

Trends in Child Poverty in Mozambique.

A deprivations-based approach.

Acknowledgements

This report is a joint undertaking between the Government of Mozambique and UNICEF Mozambique, aimed at complementing the evaluation of the PARPA II. Many organisations and individuals contributed throughout the process of researching and writing this report.

The report was written by Brendan Kelly (Ministry of Planning and Development). The analysis of the MICS and DHS data to calculate the Bristol Indicators was conducted by Pierre Martel (consultant to UNICEF).

Stefano Visani (UNICEF) conceptualised the research and contributed heavily at all stages of the production of the report.

Comments and suggestions were received during various stages of the drafting from a reference group comprised of the following members:

M. Azhar Hussain (University of Copenhagen), Nuno Cunha (ILO), Claudia Fumo (DfID), Lisa Kurbiel (UNICEF) and Virgulino Nhate (Ministry of Planning and Development);

Valuable contributions were also received from Sumaira Chowdhury (UNICEF), Elias Cuambe (USAID), Blanca Escribano (Spanish Cooperation), Freiburghaus Franziska (SDC), Robert Jenkins (UNICEF), Anjana Mangalagiri (UNICEF), Laila Pakkala (UNICEF), Neil Squires (DfID), Charlotte Taylor (Ministry of Planning and Development) and Fatima Zacarias (INE).

The report was made possible through the financial support of UNICEF.

The purpose of this study was to bring an additional analysis on issues relevant to the economic and social development of Mozambique in the preparation of the Impact Assessment (RIA) of PARPA II.

The ideas contained in the documents are the sole responsibility of the authors and do not necessarily reflect the position of the cooperation agency that funded the study, the Ministry of Planning and Development or any institution of the Government of Mozambique. Participants in the preparation of RAI made use of the contributions of studies in the parts they considered relevant and useful.

Table of Contents

| | |
|---|-----------|
| List of Figures | 4 |
| Acronyms | 5 |
| 1. Introduction | 6 |
| 2. Deprivations-based approach to childhood poverty | 6 |
| 3. Deprivations-based poverty results | 9 |
| 4. Analyses of children’s deprivations in Mozambique | 15 |
| 4.1 Severe nutrition deprivation among children | 15 |
| 4.2 Severe Water Deprivation among Children | 18 |
| 4.3 Severe Sanitation Deprivation among Children | 20 |
| 4.4 Severe Health Deprivation among Children | 21 |
| 4.5 Severe Shelter Deprivation among Children | 23 |
| 4.6 Severe Education Deprivation among Children | 25 |
| 4.7 Severe Information Deprivation among Children | 28 |
| 5. Conclusions and Recommendations | 29 |
| References | 31 |
| Annex 1: Bristol Indicators | 32 |

Tables and Figures

Tables

- Table 1: Bristol Indicators
Table 2: Proportion of children experiencing two or more severe deprivations, 2003 & 2008, percentage
Table 3: Deprivation-based poverty compared to consumption-based poverty for children, 2003, percentage

Figures

- Figure 1: Continuum of deprivation
Figure 2: Proportion of children experiencing two or more severe deprivations, 2003 & 2008
Figure 3: Proportion of children experiencing deprivations. 2003 & 2008
Figure 4: Proportion of children experiencing two or more severe deprivations by wealth quintile, 2003 & 2008
Figure 5: Level of child poverty for different levels of education of head-of-household, 2008
Figure 6: Changes in severe nutritional deprivation among children, 2003 & 2008, by province
Figure 7: Severe water deprivation among children, 2008
Figure 8: Severe water deprivation according to wealth of household, 2008
Figure 9: Severe sanitation deprivation among children by province, 2008
Figure 10: Levels of severe health deprivation in selected provinces, 2003 & 2008
Figure 11: Severe shelter deprivation by dependency ratio, education level of head-of-household and wealth of household, 2008
Figure 12: Levels of severe education deprivation by province, 2003 & 2008
Figure 13: Proportion of children experiencing deprivations according to the level of education of head-of-household, 2008
Figure 14: Severe education deprivation according to wealth of household, 2008

Acronyms and Abbreviations

| | |
|------------|---|
| ARI – | Acute Respiratory Infection |
| DHS - | Demographic and Health Survey |
| GoM – | Government of Mozambique |
| INE - | National Statistics Institute |
| MDG - | Millennium Development Goal |
| MICS - | Multiple Indicator Cluster Survey |
| NCHS - | National Centre for Health Statistics |
| OVC - | Orphans and Vulnerable Children |
| PARPA II - | Action Plan for the Reduction of Absolute Poverty 2006-2009 |
| UNICEF – | The United Nations Children’s Fund |
| WHO – | World Health Organisation |

1. Introduction

The objective of this paper is to analyse changes in child poverty in Mozambique using a deprivations-based approach. The paper uses the Multiple Indicator Cluster Survey (MICS) 2008 and the Demographic and Health Survey (DHS) 2003 as principle sources of information. Both of these national surveys were conducted by the National Institute of Statistics (INE), using the same methodology allowing data from the two years to be easily compared. Further analysis of this data, funded by UNICEF, calculated deprivation-based poverty for both years.

This paper has been undertaken to contribute to the evaluation of the Action Plan for the Reduction of Absolute Poverty (PARPA II), Mozambique's second poverty reduction strategy paper.

The paper is structured as follows; section two provides an overview of the deprivations-based approach to measuring poverty and contrasts this approach with the more traditional consumption-based measures. Section three analyses trends in deprivations-based child poverty between 2003 and 2008. Section four analyses each of the seven deprivations that are used to calculate deprivation-based poverty. Finally, a number of conclusions and recommendations are presented.

2. Deprivations-based approach to childhood poverty

Childhood poverty examines the poverty specifically experienced by human beings in any society, during their childhood. Such poverty clearly has immediate effects on the situation and experience of poor children while they are children. However, childhood poverty is distinctive in that some of its effects are felt throughout the child's life, passing on into adulthood, regardless of the adult's poverty status. For example, stunting, reduced mental development, or psychological trauma experienced in childhood affect a person for the rest of her or his life. It is also distinctive in that children have less power to improve their situation than adults. Furthermore, all evidence shows that poor children have a high chance of growing up to become poor adults and in turn, have poor children. The inter-generational and cyclical nature of childhood poverty therefore also needs to be recognised and addressed.

Mozambique's first Poverty Reduction Strategy Paper, the PARPA I (2001 - 2005), defined absolute poverty as "the inability of individuals to ensure for themselves and their dependants a set of basic minimum conditions necessary for their subsistence and well-being in accordance with the norms of society" (GoM, 2001, p.10). This is consistent with the official national consumption-based poverty measure, by which households' levels of consumption are assessed and compared to poverty lines constructed from a basket of basic foodstuffs conforming to a basic caloric requirement. Many observers subsequently proposed that this definition of poverty should be supported by more multi-dimensional measures in order to present a broader,

more pluralistic analysis and support rights-based analysis (e.g. G20, 2004). This view was formally adopted by the Government in the country's second Poverty Reduction Strategy Paper, the PARPA II (2006 - 2009). While reporting on the consumption-based measure in its poverty analysis, PARPA II adopts a new definition of poverty, defined as: "Impossibility, due to incapacity or through lack of opportunity of individuals, families and communities to have access to minimum conditions, in accordance with the norms of society.". PARPA II also explicitly recognises that it is important not to be over reliant on any one poverty measure, stating that: "For purposes of policy decisions, poverty was initially considered as the lack of income – money or negotiable goods – necessary to satisfy basic needs. Because this monetary definition did not cover all the manifestations of poverty, the definition was broadened over time to cover such aspects as a lack of access to education, health care, water and sanitation, etc." (GoM, 2006, p. 8).

In accordance with this new approach, the analysis presented here utilises a "deprivations-based" measure of childhood absolute poverty. The indicators used to quantify this measure were originally developed by a team at the University of Bristol – and are often referred to as the Bristol Indicators – and presented in the report 'The Distribution of Child Poverty in the Developing World' (Gordon et al., 2003). The Bristol indicators are based on the 'deprivation approach' to poverty, drawing upon the definition of absolute poverty agreed at the World Summit for Social Development, as "...a condition characterised by severe deprivation of basic human needs" (United Nations, 1995).

The indicators comprise seven measures of severe deprivation: nutrition, safe drinking water, sanitation facilities, health, shelter, education and information. See table one for details on each indicator. The Bristol Indicator approach defines the proportion of children living in absolute poverty as those children facing two or more types of severe deprivation. One reason for adopting this multiple deprivation threshold for absolute poverty is that, in rare cases, single severe deprivations could result from causes other than a lack of sufficient resources. For example, severe anthropometric failure can result from ill health rather than from lack of income (Gordon et al., 2003: 45). The indicators are also designed to improve international comparability of national childhood poverty estimates.

Table 2: Bristol Indicators

| Deprivation | Indicator |
|--------------------|---|
| Nutrition | Proportion of children under five years of age whose nutritional index (weight-for-height, weight-for-age, height-for-age) is equal to or below -3 standard deviations from the median of the 2006 WHO standard |
| Water | Proportion of children under 18 years of age who only have access to surface water (e.g. river) for drinking or who live in households where the nearest sources of water is 30 minutes away or |

| | |
|--------------------|---|
| | more |
| Sanitation | Proportion of children under 18 years of age who have no access to a toilet of any kind in the vicinity of their dwelling, including communal toilets or latrines |
| Health | Proportion of children under five years of age that have never been immunised or those that have suffered from a severe episode of Acute Respiratory Infection (ARI) that was not treated |
| Shelter | Proportion of children under 18 years of age living in dwellings with more than five people per room (severe overcrowding). |
| Education | Proportion of children 7 to 18 years of age who have never been to school and are not currently at school |
| Information | Proportion of children 5 to 18 years of age with no possession of or access to radio, television or newspaper at home. |

All measures of poverty have their limitations and the deprivations-based approach is no exception. Of particular importance is the question as to whether to assign weightings to different deprivations to reflect their relative importance. For example, one might consider the lasting benefits of immunisation (part of the severe health deprivation indicator) to be substantially more important than access to a radio at a given time (a component of severe information deprivation), particularly given that children may be able to access radios in neighbouring households. However, the analysis presented here does not ascribe weights to the differing deprivations. This is done in part to maintain a degree of indicative comparability both internationally (the standard methodology developed by Gordon et al. does not use weights) and over time, and in part because any such exercise would be highly subjective. The reader is therefore presented with data on the different deprivations and left to decide upon their relative importance in the context of the associated analysis.

The deprivations-based approach does, however, have some inherent strengths. In the consumption-based approach to poverty the researcher does not or can not include consumption of key public services, while the deprivations-based approach is able to do so. This is particularly evident when contrasting results of the respective measures for the nation's capital, Maputo city. In 2003, 11 per cent of children were living in absolute poverty as measured by the deprivations-based approach versus 60 per cent measured by the consumption based approach in Maputo city. An added advantage of the deprivations-based approach is that the link between resource allocation, policy actions and the resulting changes in childhood poverty is made much more explicit. For example, the increased allocation of funds toward the rapid expansion of immunisation programmes would have an immediate and direct impact on child poverty under the deprivations-based measure, but would feed through to the consumption-based measure somewhat more slowly. The inclusion of access to basic services within the deprivations-based approach

also reveals far greater differences between rural and urban households in comparison with the consumption-based measure. This is mainly due to the very low population density in rural areas, causing the provision of public services to be significantly more costly.

Deprivation can be conceptualised as a continuum that ranges from no deprivation, through mild, moderate and severe deprivation to extreme deprivation at the end of the scale. Figure 1 illustrates this concept.

Figure 1: Continuum of deprivation



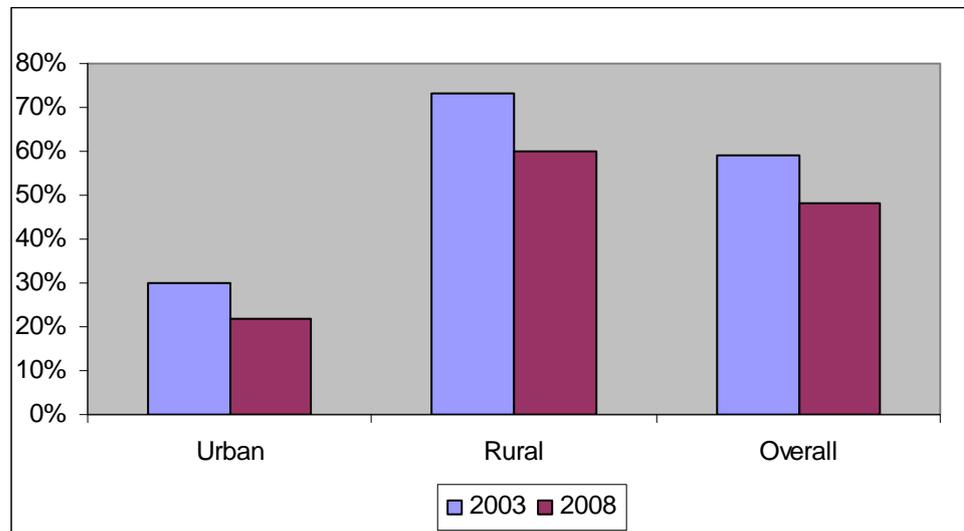
In order to measure absolute poverty amongst children using the World Summit definition, it is necessary to define the threshold measures of severe deprivation of basic human need for children. This paper uses the definition applied by Gordon et al, 2006 'severe deprivation of basic human need' as those circumstances that are highly likely to have serious adverse consequences for the health, well-being and development of children.

3. Deprivations-based poverty results

Children's absolute poverty, as measured using the deprivations-based approach (children experiencing two or more severe deprivations) has fallen from 59 per cent in 2003¹ to 48 per cent in 2008 and while absolute poverty has fallen for both urban and rural children a wide disparity remains, as shown in figure 2 below. In 2008, 22 per cent of urban children were poor, versus 60 per cent of rural children. Absolute poverty did fall significantly for rural children, from 72 per cent to 60 per cent. Absolute poverty for urban children fell more substantially than for rural children during the period, increasing the urban/rural divide.

¹ Readers may note that the levels of absolute poverty for 2003 reported in this paper differ from the level (49 per cent) reported in, "Child Poverty in Mozambique, a Situation and Trend Analysis, 2006". This is due to improvements in the methodology for a number of deprivations (water, health and nutrition). Data from 2003 was re-calculated to reflect these improvements. Detailed descriptions of changes in the methodology used can be found in the relevant sections of this paper.

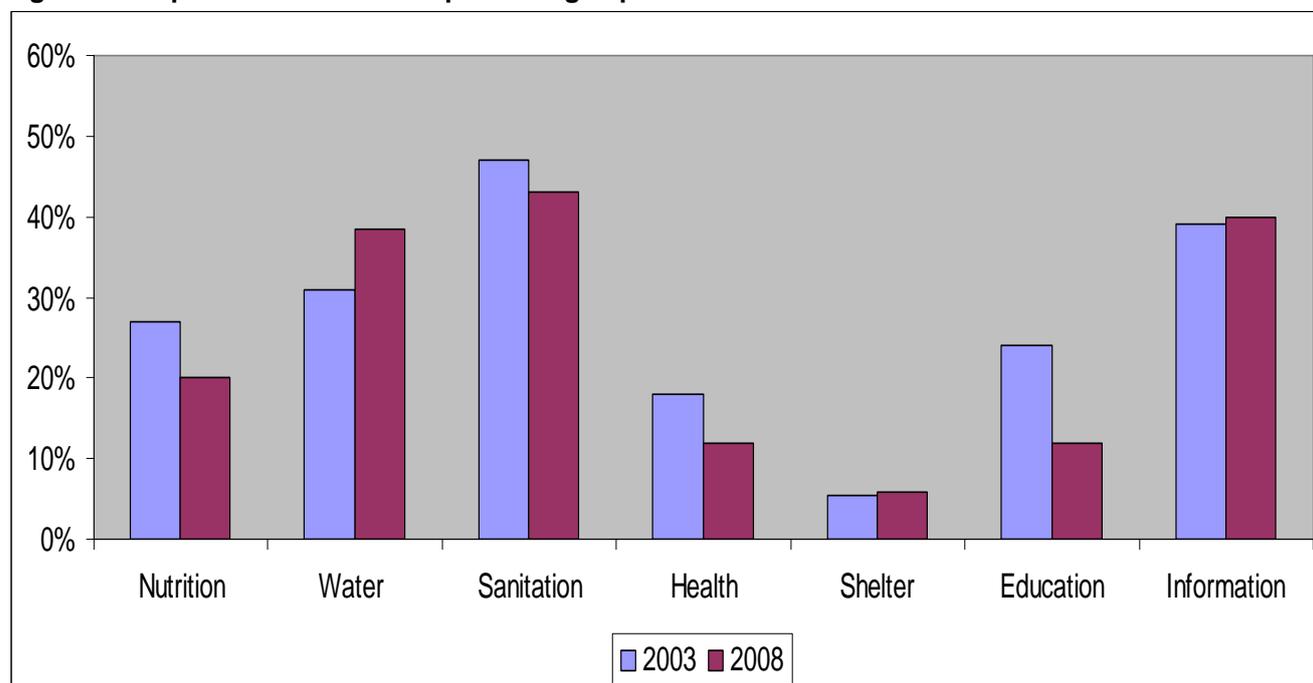
Figure 2: Proportion of children experiencing two or more severe deprivations, 2003 & 2008



Source: Martel 2009. Additional analysis of the DHS 2003 & MICS 2008

The reduction in children's absolute poverty levels was driven by good performances in the health and education sectors. The proportion of children experiencing severe education deprivation was halved between 2003 and 2008. The proportion of children experiencing severe health deprivation was reduced by 35 per cent. Severe water deprivation worsened during the period and severe information and shelter deprivation showed no significant change. Other deprivations (nutrition and sanitation) showed moderate improvements between 2003 and 2008. In terms of levels, the highest proportion of children experience severe sanitation, information and water deprivation (43 per cent, 40 per cent and 39 per cent respectively). The lowest proportion of children experience severe shelter deprivation (five per cent), see figure 3 below.

Figure 3: Proportion of children experiencing deprivations. 2003 & 2008



Source: Martel 2009. Additional analysis of the DHS 2003 & MICS 2008

There is strong evidence that there was a reduction in child poverty in Niassa, Cabo Delgado, Zambézia, Sofala and Inhambane provinces and in Maputo city between 2003 and 2008. The reduction for the five remaining provinces² was not statistically significant. Table 2 shows the proportion of children experiencing two or more severe deprivations in 2003 and 2008. In both years, children in Zambézia province experienced the highest levels of poverty (80 per cent and 64 per cent respectively). Maputo city emerges as having by far the lowest levels of child poverty. Three and a half per cent of children in Maputo are experiencing two or more severe deprivations. Maputo city also had by far the largest decline in the proportion of children experiencing poverty, a relative drop of 69 per cent between 2003 and 2008. Niassa had the second largest reduction with the child poverty rate falling from 58 per cent in 2003 to 35 per cent in 2008.

² Nampula, Tete, Manica, Inhambane, Gaza and Maputo provinces

Table 2: Proportion of children experiencing two or more severe deprivations, 2003 & 2008, percentage

| Children < 18y | Two or more severe deprivations | |
|--------------------------|---------------------------------|------|
| | 2008 | 2003 |
| Overall | 48 | 59 |
| Urban | 22 | 30 |
| Rural | 60 | 73 |
| Niassa | 35 | 58 |
| Cabo Delgado | 45 | 62 |
| Nampula | 59 | 66 |
| Zambézia | 64 | 80 |
| Tete | 60 | 65 |
| Manica | 52 | 58 |
| Sofala | 53 | 68 |
| Inhambane | 37 | 48 |
| Gaza | 39 | 53 |
| Maputo Prov. | 18 | 24 |
| Maputo City | 4 | 11 |
| Wealth quintiles: | | |
| Lowest | 91 | 95 |
| Second | 65 | 87 |
| Middle | 41 | 60 |
| Fourth | 33 | 36 |
| Highest | 5 | 13 |

Source: Martel 2009. Additional analysis of the DHS 2003 & MICS 2008

In 2003, the overall poverty levels were quite similar whether measured through a deprivations-based approach or a consumption-based approach. There are however discrepancies when making provincial comparisons. As can be seen in table 3 below, Maputo province and city and Inhambane province recorded significantly higher rates of absolute poverty as measured by the consumption index. In the case of Maputo, this is explained by the fact that the consumption-based approach does not directly take into account access to social services such as health, education, water and sanitation, which are likely to be concentrated in urban areas and particularly in the nations capital city. Conversely, Zambézia and Sofala provinces have significantly higher poverty rates as calculated using the deprivations-based approach.

Table 3: Deprivation-based poverty compared to consumption-based poverty for children, 2003, percentage

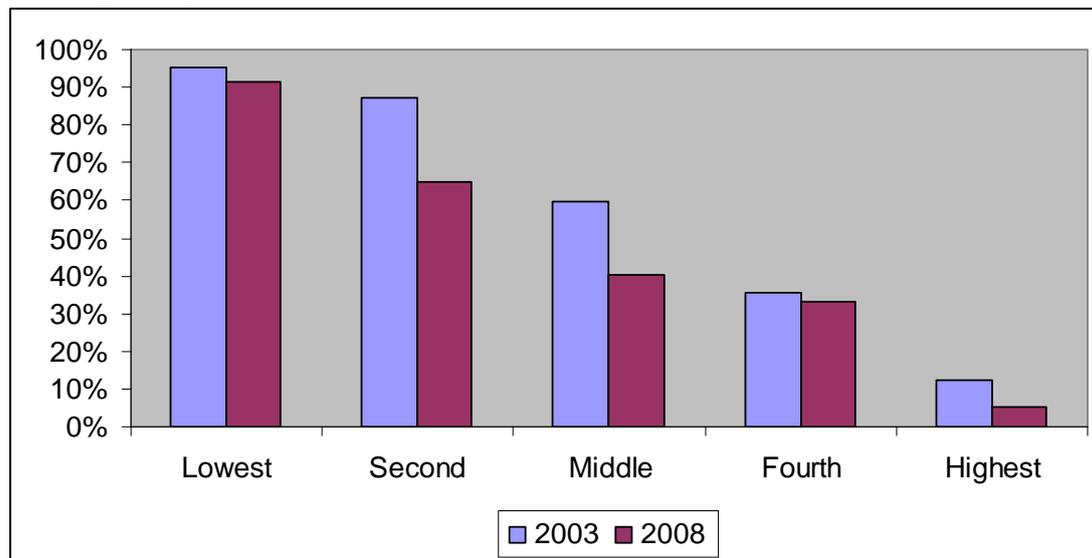
| | Bristol Indicators | |
|--------------|--|---|
| | <u>Children experiencing two or more severe deprivations</u> 2003 | <u>Poverty Headcount Index based on consumption approach</u> (2002-03) |
| Overall | 59 | 58 |
| Niassa | 58 | 57 |
| Cabo Delgado | 62 | 73 |
| Nampula | 66 | 57 |
| Zambézia | 80 | 49 |
| Tete | 65 | 63 |
| Manica | 58 | 46.5 |
| Sofala | 68 | 39 |
| Inhambane | 48 | 84 |
| Gaza | 53 | 64 |
| Maputo prov. | 24 | 73 |
| Maputo city | 11 | 60 |

Source: Martel (2009). Additional analysis of the DHS 2003 and IAF 2002/03

Between 2003 and 2008 absolute poverty fell for children in all wealth quintiles³ as can be seen in figure 4 below. Improvements were much larger for children in better-off households compared to those in poorer households. The proportion of children living in absolute poverty in the wealthiest families fell from 13 per cent to 5 per cent between 2003 and 2008, a reduction of 58 per cent. In contrast, the relative reduction in absolute poverty for the children in the poorest families was only four per cent. In 2008 children in the poorest households - i.e. the bottom wealth index quintile - were over 17 times more likely to be living in absolute poverty compared to those in the best-off households - i.e. the top wealth index quintile - 91 versus 5 per cent.

³ The Wealth Index is constructed based on information on household's possession of durable goods such as a television, a bicycle, a car as well as the characteristics of accommodation including electricity, source of drinking water, type of sanitation facility and material used for roofing. It is an indicator of the level of wealth that has been shown to be correlated with measures of expenses and incomes. For a full discussion of the methodology and its limitations see Gwatkins et al, *Socio-economic differences in Health, Nutrition and Population in Mozambique*. The World Bank, 2000.

Figure 4: Proportion of children experiencing two or more severe deprivations by wealth quintile, 2003 & 2008



Source: Martel 2009. Additional analysis of the DHS 2003 & MICS 2008

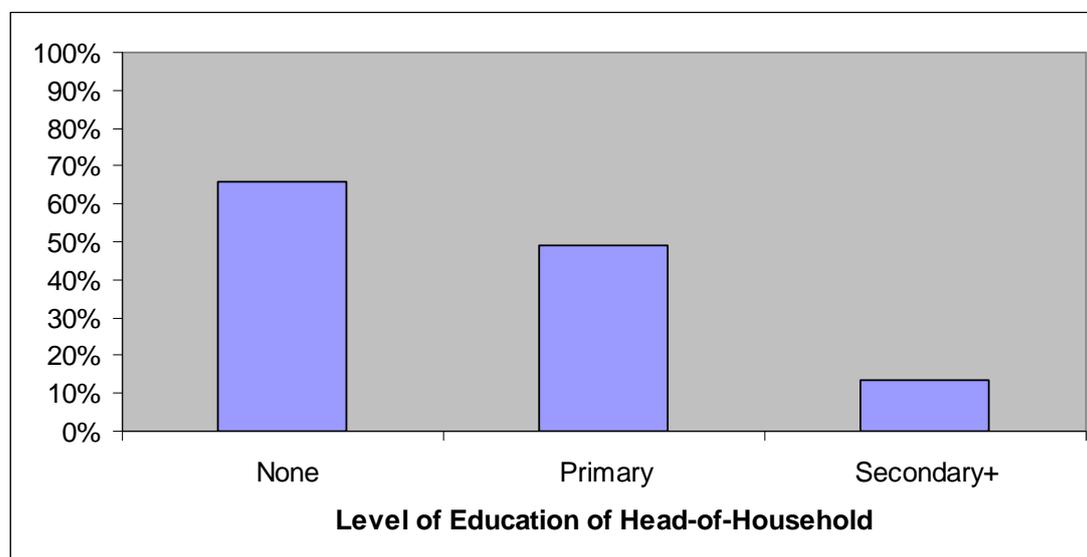
Children living in female-headed households are more likely to be living in absolute poverty than children in male-headed households, 55 versus 46 per cent.

The deprivations-based measure indicates that there is no statistical difference between the levels of deprivation for girls and boys at an aggregate level. There were differences however in the level of deprivations experienced for girls and boys in specific areas. For example, girls are more likely to experience severe education deprivation while boys are more likely to experience severe nutrition deprivation.

There is a strong correlation between the education level of the head-of-household and absolute poverty, see figure 5 below. In 2008, 76 per cent of children whose head-of-household had no formal education experienced two or more deprivations. This compares to 18 per cent of children whose head-of-household had secondary level education or higher. Finally, the dependency ratio⁴ is correlated with absolute poverty. Households with a dependency ratio of two or higher are more likely to have children living in absolute poverty.

⁴ A household member is considered dependent if s/he is below 15 years of age, or equal or above 65 years of age, or is chronically ill (this information was available for individuals 18 to 59 years of age). All household members that are between 16 and 64 years and that are not chronically ill are considered as non-dependent (i.e. are considered as “potentially” productive members of the household). The dependency ratio was then calculated as the ratio of dependents/non-dependents.

Figure 5: Level of child poverty for different levels of education of head-of-household, 2008



Source: Martel 2009. Additional analysis of the MICS 2008

4. Analyses of children’s deprivations in Mozambique

The following section analyses the changes over time of each of the seven deprivations that are included in the deprivations-based poverty calculation. The drivers behind the changes are also discussed.

4.1 Severe nutrition deprivation among children

The PARPA recognises that predictable access to food is a fundamental human right and that “food and nutritional security requires that all people have, at all times, physical and economic access to a sufficient quantity of safe, nutritive foodstuffs that are acceptable...in order to meet their nutritional needs” GoM (2006). The first Millennium Development Goal (MDG) aims to reduce by half the proportion of people suffering from hunger by 2015. The PARPA II also recognises that economic development can only be sustained with action taken to improve nutritional security. Malnutrition is one of the main underlying causes of child mortality in Mozambique. It is also closely linked to future educational outcomes, as malnutrition seriously impacts on the immediate and future cognitive development of the child.

The deprivation indicator is the proportion of children under five years of age whose nutritional index (weight-for-height, weight-for age, height-for-age) is equal to or below minus 3 standard deviations from the median of the World

Health Organisation (WHO) standard population, i.e. severe anthropometric failure.

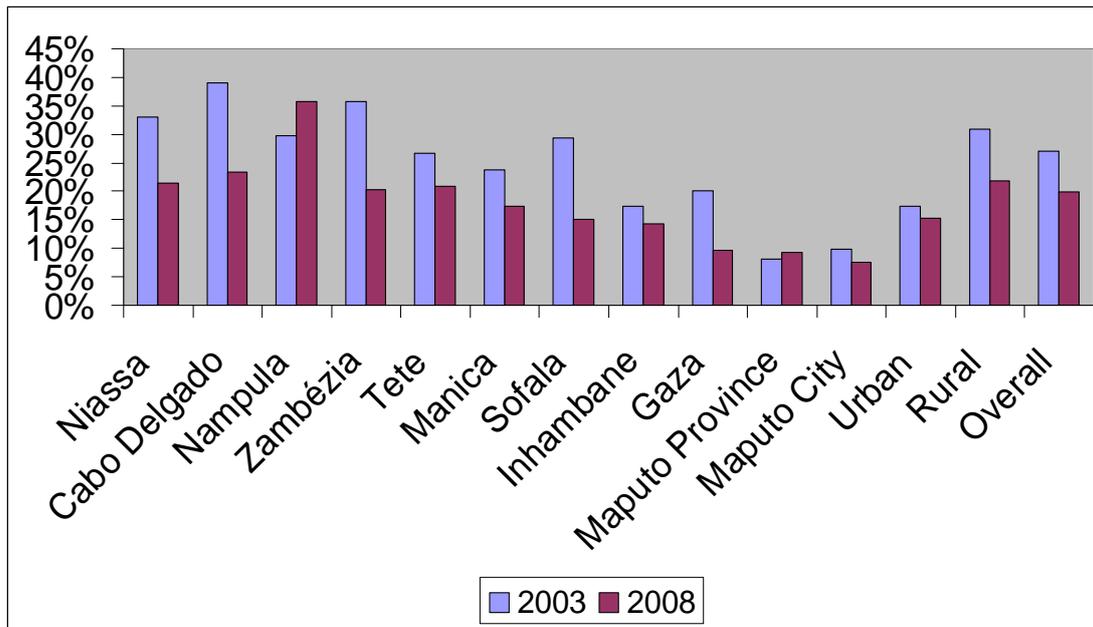
There has been a reduction in the number of children in Mozambique experiencing severe nutritional deprivation. In 2003, 27 per cent of children experienced severe nutrition deprivation⁵ compared to 20 per cent in 2008. Severe nutrition deprivation is higher for rural children (22 per cent) than for urban children (15 per cent). The higher rate of severe nutritional deprivation for children living in rural areas is largely explained by differences in food availability, monotonous feeds and lower access to health services,⁶ safe drinking water and sanitation facilities. Rural children may also be more likely to experience a reasonably prolonged food deficit at some point in time. The reduction in the proportion of children experiencing severe nutritional deprivation was driven by improvements for rural children. Thirty-one per cent of rural children were experiencing severe nutritional deprivation in 2003 compared to 22 per cent in 2008. There has been no significant change in the levels of nutritional deprivation for urban children. The gap between the rural and urban areas has thus narrowed from 2003 to 2008.

All provinces experienced a fall in severe nutritional deprivation with the exceptions of Nampula and Maputo provinces, as shown in figure 6. More than one in three children in Nampula province is experiencing severe anthropometric failure, almost five times the proportion of children living in Maputo city. Levels of severe nutritional deprivation are highest in the northern provinces, followed by the provinces in central Mozambique and lowest in the southern provinces.

Figure 6: Changes in severe nutritional deprivation among children, 2003 & 2008, by province

⁵ The difference between this figure and the figure reported in the publication *Child Poverty in Mozambique, a Situation and Trend Analysis* is due to the change of WHO standard for components of the nutritional indicator. The estimates in the DHS 2003 report were based on the NCHS reference population, developed in 1975. The estimates based on data from the 2003 DHS were recalculated using as base the 2006 WHO standard population. Please refer to WHO Growth standards, methods and development: <http://who.int/childgrowth/standards/en/>.

⁶ UNICEF, 2006



Source: Martel 2009. Additional analysis of the DHS 2003 & MICS 2008

Severe nutritional deprivation is more than two and a half times more common among children in the poorest households (25 per cent) than among children from the best-off households (9 per cent), although the poorer households have experienced higher levels of decline in the proportion of children experiencing severe nutritional deprivation.

Boys have higher levels of severe nutritional deprivation than girls (23 per cent versus 17 per cent). There are numerous hypotheses on the reasons for this difference, including differences in nutrition requirements, food habits, access to food and child care practices, but there is not sufficient evidence to confirm any of these hypotheses.

As noted above, the nutrition indicator is comprised of three ratios (height-for-weight, weight-for-age and height-for-age). Breaking down the nutritional indicator into its components shows that Mozambican children often fall outside the critical WHO height-to-age interval. Around 17 per cent of Mozambican children have a height-to-age ratio equal to or below -3 standard deviations from the median of the WHO, compared to 4 per cent and 1 per cent for the weight-for-age and weight-for-height ratios respectively.

The height-for-age ratio, often referred to as stunting or chronic malnutrition, shows malnutrition resulting from cumulative inadequacies in the child's nutritional status. Stunting is a good indicator for the general well being of a population, as it reflects the structural context surrounding malnutrition. It is difficult for a child who is stunted before the age of two years to make up their lost growth. Stunting is closely linked to impaired mental development. The MICS data shows that children whose mothers have no formal education are more than three times more likely to experience stunting than children whose mothers have secondary level education or higher (21 per cent and 6 per cent respectively). The PARPA II has the reduction of chronic malnutrition as a

priority because it seriously impairs the current and future human capital of the country.

The causes of malnutrition amongst children are interrelated. The immediate causes are related to inadequate dietary intake and diseases. The interaction between the two leads to increased morbidity and mortality. Inadequate dietary intake and diseases in turn are caused by insufficient access to food, inadequate maternal and child caring practices (particularly poor breastfeeding practices), insufficient access to safe water and sanitation and poor health care. HIV infection is also a major cause of failure to grow and of malnutrition among children (UNICEF, 2006).

4.2 Severe Water Deprivation among Children

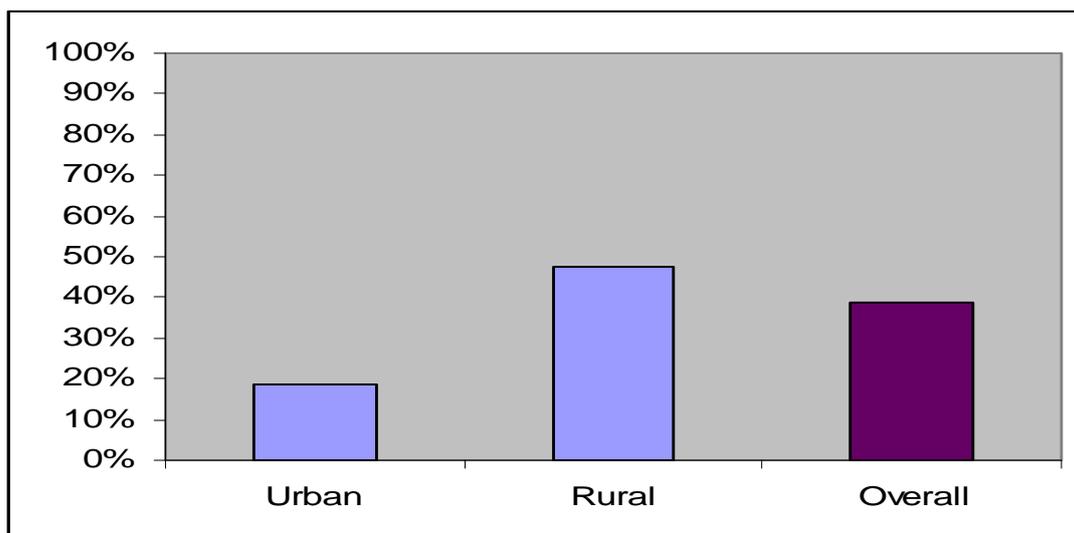
Access to clean, safe water is vital for the survival and healthy development of children, reducing sickness and death due to diarrhoeal diseases and other major causes of child mortality. Use of safe water lowers the risk of water-borne diseases among children weakened by malnutrition and reduces the risk of opportunistic infections among children living with HIV/AIDS. In Mozambique, a lack of access to safe water is directly responsible for regular outbreaks of cholera. The PARPA II states that access to potable water is a pre-requisite to increase people's productivity and improve the quality of their lives. MDG 10 aims to "to cut in half, by 2015, the percentage of people who lack access to potable water and sanitation."

The water deprivation indicator is the proportion of children under 18 years of age who only have access to surface water (e.g. rivers) for drinking or who live in household where the nearest sources of water is 30 minutes away or more⁷.

Severe water deprivation among children has increased in Mozambique between 2003 and 2008 (31 versus 39.5 per cent)⁸. Rural children experienced an increase in severe water deprivation between 2003 and 2008 while for urban children the level of deprivation remained approximately constant. Rural children are more than two and a half times more likely to experience severe water deprivation than urban children, as shown in figure 7.

Figure 7: Severe water deprivation among children in 2008

⁷ Previous calculations of severe water deprivation among children used "time to go to and return from a water source is more than 30 minutes" as the indicator. The correct indicator, as per Gordon et al, 2003, refers to children that live more than 30 minutes away from a water source. The data from 2003 was re-calculated to reflect this change. The DHS and MICS used different methods to calculate the time taken to collect water. This may have negatively biased the results. Therefore, the presented increase in severe water deprivation must be interpreted with caution.



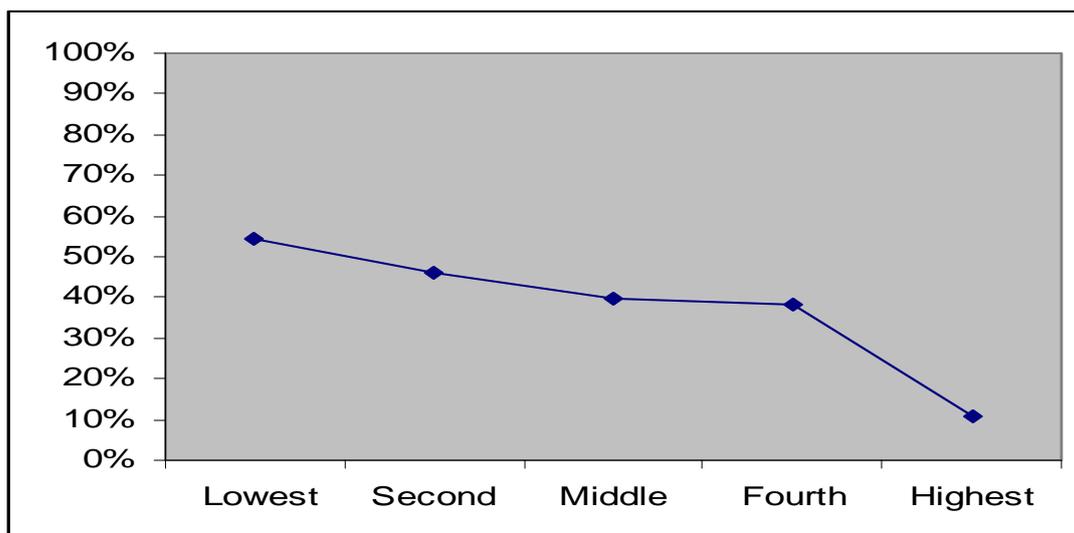
Source: Martel 2009. Additional analysis of the MICS 2008

In Gaza province, more than half of children are experiencing severe water deprivation (58 per cent). Gaza province registered an increase in children's severe water deprivation between 2003 and 2008 (39 versus 58 per cent). More than half of the households in Gaza province (52 per cent) spend one hour or more to collect drinking water. There is no evidence of any province achieving a statistically significant reduction in severe water deprivation among children.

For the vast majority of households in all provinces, it is an adult woman who normally collects water. As men's levels of education and wealth increases, they are more likely to collect water. However, the proportion of men that collect water remains extremely low, even among men with high levels of education and men in the best-off households. If a child collects water, it is much more likely to be a girl than a boy. Lack of access to safe water infringes on other rights. Children, particularly girls, may drop out of school to collect water and may have to travel long distances, which places them at greater risk of abuse. Girls collect water in 11 per cent of households in both Nampula and Gaza provinces, on average spending 52 and 96 minutes respectively per trip.

Severe water deprivation is nearly five times higher for children who live in the poorest households compared to those who live in the best-off households (54 per cent compared to 11 per cent), see figure 8. There is no statistical difference in the proportion of children experiencing severe water deprivation based on the sex of the child, the sex of the head-of-household or whether or not the child is an orphan.

Figure 8: Severe water deprivation according to wealth of household, 2008



Source: Martel 2009. Additional analysis of the MICS 2008

There is a correlation between severe water deprivation and the dependency ratio. Children in households where the dependency ratio is two or higher are more likely to experience severe water deprivation.

In households where the head-of-household has secondary level education or higher, children are less likely to experience severe water deprivation compared to children whose head-of-household has no education or only primary education.

4.3 Severe Sanitation Deprivation among Children

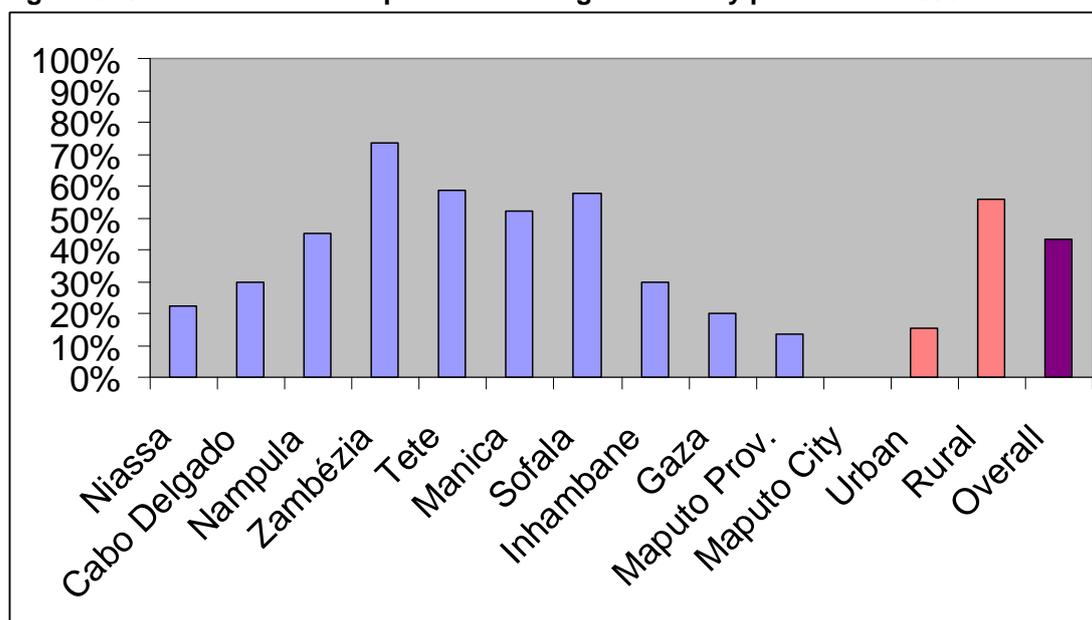
The principal objective of the PARPA II in relation to sanitation is to reduce morbidity and mortality related to diseases caused by poor sanitation conditions. It also recognises the improving sanitation in schools is necessary to increase girls enrolment and the link between improving sanitation and environmental protection. The sanitation deprivation indicator is the proportion of children under 18 years of age who have no access to a toilet of any kind in the vicinity of their dwelling, including communal toilets or latrines.

There is no evidence of a reduction in severe sanitation deprivation among children between 2003 and 2008. In 2008, 43 per cent of children were experiencing severe sanitation deprivation. The urban/rural disparity is large, with 15 per cent of urban children experiencing severe sanitation deprivation compared to 55 per cent of rural children.

Besides urban/rural disparities, there are also large disparities between provinces. In Zambézia province, 73 per cent of children are experiencing severe sanitation deprivation compared to less than one per cent in Maputo city. The urban/rural divide is also vast. Fifty-six per cent of rural children are experiencing compared to 15 per cent of urban children. A higher proportion

of children in the central and northern provinces experience severe sanitation deprivation than in the southern provinces, as can be seen in figure 9.

Figure 9: Severe sanitation deprivation among children by province in 2008



Source: Martel 2009. Additional analysis of the MICS 2008

There is also a large disparity in children's severe sanitation deprivation depending on the wealth of their family. Data shows that 92 per cent of children in the poorest households experience severe sanitation deprivation compared to 3 per cent in the best-off households.

The level of education of the head-of-household also has a significant effect on the likelihood of a child experiencing severe sanitation deprivation. Fifty-eight per cent of children whose head-of-household has no formal education experienced severe sanitation deprivation compared with 12 per cent of children whose head-of household has secondary education or higher.

4.4 Severe Health Deprivation among Children

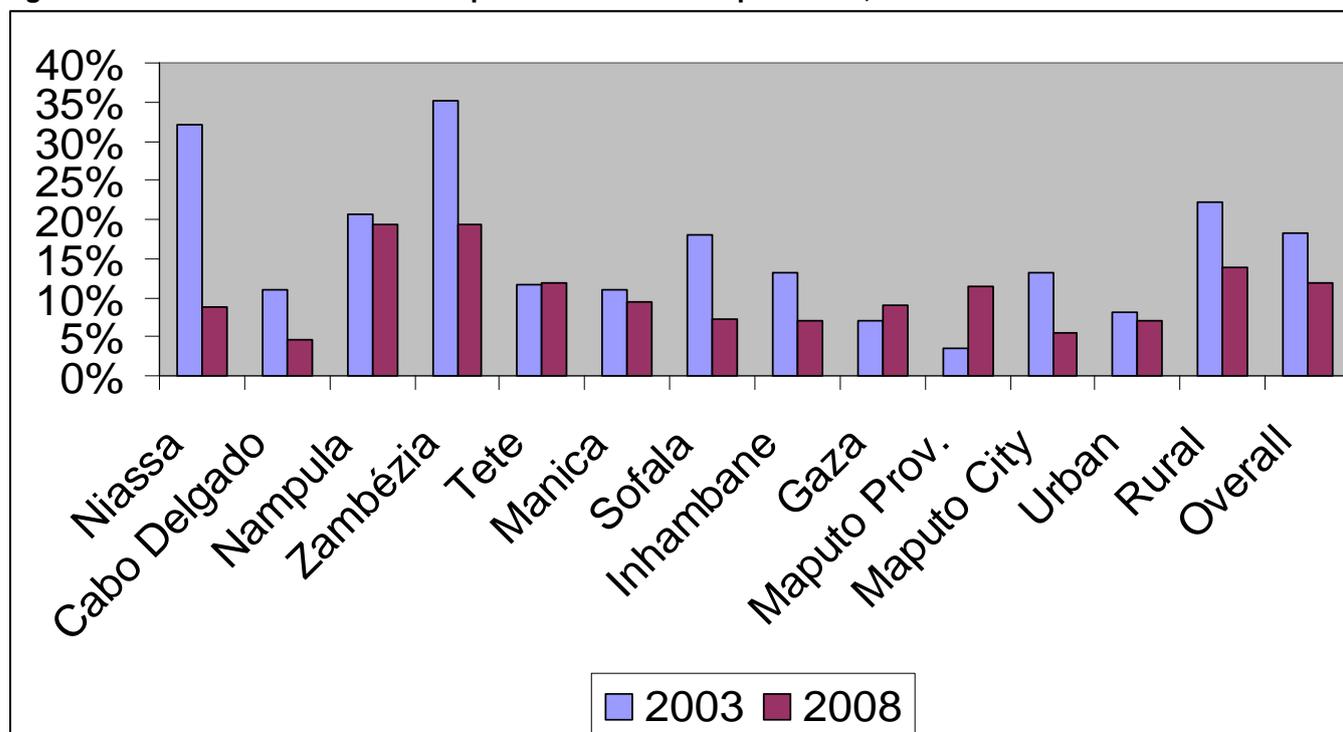
Good health contributes to human development and directly and indirectly to a reduction in poverty. It is a right guaranteed under the constitution of Mozambique (Article 54). The PARPA II also recognises that a healthy population with a high capacity to produce is necessary for the sustainable development of Mozambique. The severe health deprivation indicator is the proportion of children under five years of age that have never been immunised or those that have suffered from a severe episode of Acute Respiratory Infection (ARI) that was not treated.

Severe health deprivation among children fell significantly between 2003 and 2008, from 18 per cent⁹ to 12 per cent. As can be seen from figure 10 below,

⁹ The small difference between the value reported here for 2003 compared to the value reported in UNICEF (2006) is explained by the treatment of children without any information on health. In line

there is a disparity between rural and urban children. Rural children are more likely to experience severe health deprivation (14 per cent versus 7 per cent) although deprivation levels decreased significantly for rural children while remaining fairly constant among urban children. There is a disparity between provinces, ranging from five per cent in Maputo city to 19 per cent in Zambézia and Nampula provinces. Children in Tete also experience high levels of severe health deprivation. Niassa province showed a marked improvement in relation to severe health deprivation, with deprivation rates falling from 32 per cent in 2003 to nine per cent in 2008. In 2003, Niassa province had one of the highest levels of severe health deprivation among children. In 2008, its deprivation rates were among the lowest. Severe health deprivation increased significantly in Maputo province, from four per cent in 2003 to 11 per cent in 2008.

Figure 10: Levels of severe health deprivation in selected provinces, 2003 & 2008



Source: Martel 2009. Additional analysis of the DHS 2003 & MICS 2008

with the established Bristol Indicator methodology, children without information on the components of the health indicator were excluded from the calculation.

Severe health deprivation is strongly associated with the wealth of households. Children in the poorest households are more than twice as likely to experience severe health deprivation than children in the best-off households. There is no evidence that there is any difference in levels of health deprivation between girls and boys.

Breaking down the indicator into its components (ARI and immunisation) reveals some of the causes behind the high levels of severe health deprivation in Zambézia, Nampula and Tete provinces. In all three provinces, mothers/guardians are less likely to recognise the symptoms of pneumonia than the national average, suggesting that that severe health deprivation may be linked to the knowledge guardians have about diseases. Surprisingly, there is not a strong relationship between the ability to recognise pneumonia and levels of education, suggesting that some practical health issues may not be adequately addressed as part of formal education. Notably, only three per cent of children suspected of having pneumonia received antibiotics in Zambézia province.

ARI is among the leading causes of morbidity and mortality among young children in Mozambique, with pneumonia being the most serious infection. The World Health Organisation estimates that 60 per cent of ARI deaths can be prevented by the selective use of antibiotics (World Bank, 2008) but the success of treatment relies upon early detection and access to medical facilities.

Tete, Zambézia and Nampula provinces also have the highest proportion of children between 12 and 23 months that do not have any vaccinations. There is a strong relationship between level of education of the mother and vaccinations. As might be expected, there is a significant relationship between education of head-of-household and severe health deprivation.

4.5 Severe Shelter Deprivation among Children

The PARPA II recognises the critical importance of adequate housing in improving living conditions in Mozambique, stating that access to suitable housing is a “universally recognised right.” It stresses the role of adequate housing in improving public health and its links with the ability to access key basic services such as water, sanitation and electricity.

The shelter indicator is the proportion of children under 18 years of age living in dwellings with more than five people per room (severe overcrowding).

Five per cent of children are experiencing severe shelter deprivation in Mozambique. This level has remained fairly constant between 2003 and 2008. Cabo Delgado province has experienced a large fall in severe shelter deprivation among children. Only 0.2% of children in the province are now experiencing severe shelter deprivation, compared to 3 per cent in 2003. Sofala province has also experienced a large drop in the proportion of

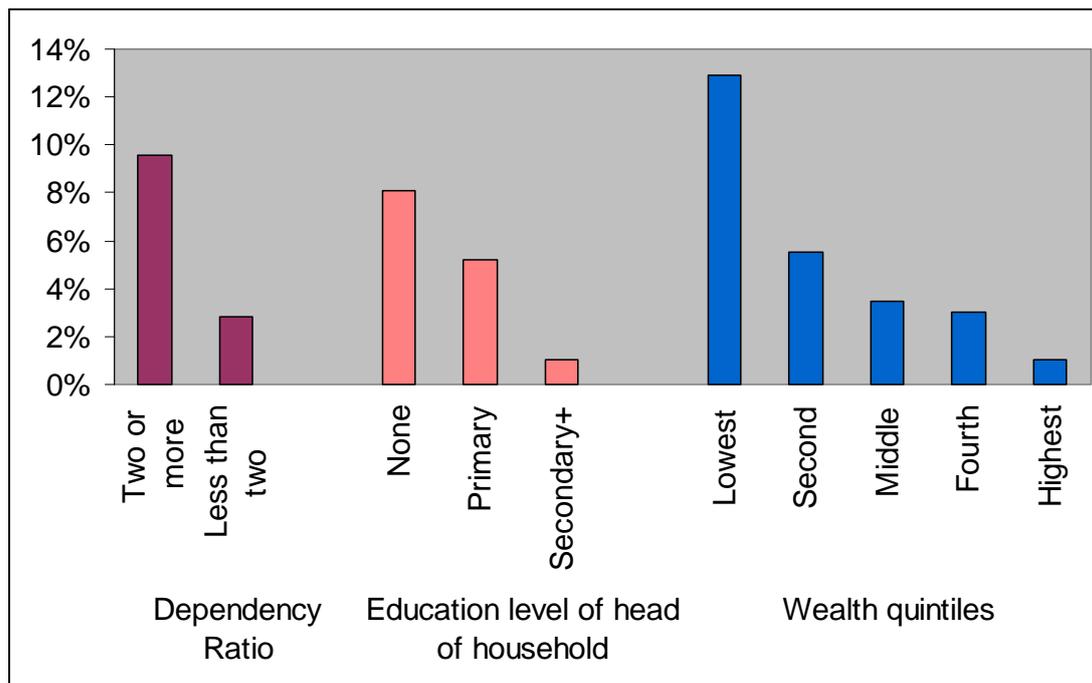
children experiencing this deprivation, from 14 per cent in 2003 to six per cent in 2008. Severe shelter deprivation has increased in Gaza and Inhambane province. No other provinces show evidence of a statistically significant change in the proportion of children experiencing severe shelter deprivation.

As might be expected there is a strong correlation between the dependency ratio and severe shelter deprivation. Three per cent of children living in household with a dependency ratio of less than two compared to 10 per cent of children living in a household with a dependency ratio of two or higher. As shown in figure 11 below, severe shelter deprivation is also influenced by the education of the head-of-household and the wealth of the child's family¹⁰.

In the context of a country affected by the HIV/AIDS epidemic, this indicator may also reflect the phenomenon of children living with caregivers other than their parents. Fourteen per cent of children do not live with a biological parent (INE, 2009). In addition, 58 per cent of households headed by an elderly person have children under the age of 18 in their care (Martel, 2009).

Figure 11: Severe shelter deprivation by dependency ratio, education level of head-of-household and wealth of household, 2008

¹⁰ It should be noted that the dependency ratio, the education of the head-of-household are very likely to be correlated with each other. This has not been controlled for in the graph below This implies that the relationship between severe shelter deprivation and each of these three factors may not be as strong as it appears below



Source: Martel 2009. Additional analysis of the MICS 2008

4.6 Severe Education Deprivation among Children

Education is a fundamental right that is guaranteed by the Constitution of Mozambique, which states that “education constitutes both a right and a responsibility of all citizens” (Article 88). MDG 3 aims to ensure that by 2015, all girls and boys complete the full cycle of primary education. Education is one the most powerful instruments for reducing childhood poverty in the medium to longer term. The importance of education, in advancing economic and social development and in reducing poverty is well documented.

The education deprivation indicator is the proportion of children between 7 and 18 years of age who have never been to school and are not currently attending school. Between 2003 and 2008, severe education deprivation has halved (24 versus 12 per cent). The levels of severe education deprivation are three times higher for rural children (15 per cent) compared with urban children (5 per cent), although both groups experienced large improvements. Severe education deprivation is highly correlated with the wealth of the household. Children in the poorest households are almost ten times more likely to experience severe education deprivation than children in the best-off households.

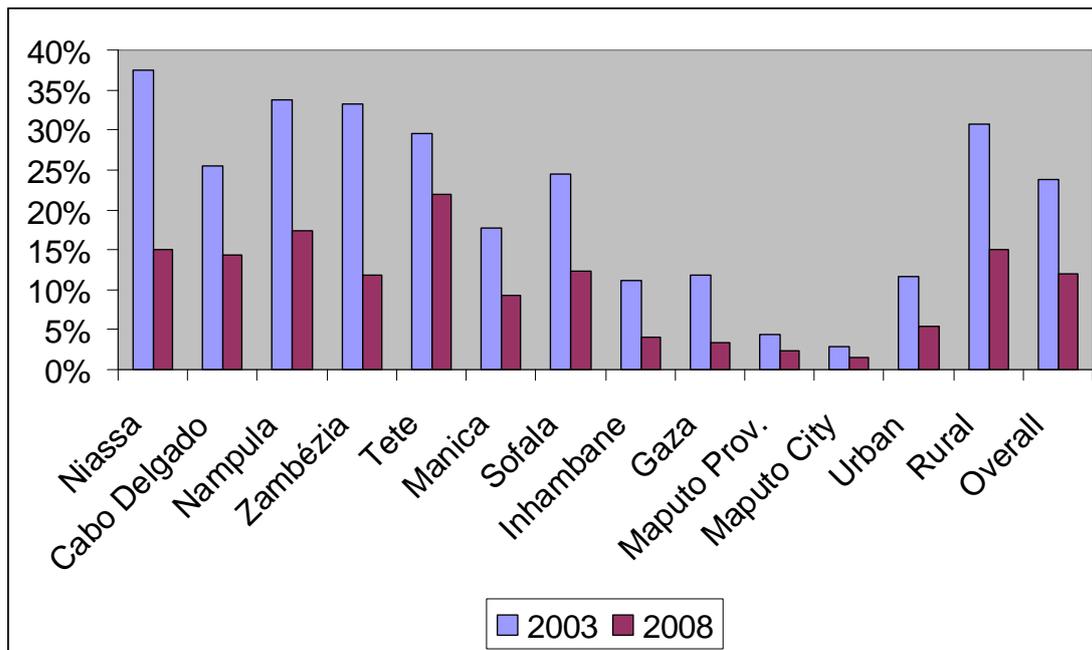
Severe education deprivation has reduced in all provinces, as shown in figure 12 below. Niassa, Zambézia, Inhambane and Gaza provinces experienced large reductions. All four provinces saw a drop in the proportion of children experiencing severe education deprivation of over 60 per cent. In the case of Gaza province the reduction was 72 per cent. Only 3 per cent of children in Gaza province are experiencing severe educational deprivation. Despite

these improvements, it must be noted that education deprivation remains high in Niassa and Zambézia provinces (15 per cent and 12 per cent respectively). Severe education deprivation is highest in Tete province (22 per cent). Children in Tete province have the lowest primary school completion rate, 5 per cent. Tete province has among the lowest level of family support for children's education¹¹ and the lowest access to pedagogical materials in the home (INE, 2009). This suggests that the poor educational outcomes in Tete province are more complex than simply a lack of supply of educational opportunities. The problem may also be related to the value parents in the province put on children's learning.

Children in Nampula and Cabo Delgado provinces are experiencing high levels of severe education deprivation (17 per cent and 14 per cent respectively).

Figure 12: Levels of severe education deprivation by province, 2003 & 2008

¹¹ The MICS survey calculates a families support for a child's education through five indicators; a) Children whose household members are involved in four or more activities that promote learning and facilitate the education; b) Average number of activities in which adult members participate with the child; c) Children whose father is involved in one or more activities that promote learning and facilitate education; d) Average number of activities in which the father is involved; and e) Children living in a household without their biological father



Source: Martel 2009. Additional analysis of the DHS 2003 & MICS 2008

Girls are more likely to experience severe education deprivation than boys (13 and 10 per cent respectively). Sofala province has the largest gender disparity for primary education attendance rates, with 87 per cent of boys, compared to 77 per cent of girls attending primary school. Tete province has the largest gender disparity when it comes to secondary level education. Twelve per cent of boys are attending secondary school compared to 6.5 per cent of girls. Nationally, the education gender gap has been gradually closing, as have disparities between provinces.

Although there is no evidence a difference in severe education deprivation between orphans¹² and vulnerable¹³ children compared to non-orphans and non-vulnerable children as measured using the Bristol Indicator methodology, there is a difference between the school attendance rates of double orphans compared to non-orphans. Male double orphans and female double orphans have a school attendance ratio to their non-orphaned peers of 0.90 and 0.92 respectively. This is in keeping with the finding that only 20% of orphans and vulnerable children have received free basic educational support (INE, 2008).

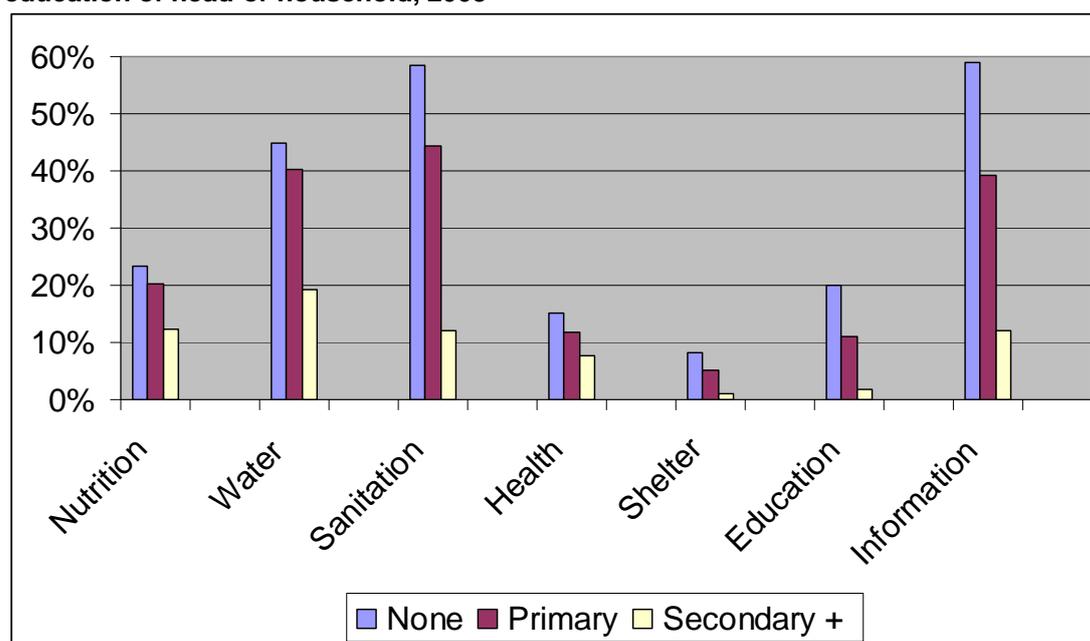
Twenty per cent of children whose head-of-household has no education experience severe education deprivation compared to two per cent if the head-of-household has secondary level education or higher. The education level of the head of household is strongly correlated with each of the seven

¹² A child is considered as an Orphan or Vulnerable Child (OVC) if s/he is either “vulnerable” (as per definition below) or at least one of his/her natural parents is dead.

¹³ Children (below 18 years) are considered vulnerable (for the purposes of this analysis) if at least one of their parents is chronically ill OR there was an adult death in the household during the previous 12 months after a prolonged illness OR there is a chronically ill adult in the household.

deprivation indicators, as can be seen in figure 13. The evidence suggests that the children of educationally deprived parents will be more likely to experience severe deprivations.

Figure 13: Proportion of children experiencing deprivations according to the level of education of head-of-household, 2008



Source: Martel 2009. Additional analysis of the DHS 2003 & MICS 2008

The immediate causes of education deprivation for Mozambican children include low uptake of education opportunities, low household incomes, lack of access to and poor quality of education. The underlying causes of education deprivation include poverty, parental attitudes to education, parental levels of education and cultural factors.¹⁴

4.7 Severe Information Deprivation among Children

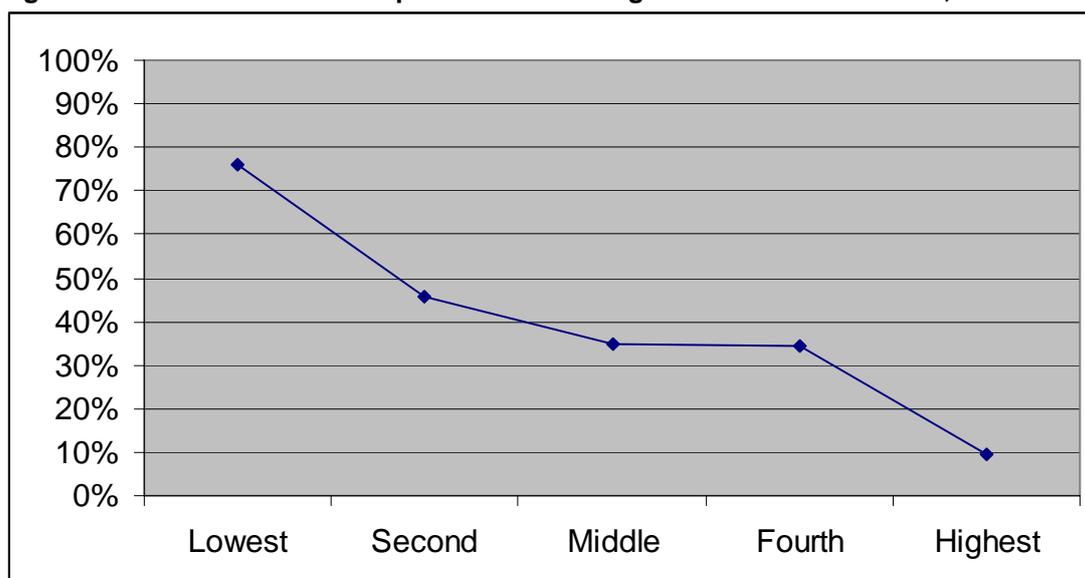
The PARPA II recognises that access to information is vital to the success of many its priority areas including; combating HIV/AIDS; agricultural development; natural resource management; the integration and consolidation of the domestic market and improving literacy. The information deprivation indicator is the proportion of children between 5 to 18 years of age with no possession of or access to a radio, television or newspaper at home. There is no evidence that there was a change in the proportion of children

¹⁴ For a more detailed discussion on the immediate and underlying causes of education deprivation see *Child Poverty in Mozambique. A Situation and Trend Analysis*. UNICEF, 2006

experiencing severe information deprivation between 2003 and 2008. Forty per cent of children were experiencing severe information in 2008.

Severe information deprivation is highly correlated with the wealth of a child's household, as shown in figure 14. Children in the poorest households are nearly seven times more likely to experience this deprivation. The prevalence of information deprivation is also related to the level of education of the child's head-of-household.

Figure 14: Severe education deprivation according to wealth of household, 2008



Source INE 2005: Additional analysis of the DHS 2003

The information deprivation indicator does not take into account mobile phone ownership. Mobile service penetration and number of subscribers in Mozambique has increased significantly over the past 10 years from 0.5% to 20 per cent reaching a total of 4.2 million subscribers in 2008 (World Bank, 2009). It is likely that if access to mobile phones were included in the calculation of information deprivation, it would have caused a reduction in the proportion of children experiencing severe information deprivation. Mobile coverage is however limited, with rural areas lagging behind urban centres. It is also possible that the rapid expansion of mobile phone ownership is actually reducing the demand for radios and televisions among the poorest households as they prioritise mobile phones over other durable goods.

5. Conclusions and Recommendations

The preceding analysis clearly shows that between 2003 and 2008 there have been significant improvements in levels of absolute poverty among children. This was driven by large reductions in the proportion of children experiencing severe health and education deprivations. Water, sanitation and information lagged behind and the level of deprivations in these areas remains high.

The analysis highlights the importance of the education of parents/guardians on the well-being of children. For all deprivations, children whose head-of-household had a higher level of education were less likely to experience deprivations. From this perspective, it is encouraging for the future that levels of education deprivation has fallen so significantly. However, a significant proportion of children (12 per cent) have never been to school, suggesting that efforts in this sector need to be re-doubled.

There is also an unambiguous relationship between the wealth of households and the level of deprivations of their children. Children from wealthier families tend not to experience deprivations as frequently as children from poorer families, indicating that the PARPA's focus of increasing incomes needs to be continued.

The urban/rural divide is particularly evident through this type of analysis. It is also clear from the results that levels of deprivations are significantly higher in the central and northern provinces than in the southern provinces. However, if we exclude Maputo city, the northern provinces experienced the largest reduction in levels of deprivation among children.

References

Dupraz, J, Handley, G. and Wills, O. *Child Poverty in Mozambique. A Situation and Trends Analysis*. UNICEF, 2006

Filmer D. and Pritchett L. H. *Estimating Wealth Effects without Expenditure Data – or Tears: An Application to Educational Enrolments in India*. Demography, Vol. 38, No. 1, 2001

Gordon, D., Nandy. S., Pantazis C., Pemberton S. and Townsend, P. *The Distribution of Poverty in the Developing World*. University of Bristol, UK, Centre for International Poverty Research, 2003

Grupo 20. *Annual Poverty Report (RAP)*. 2004

Government of Mozambique. *Action Plan for the Reduction of Absolute Poverty 2001-2005*. 2001

Government of Mozambique. *Action Plan for the Reduction of Absolute Poverty 2006-2009*. 2006

Government of Mozambique, 1980. *The Constitution of Mozambique*

Gwatkin, D., Rutstein, S., Johnson, K., Suliman, E., Wagstaff, A. and A. Amozou. *Socio-Economic Differences in Health, Nutrition and Population within Developing Countries – an Overview*. The World Bank, 2007

INE & Ministry of Health, 2005. *Demographic and Health Survey 2003*

Martel, P., 2009. *Additional Analyses of MICS 2008 and DHS 2003 data*. UNICEF

World Bank. *World Development Indicators*. 2008

Annex 1: Bristol Indicators

Table 1A. Severe nutritional deprivation by survey.

| Children < 5y r.r. ² = 93.5%, deff = 2.7 | n | Severe nutritional deprivation ¹ | |
|--|-------|---|-------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| | | 10675 | 9138 |
| Overall | 10675 | 19.9% [18.6 - 21.1] | 27.0% [25.4 - 28.6] |
| Urban | 4230 | 15.2% [13.1 - 17.2] | 17.3% [14.5 - 20.1] |
| Rural | 6445 | 21.8% [20.2 - 23.3] | 30.9% [28.9 - 32.8] |
| Niassa | 812 | 21.5% [17.3 - 25.7] | 33.0% [28.9 - 37.2] |
| Cabo Delgado | 874 | 23.3% [19.8 - 26.8] | 39.0% [33.5 - 44.6] |
| Nampula | 917 | 35.8% [31.3 - 40.2] | 29.8% [24.9 - 34.7] |
| Zambézia | 1136 | 20.2% [17.3 - 23.2] | 35.8% [30.8 - 40.8] |
| Tete | 957 | 20.9% [17.7 - 24.1] | 26.7% [22.5 - 30.9] |
| Manica | 953 | 17.4% [13.7 - 21.1] | 23.7% [20.6 - 26.8] |
| Sofala | 1758 | 15.0% [12.8 - 17.2] | 29.3% [23.5 - 35] |
| Inhambane | 780 | 14.2% [10.9 - 17.5] | 17.3% [15.1 - 19.4] |
| Gaza | 913 | 9.6% [6.9 - 12.3] | 20.0% [16.6 - 23.5] |
| Maputo Prov. | 753 | 9.2% [7 - 11.5] | 8.2% [5.9 - 10.5] |
| Maputo City | 822 | 7.6% [5 - 10.3] | 9.9% [7.2 - 12.5] |
| Wealth quintiles: | | | |
| Lowest | 1840 | 25.1% [22.3 - 27.9] | 35.7% [32.4 - 38.9] |
| Second | 2006 | 26.0% [23.5 - 28.6] | 31.5% [28.4 - 34.6] |
| Middle | 1992 | 21.3% [19.1 - 23.4] | 29.4% [26.4 - 32.5] |
| Fourth | 2363 | 14.6% [12.4 - 16.9] | 21.0% [18.2 - 23.9] |
| Highest | 2474 | 9.0% [6.9 - 11.1] | 10.4% [8.2 - 12.5] |

¹Severe nutritional deprivation = Children under 5 years of age whose nutritional index (weight-for-height, weight-for-age, height-for-age) is equal to or below -3 standard deviations from the median of the 2006 WHO standard, e.g. severe anthropometric failure.

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 1B. Severe nutritional deprivation by survey.

| Children < 5y r.r. ² = 93.5%, deff = 2.7 | <i>n</i> | Severe nutritional deprivation¹ | |
|--|----------|---|-------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| <i>n</i> | | 10675 | 9138 |
| Overall | 10675 | 19.9% [18.6 - 21.1] | 27.0% [25.4 - 28.6] |
| Sex of child: Male | 5252 | 22.6% [21 - 24.2] | 30.2% [28.2 - 32.2] |
| Female | 5423 | 17.2% [15.7 - 18.7] | 23.9% [21.8 - 25.9] |
| Dependency ratio < 2 | 7017 | 18.9% [17.5 - 20.3] | 27.0% [25.1 - 28.9] |
| Dependency ratio 2+ | 3658 | 21.6% [19.5 - 23.7] | 26.9% [24.5 - 29.3] |
| Education head HH: | | | |
| None | 2120 | 23.4% [20.8 - 26.1] | 32.0% [29.4 - 34.6] |
| Primary | 6859 | 20.3% [18.8 - 21.8] | 26.8% [24.7 - 28.8] |
| Secondary+ | 1576 | 12.2% [9.4 - 14.9] | 9.5% [6.4 - 12.6] |
| Sex head HH: Male | 8254 | 20.2% [18.8 - 21.6] | 26.7% [24.9 - 28.5] |
| Female | 2409 | 18.6% [16.2 - 21.1] | 28.0% [25.2 - 30.8] |
| Not an orphan | 10284 | 19.7% [18.5 - 21] | 27.0% [25.3 - 28.6] |
| Orphan | 391 | 23.8% [18 - 29.6] | 28.0% [21.2 - 34.7] |
| Not an OVC | 9765 | 19.7% [18.4 - 21] | |
| OVC | 910 | 21.8% [17.9 - 25.7] | |

¹Severe nutritional deprivation = Children under 5 years of age whose nutritional index (weight-for-height, weight-for-age, height-for-age) is equal to or below -3 standard deviations from the median of the 2006 WHO standard, e.g. severe anthropometric failure.

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 2A. Severe water deprivation by survey. Data corrected: DHS time to water source has been halved (like for the MICS) so as to estimate time to reach water source only, not go and come back.

| Children < 18y r.r. ² = 100%, deff = 33.1 | n | Severe water deprivation ¹ | |
|---|-------|---------------------------------------|-------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| n | | 34714 | 32481 |
| Overall | 34714 | 38.5% [35.6 - 41.5] | 30.9% [28.2 - 33.6] |
| Urban | 14772 | 18.4% [14.1 - 22.6] | 13.6% [9.9 - 17.2] |
| Rural | 19942 | 47.5% [43.8 - 51.1] | 39.2% [35.8 - 42.6] |
| Niassa | 2827 | 27.1% [15.8 - 38.4] | 32.8% [22.6 - 42.9] |
| Cabo Delgado | 2611 | 40.4% [29.6 - 51.2] | 28.3% [17.9 - 38.6] |
| Nampula | 3480 | 44.1% [36.4 - 51.8] | 31.6% [24.7 - 38.5] |
| Zambézia | 3529 | 40.4% [32.7 - 48.1] | 40.2% [34 - 46.4] |
| Tete | 2968 | 38.4% [29.4 - 47.5] | 36.3% [25 - 47.5] |
| Manica | 3229 | 45.4% [37.9 - 52.9] | 38.0% [31.2 - 44.7] |
| Sofala | 4347 | 45.9% [35.8 - 56.1] | 30.5% [21.6 - 39.3] |
| Inhambane | 2742 | 37.1% [28.4 - 45.9] | 30.2% [20.6 - 39.7] |
| Gaza | 3156 | 57.6% [49.1 - 66.2] | 38.8% [30.2 - 47.3] |
| Maputo Prov. | 2734 | 14.1% [5.8 - 22.4] | 13.1% [6.9 - 19.4] |
| Maputo City | 3091 | 2.9% [1.5 - 4.4] | 1.6% [0.1 - 3.1] |
| Wealth quintiles: | | | |
| Lowest | 5546 | 54.3% [49.1 - 59.6] | 49.9% [45.4 - 54.3] |
| Second | 5846 | 46.3% [41.6 - 50.9] | 37.2% [33.1 - 41.4] |
| Middle | 6236 | 39.7% [35.2 - 44.3] | 37.1% [32.4 - 41.7] |
| Fourth | 7875 | 38.0% [33.4 - 42.6] | 22.1% [18.3 - 26] |
| Highest | 9211 | 10.8% [8.2 - 13.3] | 5.6% [3.7 - 7.4] |

¹Severe water deprivation = Children under 18 years of age who only have access to surface water (e.g. river) for drinking or who live in households where the nearest sources of water is 30 minutes away or more.

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 2B. Severe water deprivation by survey. Data corrected: DHS time to water source has been halved (like for the MICS) so as to estimate time to reach water source only, not go and come back.

| Children < 18y r.r. ² = 100%, deff = 33.1 | n | Severe water deprivation ¹ | |
|---|-------|---------------------------------------|-------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| n | | 34714 | 32481 |
| Overall | 34714 | 38.5% [35.6 - 41.5] | 30.9% [28.2 - 33.6] |
| Sex of child: Male | 17092 | 38.8% [35.7 - 41.9] | 30.8% [28 - 33.5] |
| Female | 17594 | 38.2% [35.3 - 41.1] | 31.1% [28.3 - 33.9] |
| Dependency ratio < 2 | 22573 | 36.1% [33.1 - 39] | 28.6% [25.8 - 31.4] |
| Dependency ratio 2+ | 12141 | 42.6% [39 - 46.2] | 35.7% [32.3 - 39.1] |
| Education head HH: | | | |
| None | 7312 | 45.0% [40.4 - 49.7] | 39.0% [35.3 - 42.7] |
| Primary | 21716 | 40.2% [37.1 - 43.3] | 30.1% [27.2 - 33] |
| Secondary+ | 5267 | 19.2% [15.4 - 22.9] | 9.7% [6.1 - 13.3] |
| Sex head HH: Male | 25442 | 38.7% [35.5 - 41.9] | 31.4% [28.6 - 34.3] |
| Female | 9236 | 38.0% [34.2 - 41.8] | 29.1% [25.4 - 32.8] |
| Not an orphan | 30121 | 38.8% [35.9 - 41.8] | 31.5% [28.7 - 34.2] |
| Orphan | 4593 | 36.5% [32.5 - 40.4] | 26.6% [23.2 - 30.1] |
| Not an OVC | 28650 | 39.1% [36.1 - 42.2] | |
| OVC | 6064 | 35.6% [31.7 - 39.5] | |

¹Severe water deprivation = Children under 18 years of age who only have access to surface water (e.g. river) for drinking or who live in households where the nearest sources of water is 30 minutes away or more.

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 3A. Severe sanitation deprivation by survey (for the MICS, includes use of sanitation facilities at home or nearby).

| Children < 18y r.r. ² = 99.9%, deff = 33.3 | n | Severe sanitation deprivation ¹ | |
|--|-------|--|-------------------------------|
| | | MICS 2008 [95% CI] ³ | DHS 2003 [95% CI] |
| n | | 34693 | 32464 |
| Overall | 34693 | 43.4% [40.4 - 46.4] | 47.2% [44.2 - 50.3] |
| Urban | 14762 | 15.4% [11.3 - 19.6] | 18.3% [12.4 - 24.1] |
| Rural | 19931 | 55.8% [52 - 59.6] | 61.1% [57.8 - 64.5] |
| Niassa | 2822 | 22.5% [14.7 - 30.4] | 21.2% [14 - 28.4] |
| Cabo Delgado | 2603 | 29.6% [19.7 - 39.4] | 38.7% [30 - 47.5] |
| Nampula | 3477 | 45.2% [36.8 - 53.7] | 57.6% [48.2 - 66.9] |
| Zambézia | 3531 | 73.3% [65.9 - 80.7] | 79.4% [73.8 - 84.9] |
| Tete | 2970 | 58.6% [49.1 - 68] | 45.4% [37.2 - 53.7] |
| Manica | 3224 | 51.9% [44.1 - 59.7] | 49.3% [36.5 - 62.2] |
| Sofala | 4347 | 57.9% [49.2 - 66.6] | 70.8% [63.2 - 78.4] |
| Inhambane | 2739 | 29.7% [17 - 42.4] | 34.3% [24.6 - 44] |
| Gaza | 3153 | 20.0% [10.1 - 29.9] | 31.5% [23 - 40] |
| Maputo Prov. | 2734 | 13.3% [4 - 22.7] | 8.2% [2.8 - 13.6] |
| Maputo City | 3093 | 0.2% [0 - 0.5] | 0.2% [0 - 0.5] |
| Wealth quintiles: | | | |
| Lowest | 5546 | 92.1% [90 - 94.2] | N/A |
| Second | 5841 | 60.6% [56.1 - 65] | 83.5% [80.2 - 86.8] |
| Middle | 6242 | 31.6% [27.2 - 35.9] | 28.3% [24 - 32.6] |
| Fourth | 7854 | 23.0% [18.5 - 27.5] | 16.8% [13.2 - 20.4] |
| Highest | 9210 | 3.2% [0.7 - 5.6] | 3.6% [2.1 - 5.2] |

¹Severe sanitation deprivation = Children under 18 years of age who have no access to a toilet of any kind in the vicinity of their dwelling, including communal toilets or latrines.

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 3B. Severe sanitation deprivation by survey (for the MICS, includes use of sanitation facilities at home or nearby).

| Children < 18y r.r. ² = 99.9%, deff = 33.3 | n | Severe sanitation deprivation ¹ | |
|--|-------|--|-------------------------------|
| | | MICS 2008 [95% CI] ³ | DHS 2003 [95% CI] |
| n | | 34693 | 32464 |
| Overall | 34693 | 43.4% [40.4 - 46.4] | 47.2% [44.2 - 50.3] |
| Sex of child: Male | 17083 | 43.8% [40.7 - 46.9] | 47.4% [44.3 - 50.5] |
| Female | 17582 | 43.0% [40 - 46] | 47.1% [43.9 - 50.3] |
| Dependency ratio < 2 | 22558 | 39.3% [36.4 - 42.2] | 43.7% [40.4 - 47] |
| Dependency ratio 2+ | 12135 | 50.1% [46 - 54.1] | 54.5% [50.5 - 58.5] |
| Education head HH: | | | |
| None | 7301 | 58.4% [54.2 - 62.7] | 63.5% [60 - 67] |
| Primary | 21719 | 44.4% [41.3 - 47.6] | 44.6% [41.3 - 48] |
| Secondary+ | 5256 | 12.0% [8.9 - 15.2] | 10.3% [6.9 - 13.6] |
| Sex head HH: Male | 25427 | 43.4% [40.1 - 46.7] | 47.7% [44.4 - 51.1] |
| Female | 9230 | 43.2% [39.9 - 46.6] | 45.6% [41.7 - 49.5] |
| Not an orphan | 30102 | 43.6% [40.6 - 46.7] | 47.7% [44.6 - 50.8] |
| Orphan | 4591 | 41.7% [37.9 - 45.5] | 43.7% [39.7 - 47.7] |
| Not an OVC | 28634 | 44.0% [40.9 - 47.1] | |
| OVC | 6059 | 40.4% [36.5 - 44.3] | |

¹Severe sanitation deprivation = Children under 18 years of age who have no access to a toilet of any kind in the vicinity of their dwelling, including communal toilets or latrines.

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 4A. Severe health deprivation by survey. (In the case of the DHS 2003, this refers only to children under five years of age living with their mother.)

| Children < 5y r.r. ² = 100%, deff = 3.7 | n | Severe health deprivation ¹ | |
|---|-------|--|-------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| n | | 11418 | 8671 |
| Overall | 11418 | 11.9% [10.8 - 13.1] | 18.3% [16.4 - 20.1] |
| Urban | 4505 | 7.1% [5.8 - 8.3] | 8.2% [6.3 - 10.1] |
| Rural | 6913 | 13.9% [12.3 - 15.4] | 22.1% [19.8 - 24.5] |
| Niassa | 907 | 8.7% [5.6 - 11.9] | 32.0% [22.9 - 41.2] |
| Cabo Delgado | 924 | 4.7% [3.4 - 6.1] | 10.9% [7.8 - 14] |
| Nampula | 1007 | 19.4% [15.3 - 23.5] | 20.7% [16.1 - 25.4] |
| Zambézia | 1208 | 19.4% [15.5 - 23.3] | 35.2% [28.5 - 41.9] |
| Tete | 1047 | 11.8% [8.9 - 14.8] | 11.7% [6.6 - 16.8] |
| Manica | 1084 | 9.5% [4.5 - 14.5] | 10.9% [7.9 - 13.9] |
| Sofala | 1787 | 7.2% [4.2 - 10.2] | 18.0% [12.6 - 23.4] |
| Inhambane | 835 | 7.1% [5.1 - 9.2] | 13.1% [9.2 - 17] |
| Gaza | 951 | 9.1% [6.7 - 11.6] | 7.1% [4.3 - 9.8] |
| Maputo Prov. | 799 | 11.4% [8.5 - 14.2] | 3.6% [1.8 - 5.4] |
| Maputo City | 869 | 5.5% [3.7 - 7.2] | 13.1% [10.2 - 16] |
| Wealth quintiles: | | | |
| Lowest | 2023 | 18.3% [15.4 - 21.3] | 31.9% [27.8 - 36] |
| Second | 2126 | 13.6% [11.3 - 15.8] | 21.4% [18 - 24.8] |
| Middle | 2133 | 9.9% [7.9 - 11.8] | 14.8% [12.3 - 17.3] |
| Fourth | 2519 | 8.6% [6.8 - 10.4] | 7.3% [5.5 - 9.1] |
| Highest | 2617 | 7.3% [5.7 - 8.8] | 6.7% [5.3 - 8.1] |

¹Severe health deprivation = Children under five years of age that have never been immunised or those that have suffered from a severe episode of ARI that was not treated.

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 4B. Severe health deprivation by survey. (In the case of the DHS 2003, this refers only to children under five years of age living with their mother.)

| Children < 5y r.r. ² = 100%, deff = 3.7 | n | Severe health deprivation ¹ | |
|---|-------|--|-------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| n | | 11418 | 8671 |
| Overall | 11418 | 11.9% [10.8 - 13.1] | 18.3% [16.4 - 20.1] |
| Sex of child: Male | 5637 | 11.7% [10.3 - 13] | 18.8% [16.7 - 21] |
| Female | 5779 | 12.2% [10.8 - 13.6] | 17.7% [15.7 - 19.7] |
| Dependency ratio < 2 | 7514 | 11.3% [10.1 - 12.5] | 17.2% [15.2 - 19.1] |
| Dependency ratio 2+ | 3904 | 13.1% [11.3 - 14.8] | 20.6% [17.8 - 23.4] |
| Education head HH: | | | |
| None | 2273 | 15.1% [12.3 - 17.9] | 25.8% [22.2 - 29.4] |
| Primary | 7318 | 11.7% [10.5 - 12.9] | 16.1% [14.2 - 18] |
| Secondary+ | 1703 | 7.7% [5.1 - 10.3] | 6.8% [4.3 - 9.2] |
| Sex head HH: Male | 8839 | 11.8% [10.5 - 13] | 19.1% [17.1 - 21.2] |
| Female | 2567 | 12.6% [10.6 - 14.6] | 14.8% [12.2 - 17.4] |
| Not an orphan | 10993 | 11.8% [10.6 - 13] | 18.4% [16.5 - 20.2] |
| Orphan | 425 | 15.3% [10.7 - 19.9] | 14.4% [8.2 - 20.6] |
| Not an OVC | 5637 | 11.7% [10.3 - 13] | |
| OVC | 5779 | 12.2% [10.8 - 13.6] | |

¹Severe health deprivation = Children under five years of age that have never been immunised or those that have suffered from a severe episode of ARI that was not treated..

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 5A. Severe shelter deprivation by survey (for the MICS, total number of rooms as per question hc2a is used as denominator).

| Children < 18y r.r. ² = 99.6%, deff = 10.3 | n | Severe shelter deprivation ¹ | |
|--|-------|---|------------------------------|
| | | MICS 2008 [95% CI] ³ | DHS 2003 [95% CI] |
| n | | 34599 | 32431 |
| Overall | 34599 | 5.4% [4.6 - 6.1] | 5.8% [5.1 - 6.6] |
| Urban | 14727 | 2.7% [1.8 - 3.6] | 4.1% [3.1 - 5.1] |
| Rural | 19872 | 6.5% [5.5 - 7.6] | 6.7% [5.8 - 7.6] |
| Niassa | 2803 | 14.4% [10.8 - 17.9] | 8.6% [5.4 - 11.7] |
| Cabo Delgado | 2605 | 0.2% [0 - 0.7] | 2.8% [1.3 - 4.3] |
| Nampula | 3424 | 2.9% [1.3 - 4.6] | 4.4% [2.7 - 6] |
| Zambézia | 3520 | 4.8% [2.9 - 6.8] | 5.1% [3.7 - 6.6] |
| Tete | 2959 | 12.5% [8.3 - 16.7] | 10.3% [7.5 - 13.1] |
| Manica | 3224 | 10.9% [7.4 - 14.3] | 10.1% [7.7 - 12.6] |
| Sofala | 4347 | 5.5% [3.0 - 8.0] | 13.5% [9.4 - 17.7] |
| Inhambane | 2742 | 3.5% [1.1 - 6] | 2.9% [0.9 - 4.9] |
| Gaza | 3152 | 5.2% [2.5 - 7.9] | 2.2% [0.9 - 3.6] |
| Maputo Prov. | 2732 | 2.7% [0.8 - 4.6] | 2.4% [1.4 - 3.4] |
| Maputo City | 3091 | 1.6% [0.4 - 2.8] | 4.4% [1.2 - 7.7] |
| Wealth quintiles: | | | |
| Lowest | 5527 | 12.9% [10.5 - 15.3] | 8.4% [6.2 - 10.5] |
| Second | 5813 | 5.5% [4.2 - 6.8] | 8.2% [6.2 - 10.2] |
| Middle | 6211 | 3.5% [2.5 - 4.6] | 6.5% [4.8 - 8.2] |
| Fourth | 7853 | 3.0% [1.9 - 4] | 3.3% [2.3 - 4.4] |
| Highest | 9195 | 1.0% [0.4 - 1.6] | 2.6% [1.5 - 3.8] |

¹Severe shelter deprivation = Children under 18 years of age living in dwellings with more than five people per room (severe overcrowding).

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 5B. Severe shelter deprivation by survey (for the MICS, total number of rooms as per question hc2a is used as denominator).

| Children < 18y r.r. ² = 99.6%, deff = 10.3 | n | Severe shelter deprivation ¹ | |
|--|-------|---|------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| n | | 34599 | 32431 |
| Overall | 34599 | 5.4% [4.6 - 6.1] | 5.8% [5.1 - 6.6] |
| Sex of child: Male | 17041 | 5.4% [4.6 - 6.2] | 5.9% [5.1 - 6.7] |
| Female | 17530 | 5.3% [4.5 - 6.2] | 5.8% [5 - 6.6] |
| Dependency ratio < 2 | 22502 | 2.8% [2.1 - 3.4] | 3.1% [2.5 - 3.7] |
| Dependency ratio 2+ | 12097 | 9.6% [8.0 - 11.2] | 11.5% [9.8 - 13.3] |
| Education head HH: | | | |
| None | 7287 | 8.1% [6.2 - 9.9] | 6.4% [5.2 - 7.6] |
| Primary | 21640 | 5.2% [4.3 - 6.1] | 5.9% [4.9 - 6.9] |
| Secondary+ | 5253 | 1.0% [0.4 - 1.7] | 3.6% [2.1 - 5.1] |
| Sex head HH: Male | 25352 | 5.5% [4.6 - 6.3] | 6.3% [5.4 - 7.1] |
| Female | 9211 | 5.0% [3.7 - 6.2] | 4.4% [3.2 - 5.6] |
| Not an orphan | 30019 | 5.5% [4.7 - 6.3] | 5.9% [5.2 - 6.7] |
| Orphan | 4580 | 4.3% [2.9 - 5.7] | 5.4% [3.8 - 7] |
| Not an OVC | 28553 | 5.4% [4.6 - 6.1] | |
| OVC | 6046 | 5.4% [3.7 - 7] | |

¹Severe shelter deprivation = Children under 18 years of age living in dwellings with more than five people per room (severe overcrowding).

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 6A. Severe education deprivation by survey.

| Children < 7-18y r.r. ² = 99.9%, deff = 6.1 | n | Severe education deprivation ¹ | |
|---|-------|---|-------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| n | | 19733 | 19419 |
| Overall | 19733 | 11.9% [10.7 - 13] | 23.8% [22.1 - 25.6] |
| Urban | 9076 | 5.4% [3.9 - 6.8] | 11.6% [9.1 - 14.1] |
| Rural | 10657 | 15.1% [13.6 - 16.6] | 30.7% [28.5 - 32.8] |
| Niassa | 1604 | 15.0% [11.2 - 18.9] | 37.4% [27.7 - 47.1] |
| Cabo Delgado | 1371 | 14.4% [10.5 - 18.3] | 25.5% [20.2 - 30.8] |
| Nampula | 1981 | 17.4% [13.6 - 21.2] | 33.8% [27.7 - 40] |
| Zambézia | 1930 | 11.8% [9 - 14.6] | 33.3% [29.2 - 37.4] |
| Tete | 1607 | 22.0% [16.9 - 27.1] | 29.5% [24.3 - 34.6] |
| Manica | 1799 | 9.2% [5.8 - 12.5] | 17.7% [13.9 - 21.5] |
| Sofala | 2255 | 12.4% [9.2 - 15.5] | 24.4% [21.1 - 27.7] |
| Inhambane | 1605 | 4.1% [3.2 - 5.1] | 11.2% [8.9 - 13.5] |
| Gaza | 1873 | 3.3% [2 - 4.7] | 11.8% [8 - 15.6] |
| Maputo Prov. | 1691 | 2.4% [0.9 - 4] | 4.4% [3.1 - 5.7] |
| Maputo City | 2017 | 1.5% [0.8 - 2.1] | 2.8% [2.2 - 3.5] |
| Wealth quintiles: | | | |
| Lowest | 2838 | 21.0% [18.1 - 24] | 39.2% [35.5 - 42.9] |
| Second | 3018 | 18.0% [15.7 - 20.3] | 34.9% [31.6 - 38.3] |
| Middle | 3405 | 12.2% [10.5 - 13.9] | 29.2% [26.3 - 32.1] |
| Fourth | 4512 | 7.2% [5.7 - 8.7] | 15.3% [13.4 - 17.3] |
| Highest | 5960 | 2.2% [1.5 - 2.8] | 4.4% [3.3 - 5.5] |

¹Severe education deprivation = Children 7 to 18 years of age who have never been to school (and are not currently at school).

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 6B. Severe education deprivation by survey.

| Children < 7-18y r.r. ² = 99.9%, deff = 6.1 | n | Severe education deprivation ¹ | |
|---|-------|---|-------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| n | | 19733 | 19419 |
| Overall | 19733 | 11.9% [10.7 - 13] | 23.8% [22.1 - 25.6] |
| Sex of child: Male | 9697 | 10.4% [9.3 - 11.4] | 20.2% [18.3 - 22] |
| Female | 10015 | 13.3% [11.8 - 14.8] | 27.7% [25.6 - 29.8] |
| Dependency ratio < 2 | 13368 | 10.7% [9.5 - 11.9] | 21.6% [19.9 - 23.4] |
| Dependency ratio 2+ | 6365 | 14.0% [12.5 - 15.4] | 29.0% [26.2 - 31.7] |
| Education head HH: | | | |
| None | 4226 | 20.0% [17.5 - 22.6] | 37.8% [35 - 40.7] |
| Primary | 12076 | 11.0% [9.9 - 12.1] | 19.9% [18.1 - 21.6] |
| Secondary+ | 3193 | 1.7% [1.1 - 2.3] | 4.4% [3.1 - 5.8] |
| Sex head HH: Male | 13912 | 12.1% [10.8 - 13.3] | 24.4% [22.7 - 26.2] |
| Female | 5798 | 11.2% [9.5 - 13] | 22.0% [19.1 - 24.8] |
| Not an orphan | 15522 | 12.1% [10.9 - 13.3] | 24.1% [22.2 - 25.9] |
| Orphan | 4211 | 10.9% [9.5 - 12.3] | 22.5% [20.1 - 24.9] |
| Not an OVC | 15305 | 12.2% [10.9 - 13.5] | |
| OVC | 4428 | 10.7% [9.3 - 12] | |

¹Severe education deprivation = Children 7 to 18 years of age who have never been to school (and are not currently at school).

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 7A. Severe information deprivation by survey (for the MICS, includes information on journals at home).

| Children < 5-18y r.r. ² = 100%, deff = 11.7 | n | Severe information deprivation ¹ | |
|---|-------|---|-------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| n | | 24202 | 23417 |
| Overall | 24202 | 40.3% [38.2 - 42.4] | 38.7% [36.9 - 40.5] |
| Urban | 10815 | 27.0% [24 - 30] | 24.8% [22.4 - 27.2] |

| | | | |
|--------------------------|-------|-------------------------------|-------------------------------|
| Rural | 13387 | 46.6% [44.1 - 49.1] | 46.0% [43.6 - 48.5] |
| Niassa | 2002 | 35.6% [30.4 - 40.8] | 47.3% [40.4 - 54.1] |
| Cabo Delgado | 1755 | 44.5% [39 - 50] | 50.1% [44.9 - 55.4] |
| Nampula | 2515 | 52.4% [45.2 - 59.6] | 38.3% [34 - 42.6] |
| Zambézia | 2412 | 45.1% [40.2 - 49.9] | 53.6% [47.6 - 59.7] |
| Tete | 2008 | 47.0% [41.2 - 52.8] | 39.1% [33.6 - 44.7] |
| Manica | 2212 | 36.9% [31.4 - 42.5] | 24.3% [19.3 - 29.2] |
| Sofala | 2707 | 27.5% [21.5 - 33.6] | 28.4% [24.4 - 32.4] |
| Inhambane | 1949 | 41.9% [36.2 - 47.7] | 41.5% [36.5 - 46.4] |
| Gaza | 2255 | 33.1% [28.9 - 37.4] | 40.0% [35.5 - 44.5] |
| Maputo Prov. | 2026 | 29.5% [25 - 33.9] | 27.6% [22.7 - 32.4] |
| Maputo City | 2361 | 13.6% [10.8 - 16.5] | 13.6% [10.7 - 16.5] |
| Wealth quintiles: | | | |
| Lowest | 3634 | 76.2% [72.3 - 80.1] | 65.5% [61 - 70] |
| Second | 3845 | 45.5% [41.8 - 49.3] | 55.9% [51.7 - 60.1] |
| Middle | 4251 | 34.8% [31 - 38.7] | 36.0% [32.5 - 39.6] |
| Fourth | 5491 | 34.3% [31.1 - 37.5] | 27.4% [24.5 - 30.3] |
| Highest | 6981 | 9.5% [7.8 - 11.3] | 11.1% [8.6 - 13.7] |

¹Severe information deprivation = Children 5 to 18 years of age with no possession of or access to radio, television or newspaper at home.

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 7B. Severe information deprivation by survey (for the MICS, includes information on journals at home).

| Children < 5-18y r.r. ² = 100%, deff = 11.7 | n | Severe information deprivation ¹ | |
|---|-------|---|-------------------------------|
| | | MICS 2008 [95% CI ³] | DHS 2003 [95% CI] |
| | | 24202 | 23417 |
| Overall | 24202 | 40.3% [38.2 - 42.4] | 38.7% [36.9 - 40.5] |
| Sex of child: Male | 11900 | 40.1% [37.7 - 42.4] | 38.4% [36.4 - 40.3] |

| | | | |
|-----------------------------------|-------|-------------------------------|-------------------------------|
| Female | 12279 | 40.4% [38.2 - 42.7] | 39.0% [37.1 - 41] |
| Dependency ratio < 2 | 16009 | 36.3% [34 - 38.6] | 34.3% [32.5 - 36] |
| Dependency ratio 2+ | 8193 | 47.0% [44.3 - 49.8] | 48.3% [44.9 - 51.7] |
| Education head HH: None | 5201 | 59.1% [55.7 - 62.5] | 53.5% [50.5 - 56.6] |
| Primary | 14911 | 39.3% [37.2 - 41.4] | 35.6% [33.4 - 37.7] |
| Secondary+ | 3793 | 12.0% [9.1 - 14.8] | 10.3% [7.1 - 13.5] |
| Sex head HH: Male | 17236 | 33.1% [30.9 - 35.3] | 33.2% [31.1 - 35.3] |
| Female | 6940 | 59.6% [56.5 - 62.7] | 56.7% [53.8 - 59.5] |
| Not an orphan | 19585 | 38.4% [36.2 - 40.6] | 37.8% [35.8 - 39.9] |
| Orphan | 4617 | 49.2% [45.9 - 52.4] | 43.8% [40.8 - 46.9] |
| Not an OVC | 19157 | 38.7% [36.4 - 41] | |
| OVC | 5045 | 46.8% [43.6 - 50.1] | |

¹Severe information deprivation = Children 5 to 18 years of age with no possession of or access to radio, television or newspaper at home.

²r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

³CI = Confidence interval.

Table 8. Distribution of number of severe deprivations (as per previous definitions) in children below 18 years of age by survey.

| Children < 18y r.r. ¹ = 100%, deff = 17.2 | Severe deprivations | |
|---|-------------------------------------|-------------------------------|
| | MICS 2008 [95% CI ²] | DHS 2003 [95% CI] |
| n | 34728 | 32481 |
| No severe deprivation | 23.2% [21.4 - 25] | 16.8% [15.3 - 18.2] |
| 1 severe deprivation | 28.5% [27 - 30] | 24.4% [23.1 - 25.6] |
| 2 severe deprivations | 26.8% [25.5 - 28.1] | 25.9% [24.9 - 27] |

| | | |
|-----------------------|-------------------------------|-------------------------------|
| 3 severe deprivations | 15.9% [14.6 - 17.2] | 20.5% [19.2 - 21.8] |
| 4 severe deprivations | 5.0% [4.2 - 5.7] | 9.5% [8.7 - 10.3] |
| 5 severe deprivations | 0.6% [0.4 - 0.8] | 2.4% [2.1 - 2.8] |
| 6 severe deprivations | 0.0% [0 - 0.1] | 0.5% [0.3 - 0.6] |
| 7 severe deprivations | 0% N/A | 0.0% [0.0 - 0.0] |

¹r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

²CI = Confidence interval.

Table 9A. Percentage of children less than 18 years of age suffering from at least one, two or four severe deprivations (as per previous definitions), MICS 2008.

| Children < 18y r.r. ¹ = 100%, deff = 17.2 | n | MICS 2008 | | |
|---|-------|--|--|---|
| | | At least <u>one</u> severe deprivation [95% CI ²] | <u>Two</u> or more severe deprivations [95% CI] | <u>Four</u> or more severe deprivations [95% CI] |
| Overall | 34728 | 76.8% [75 - 78.6] | 48.3% [45.9 - 50.7] | 5.6% [4.7 - 6.5] |
| Urban | 14775 | 51.7% [47.7 - 55.8] | 21.7% [18.1 - 25.3] | 0.9% [0.5 - 1.3] |
| Rural | 19953 | 87.9% [86.2 - 89.5] | 60.0% [57.2 - 62.8] | 7.6% [6.4 - 8.9] |
| Niassa | 2828 | 70.7% [63.8 - 77.7] | 35.4% [28.3 - 42.5] | 4.4% [2.3 - 6.5] |
| Cabo Delgado | 2611 | 80.9% [75.2 - 86.7] | 45.1% [37.9 - 52.4] | 1.9% [0.4 - 3.3] |
| Nampula | 3480 | 84.3% [79.4 - 89.2] | 58.7% [51.7 - 65.7] | 8.3% [5.1 - 11.5] |
| Zambézia | 3534 | 88.5% [84 - 92.9] | 64.3% [58.5 - 70.2] | 7.5% [4.8 - 10.1] |
| Tete | 2973 | 85.7% [81.2 - 90.3] | 60.2% [52.9 - 67.4] | 10.4% [6.6 - 14.1] |
| Manica | 3229 | 77.9% [73.3 - 82.5] | 51.8% [44.7 - 58.9] | 8.9% [5.7 - 12.1] |
| Sofala | 4347 | 78.5% [71.7 - 85.3] | 52.6% [45 - 60.1] | 5.5% [3.6 - 7.4] |
| Inhambane | 2742 | 73.2% [66.6 - 79.9] | 36.7% [29.9 - 43.5] | 2.7% [1.4 - 4] |
| Gaza | 3156 | 75.0% [68.6 - 81.5] | 38.5% [29.8 - 47.3] | 2.4% [1.2 - 3.6] |
| Maputo Prov. | 2734 | 49.7% [43.5 - 55.8] | 18.4% [11.4 - 25.4] | 0.2% [-0.1 - 0.5] |
| Maputo City | 3094 | 24.6% [21.5 - 27.7] | 3.5% [2.4 - 4.6] | 0% N/A |
| Wealth quintiles: | 5549 | 99.9% | 91.3% | 18.6% |

| | | | | |
|---------|------|-------------------------------|-------------------------------|----------------------------|
| Lowest | | [99.7 - 100] | [89.2 - 93.4] | [16.1 - 21.2] |
| Second | 5846 | 95.2% [93.7 - 96.6] | 64.8% [61.7 - 67.9] | 5.0% [3.5 - 6.4] |
| Middle | 6244 | 80.0% [77.2 - 82.7] | 40.5% [37.4 - 43.6] | 1.9% [1.2 - 2.7] |
| Fourth | 7875 | 73.4% [70.2 - 76.5] | 33.0% [29.6 - 36.5] | 1.1% [0.5 - 1.6] |
| Highest | 9214 | 30.0% [27.1 - 33.0] | 5.3% [3.8 - 6.8] | 0% N/A |

¹r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.

²CI = Confidence interval.

Table 9B. Percentage of children less than 18 years of age suffering from at least one, two or four severe deprivations (as per previous definitions), MICS 2008.

| Children < 18y r.r. ¹ = 100%, deff = 17.2 | n | MICS 2008 | | |
|---|-------|--|--|---|
| | | At least <u>one</u> severe deprivation [95% CI ²] | <u>Two</u> or more severe deprivations [95% CI] | <u>Four</u> or more severe deprivations [95% CI] |
| Overall | 34728 | 76.8% [75 - 78.6] | 48.3% [45.9 - 50.7] | 5.6% [4.7 - 6.5] |
| Sex of child: Male | 17097 | 77.1% [75.2 - 78.9] | 48.7% [46.2 - 51.2] | 5.3% [4.4 - 6.2] |
| Female | 17603 | 76.5% [74.6 - 78.4] | 47.8% [45.3 - 50.3] | 5.9% [4.9 - 6.8] |
| Dependency ratio < 2 | 22580 | 71.9% [69.8 - 74.1] | 43.6% [41.1 - 46.1] | 4.2% [3.5 - 5] |
| Dependency ratio 2+ | 12148 | 84.8% [83 - 86.6] | 55.9% [53.1 - 58.7] | 7.8% [6.3 - 9.3] |
| Education head HH: None | 7313 | 89.8% [88.2 - 91.4] | 65.9% [62.7 - 69] | 10.4% [8.2 - 12.5] |
| Primary | 21726 | 79.7% [78 - 81.4] | 49.2% [46.7 - 51.6] | 4.9% [4 - 5.8] |
| Secondary+ | 5270 | 38.7% [34.6 - 42.8] | 13.4% [10.7 - 16.1] | 0.8% [0.2 - 1.4] |
| Sex head HH: Male | 25450 | 75.3% [73.2 - 77.3] | 45.9% [43.3 - 48.5] | 5.4% [4.4 - 6.4] |
| Female | 9242 | 81.3% [79.1 - 83.5] | 55.4% [52 - 58.7] | 6.1% [4.9 - 7.2] |
| Not an orphan | 30135 | 76.8% [75 - 78.6] | 48.2% [45.8 - 50.6] | 5.8% [4.8 - 6.7] |
| Orphan | 4593 | 76.7% [74 - 79.5] | 49.0% [45.5 - 52.6] | 4.3% [3.1 - 5.4] |
| Not an OVC | 28664 | 77.1% [75.3 - 78.9] | 48.4% [46 - 50.9] | 5.8% [4.8 - 6.7] |
| OVC | 6064 | 75.3% [72 - 78.6] | 47.5% [43.8 - 51.1] | 4.5% [3.5 - 5.6] |

¹r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.
²CI = Confidence interval.

Table 10A. Percentage of children less than 18 years of age suffering from at least one, two or four severe deprivations (as per previous definitions), DHS 2003.

| Children < 18y r.r. ¹ = 100%, deff = 13.2 | n | DHS 2003 | | |
|---|-------|--|--|---|
| | | At least <u>one</u> severe deprivation [95% CI ²] | <u>Two</u> or more severe deprivations [95% CI] | <u>Four</u> or more severe deprivations [95% CI] |
| Overall | 32481 | 83.2% [81.8 - 84.7] | 58.9% [56.4 - 61.3] | 12.4% [11.4 - 13.5] |
| Urban | 13117 | 64.3% [60.9 - 67.7] | 30.4% [25.3 - 35.5] | 3.3% [1.9 - 4.7] |
| Rural | 19364 | 92.3% [91.2 - 93.5] | 72.5% [70.2 - 74.8] | 16.8% [15.4 - 18.3] |
| Niassa | 2624 | 86.8% [83.5 - 90.1] | 58.3% [51 - 65.6] | 11.5% [7.7 - 15.4] |
| Cabo Delgado | 2266 | 87.7% [82.9 - 92.6] | 61.9% [55.8 - 68] | 10.0% [7.7 - 12.3] |
| Nampula | 3298 | 86.0% [81 - 90.9] | 65.7% [57.2 - 74.2] | 14.1% [11.1 - 17] |
| Zambézia | 3182 | 95.6% [93.1 - 98.1] | 79.9% [75.4 - 84.3] | 22.5% [19 - 26.1] |
| Tete | 3040 | 87.5% [84.5 - 90.5] | 64.9% [59.4 - 70.3] | 12.7% [9 - 16.3] |
| Manica | 3424 | 83.7% [79.6 - 87.8] | 57.7% [49.5 - 65.9] | 11.0% [8.3 - 13.7] |
| Sofala | 3312 | 87.8% [84.7 - 90.8] | 67.9% [62.1 - 73.6] | 15.1% [11 - 19.2] |
| Inhambane | 2884 | 79.5% [74.5 - 84.5] | 48.3% [41.6 - 55] | 8.9% [5.8 - 12] |
| Gaza | 2959 | 81.8% [77.4 - 86.2] | 52.8% [46.4 - 59.3] | 8.8% [5.6 - 12] |
| Maputo Prov. | 2602 | 61.5% [57.1 - 65.9] | 23.9% [19.3 - 28.5] | 1.8% [0.5 - 3.1] |
| Maputo City | 2890 | 47.2% [44.6 - 49.8] | 11.4% [9 - 13.8] | 0.2% [0 - 0.5] |
| Wealth quintiles: | | | | |
| Lowest | 5716 | 100% N/A | 95.3% [94.3 - 96.3] | 34.8% [32.1 - 37.5] |
| Second | 5386 | 100% N/A | 87.0% [85.1 - 89] | 17.6% [15.6 - 19.6] |
| Middle | 6186 | 89.6% [88 - 91.2] | 59.7% [56.8 - 62.7] | 5.9% [4.4 - 7.3] |
| Fourth | 7561 | 75.0% [72.5 - 77.4] | 35.7% [32.7 - 38.6] | 1.8% [1.3 - 2.4] |
| Highest | 7632 | 49.0% [47.0 - 51.0] | 12.5% [10.8 - 14.3] | 0.3% [0.1 - 0.5] |

¹r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.
²CI = Confidence interval.

Table 10B. Percentage of children less than 18 years of age suffering from at least one, two or four severe deprivations (as per previous definitions), DHS 2003.

| Children < 18y r.r. ¹ = 100%, deff = 13.2 | n | DHS 2003 | | |
|---|-------|--|--|---|
| | | At least <u>one</u> severe deprivation [95% CI ²] | <u>Two</u> or more severe deprivations [95% CI] | <u>Four</u> or more severe deprivations [95% CI] |
| Overall | 32481 | 83.2% [81.8 - 84.7] | 58.9% [56.4 - 61.3] | 12.4% [11.4 - 13.5] |
| Sex of child: Male | 16337 | 82.9% [81.4 - 84.4] | 57.9% [55.6 - 60.3] | 12.3% [11.2 - 13.4] |
| Female | 16144 | 83.6% [82 - 85.1] | 59.8% [57.1 - 62.5] | 12.6% [11.3 - 13.8] |
| Dependency ratio < 2 | 22385 | 79.8% [78.1 - 81.6] | 53.9% [51.2 - 56.7] | 10.5% [9.4 - 11.6] |
| Dependency ratio 2+ | 10096 | 90.3% [88.9 - 91.6] | 69.1% [66.4 - 71.8] | 16.4% [14.6 - 18.1] |
| Education head HH: None | 9153 | 93.0% [91.8 - 94.2] | 76.1% [73.9 - 78.3] | 19.4% [17.5 - 21.2] |
| Primary | 19454 | 83.0% [81.3 - 84.8] | 56.2% [53.6 - 58.8] | 10.7% [9.6 - 11.8] |
| Secondary+ | 3353 | 52.2% [48.6 - 55.9] | 18.3% [15.1 - 21.6] | 0.7% [0.2 - 1.3] |
| Sex head HH: Male | 24634 | 82.7% [81 - 84.4] | 58.1% [55.4 - 60.8] | 12.3% [11.1 - 13.5] |
| Female | 7847 | 85.1% [83.3 - 86.9] | 61.6% [58.7 - 64.5] | 12.9% [11.4 - 14.3] |
| Not an orphan | 28436 | 84.2% [82.7 - 85.6] | 59.9% [57.5 - 62.4] | 13.2% [12.1 - 14.4] |
| Orphan | 4045 | 76.2% [73.4 - 79] | 50.7% [47.1 - 54.4] | 6.3% [4.8 - 7.7] |

¹r.r. = response rate, deff = design effect. Response rate and design effect are in relation to the topmost and leftmost statistic in the table.
²CI = Confidence interval.