact of these documented trends? Where and how have women’s employment and income opportunities improved, and how can this be consolidated so women’s employment and income security improves? To what extent has the increase in women’s employment in rural agricultural jobs enhanced production of food and household
food security for these women? What about the economic and social security in other vulnerable groups, such as young people, or orphans and vulnerable children? In what areas are women taking a greater role in decision making, with what impact on influencing the resources for their social needs?

This report is only a partial analysis of the ZDHS data, given that we did not access the raw data and used only a sample of indicators that could be tracked across the three rounds. Yet it highlights the significant wealth of evidence in this database. In the current context of conflict and polarization, such population databases provide an important resource for framing positions and responses, particularly if they are to be responsive to need and based on principles of equity and universality. Making databases like the ZDHS more available, encouraging their wider use through research calls and publication would be important to enhance the uptake of these valuable sources of evidence, for social policy that is that is a product of social dialogue and evidence.
5. References


6. Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>ACQUIRED IMMUNO DEFICIENCY SYDROME</td>
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<td>BMI</td>
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<td>ART</td>
<td>ANTI-RETROVIRAL THERAPY</td>
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<td>CIMAS</td>
<td>COMMERCIAL and INDUSTRIAL MEDICAL AID SOCIETY</td>
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<td>CSO</td>
<td>CENTRAL STATISTICAL OFFICE</td>
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<td>DHS</td>
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<td>HIV</td>
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<td>MOHCW</td>
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<td>MPSLSW</td>
<td>MINISTRY OF PUBLIC SERVICE LABOUR AND SOCIAL WELFARE</td>
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<td>NGOs</td>
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<td>PHC</td>
<td>PRIMARY HEALTH CARE</td>
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<tr>
<td>PMTCT</td>
<td>PREVENTION OF MOTHER TO CHILD TRANSMISSION</td>
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<td>STIs</td>
<td>SEXUALLY TRANSMITTED INFECTIONS</td>
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<td>TCPL</td>
<td>TOTAL CONSUMPTION POVERTY LINE</td>
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<td>VOLUNTARY COUNSELING AND TESTING</td>
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