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Child Poverty and Deprivation in Mali

The First National Estimates

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CHILD POVERTY AND DEPRIVATION IN MALI: THE FIRST NATIONAL ESTIMATES

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Abstract. This study provides the first ever estimates of national child deprivation rates in Mali using the Multiple Overlapping Deprivations Approach (MODA) pioneered by UNICEF. Deprivations are defined according to the age of the child. A participatory national process led to the selection of four distinct age groups and a set of deprivation dimensions for each age group. The age groups are 0-23 months, 24-59 months, 5-14 years and 15-17 years. The younger age groups have 7 dimensions of deprivation while the older age groups have 6 dimensions.

The national child deprivation rate is 50%, slightly higher than the national (monetary) child poverty rate of 46%. The deprivation rate is based on a threshold of 4 for children 0-59 months and 3 for children 5-17 years. The deprivation headcount is 60% in rural areas versus 16% in urban areas. The highest deprivation headcounts are found in Kidal (73%), Tombouctou (72%) and Mopti (68%). The headcount is 9% in Bamako.

The overlap of children who are both poor and deprived is 29% of all children, hence not all children who are deprived are living in poor households as defined by the national poverty line. Only 58% of children who are deprived live in poor households. Similarly, only 62% of children in poor households are multidimensionally deprived. Consequently, policies that are targeted exclusively on monetary poverty will miss children who are deprived.

Across regions in Mali the correlation between deprivation and poverty rates is uneven. The highest monetary poverty rate is in Sikasso (86%) where the child deprivation rate is around the national average. On the other hand, regions with the highest deprivation rates (Kidal, Tombouctou) have poverty rates of only 16% and 33% respectively. These patterns are related to the level of services available for families with children in each region and underscore the fact that low levels of poverty do not automatically translate into reductions in child deprivation.

The relationship between being deprived and monetary poverty is strongest in rural areas for all age groups. An increase of USD 1 per person per day would reduce the probability of being deprived by 25 percentage points in rural areas. The specific dimensions most strongly linked with income are health for younger children and education for older children. Beyond income, maternal education is an important determinant of childhood deprivation, especially in rural areas. Children 0-59 months in rural areas whose mothers have attained secondary schooling are 21 percentage points less likely to be deprived; the comparable figure for older children 5-17 years of age is 20 percentage points.

Keywords: child poverty; child well-being; multidimensional poverty; poverty overlaps

JEL classification: I31, I32, J13

Acknowledgements: Special thanks to participants at two N-MODA workshops in Bamako in March and June 2014 who identified the key indicators of child deprivation that were subsequently used in this report.

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1. INTRODUCTION

Understanding child poverty and deprivation in society is an important step towards defining and ultimately implementing programmes and policies to address children's development. Traditionally, the analysis of poverty of the kind found in Poverty Reduction Strategies or National Development Plans has focused on monetary well-being and utilises income or expenditure measures to assess the poverty status of the household that individuals live in. However, for children in particular, access to income at the household level may not translate directly into improvements in child well-being, both because children are not decision-makers and because their needs are unique and not necessarily addressed by income alone. Consequently, there is a relatively recent attempt to complement traditional income-based measures of poverty with multidimensional deprivation analysis, which assesses directly whether a child lacks access to particular goods and services. UNICEF's MODA methodology is an approach to define and quantify multidimensional child deprivation and to study how deprivation and monetary poverty coincide to identify the most vulnerable children. Such an approach is more holistic and child-friendly, and provides better information for designing appropriate interventions for any particular child, being income support or provision of particular services.

The United Nations definition describes child poverty as multidimensional, "*Children living in poverty are deprived of nutrition, water and sanitation facilities, access to basic health-care services, shelter, education, participation and protection, and that while a severe lack of goods and services hurts every human being, it is most threatening and harmful to children, leaving them unable to enjoy their rights , to reach their full potential and to participate as full members of the society."* (United Nations, 2007). The definition is multidimensional, comprising the lack of access to various basic goods and services and embracing a rights-based approach to child well-being. Moreover, the definition distinguishes child poverty from the poverty experienced by adults. The multidimensional nature of poverty is also recognised by scholars in the field. As far back as 1901 Rowntree defined households as poor if they had insufficient financial resources to provide themselves with food, shelter, clothing and other necessities at subsistence level while more recently Ravallion (2012) states that in essence nearly all poverty measures are multidimensional including the measurement of monetary poverty. Monetary poverty analysis uses a composite of income or consumption and compares it to a poverty line, which is established based on the budget needed to purchase a set of basic goods and services.

While both can be seen as multidimensional, there are conceptual differences between monetary poverty and deprivation analyses. Monetary poverty is measured under the assumption that market prices are known, that having sufficient financial resources will provide a household with the opportunity to purchase necessary goods and services, and thus markets exist for these items. Deprivation analysis on the other hand looks more directly at the household's actual access and uptake of these goods and services. While a household might be unable to access health care services, does not have sufficient food at home or a clean source of drinking water, the reasons for the lack of these might be other than financial constraints. Deprivation analysis focuses on the outcomes per person or per household and therefore includes constraints that go beyond having insufficient income, such as not having time or appropriate transportation to obtain a particular service, limited supply of goods, discrimination, inability to access services due to safety issues, inadequate quality, etc.

Another difference between the income-based approach and deprivation analysis is that it is easier to focus on the individual experience of poverty. Where monetary poverty is typically measured at the household level and then assigns each member that level of income or consumption, deprivation analysis allows measurement of deprivation at the level of the individual. In particular, when the analysis focuses on children, who are often not independent financial agents, the deprivation approach allows one to measure more directly what the experiences of children are, and whether there are intra-household differences (Hulme & McKay, 2008). Since the basic rights and needs of children are different from those of their adult household members (need for different type of feeding, health care and education) this approach is both more appropriate and more sensitive to their well-being (White et al., 2003).

Lastly, since many key facets of child well-being depend on (semi-)public goods (e.g. education, water, and sanitation, health care) of which the market value is harder to establish and for which in fact competitive markets often do not exist, the deprivation approach provides a way to capture those aspects of child well-being, which are otherwise masked by the use of a composite of all household income/expenditure (Gordon et al., 2003; Minujin et al., 2006). Finally, the assumptions on intra-household distribution upon which monetary poverty analysis is based are much more contestable than in deprivation analysis where the absence of piped water or electricity at the household level is clearly something that all members experience regardless of their relative position within the household.

Both monetary poverty and deprivation analysis face certain measurement challenges which are somewhat distinct and which have important implications for results. One attraction of the monetary approach is that all goods and services are valued in the same units and can be subsequently aggregated. Of course this relies on the underlying assumption that prices and quantities are known, something which might be more problematic in economies which are less monetised or which have many regional and seasonal differences (see de Neubourg et al, 2014 for more details); this is particularly problematic when trying to monetise the flow of services associated with housing in rural areas of developing countries where there is no rental market for the type of housing that most people utilise. On the other hand, deprivation analysis faces the issue of having to compare and aggregate various 'dimensions' of well-being, which may consist of very different underlying concepts. The demarcation line used to identify the monetary poor is 'anchored' against the price of a basic basket of food plus an allowance for non-foods; a cut-off which is theoretically consistent even though in practice the non-food allowance, especially the housing component, is not measured but derived from existing consumption patterns. The cut-off in deprivation analysis is more arbitrary and typically not anchored on a theoretical concept such as the cost of basic needs. In sum, both approaches require assumptions and empirical decisions that will ultimately affect the number of people deemed to be 'poor' or 'deprived'.

This paper uses the MODA methodology to analyse child well-being in Mali. The methodology includes both a monetary poverty and deprivation analysis for children made possible because of a unique dataset in which a consumption module was administered to a sub-set of households in the Multiple Indicators Cluster Survey (MICS) in 2009/10. This study takes advantage of these unique data to derive

national estimates of child deprivation, the first ever for Mali, and assesses these against traditional child poverty estimates using household consumption. It identifies four groups of children depending on whether they are poor, deprived, neither or both, and analyses the relationship between child-level deprivation and monetary poverty. It represents an important step towards establishing childhood deprivation as a lead indicator for social policy in Mali, and towards understanding the complex interaction between financial constraints and other household factors in determining children's well-being.

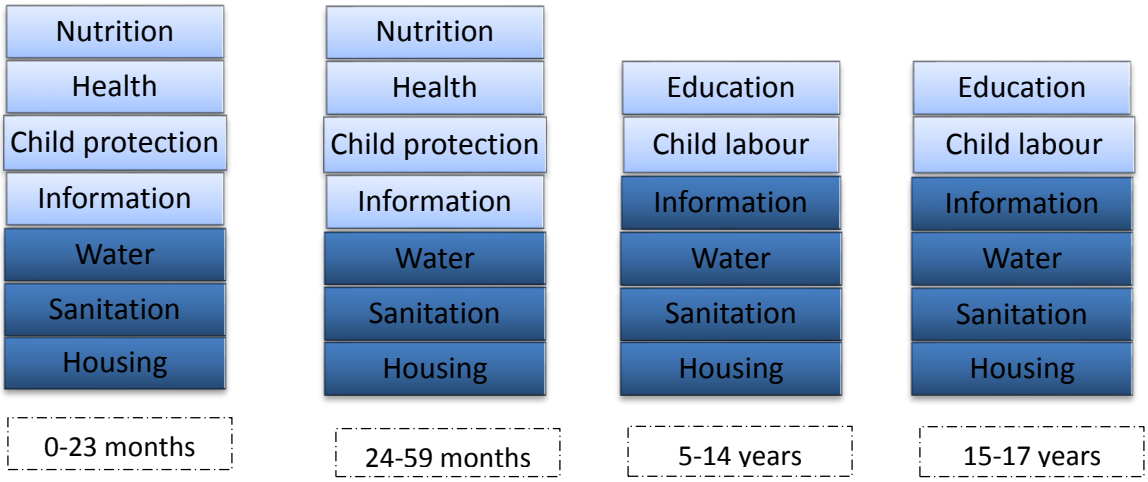
2. MODA METHODOLOGY AND THE DEPRIVATION DIMENSIONS

This child poverty analysis uses the MODA methodology adjusted to use age groups, indicators, dimensions, thresholds relevant for Mali (see de Neubourg et al., 2012). The analysis is primarily based on the MICS (2009-10) dataset and covers 12,542 households with children, and has a sample with a total of 71,055 children. The MICS data covers various aspects of child well-being and is therefore particularly suitable for the child deprivation analysis. Additional data on household consumption has been collected on a subsample of the MICS. These people have answered the consumption module of the ELIM questionnaire and represent in total 8,186 households with children, and 46,486 children. The larger MICS sample is used for the deprivation analysis, whereas the smaller subsample has been applied in all analyses including consumption or monetary poverty (see Appendix 1 for more details of the sample).

In line with general MODA methodology, all of the dimensions have been selected using the Convention on the Rights of the Child (CRC) as the guiding principle (United Nations, 1989). Further decisions on age groups, dimensions, indicators and thresholds have been guided by a technical group on MODA composed of key government ministries, the national statistical institute, and other donor partners and reflect both international and national standards as well as data availability.

MODA is a child-sensitive methodology, which has adopted a life-cycle approach. The analysis is broken down by four age groups in order to capture the varying needs of children across their lives (see Figure 2.1). For infants (0 to 23 months) and children in their early childhood (24 to 59 months) age-specific indicators on nutrition, health, child protection and information have been selected. For children of school-age (5 to 14 years), and beyond school-age (15 to 17 years) the analysis includes indicators on education, information and child labour. All age groups include household level-indicators on dimensions of water, sanitation and housing to enable the measurement of deprivation in the direct environment in which a child grows up. Additional indicators have been considered in the chosen dimensions, as well as in areas such as hygiene and ECD but could not be included mainly due to data limitations. Table 1 summarises all of the selected dimensions, indicators and the thresholds (see Table 2.1 and Appendix 2 for more details).

Figure 2.1 – Selected age groups and dimensions



For the analysis, the dimensions are used, identifying a child as deprived if he or she is deprived in at least one of the indicators in the dimension. This method is insensitive to the depth of deprivation within a given dimension. However, the indicators are selected on the basis that they complement each other in explaining the (non-)realisation of a child's right (see Appendix 3.1-3.4 for correlation tests). For example, a child is deprived in health if he or she did not receive a BCG vaccination, or had an unskilled birth attendant, or both. The major part of the deprivation analysis is concentrated on deprivation by dimension or by multiple dimensions. Multiple deprivations are measured by a simple deprivation count, in which each of the dimensions has an equal weight. While it is possible to weight dimensions to indicate a relative value difference between them, no weighting scheme is applied in this analysis. Each of the selected dimensions reflects a basic right and all of them are therefore considered of equal importance (see de Neubourg et al., 2014 for further details on weighting).

Table 2.1 – Dimensions, indicators and deprivation thresholds by age group

		0-23 months	24-59 months	5-14 years	15-17 years
Nutrition	Wasting (-2 sd)	x	x		
	Stunting (-2 sd)	x	x		
	Underweight (-2 sd)	x	x		
	Exclusive breastfeeding	x (0-5m)			
	Infant and young child feeding (frequency by age)	x (6-23m)			
Health	Skilled birth attendant (deprived: matron; traditional birth assistant; parents/friends; no one)	x			
	BCG vaccination (not received)	x			
	Health card (not having)		x		
	DPT 3 vaccination (not received)		x		

Child protection	Birth certificate (not having)	x	x		
	Negligence (left alone or with child under 15 years for more than 1h)	x			
	Left alone (for more than 1h)		x		
Information	Mother's knowledge on handwashing (knows <2 occasions)	x	x		
	Mother's knowledge on illness symptoms (knows no symptoms)	x	x		
	Information devices (no phone, TV, radio or computer)			x	x
Education	School enrolment (not regularly going to school)			x	x
	Grade-for-age (2 or more years behind)			x	
	Literacy (unable to read and write in any language)				x
Child labour	Child labour (more than specified no. of hours of economic and/or domestic labour)			x	x
Sanitation	Type of toilet (deprived: flush to somewhere else; latrine without slab/open pit; bucket toilet; hanging latrine; no facility; other)	x	x	x	x
Water	Water source (deprived: unprotected well (modern & traditional); unprotected spring; tanker-truck; cart with small tank; surface water)	x	x	x	x
	Distance to water (>30 min 2-way)	x	x	x	x
Housing	Overcrowding (>4 ppl per sleeping room)	x	x	x	x
	Roof, walls, floor (ALL of natural/non-permanent material)	x	x	x	x

The MODA methodology includes the method of analysis for the following elements (1) single deprivation analysis, (2) the distribution of the number of dimensions children are deprived in, (3) multidimensional deprivation overlaps, (4) multidimensional deprivation indices, (5) child monetary poverty analysis and (6) a multidimensional deprivation and monetary poverty overlap analysis.

Firstly, MODA provides single dimension deprivation estimates. These findings display a sector perspective by presenting the percentage of children deprived in a given indicator or dimension. These findings give a first insight in which deprivations are particularly relevant for children of a certain age in a specific (country) context.

In a second phase the methodology moves to a child-perspective, and measures the number of dimensions each child is deprived in. Counting the deprivations per child gives an overview of the distribution of all deprivations among a given child-population (defined by age group and/or background characteristics). In addition, the deprivation count enables analysis of the depth of multidimensional deprivation.

The third element of the analysis concentrates on the deprivation overlap identifying which deprivations are commonly experienced together. Combinations of deprivations are highlighted at this stage and estimations are made on the proportion of children suffering from one or multiple deprivations at the same time.

An overview of multidimensional deprivation is given by calculating multidimensional deprivation indices. The headcount ratio (H) refers to the percentage of children who are multidimensionally deprived. The average intensity (A) is the number of deprivations experience by the deprived as a percentage of all possible deprivations. Lastly, the adjusted deprivation headcount (M_0) is designed to capture both the incidence and the depth of deprivation, and is calculated by multiplying the headcount with the average intensity (M_0=H *A). These indices are calculated following the Alkire and Foster (2011) methodology, and are useful as summary statistics.

Parallel to the deprivation analysis for children, the methodology also encourages analysis of child monetary poverty. In this report the results of the add-on consumption module are used and are analysed against nationally-set poverty lines measuring food and overall consumption poverty experienced by children. In addition, various analyses are made comparing the experience of child monetary poverty with (multidimensional) deprivation.

The extent to which each of the elements are adopted in the analysis depends on the purpose and scope of the study. Moreover, the analysis can be complemented by further research, as is done with the regression-based analysis and simulation provided at the end of this report.

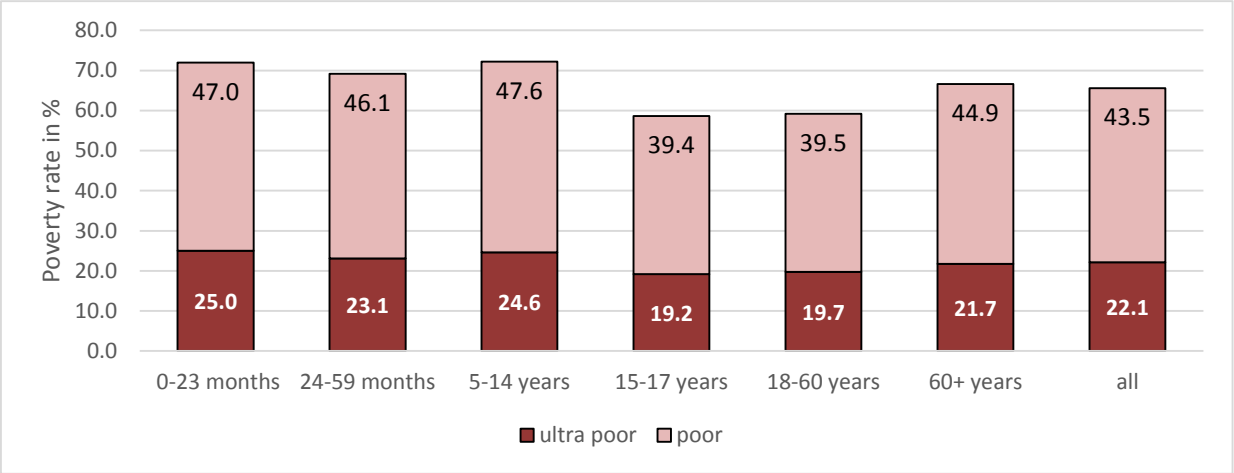
3. MONETARY POVERTY AMONG CHILDREN

As explained in section 1 monetary poverty and deprivation are two concepts highlighting different aspects of poverty. Both types of poverty can affect all people, young, old, men, women, etc. However, poverty among children is a concern as they are in a critical period of their lives in which the availability of resources can make a significant difference in the child's ability to survive and develop. The environment in which a child grows up can make her/him less vulnerable to adversities and can enable participation in society (Marshall, 2003; Jones & Sumner, 2009).

While monetary poverty is measured as the lack of financial resources per person in the household, poverty can affect various groups in the society differently. Figure 3.1 shows that when using the national poverty line (at West African CFA franc 165,431 p.a.) 44% of the entire population in Mali is poor, while 22% is extremely poor with their consumption falling below the food poverty line (at CFA 118,173 p.a.). When different age groups are considered it is found that children in specific are found

in poorer households with monetary poverty rates above 46% for children under 15 years. Adolescents and the active population have the lowest poverty rates (around 40%). The elderly population has a poverty rate slightly above the national average, but is still lower than the child poverty levels.

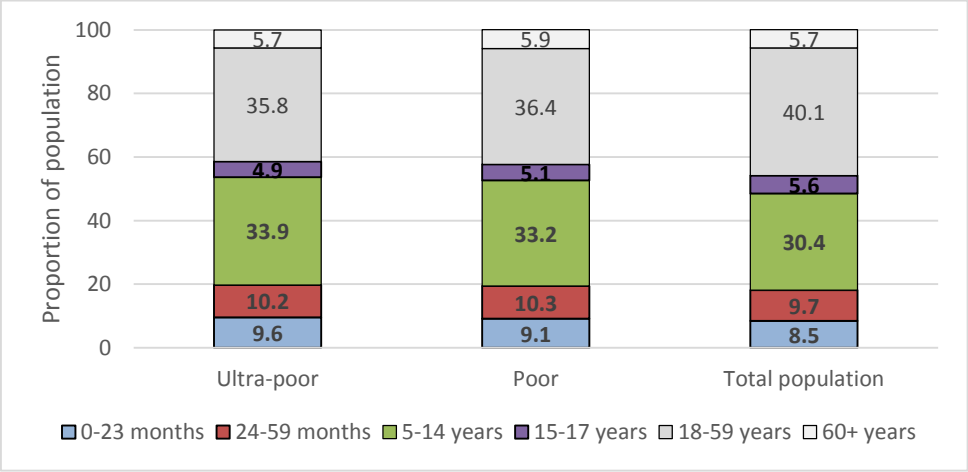
Figure 3.1 – Poverty rates by age group for Mali



Source: ELIM 2009-10

Even when the relative population shares are accounted for it is evident that there is a greater frequency of children below the age of 15 living in monetary poor households (Figure 3.2). Extremely poor households include relatively more infants (under 2 years) and children of school-age (5-14 years).

Figure 3.2 – Monetary poverty shares by age group

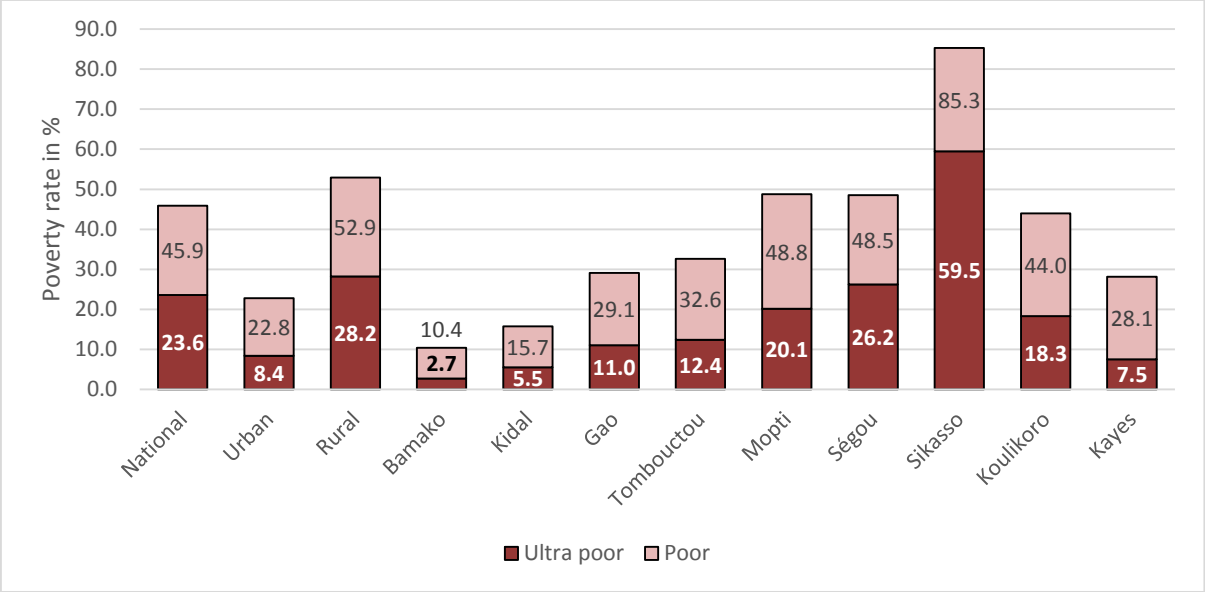


Source: ELIM 2009-10

Even though children are the most vulnerable group, the occurrence of child poverty is not the same across the country. Monetary child poverty (poverty measured for children up to 17 years) is 30 percentage points higher in rural areas compared to urban areas. Mainly the regions of Sikasso (85%), Mopti (49%) and Ségou (49%) encounter high rates of poverty. When comparing the latter two regions

it is seen that although they have similar monetary poverty rates the severity is higher in Ségou where 26% of children live in extreme poverty (as compared to 20% in Mopti) (See Figure 3.3 and Appendix 4).

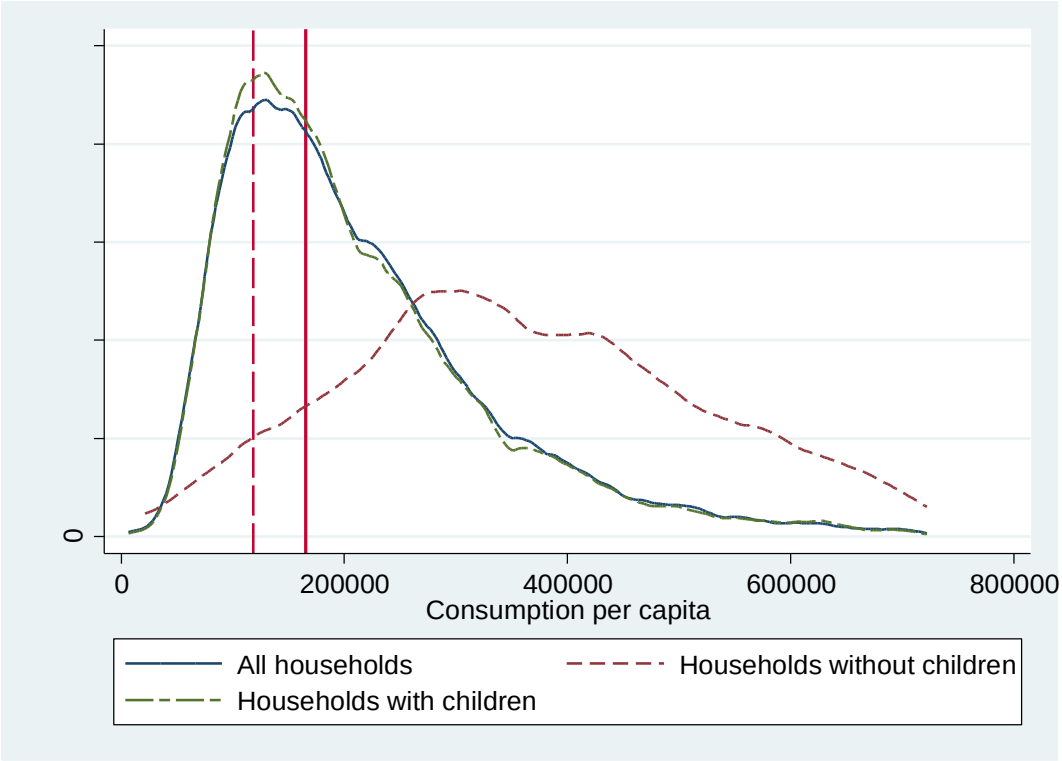
Figure 3.3 – Child poverty rates, nationally, by area and by region



Source: ELIM 2009-10

This analysis does not account for the intra-household differences, and the experience of monetary poverty within a given household is considered to be the same for each household member regardless of their age or position in the household. Nevertheless, poverty levels between households with children and without children can be compared to give an indication of vulnerabilities of people living in households with children. The vast majority of households in Mali have children (91%) and their average consumption distribution is remarkably low. Figure 3.4 indicates that the peak of the consumption distribution for all households and households with children lies around the food poverty line (the vertical dotted line), while the peak of the consumption distribution for households without children lies far beyond the national poverty line (at CFA165,431 p.a.).

Figure 3.4 – Kernel density curves of consumption per capita for all households, and households with and without children



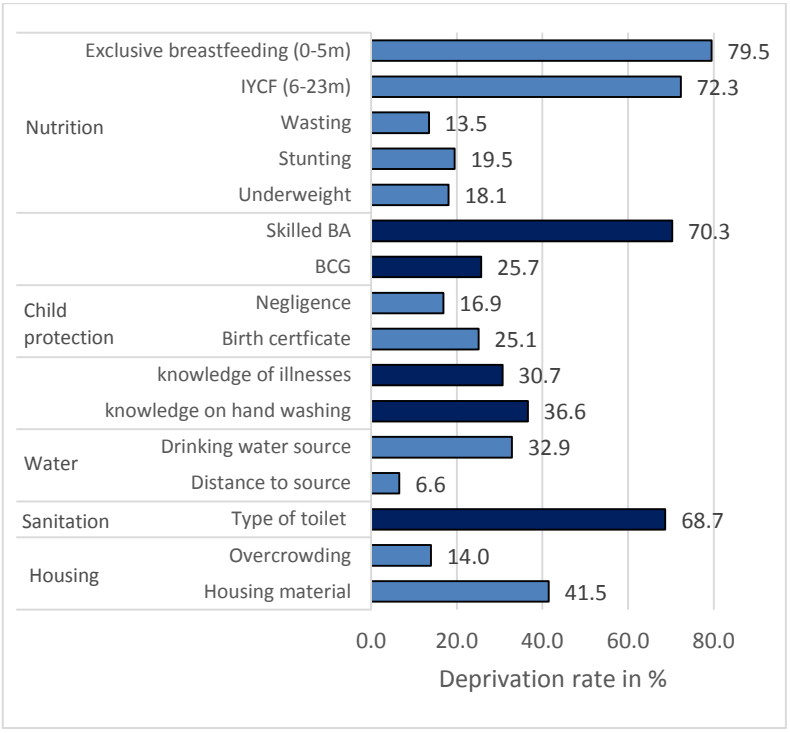
Note: The vertical dotted line is the food poverty line, the solid vertical line is the total consumption poverty line.
Source: ELIM 2009-10

4. DEPRIVATION ANALYSIS FOR CHILDREN 0 TO 23 MONTHS

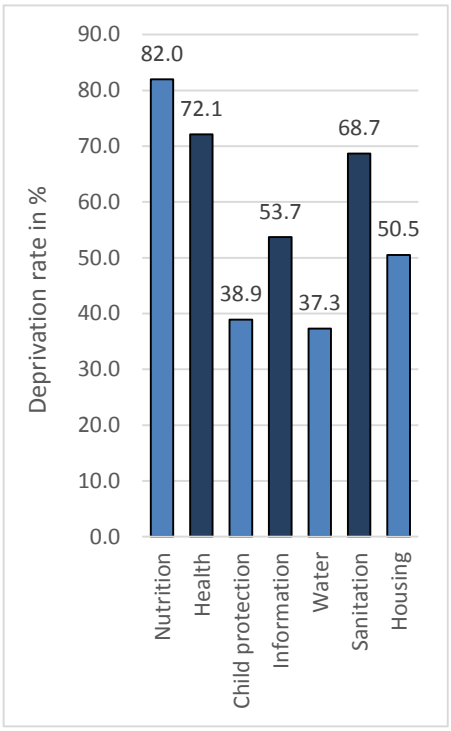
Single deprivation analysis

The single deprivation analysis presents the results for each of the separate indicators and dimensions that have been selected for the analysis (Figure 4.1). The results give an indication of which sectors should receive specific attention. For children up to the age of 2 nutrition, health and sanitation have the highest deprivation rates (82%, 72% and 69% respectively). The high deprivation level in nutrition is mainly driven by infant and young child feeding (IYCF) (72%), which captures issues of food security, and by the lack of exclusive breastfeeding (80%). In addition, the health dimension has a deprivation rate of 72%, mainly driven by lack of skilled attendance at birth. For sanitation the indicator for adequate toilet facilities finds 69% of children are deprived.

Figure 4.1 – Deprivation rates by indicator and dimension, 0-23 months (MICS 2009-10)



Source: MICS 2009-10



Source: MICS 2009-10

The deprivation rates by different background characteristics give a first indication of which children are at greater risk. For all dimensions the deprivation rate is higher among children living in rural areas (see Appendix 5.1); in rural areas the deprivation rates for health and sanitation are higher with about 50 percentage points and for water and housing the deprivation level in rural areas are, respectively, 26 and 35 points higher. Children in monetary poor households are in general more deprived, a finding which is confirmed by the asset index1 by area. The latter variable shows that even though there is a significant difference between the poorest and wealthiest quintile of the population in a given area, the area itself accounts for a large part of the difference. In general, fewer differences are found for deprivation in nutrition regardless of the various characteristics suggesting that the deprivation in nutrition is unrelated to location, socio-economic status or any other individual or household characteristic.

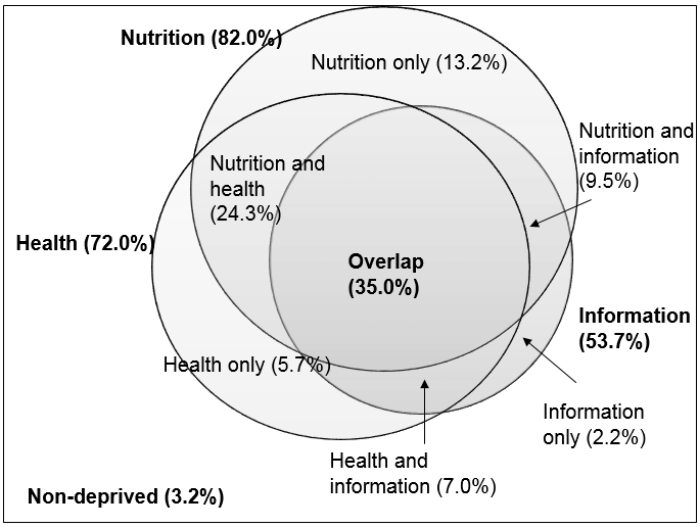
Overlap analysis

To understand the severity of the deprivation it is useful to examine how deprivations relate to each other. Figure 4.2 gives the overlap analysis for deprivation in nutrition, health and information. While 54% of children under the age of 2 are deprived in information, only 2% of children are only deprived in information and none of the two other dimensions. In addition, 35% of children are deprived in nutrition, health and information simultaneously. In other words, having a mother with inadequate

1 The asset index is constructed using a principal components analysis including various variables on household appliances and means of transport available to the household.

knowledge of illness symptoms and/or hand washing is closely related to the deprivations in nutrition and health. The deprivation overlap for the same dimensions has relatively larger overlaps for both Ségou and Sikasso, where only about 1% of children are not deprived in any of the three dimensions while this is 3% at national level (see Figure 4.3). Moreover in Sikasso 11% of children have a stand-alone problems (3% for nutrition, 6% for health and 1% for information), whereas this is 16% of children in Ségou.

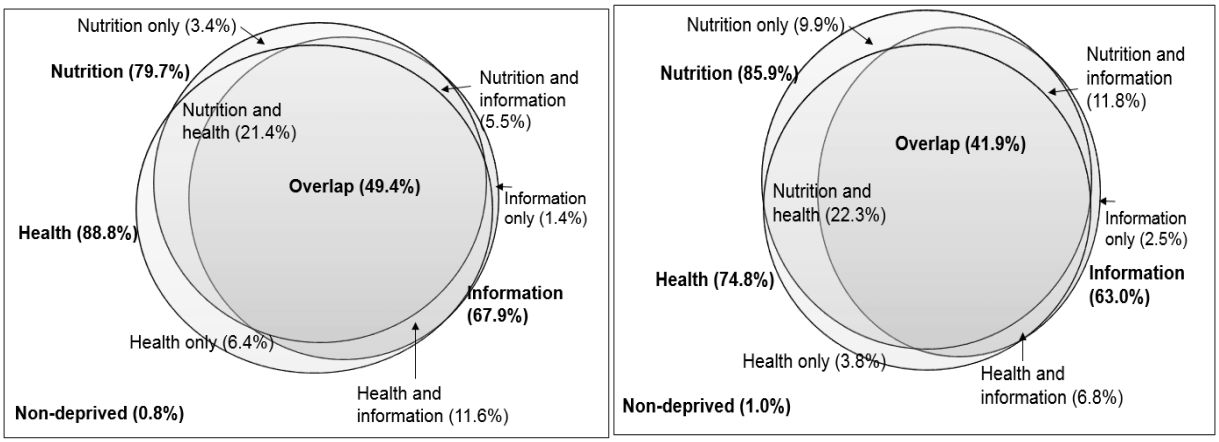
Figure 4.2 – Deprivation overlap between nutrition, health and information, 0-23 months



Source: MICS 2009-10

Figure 4.3 – Deprivation overlap for Sikasso and Ségou, 0-23 months

Sikasso *Ségou*

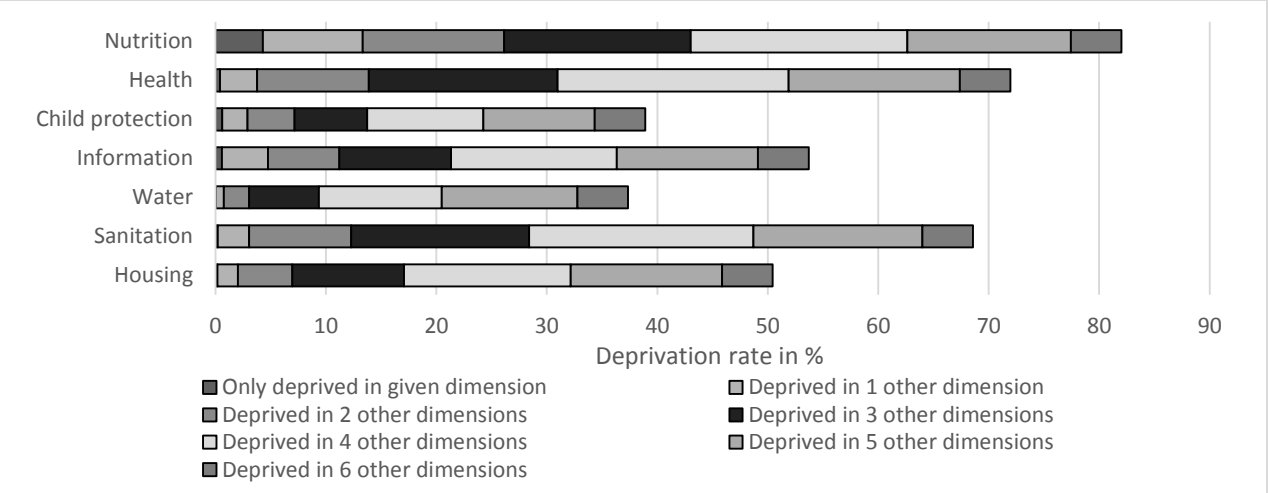


Source: MICS 2009-10

Figure 4.4 captures the overlap analysis from the perspective of a given dimension, and adds to the information of the Venn-diagrams above which only capture combinations of three dimensions at a time. The highest overall deprivation rate is in the nutrition dimension with a deprivation rate of 82%.

A more detailed look at deprivation in nutrition shows that 4% of children are only deprived in nutrition and none of the six other dimensions, 9% have one other deprivation besides nutrition, and 13% have two additional deprivations. In other words, about 26% of children are deprived in nutrition and up to two other dimensions, while the majority (56% of children under 2 years) are deprived in nutrition and three or more deprivations.

Figure 4.4 - Deprivation overlap by dimension, 0-23 months

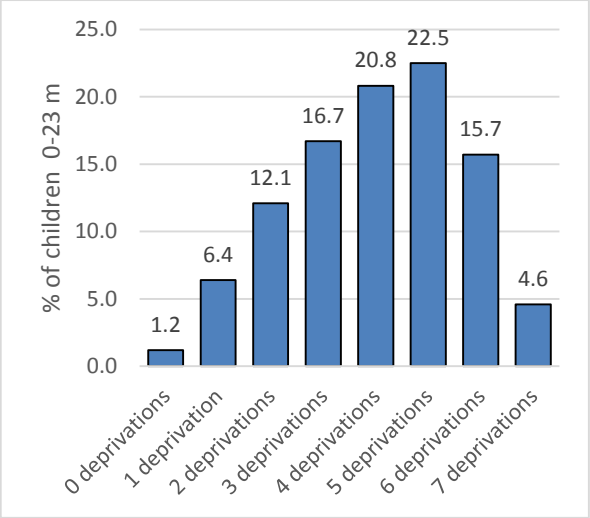


Source: MICS 2009-10

Multiple deprivation analysis

The multiple deprivation analysis moves from a sector-specific perspective towards a child-focused view, counting the number of deprivations a child experiences simultaneously. The deprivation distribution in Figure 4-5 shows that among the youngest children in Mali almost all (99%) experience at least one deprivation out of the seven selected dimensions. 5% of the children under the age of two experience all seven deprivations at the same time. The distribution is skewed towards the experience of higher numbers of deprivations with the peak of the distribution being at five. The deprivation distribution is complemented by the multidimensional deprivation indices to report the overall incidence and intensity of deprivation. The deprivation headcount gives the percentage of deprived children for each of the possible multidimensional deprivation cut-offs, including only the most deprived when the thresholds shift upwards. As with the poverty gap in monetary poverty analysis, the average intensity among the deprived gives an indication of the depth of one's deprivation. The average number of deprivations is 4.1 for all children with at least one deprivation. It should be noted that the average number of deprivations is censored to include only those children who are identified as multidimensionally deprived according to the selected threshold. For example, with a threshold of four deprivations, 64% of children are identified as multidimensionally deprived, and they experience on average 72% of all possible deprivations (meaning 5.1 deprivations on average per child).

Figure 4.5 – Deprivation distribution, 0-23 months



Source: MICS 2009-10

Table 4.1 - Multidimensional deprivation indices, 0-23 months

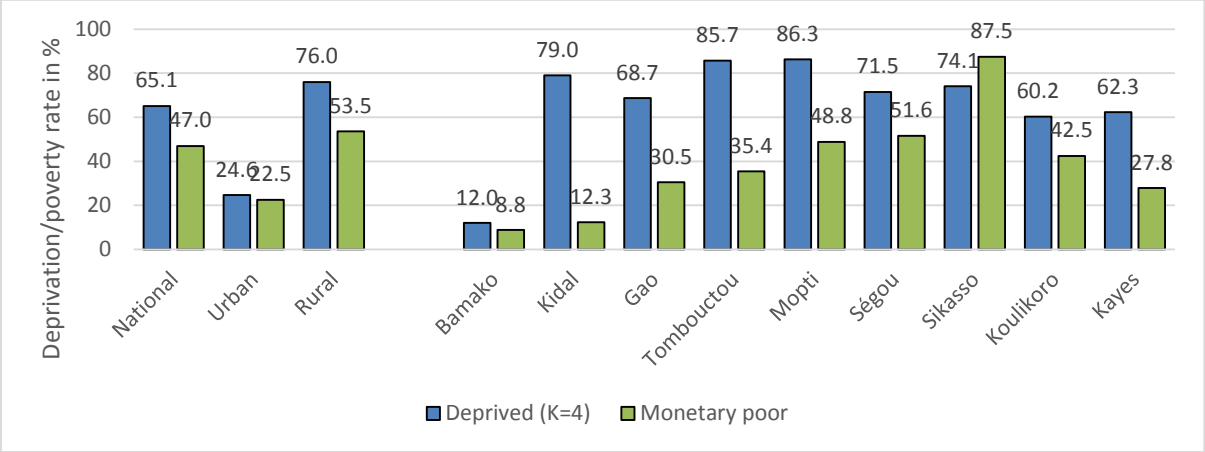
	Deprivation headcount (H), %	Average no. of deprivations among the deprived	Average intensity among the deprived (A), %
1-7 deprivations	**98.8**	**4.1**	**58.2**
2-7 deprivations	**92.4**	**4.3**	**61.3**
3-7 deprivations	**80.3**	**4.6**	**66.2**
4-7 deprivations	**63.6**	**5.1**	**72.4**
5-7 deprivations	**42.8**	**5.6**	**79.7**
6-7 deprivations	**20.3**	**6.2**	**88.9**
7 deprivations	**4.6**	**7.0**	**100**

Source: MICS 2009-10

Integrating monetary poverty and multidimensional deprivation

As stated at the beginning of this study, monetary poverty and multidimensional deprivation are conceptually different. The results portrayed in Figure 4.6 confirm that poverty and deprivation are not the same and that both highlight various aspects of the lack of well-being. When using a deprivation threshold of at least four deprivations (K=4) and the national poverty line to identify the monetary poor, more children are deprived than poor (65% and 47%, respectively) (see Figure 4.6). In urban areas poverty and deprivation levels are fairly similar (23% and 25%), but in rural areas the deprivation rate is about 23 percentage points higher than the rural poverty level. Also, when considering regional differences the discrepancy between poverty and deprivation shows the same trend in all regions, except for Sikasso. In Sikasso more children are poor (88%) than deprived (74%). Concerning the other regions, the difference between monetary poverty and deprivation is largest for Kidal and Tombouctou.

Figure 4.6 – Monetary child poverty and multidimensional deprivation, 0-23 months[2]



Source: MICS 2009-10

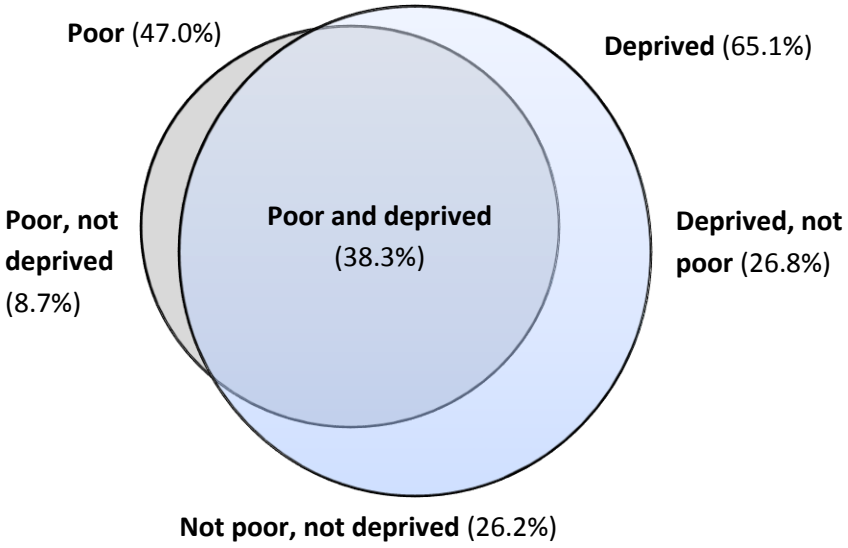
More telling is to see how monetary poverty and deprivation rates relate. Using the same poverty thresholds, 38% are simultaneously poor and deprived, 9% are poor and not deprived and 27% of children under two years are only deprived. The overlap analysis serves not only to indicate those who are most vulnerable and experiencing multiple forms of poverty, but it can also suggest what type of interventions are most appropriate. Children, who are poor but not deprived might benefit from income support, whereas children who are deprived but not poor might require improved access to goods and services.

For the children who are identified in the poverty overlap, deprivations and financial obstacles should be addressed simultaneously. For example, when improving the structure of health services it should be kept in mind that services for these children should be subsidised, or additional income support should be provided to enable children to fully access the appropriate services. Appendix 5.3 gives further details on the characteristics of the children who are simultaneously poor and deprived.

The deprivation overlap confirms the urban-rural divide observed earlier with separate poverty levels showing that 46% of children in rural areas are poor and deprived, while this falls to 10% for urban children. In addition, children most likely to experience multiple forms of poverty are those living in the poorest rural areas (56%), children with a mother and/or father without education (43% for both) and children, whose parent(s) are employed in the agricultural sector (51%).

[2] Note that all calculations containing both deprivation and monetary poverty are performed on the combined sample of the MICS-ELIM and may therefore show minor differences with the deprivation results coming from the complete MICS sample.

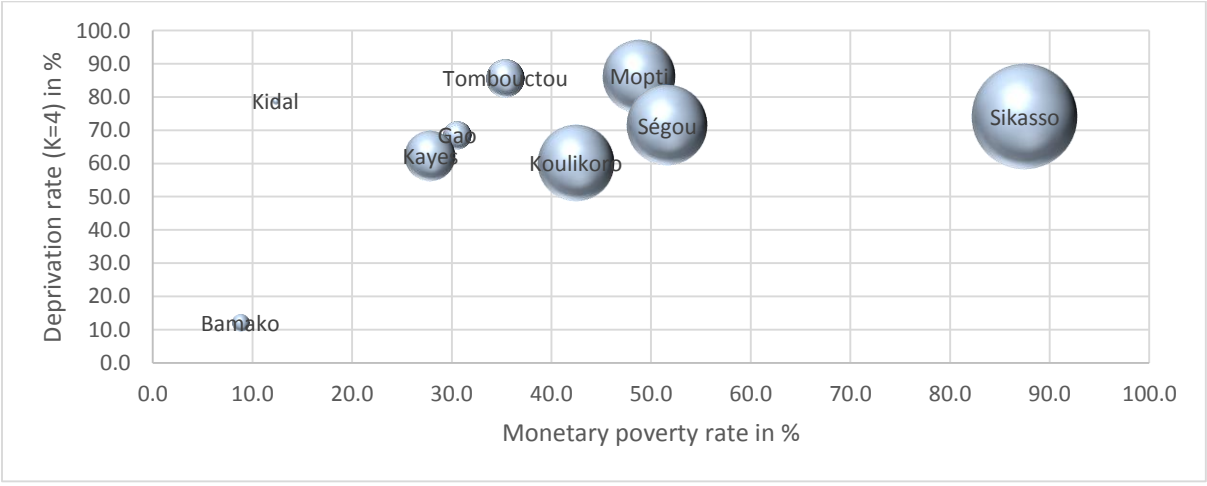
Figure 4.7– Monetary poverty and deprivation overlap (K=4), 0-23 months



Source: MICS-ELIM 2009-10

Regional differences too are substantial within the poverty overlap. Children in Sikasso experience both high levels of monetary poverty and deprivation (88% and 74%, respectively) with 70% being simultaneously poor and deprived, whereas in Bamako only 2.0% are poor and deprived at the same time, with lower monetary poverty and deprivation levels (7% and 10.0%). Figure 4-.8 combines the various poverty rates and identifies the least vulnerable regions towards the lower left, whereas those closer to the upper right face multiple forms of poverty. The size of the bubbles indicates the number of children who are simultaneously poor and deprived. In other words, bubble size is determined by the absolute number of children who are simultaneously poor and deprived in the respective region.

Figure 4.8 – Relationship between monetary poverty and multidimensional deprivation, 0-23 months



Note: the bubble size represents the number of children 0-23 months, who are simultaneously poor and deprived.
Source: MICS-ELIM 2009-10

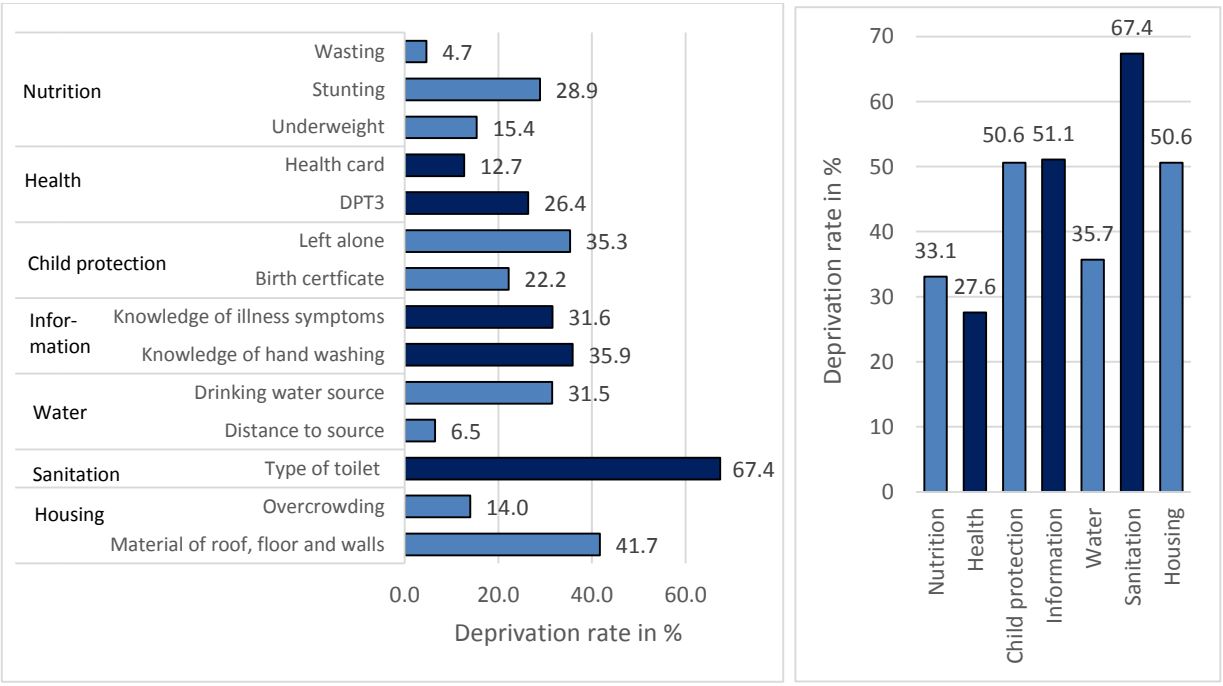
5. DEPRIVATION ANALYSIS FOR CHILDREN 24 TO 59 MONTHS

Single deprivation analysis

When moving from infancy to early childhood (focusing on children between 24 and 59 months) the same deprivation dimensions have been identified as important to the well-being of these children. Nevertheless, some of the indicators used to measure the deprivations differ from the first age group. The nutrition dimension consists of only three anthropometric indicators, omitting the indicators on exclusive breastfeeding and feeding practices due to unavailable data. In the health dimension, two different indicators are used, namely the availability of a health card, and the receipt of DPT3. While the first indicator serves as a proxy for incidental access to health care services, the second indicator captures the child's ability to receive a full set of DPT vaccinations, and comprises therefore his or her repetitive access to the health care service. With regards to the dimension on child protection, the indicator on negligence is replaced with an indicator identifying a child as deprived when he or she is left alone for more than one hour.

The deprivation rates at the dimension level for children aged 24 to 59 months are lower or equal to the deprivation rates for children aged 0 to 23 months, with the exception of child protection. The lower rates can be (partly) explained by the absence of the infant and young child feeding and skilled birth attendant indicators. Nevertheless, it should be noted that differences in separate indicators exist, for instance the indicator on stunting is nearly ten percentage points higher for the children between two and four years. Also, neglect of children under the age of two is lower than the proportion of children being left alone in the second age group (17% and 35%, respectively). The differences in the household-level dimensions, i.e. water, sanitation, housing, result from differences in household composition.

Figure 5.1 – Deprivation rates by indicator and dimension, 24-59 months



Source: MICS 2009-10

Deprivation overlap analysis

The overlap analyses of Figure 5-2 and 5-3 compare the deprivation overlap between child protection, information and either health or nutrition. The figures indicate that the overlap between the three selected dimensions is slightly lower for the combination with nutrition, despite a higher deprivation level for nutrition as compared to health. Moreover the deprivation overlap between two dimensions is higher for the combination nutrition-information than for health-information (18% and 16%, respectively), but lower for nutrition-child protection than health-child protection (16% and 17%). These overlaps suggest that anthropometric outcomes correlate higher with the mother's knowledge on illnesses and hand washing, while the health dimension seems to have a stronger connection with the availability of a birth certificate and/or adequate care.

Figure 5.2– Deprivation overlap between health, child protection and information, 24-59 months

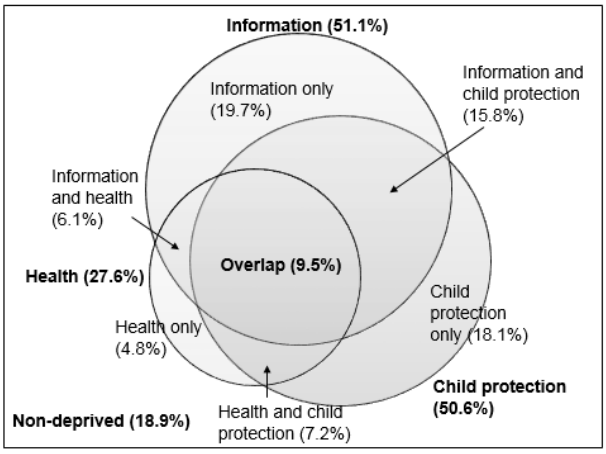
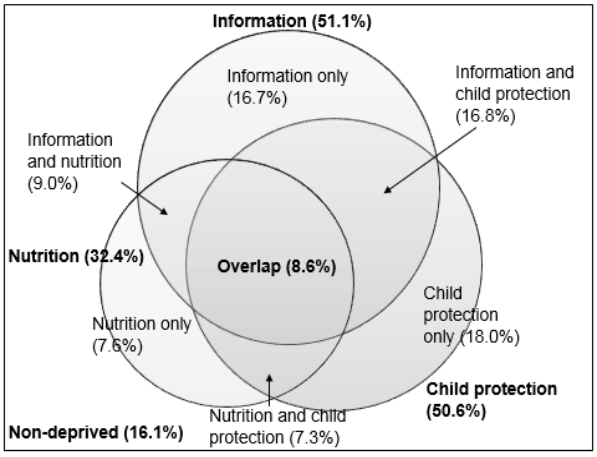


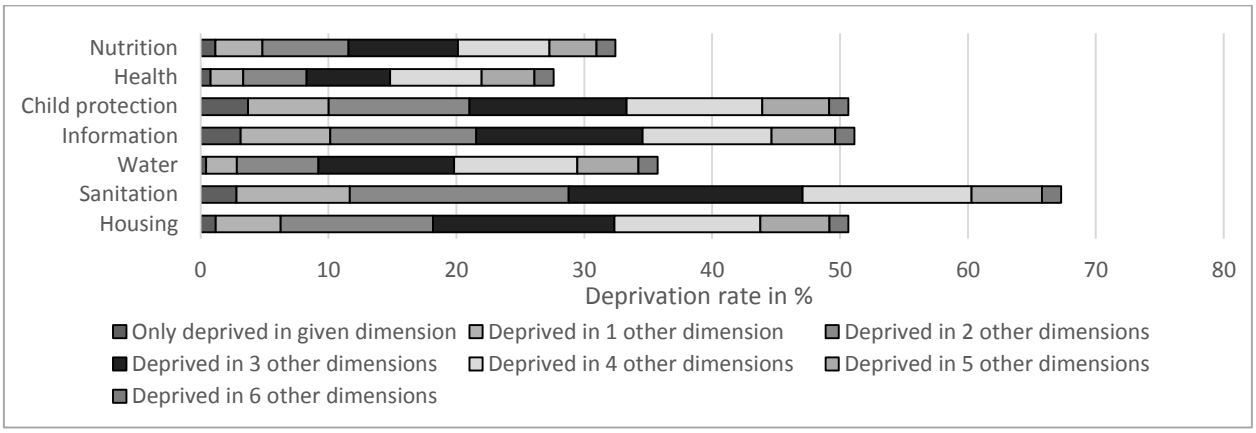
Figure 5.3– Deprivation overlap between nutrition, child protection and information, 24-59 months



Source: MICS 2009-10

The deprivation overlap analysis using all dimensions indicates to what extent a deprivation is a unique problem. The largest proportion of children experiencing only one deprivation is in the child protection dimension (4% are deprived in child protection only with 51% deprived in child protection in total) (see Figure 5.4). Less than 1% of children are deprived in water alone and this indicator is the most associated with other deprivations.

Figure 5.4 - Deprivation overlap by dimension, 24-59 months

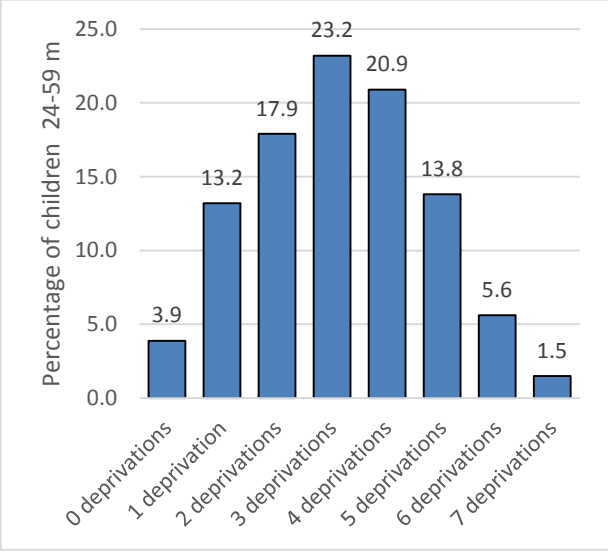


Source: MICS 2009-10

Multiple deprivation analysis

The lower deprivation rates in the single deprivation dimensions lead also to lower deprivation levels when aggregating the number of deprivations per child. The distribution in Figure 5.5 shows that about 44% of children experience three or four deprivations. Almost 4% of children aged between two and four years are not deprived at all, and 1.5% of children suffer from all the possible deprivations at the same time. The vast majority of children (96%) suffers from at least one deprivation and among these children the average number of deprivations is 3.3. in identifying a multidimensional deprivation threshold for further analysis, children are deprived if they have at least four deprivations, giving a rate of 42%, with those deprived experiencing 4.7 deprivations on average.

Figure 5.5 – Deprivation distribution, 24-59 months



Source: MICS 2009-10

Table 5.1 –Multidimensional deprivation indices, 24-59 months

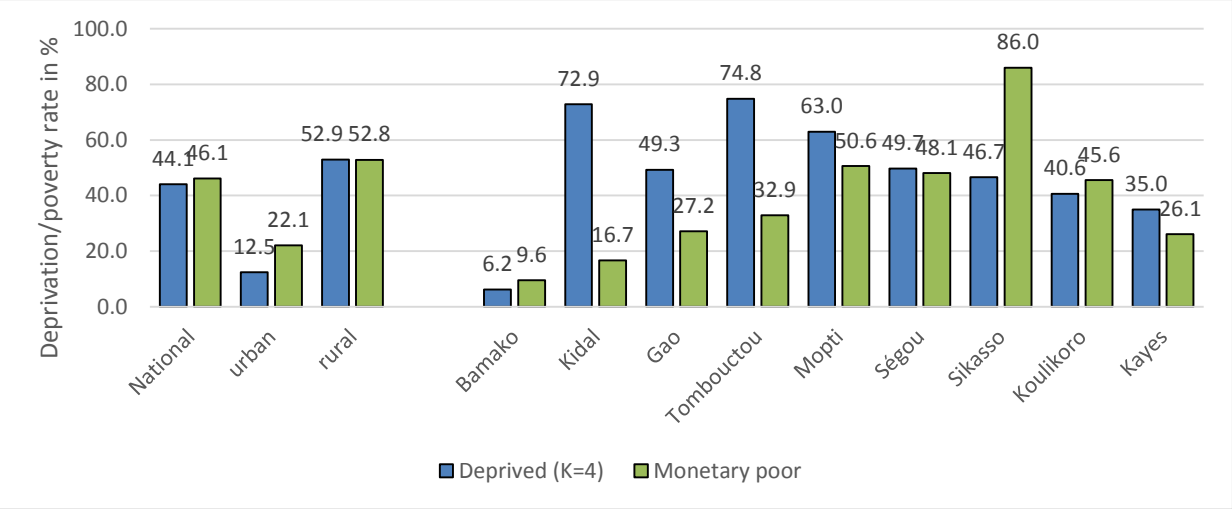
	Deprivation headcount (H), %	Average no. of deprivations among the deprived	Average intensity among the deprived (A), %
1-7 deprivation	**96.1**	**3.3**	**46.9**
2-7 deprivations	**82.9**	**3.6**	**52.1**
3-7 deprivations	**65.0**	**4.1**	**58.5**
4-7 deprivations	**41.8**	**4.7**	**67.2**
5-7 deprivations	**21.0**	**5.4**	**77.3**
6-7 deprivations	**7.1**	**6.2**	**88.7**
7 deprivations	**1.5**	**7.0**	**100**

Source: MICS 2009-10

Integrating monetary poverty and multidimensional deprivation

When comparing monetary poverty and multidimensional deprivation for children in in the 24 to 59 months age group, the multidimensional deprivation rate (K=4) at the national level is slightly lower than the monetary poverty rate. Nevertheless, some regions, such as Kidal, Gao, and Tombouctou, display a significantly higher deprivation rate. Similar to the pattern observed for the children in the first age group, the children in Sikasso (and Koulikoro – in this case) experience monetary poverty relatively more often than multidimensional deprivation.

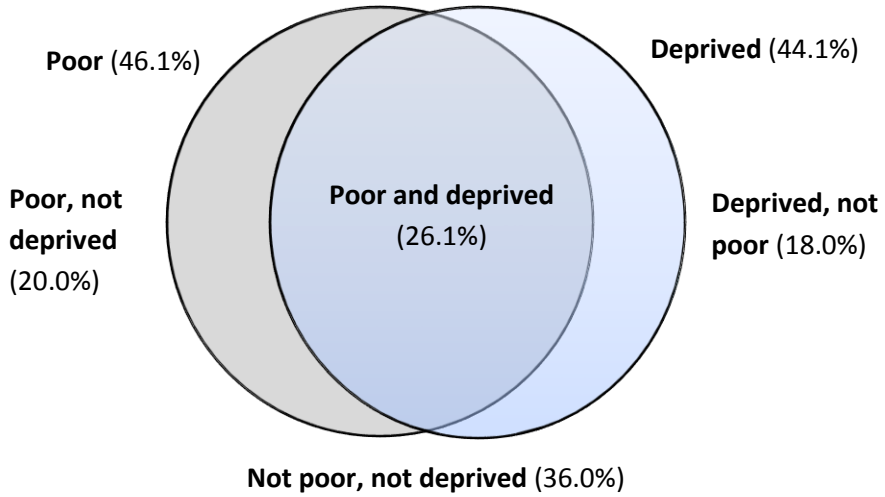
Figure 5.6 – Monetary child poverty and multidimensional deprivation, 24-59 months



Source: MICS-ELIM 2009-10

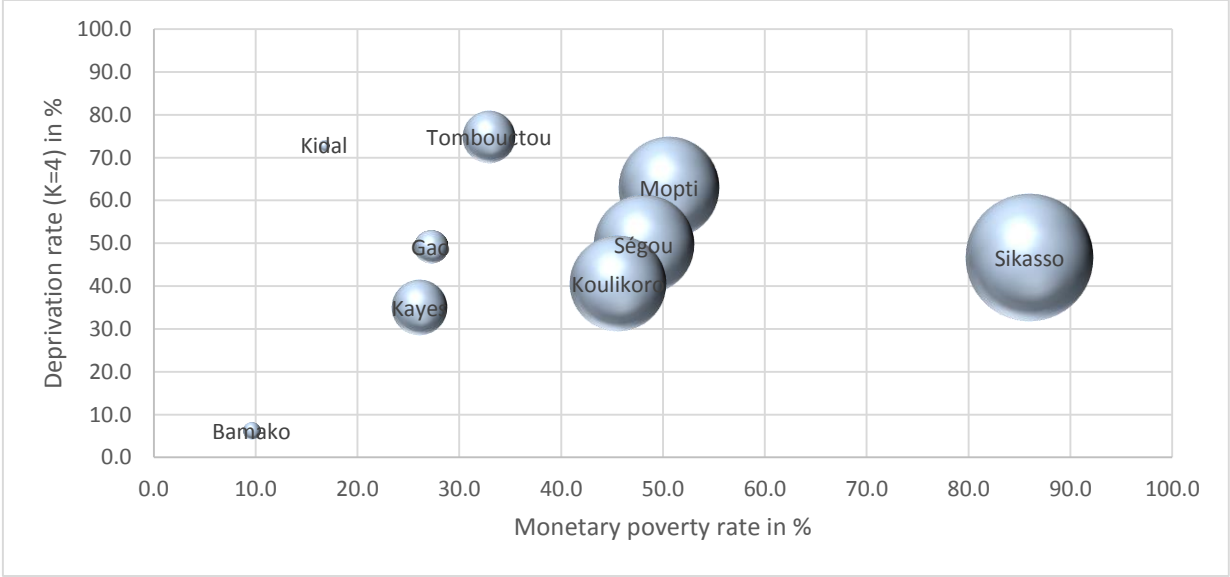
The overlap between monetary poverty and multidimensional deprivation shows that 26% of the children in the second age group are simultaneously poor and deprived. 20% are poor, but not deprived and another 18% are deprived, but not poor. Capturing the regional differences, Sikasso, Mopti and Ségou have the highest levels of combined deprivation and monetary poverty. Koulikoro and Tombouctou still have a large proportion of vulnerable children. In Koulikoro 46% are poor, 41% are deprived, and 24% of the children who are simultaneously poor and deprived are found in this region. For Tombouctou the deprivation rate is remarkably high at 75%, but this region has a lower poverty rate (33%). Since the region has a low population density rate only 5% of all children poor and deprived are living in Tombouctou.

Figure 5.7– Monetary child poverty and deprivation overlap (K=4), 24-59 months



Source: MICS-ELIM 2009-10

Figure 5.8 – Relationship between monetary poverty and multidimensional deprivation, 24-59 months



Note: the bubble size represents the number of children 24-59 months, who are simultaneously poor and deprived.
Source: MICS 2009-10

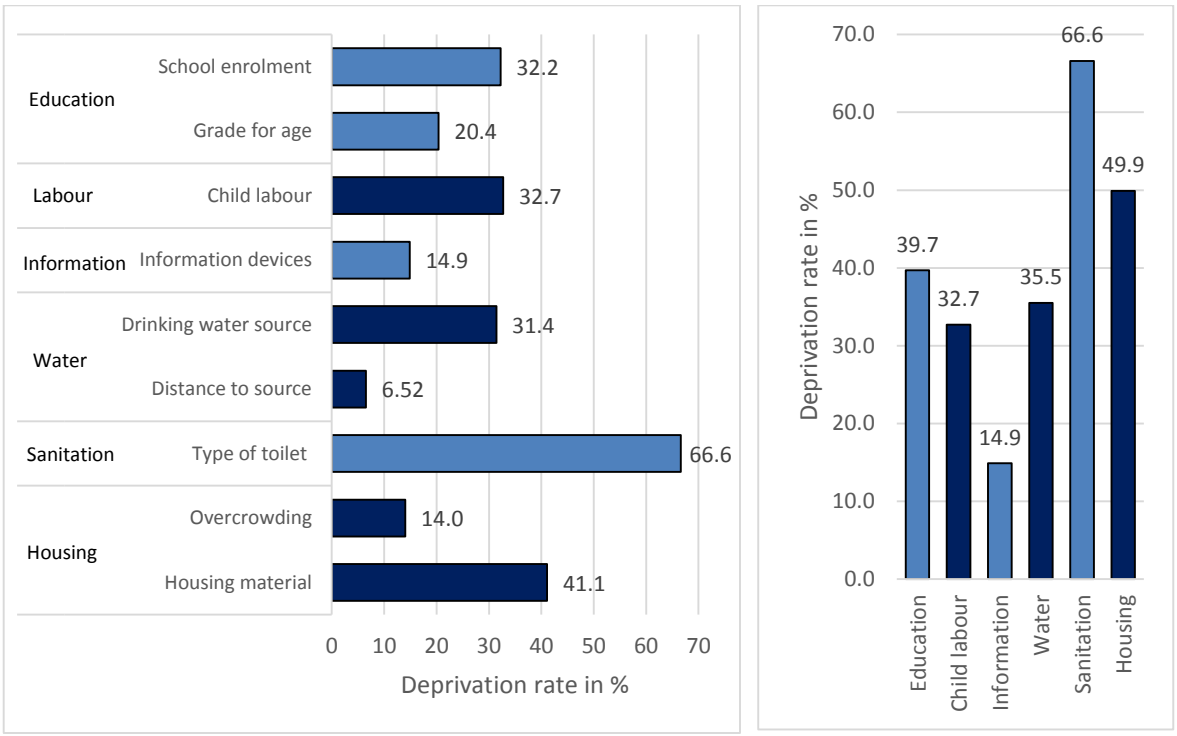
6. DEPRIVATION ANALYSIS FOR CHILDREN 5 TO 14 YEARS

Single deprivation analysis

The deprivation dimensions for the children of primary school age and older are slightly different from the previous two age groups. As a result of data limitations no indicators on nutrition and health are included, though both are acknowledged to be important aspects of well-being for children regardless of their age. Dimensions on education and child labour are added for this particular age group. Deprivation in education is measured by two indicators, namely school enrolment and grade-for-age (whether a child is less than two years behind in school). The number of hours and the type of work

(domestic or economic) is considered for the child labour dimension. The indicator to measure deprivation in information has changed to include the availability of information devices in the household (e.g. TV, radio, phone, computer). The deprivation rate is lowest for the information dimension (15%), while the highest rates are in sanitation (67%) and housing (50%). Nearly two out of five children in this age group are deprived in education, and this is only slightly less for children experiencing child labour (33%).

Figure 6.1 – Deprivation rates by indicator and dimension, 5-14 years

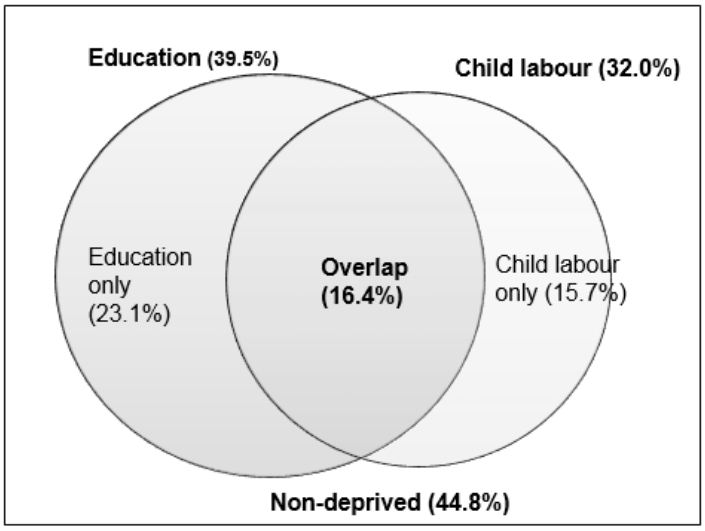


Source: MICS 2009-10

Deprivation overlap analysis

The deprivation overlap between two key dimensions in the well-being of children aged 5 to 14 are education and child labour. The relation between the two is presented in the Venn-diagram in Figure 6.2, with a deprivation overlap of 16%. The figure shows that half of the children who are deprived in child labour are also deprived in education, while the other half of children working more than the specified number of hours are enrolled in school in the correct grade. 23% are deprived in education, but are not deprived in the child labour dimension. Separating the overlap analysis by urban and rural areas finds that not only are children more likely to be deprived in education and child labour, they are also relatively more deprived in the two dimensions simultaneously.

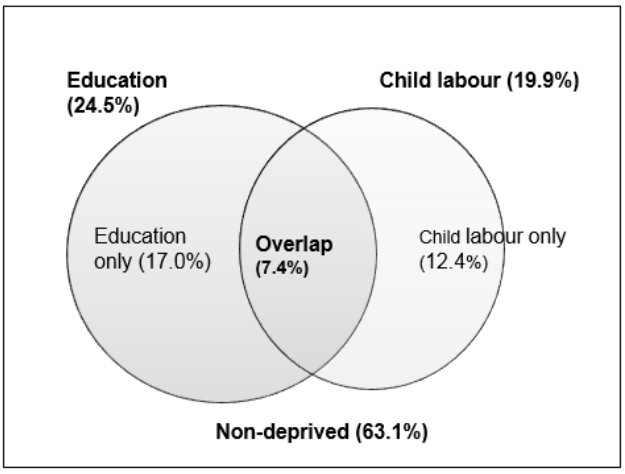
Figure 6.2– Deprivation overlap between education and child labour, 5-14 years



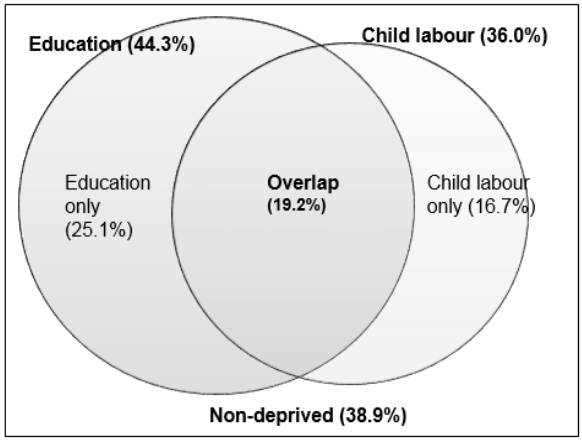
Source: MICS 2009-10

Figure 6.3 - Deprivation overlap between education and child labour for urban and rural areas, 5-14 years

Urban



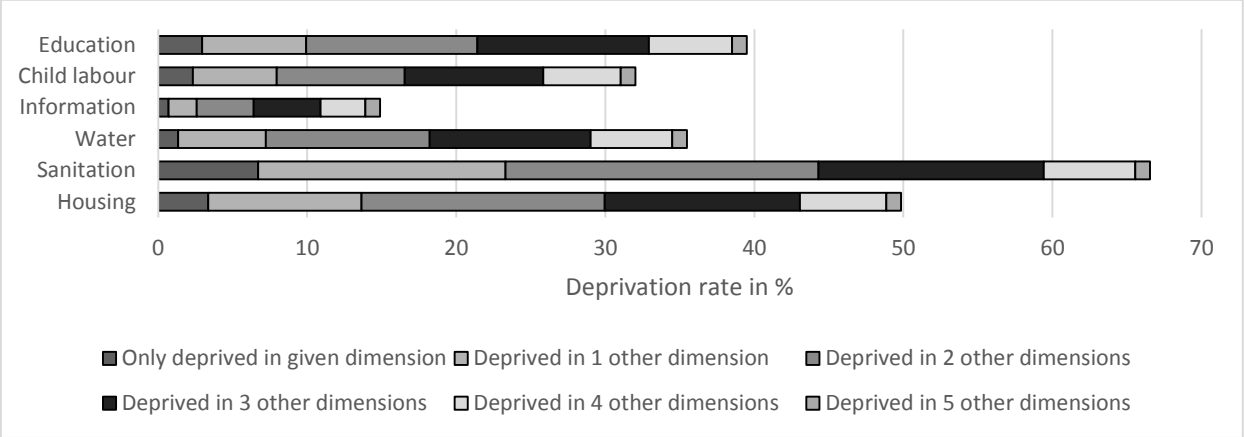
Rural



Source: MICS 2009-10

When including all of the selected dimensions for this age group the pattern in the deprivation overlap between child labour and education seems fairly similar. In total 40% of children are deprived in education, 3% are deprived in only education and none of the five other dimensions, 18% are deprived in education and three, four or five additional dimensions. Children deprived in child labour alone represent 2%, while 16% are highly deprived, having an additional 3 or more.

Figure 6.4 - Deprivation overlap by dimension, 5-14 years

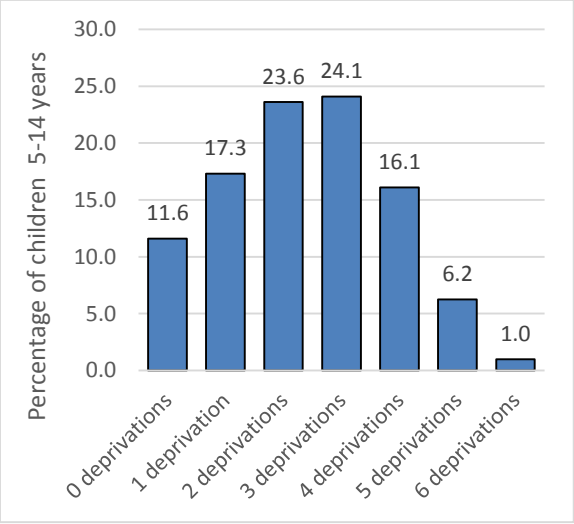


Source: MICS 2009-10

Multiple deprivation analysis

Aggregating the number of deprivations per child gives an indication of the distribution of the total possible deprivations among children between five and fourteen years. In this age group 48% of children experience two or three deprivations at a time. More than 7% are relatively highly deprived encountering either five or six deprivations, but at the other end of the distribution are 12% of children not experiencing any deprivation. Table 6-1 gives the multidimensional deprivation headcount rates and the average intensity of the deprivation among those deprived for all possible thresholds; 88% of children are deprived in at least one dimension, and 47% of children are deprived in three or more dimensions.

Figure 6.5 – Deprivation distribution, 5-14 years



Source: MICS 2009-10

Table 6.1 - Multidimensional deprivation indices, 5-14 years

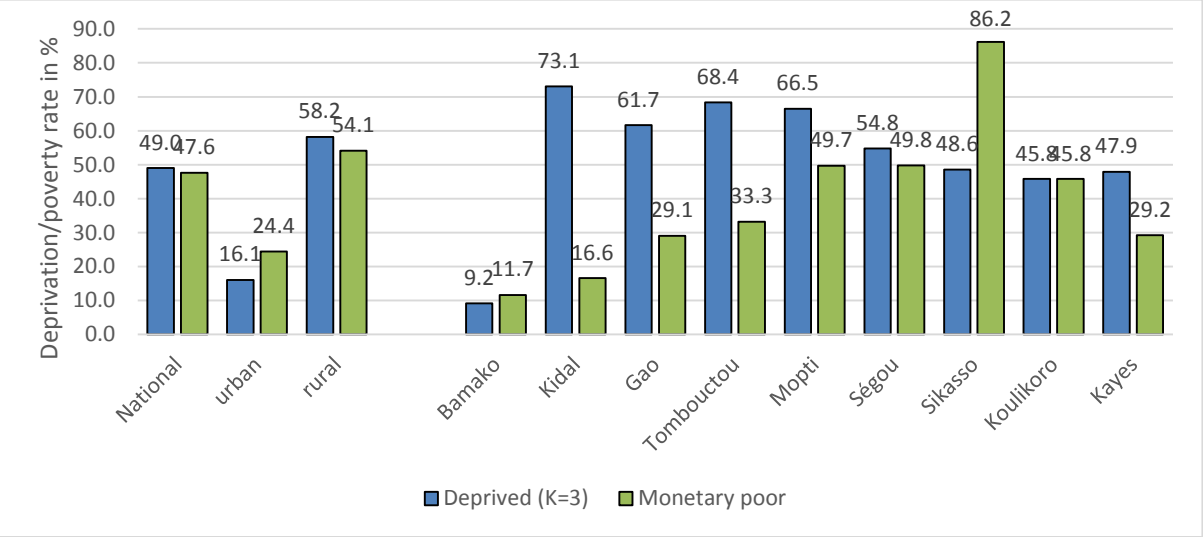
	Deprivation headcount %	Average no. of deprivations among the deprived	Average intensity among the deprived; %
1-6 deprivation	88.4	2.7	44.9
2-6 deprivations	71.0	3.1	51.9
3-6 deprivations	47.4	3.7	61.1
4-6 deprivations	23.3	4.4	72.5
5-6 deprivations	7.2	5.1	85.6
6 deprivations	1.0	6	100

Source: MICS 2009-10

Integrating monetary poverty and multidimensional deprivation

When using a multidimensional deprivation threshold identifying children with at least three deprivations as deprived, the level (47%) is very similar to the monetary child poverty rate (49%) at national level. In urban areas both poverty levels are significantly lower than in rural areas with the monetary poverty rate being slightly higher than deprivation in urban areas and the deprivation level being higher than the monetary poverty rate in rural areas. The poverty rates by region show large discrepancies between monetary poverty and deprivation for Kidal, Gao, Tombouctou, Mopti and Sikasso. Only for the latter region is the monetary poverty rate significantly higher than the multidimensional deprivation level, while in the other regions the multidimensional deprivation rate outweighs monetary poverty.

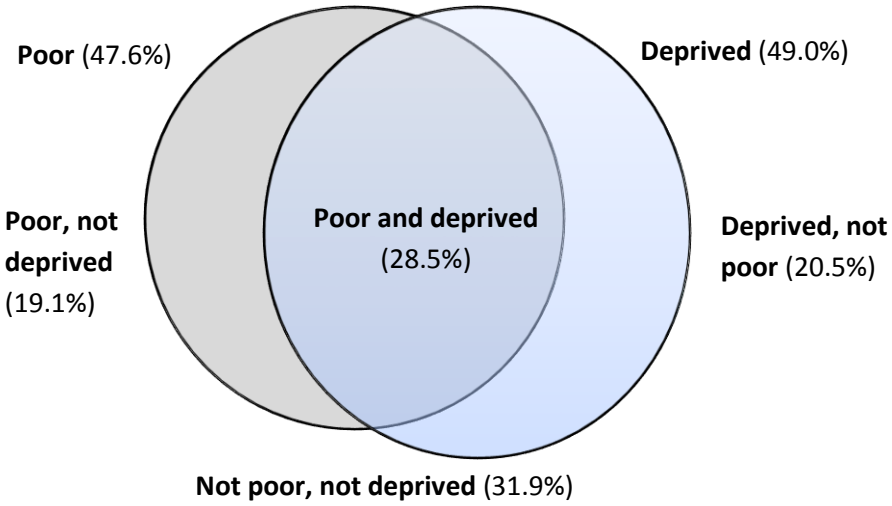
Figure 6.6 – Monetary child poverty and multidimensional deprivation, 5-14 years



Source: MICS-ELIM 2009-10

While the poverty rates for both deprivation and monetary poverty are almost equally high at the national level, they do not identify the same children. As shown in Figure 6.7, only 29% of children in this age group are simultaneously poor and deprived. In addition, 19% of children in this age group are poor and not deprived, and 21% of children are deprived and not poor. In total, nearly 32% are neither poor nor deprived.

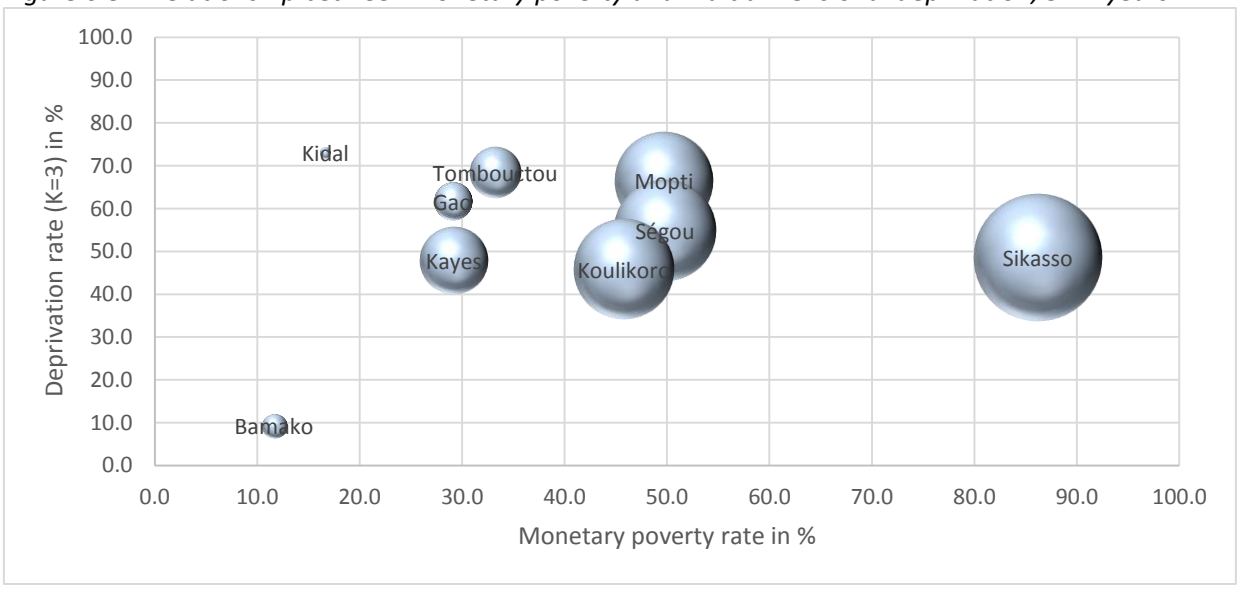
Figure 6.7– Monetary child poverty and deprivation overlap (K=3), 5-14 years



Source: MICS-ELIM 2009-10

Summarising the findings on monetary poverty, deprivation and the poverty overlap by region gives a picture similar to the previous two age groups. Sikasso has the highest monetary poverty rate (86%) and a relatively high multidimensional deprivation rate (49%). When adjusting the proportion of poor and deprived with the number of people in each region, Sikasso still has the highest percentage of poor and deprived of all children simultaneously poor (30%). Moreover, 21% of the simultaneously poor and deprived live in Mopti, and 16% in Koulikoro.

Figure 6.8 – Relationship between monetary poverty and multidimensional deprivation, 5-14 years



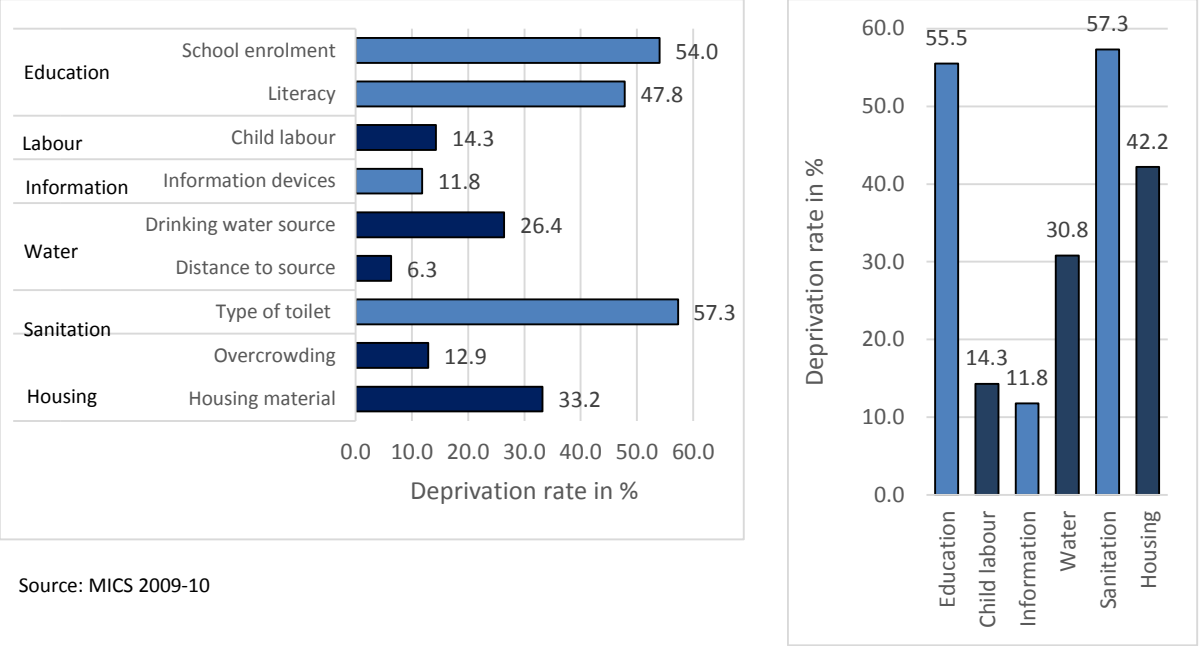
Note: the bubble size represents the number of children 5-14 years, who are simultaneously poor and deprived.
Source: MICS-ELIM 2009-10

7. DEPRIVATION ANALYSIS FOR CHILDREN 15 TO 17 YEARS

Single deprivation analysis

The last age group including children between 15 and 17 years comprises six dimensions, i.e. education, child labour, information, water, sanitation and housing. While the dimensions are the same as for children in the third age group the indicators on education and child labour differ. Whereas children of 15 years and older are not obliged to go to school, the education dimension focuses also on schooling outcomes, rather than just access. The school enrolment indicator is combined with primary school attainment, meaning that children who are not going to school, but have completed primary school are not deprived. In addition, there is an indicator measuring quality, identifying a child as deprived if he/she cannot read and write in any language. Children of 15 years and older experience a high deprivation level in school enrolment and attainment (54%) and literacy (48%). As a result the percentage of children who are deprived in one or both indicators amounts to 56%. In comparison to the previous age group, deprivation in child labour is remarkably low (33% and 14%, respectively), but it should be mentioned that children of these ages are allowed to work more hours.

Figure 7.1 – Deprivation rates by indicator and dimension, 15-17 years



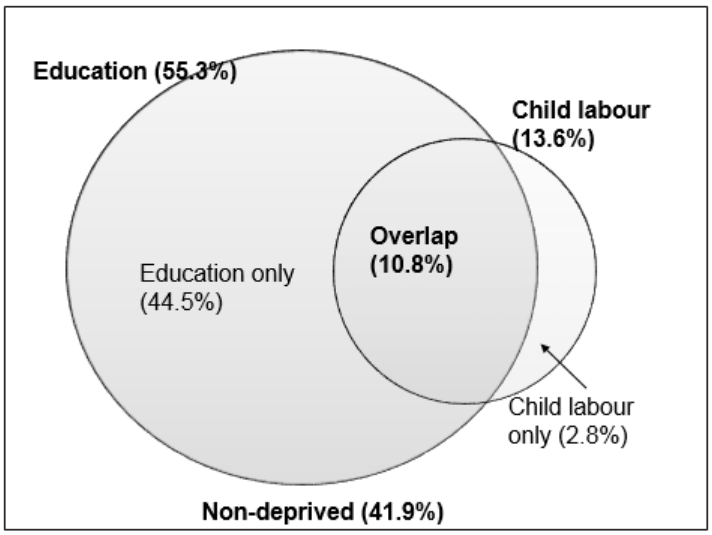
Source: MICS 2009-10

Deprivation overlap analysis

The deprivation overlap analyses of Figures 7.2 and 7.3 show how education and child labour coincide on a national level, and for boys and girls separately. At the national level 55% are deprived in education, and 14% are deprived in child labour, however only 11% of children aged 15 and older are deprived in education and child labour simultaneously. One of the reasons why the correlation between the education and child labour dimensions is less strong for children between 15 and 17

years old in comparison to the same combinations for children between 5 and 14 years is probably that the education dimension focuses more on the schooling outcomes and not the actual practice. The gender difference for this age group is large, where the deprivation is higher for girls with 16 percentage points in education and 8 percentage points in child labour. With 15% for girls and 7% for boys the deprivation overlap is also higher (both in percentage and relative to the overall deprivation).

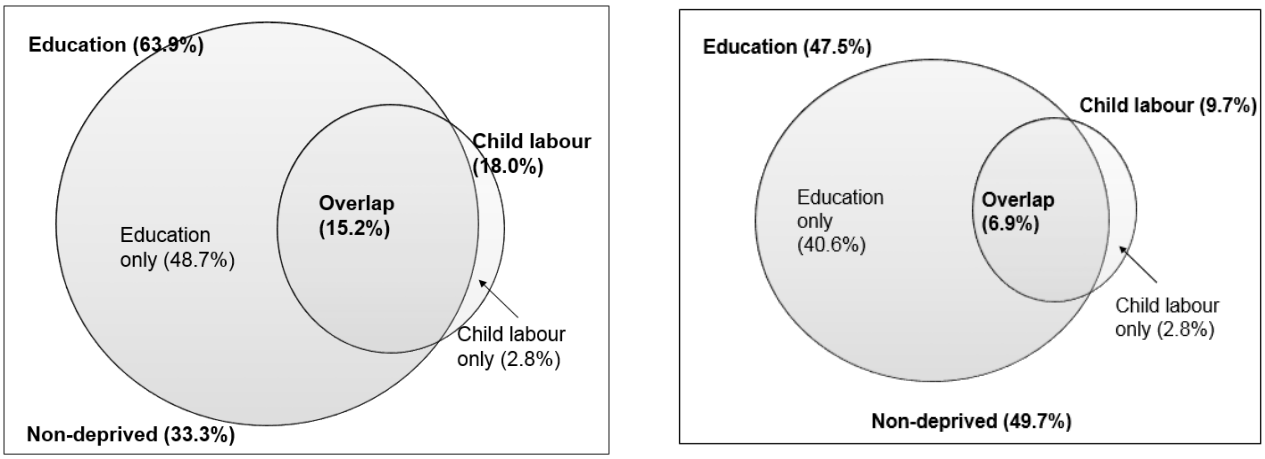
Figure 7.2– Deprivation overlap between education and child labour, 15-17 years



Source: MICS 2009-10

Figure 7.3 -Deprivation overlap between education and child labour by gender, 15-17 years

Female *Male*

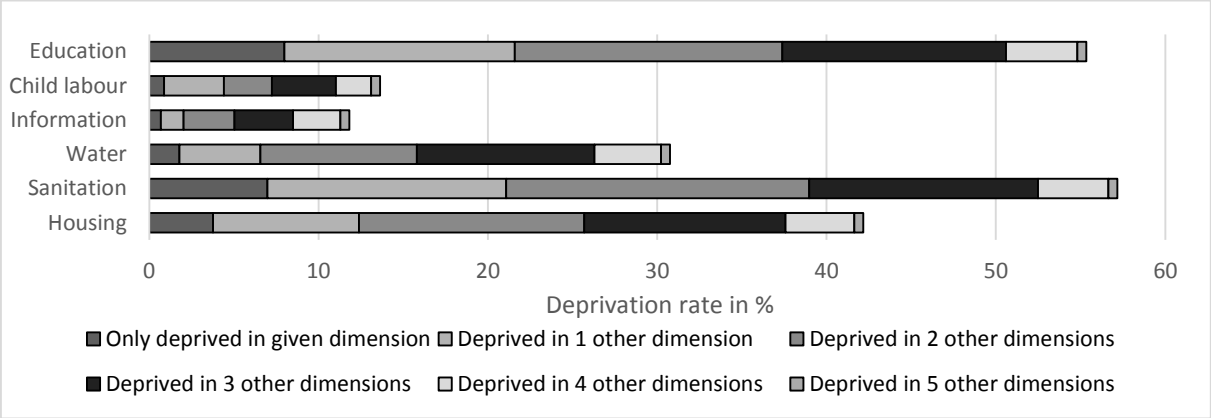


Source: MICS 2009-10

The comparison between the deprivation overlap analysis for education and for sanitation shown in Figure 7.4 is interesting, because of the possible differences between an individual-level dimension and a household-level dimension. Sanitation has a higher total deprivation level than education (57%

and 56%, respectively), but the proportion of children deprived only in a given dimension is lower for the children deprived in sanitation compared to education (7% and 8% respectively).

Figure 7.4 - Deprivation overlap by dimension, 15-17 years



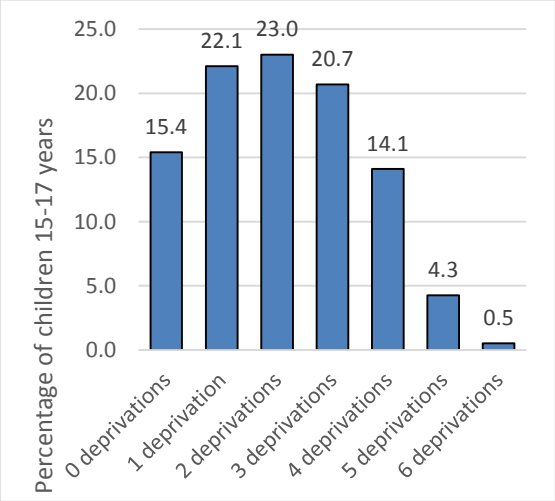
Source: MICS 2009-10

Multiple deprivation analysis

The deprivation distribution shown in Figure 7.5 has its peak slightly to the left with 45% of children being deprived in either one or two dimensions. Compared to the other age groups, a relatively large proportion (15%) is not deprived in any of the selected dimensions. Also, less than 5% of children between 15 and 17 years have five or six deprivations.

When using the same suggested multidimensional deprivation threshold as used for children between five and fourteen years, namely experiencing at least three deprivations, about 40% of children are multidimensionally deprived, with on average 3.6 deprivations. In other words, even though the multidimensional deprivation incidence is lower compared to children in the third age group, the average intensity of the deprivation is similar.

Figure 7.5 – Deprivation distribution, 15-17 years



Source: MICS 2009-10

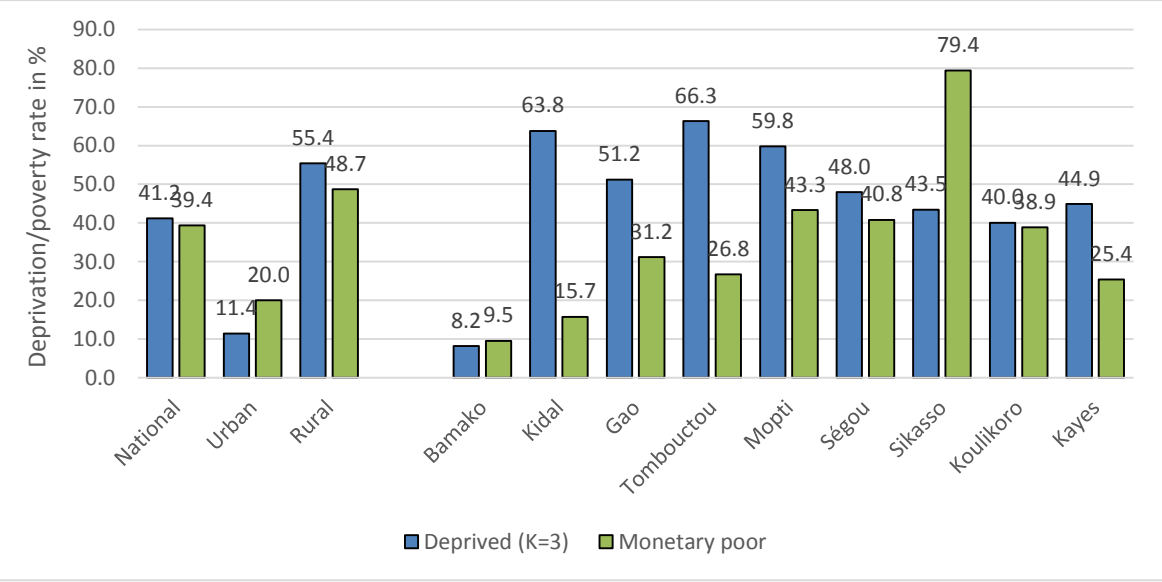
Table 7.1 - Multidimensional deprivation indices, 15-17 years

	Deprivation headcount, %	Average no. of deprivations among the deprived	Average intensity among the deprived; %
1-6 deprivation	84.6	2.5	41.5
2-6 deprivations	62.5	3.0	50.3
3-6 deprivations	39.5	3.6	60.2
4-6 deprivations	18.9	4.3	71.4
5-6 deprivations	4.8	5.1	85.2
6 deprivations	0.5	6.0	100.0

Integrating monetary poverty and multidimensional deprivation

For the oldest age group the multidimensional deprivation headcount is highly comparable to the child poverty rate, which is around 40% for both (with less than 2 percentage points difference). The regional differences between monetary poverty and deprivation are similar to the trend found in the other age groups. Sikasso's level of multidimensional deprivation is comparable to the national average, whereas its monetary poverty rate is nearly twice as high as the national rate. In Kidal, on the contrary, the monetary poverty rate is less than half of the national rate, but the deprivation rate is more than one and a half times the national deprivation headcount rate.

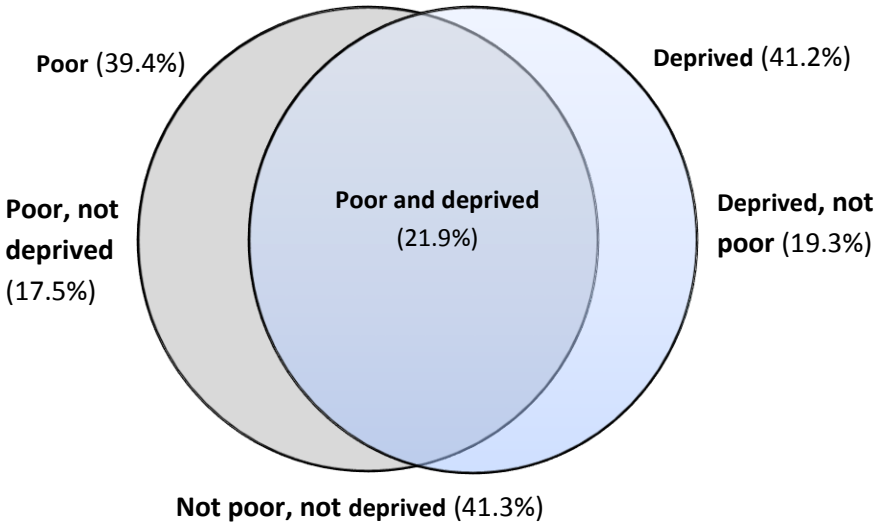
Figure 7.6 – Monetary child poverty and multidimensional deprivation, 15-17 years



Source: MICS-ELIM 2009-10

The overlap analysis between monetary child poverty and multidimensional deprivation shows only a certain degree of synergy between the two concepts of poverty (see Figure 7-7). For both monetary poverty and deprivation the overlap is just over half of the total respective poverty levels. In other words, of every five children in this age group about two are neither poor, nor deprived; one is poor, but not deprived; another is deprived and not poor; and one is poor and deprived at the same time.

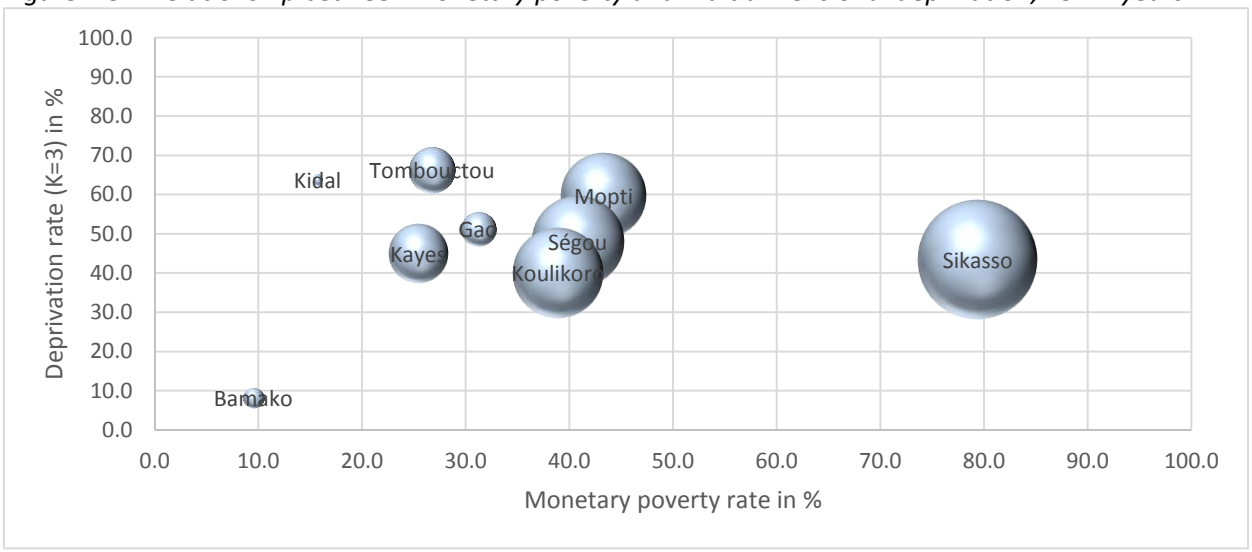
Figure 7.7– Monetary child poverty and deprivation overlap (K=3), 15-17 years



Source: MICS-ELIM 2009-10

As shown in Figure 7-8, the simultaneous experience of various forms of poverty is highest in Sikasso. Of all children who are poor and deprived at the same time, 31% are in Sikasso, 19% in Ségou, 18% in Koulikoro, and 16% in Mopti. Even though Bamako has a population share of 15%, its proportion of poor and deprived is only 1%.

Figure 7.8 – Relationship between monetary poverty and multidimensional deprivation, 15-17 years



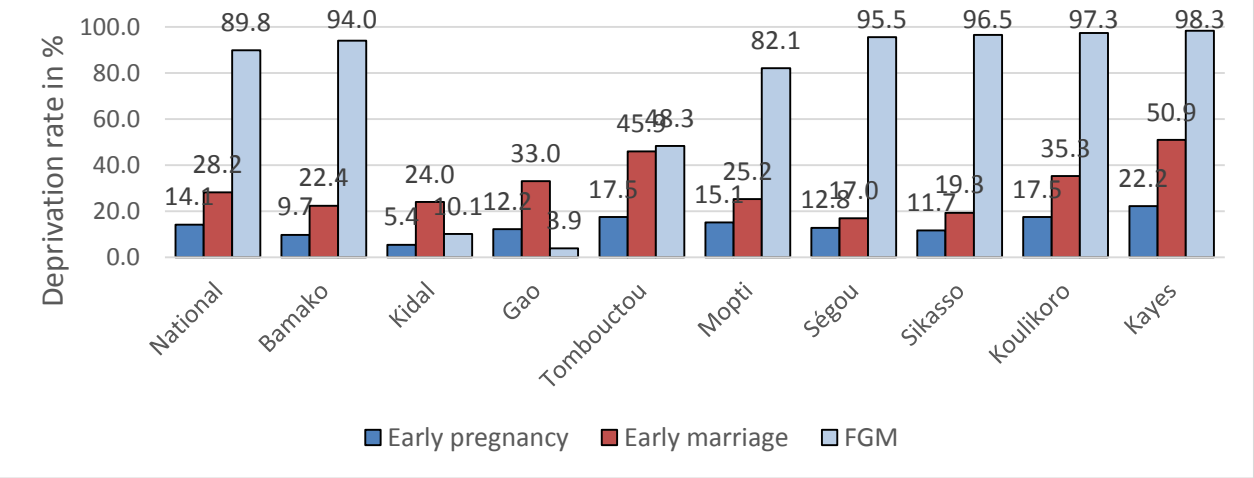
Note: the bubble size represents the number of children 15-17 years, who are simultaneously poor and deprived.
Source: MICS-ELIM 2009-10

Deprivations among girls aged between 15 and 17 years

With the life-cycle approach the MODA methodology seeks to capture the fulfilment of individual needs and rights as best as possible, however, due to data and technical limitations not all significant indicators can always be included. For instance, early marriage, early pregnancy and female genital mutilation are relevant to the well-being of the girl child. Nonetheless, including them in the multiple deprivation analysis will lead to additional indicators and dimensions for girls compared to boys of the same age. Comparisons of multidimensional deprivation levels and establishing deprivation thresholds will be distorted by different probabilities for deprivation in a given number of dimensions. Incidence levels of these indicators and their relationship to deprivations are included to contribute to information on girls' well-being.

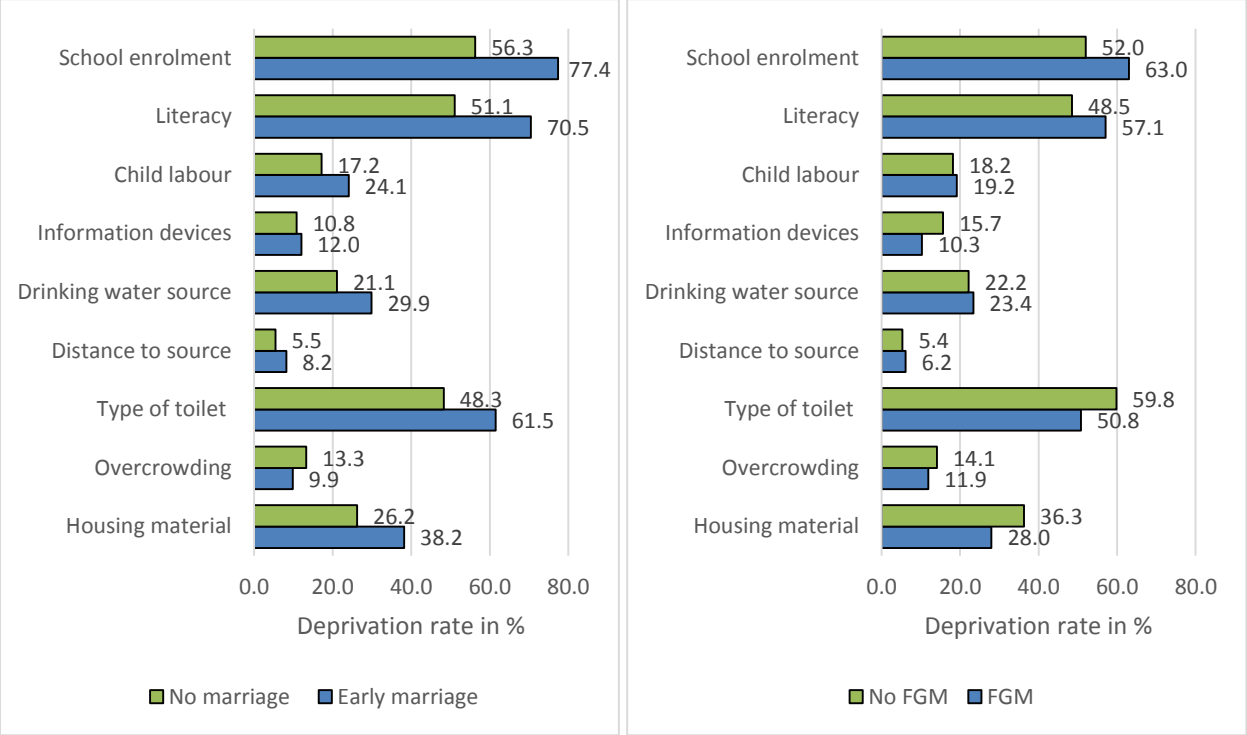
Figure 7.9 shows large regional differences in the practices of early marriage, early pregnancy and female genital mutilation (FGM) (28%, 14%, 90%, respectively at national level). Early marriage and pregnancy are most common in the north (Tombouctou and Gao) and east (Kayes and Koulikoro). The highest incidence rates of FGM are reported in Kayes, Koulikoro, Sikasso, Ségou and Bamako (all between 98% and 94%). When assessing the relationship between these indicators and the selected MODA indicators, early marriage and early pregnancy show a very similar pattern (see Appendix 9.2). Girls who are not married have lower deprivations in all of the available indicators for children between 15 and 17 years. The deprivation rates for girls who have experienced FGM is slightly different. Girls who have undergone FGM have a slightly higher deprivation level in most indicators, with the exception of those for information, sanitation and housing. It should be noted that Figure 7-10 only indicates the deprivation incidence of girls with a given characteristic; it does not identify the causes of the actual deprivations as the underlying cause might not be included in the figure.

Figure 7.9 – Deprivation rates for early marriage, early pregnancy and female genital mutilation among girls aged 15-17 years, by region



Source: MICS 2009-10

Figure 7.10 – Deprivation rates for early marriage and female genital mutilation among girls 15-17 years



Source: MICS 2009-10

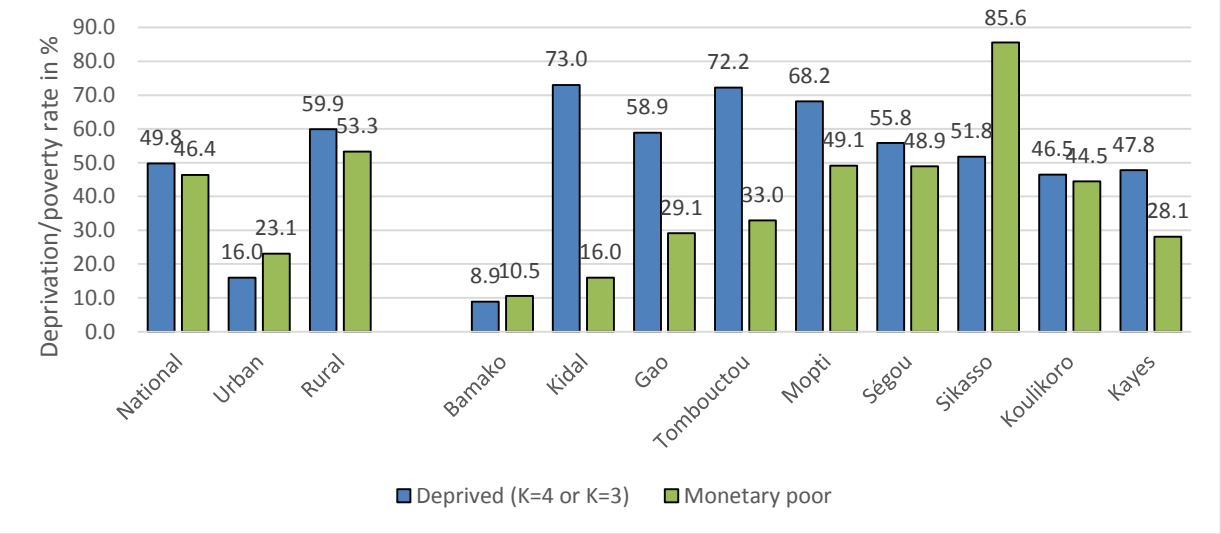
8. MONETARY POVERTY AND DEPRIVATION ANALYSIS FOR ALL CHILDREN

To provide information about the child population as a whole (0-17 years), key results on multidimensional deprivation and monetary poverty of children are combined. Identification of the multidimensionally deprived uses thresholds specific to the age group, namely being deprived if having at least four out of seven possible dimensions (K=4) for children in the first and second age group, and having at least three out of six deprivations (K=3) for children in the third and fourth age group. The multidimensional deprivation rate for all children up to 17 years consists of the average rate of the four age groups weighted by the respective child population shares.

Comparing the deprivation results with the monetary poverty rates (for children up to 17 years) shows that while the national poverty rates are almost equal, large regional differences between poverty and deprivation exist (see Figure 8.1). The discrepancy between multidimensional deprivation and monetary poverty may arise from the conceptual difference between the two types of poverty. Monetary poverty assesses whether in principle a household can afford necessary goods and services at subsistence level and whether these goods and services are indeed readily available to the household; whether the household decides to purchase these is not captured in the analysis. The deprivation analysis focuses on the actual access to the selected aspects of well-being, e.g. the quality of drinking water, the type of toilet facilities, school enrolment and adequacy of nutrition. The differences between financial resources and access to goods and services is particularly large for Kidal, Gao, Tombouctou, Mopti and Sikasso, as was already indicated in the separate age groups. In urban

areas, as well as in the Bamako and Sikasso regions, the monetary child poverty rates are higher than the multidimensional deprivation rates. In rural areas and in the predominately rural regions of Kidal, Gao, Tombouctou and Mopti the multidimensional deprivation rate is higher than the monetary poverty rate. The latter results suggest supply-driven limitations to the provision of basic goods and services, as apparently a sufficient level of financial resources cannot prevent deprivation in various aspects of child and household well-being.

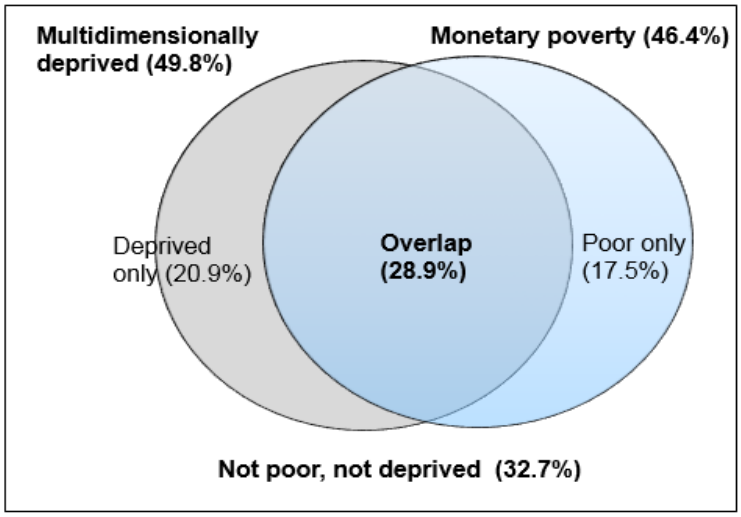
Figure 8.1 *– Monetary child poverty and multidimensional deprivation, 0-17 years*



Source: MICS-ELIM 2009-10

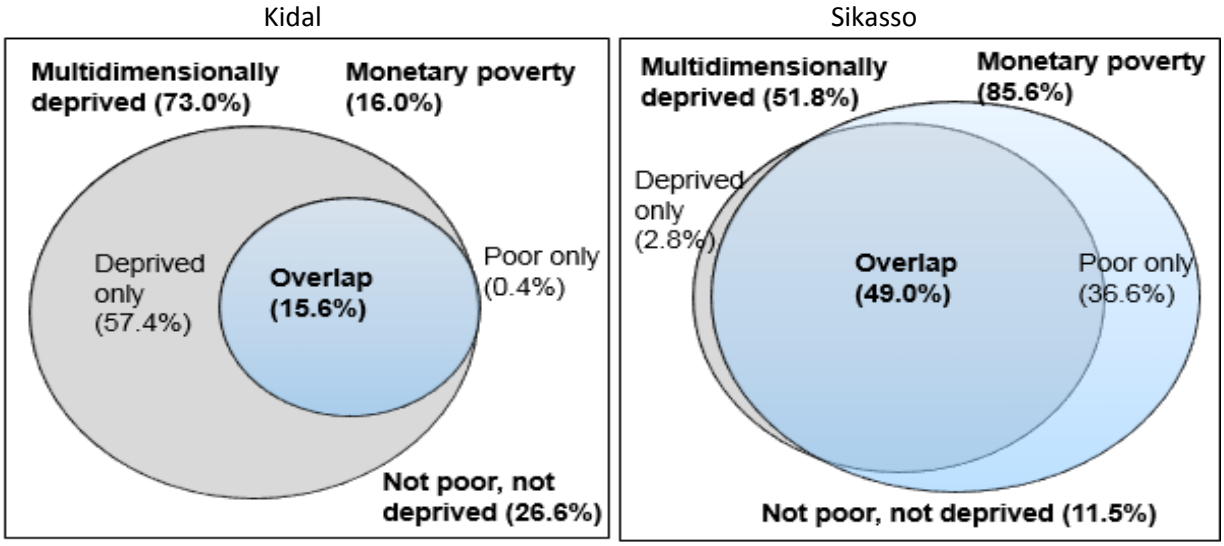
Figure 8.3 compares the poverty overlap of two particular regions, Kidal and Sikasso. The poverty overlap confirms that in Kidal there is a substantial proportion of children, who are deprived, but not poor. Moreover, nearly all the children who live in monetary poor households are also multidimensionally deprived suggesting that providing interventions, which are based only on income support might not be sufficient. In Sikasso the monetary poverty rate is significantly higher than the national average (86% and 52%, respectively). In this region only a small proportion of children is multidimensionally deprived (3%) but not poor, and a large proportion (49%) experiences both types of poverty. Even though monetary child poverty seems to be the most diffuse in this region, further research is required to observe what type of intervention(s) are most suitable to eliminate these forms of child poverty.

Figure 8-2– Monetary child poverty and deprivation overlap (K=3 or K=4), 0-17 years



Source: MICS-ELIM 2009-10

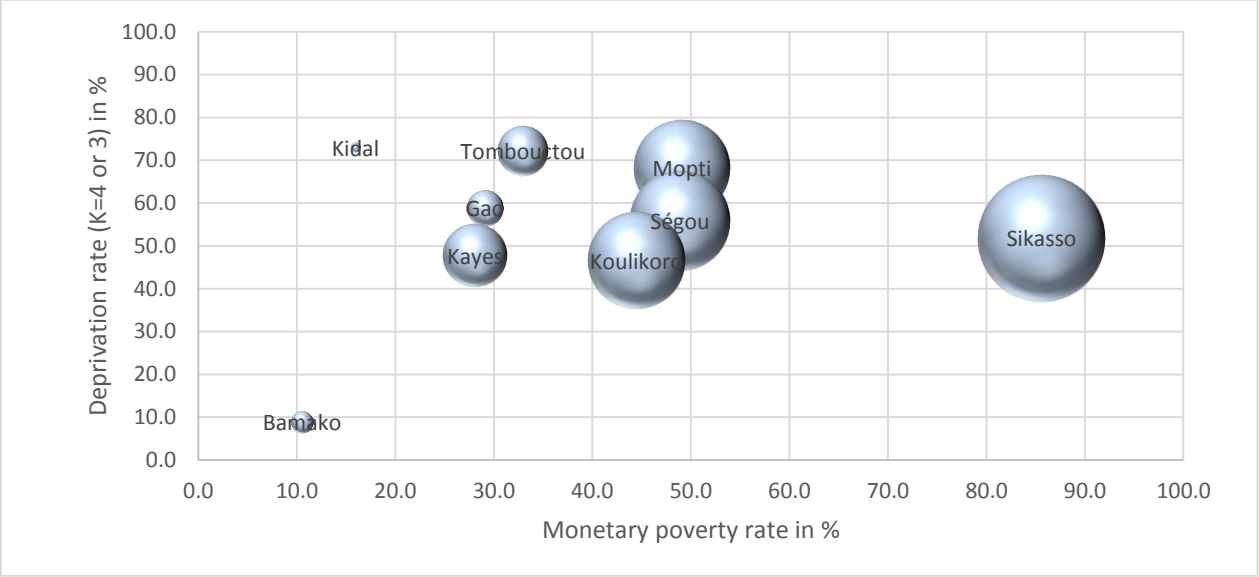
Figure 8-3– Monetary child poverty and deprivation overlap (K=3 or K=4) by region, 0-17 years



Source: MICS-ELIM 2009-10

Figure 8-4, which captures the multidimensional deprivation rate, the monetary poverty level and the poverty overlap, shows Sikasso on the right-hand side of the graph indicating a high level of monetary child poverty and a medium level of multidimensional deprivation. In comparison Mopti and Ségou have higher levels of child deprivation, but have lower monetary rates (about 35 percentage points lower). The size of the bubbles represents the proportion of children who are poor and deprived as a percentage of the number of children poor and deprived nationally. The bubbles in the chart indicate that the most vulnerable children, namely those who simultaneously experience monetary poverty and deprivation, are found respectively in Sikasso, Ségou, Koulikoro and Mopti (31%, 19%, 18% and 17%).

Figure 8-4 - Relationship between monetary poverty and multidimensional deprivation, 0-17 years



Note: the bubble size represents the number of children 0-17 years, who are simultaneously poor and deprived.
Source: MICS-ELIM 2009-10

9. DEPRIVATION, MONETARY POVERTY AND PUBLIC POLICY

This section probes a bit deeper into the relationship among deprivations and monetary well-being (household consumption per capita). To begin with, the correlation among deprivation dimensions is explored (Appendix 2 shows correlations among each indicator used to determine deprivation in each dimension) using factor analysis, a data reduction technique which statistically identifies common variance among the data and assigns them to 'factors', usually two main factors though occasionally there may be more than two if particular variables do not correlate well with each other. This technique shows how much unique information is contained in a set of indicators; for the purposes of this study it explores how much unique information is contained in the set of deprivations. Table 9.1 shows the factor 'loadings' for each dimension for younger children by region. A loading or correlation with a factor is considered 'strong' if it is above 0.40 in absolute value. In urban areas, water, sanitation, housing and health load on to the first factor while nutrition loads on to the second; information is not strongly correlated with either factor and the child protection dimension is strongly negatively correlated with the second factor (-0.69). Nutrition and child protection seem to represent unique dimensions in urban areas. In rural areas, however, there appear to be three unique factors rather than two. Nutrition and health, both measured at the individual level, load together on the first factor (0.80 and 0.78, respectively). As in urban areas, water and sanitation are loaded together, but now in combination with information. In contrast with the urban areas child protection is not a unique factor, but loads together with housing to factor 3.

Table 9.1 - *Factor Analysis of Deprivations among 0-59 month old children by region*

	URBAN		RURAL		
	Factor1	Factor2	Factor1	Factor2	Factor3
Nutrition	0.21	0.67	0.80	-0.01	-0.13
Health	0.56	0.24	0.78	0.07	0.13
Child protection	0.22	-0.69	-0.06	-0.10	0.78
Information	0.24	0.32	0.01	0.63	-0.25
Water	0.54	-0.00	0.06	0.57	0.22
Sanitation	0.73	-0.02	0.05	0.65	0.11
Housing	0.55	-0.22	0.07	0.22	0.65

Source: MICS-ELIM 2009-10

The factor loadings for older children are shown in Table 9-.2. In urban areas water, sanitation and housing (which are all measured at the household level) again load together to factor 1 along with information which is also measured at household level for older children. Not surprisingly the two individually measured dimensions (child labour, education) load to factor 2. This same pattern is observed in rural areas though information is weakly related to both factors.

These results illustrate three main points. First, household level measures tend to move together and for older children seem to represent a separate factor from education and labour. Second, for younger children in urban areas, health loads with these household variables. And third, child protection appears to contain information that is somewhat different from the 6 other dimensions among younger children. Overall then, deprivations do not all cluster together, some correlate more strongly with each other than others, and some individual deprivations correlate more strongly with household level measures (e.g. health among younger children in urban areas, information for younger children in rural areas). This means that further probing of the data is necessary to understand the determinants of individual deprivations in order to pin point whom to target and which interventions will have the highest chance of reducing deprivation rates.

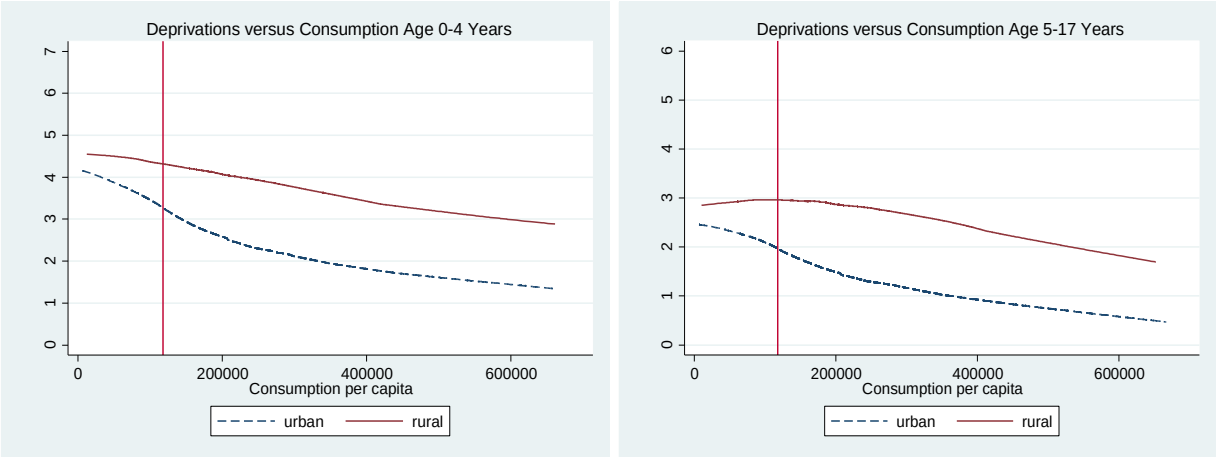
Table 9.2 - Factor Analysis of Deprivations among 5-17 year old children by region

	URBAN		RURAL	
	Factor1	Factor2	Factor1	Factor2
Education	0.11	0.72	0.13	0.64
Labour	-0.03	0.78	-0.09	0.78
Information	0.52	-0.02	0.36	0.26
Water	0.50	0.17	0.60	0.02
Sanitation	0.74	0.06	0.69	-0.13
Housing	0.62	-0.02	0.53	0.18

Source: MICS-ELIM 2009-10

Turning now to the relationship between consumption and deprivations, Figure 9-3 shows graphically how the number of deprivations (the deprivation count) varies with consumption per capita. The slope in these graphs is steepest among younger children in urban areas suggesting that income is an important determinant of deprivations in urban areas, probably because services are actually available in urban areas if one has the ability to purchase them. Nevertheless, having a high level of consumption does not prevent all deprivations. Children under the age of five living in the richest, urban households still have more than one deprivation on average, while this is around two for wealthy children in rural areas. In general, the average number of deprivations is significantly lower for both rich and poor households among the older children, while showing a similar discrepancy between urban and rural areas. The relationship for children between five and seventeen in rural areas is slightly more complex as there is actually a slight increase in deprivations when consumption goes up in households below the poverty line. This increase can mainly be attributed to the deprivation in child labour (see appendix 9.I) signifying the connection between deprivation in child labour and possible contribution to the household income.

Figure 9.3 – Comparing deprivations and consumption per capita, by ages[3]



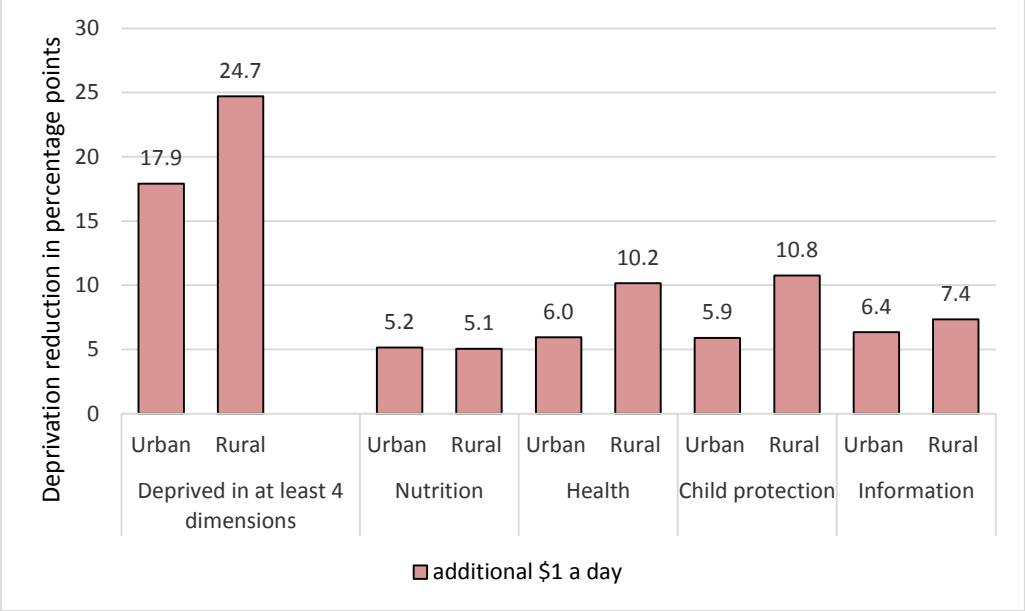
Source: MICS-ELIM 2009-10

Figure 9.3 depicts the bivariate relationship between the deprivation count and consumption. Moving to a multivariate framework, which estimates the probability of each deprivation that is based on individual (rather than household level) information as a function of household characteristics including consumption. The regressions include the age and sex of the child, the age and schooling of the head of household, demographic composition of the household and indicators for region of residence. Based on this model the 'effect' is computed of a small change in consumption, and a change in parental education on the likelihood of being multidimensionally deprived (i.e having 3 or more deprivations if older or 4+ if younger) as well as for each individual dimension. These results are summarised in a series of graphs in order to facilitate ease of interpretation.

[3] For presentation purposes consumption has been truncated excluding the wealthiest 1% of household.

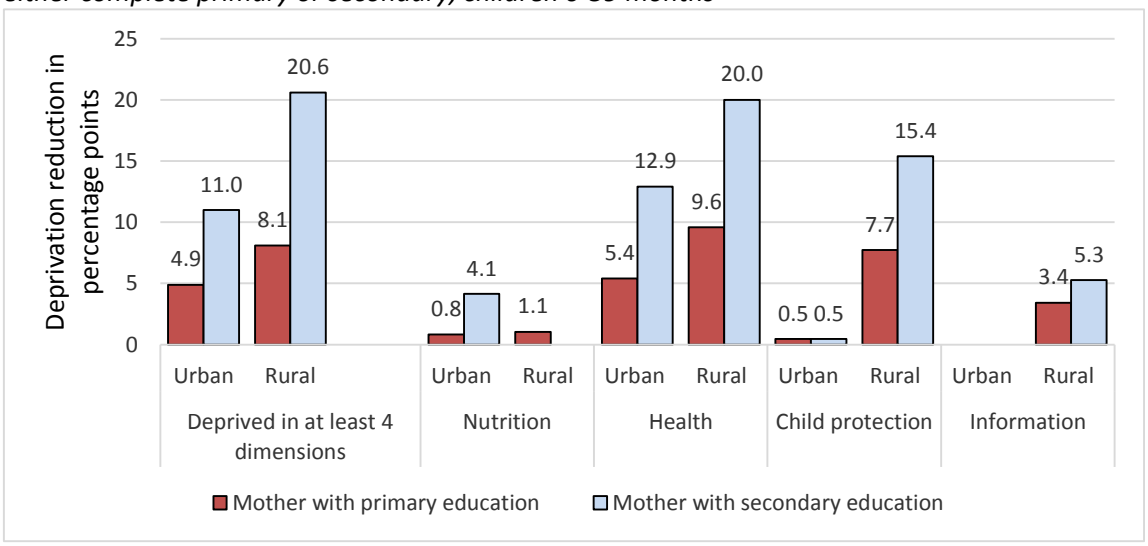
Figure 9.4 shows that an additional $1 per person per day[4] reduces the probability of being multidimensionally deprived by 18 and 25 percentage points in urban and rural areas respectively. The largest effects of consumption are found in rural areas for child protection and health deprivations. Figure 9.5 allows comparison of these effects with that of improving mother's education.

Figure 9.4 – Probability of reducing deprivation with $1 per person per day increase in consumption, children 0-59 months



Source: MICS-ELIM 2009-10

Figure 9.5 – Probability of reducing deprivation through increasing maternal education from none to either complete primary or secondary, children 0-59 months



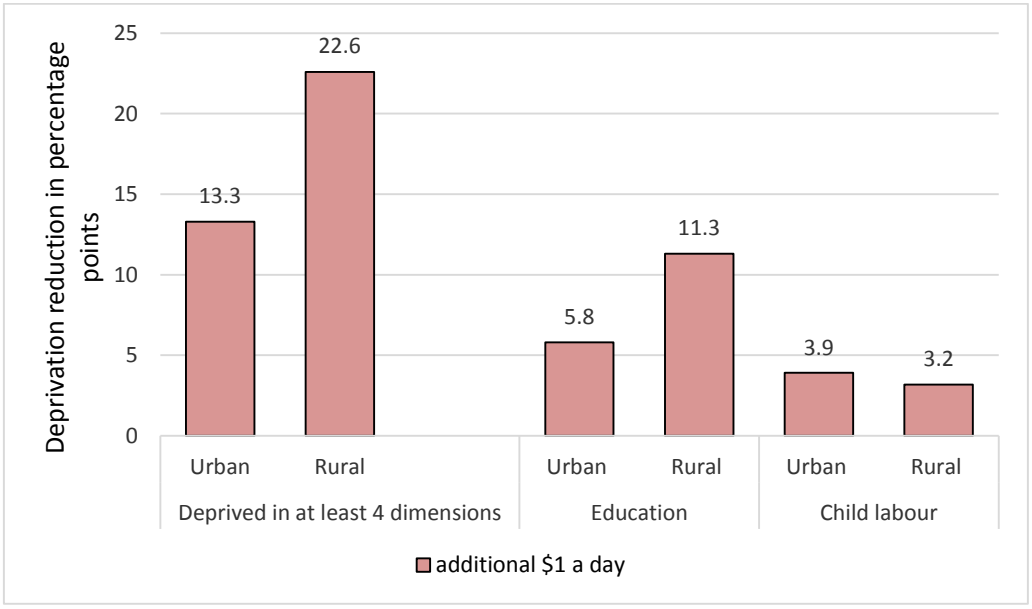
Source: MICS-ELIM 2009-10

[4] The ELIM data reports annual consumption per person in 2010 CFA. This is divided by 365 and uses an exchange rate of Western African CFA franc 500=US$1 to 'simulate' the change due to an increase in consumption of CFA500=$US1 per person per day.

Of particular interest here is the large effect on reducing the likelihood of being deprived when the mother attains secondary schooling (these effects are net of any effect her schooling may have on consumption), particularly in rural areas. The single largest effect of mother's schooling is on the health dimension, where having a mother complete secondary school reduces the probability of a health deprivation by 20 percentage points in rural areas compared to children in rural areas whose mother has no schooling. In urban areas mother's schooling has generally a smaller effect than in rural areas. Nevertheless, having a mother who completed secondary education still decreases a child's probability of being health deprived by 13 points. Of course schooling is a long term investment; nevertheless these results highlight the long run importance of female education for reducing child deprivation in Mali.

The analogous results for older children focus naturally on the two deprivation dimensions that use individual child level. Once again, consumption is much more important in rural areas for reducing the likelihood of being multidimensionally deprived (having three or more deprivations), with an additional $1 per day reducing the likelihood by 23 percentage points in rural areas compared to 13 points in urban areas. Household consumption is particularly important for reducing education deprivation in rural areas, an additional $1 per day reducing the likelihood by 11 percentage points compared to only 6 percentage points in urban areas. Note that for child labour consumption has only a slight effect on reducing deprivation.

Figure 9.6 – Probability of reducing deprivation with $1 per person per day increase in consumption, children 5-17 years

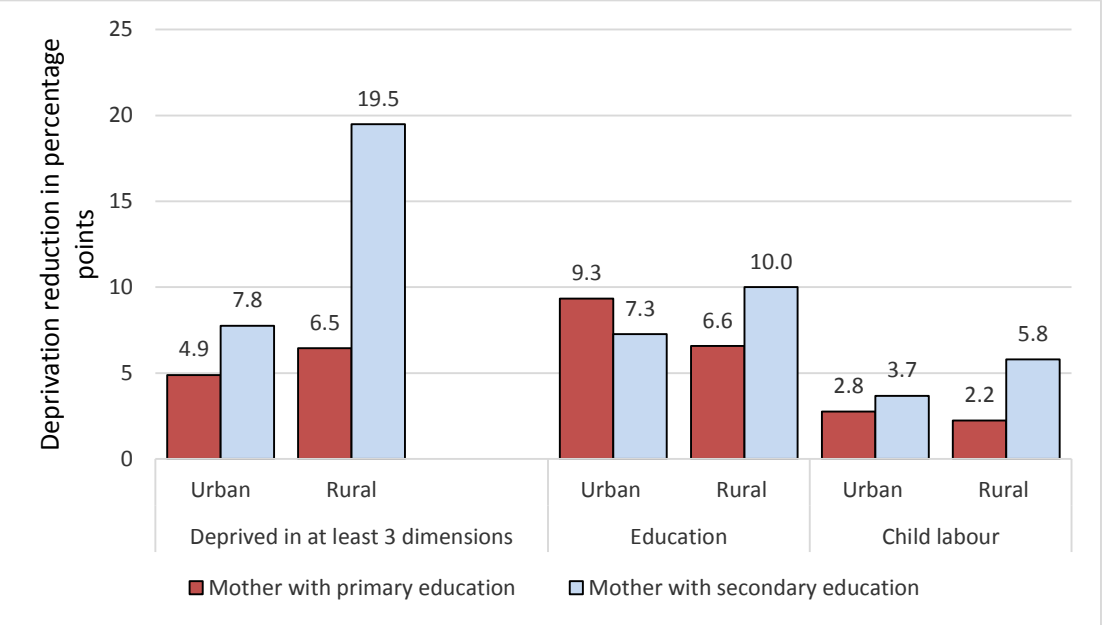


Source: MICS-ELIM 2009-10

As seen before for younger children, the probability of reducing deprivation for older children through increasing maternal education serves as an example of a more long term intervention. As for the findings for younger children, completion of secondary school is key to reducing overall deprivation for

older children, particularly in rural areas, and the greatest effect of maternal education appears to be on reducing deprivation in rural areas.

Figure 9.7 – Probability of reducing deprivation through increasing maternal education from none to either complete primary or secondary (children 5-17 years)



Source: MICS-ELIM 2009-10

10. CONCLUSIONS AND POLICY IMPLICATIONS

This paper provides the first ever estimates of national child deprivation rates in Mali using the Multiple Overlapping Deprivations Approach (MODA) pioneered by UNICEF. Following the MODA approach, deprivations are defined according to the age of the child, and each deprivation 'dimension' consists of several specific indicators that represent a dimension. The age groups, the dimensions per age group and the specific indicators that comprise each dimension of MODA for Mali, were defined through a participatory national process led by UNICEF and the Ministry of Finance and Planning. This process led to the identification of four distinct age groups: 0-23 months, 24-59 months, 5-14 years and 15-17 years. The younger age groups have 7 dimensions of deprivation while the older age groups have 6 dimensions.

Based on these national indicators, a threshold of at least 4 deprivations for younger children (K=4) and 3 for older children (K=3), and using the MODA methodology, the national child deprivation rate in Mali is 50%, a rate that is only slightly higher than the national child poverty rate of 46%. The deprivation headcount is 60% in rural areas versus 16% in urban areas. The highest deprivation headcounts are found in Kidal (73%), Tombouctou (72%) and Mopti (68%). The headcount is 9% in Bamako.

The overlap of children who are both poor and deprived is 29%, hence not all children who are deprived are living in poor households as defined by the national poverty line. Only 58% of children who are deprived live in poor households. Similarly, only 62% of children in poor households are multidimensionally deprived. Consequently, policies that are targeted exclusively on monetary poverty will miss a significant proportion of Malian children who are deprived. Across regions in Mali the correlation between deprivation and poverty rates is uneven. The highest monetary poverty rate is in Sikasso (86%) where the child deprivation rate is around the national average (of 50%). On the other hand, regions with the highest deprivation rates (Kidal, Tombouctou) have poverty rates of only 16% and 33% respectively. These patterns are related to the level of services available for families with children in each region and underscore the fact that low levels of poverty do not automatically translate into reductions in child deprivation.

The relationship between multidimensional deprivation and monetary poverty is strongest in rural areas for all age groups. An increase of USD 1 per person per day would reduce the probability of being deprived by 25 percentage points in rural areas. The specific dimensions most strongly linked with income are health for younger children and education for older children. Beyond income, maternal education is an important determinant of childhood deprivation, especially in rural areas. Children 0-59 months in rural areas whose mothers have attained secondary schooling are 21 percentage points less likely to be deprived; the comparable figure for older children 5-17 years of age is 20 percentage points.

This paper represents the first attempt at estimating child deprivation in Mali, comparing it to child monetary poverty and estimating the relationship between the two. While further detailed work is necessary to understand the specific determinants of child deprivation in each sector, several clear policy implications emerge from the present analysis. First and foremost, the results serve as a reminder that while financial constraints are one of the most important determinants of child deprivation, not all monetary poor children are deprived nor are all deprived children monetary

poor. Targeting programmes to financially poor children will thus not eliminate child deprivation, a fact that comes out most clearly in regions such as Kidal and Tombouctou which have extremely high deprivation rates in the face of relatively low poverty. A further implication of the results is the importance of maternal education in determining children's deprivation, particularly in rural areas of the country. This effect is net of income and can therefore be attributed to either information access, efficiency at processing information, or values and culture. These three pathways serve as potential programming entry points, in the short run for demand side interventions to address child deprivation. In the long run, increasing girls' schooling today can have a spillover effect, reducing the inter-generational link in deprivation.

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Appendix 1 – Sample description MICS-ELIM (2009-10)

	Complete MICS sample		ELIM-MICS subsample	
	At individual level			
	Observations	*Percentage*	*Observations*	*Percentage*
0-23 months	10,734	8.2	*7,139*	8.3
24-59 months	12,759	9.7	8,332	9.7
5-14 years	39,813	30.4	25,982	30.2
15-17 years	7,749	5.9	5,033	5.9
All children: 0-17 years	*71,055*	*54.2*	*46,486*	*54.0*
18-60 years	52,731	40.2	34,750	40.4
60+ years	7,271	5.6	4,768	5.5
	At household level			
	Observations	*Percentage*	*Observations*	*Percentage*
All households	13,852		9,036	
Households with children	12,542	90.5	8,186	90.6
Households without children	1,310	9.5	850	9.4
Rural	8,506	61.4	5,475	60.6
Urban	5,346	38.6	3,561	39.4
Kayes	1,584	11.4	1,056	11.7
Koulikoro	1,676	12.1	1,116	12.4
Sikasso	1,822	13.2	1,215	13.5
Ségou	1,571	11.3	1,048	11.6
Mopti	1,649	11.9	1,099	12.2
Tombouctou	1,311	9.5	872	9.7
Gao	1,047	7.6	698	7.7
Kidal	938	6.8	432	4.8
Bamako	2,254	16.3	1,500	16.6
	Mean	*Standard deviation*	*Mean*	*Standard deviation*
Household size	9.6	8.35	9.6	8.37
No. of children	5.2	5.15	5.2	5.17
Rural: household size	10.2	8.84	10.4	8.88
Rural: No. of children	5.8	5.57	5.9	5.60
Urban: household size	8.5	7.37	8.4	7.37
Urban: No. of children	4.3	4.25	4.3	4.26

Source: MICS-ELIM 2009-10

Appendix 2 - Indicator definitions and thresholds, by dimension

1.1 WATER: *Source of drinking water* (0-17 years): deprived if unimproved source. WHO standards.

Deprived	Non-deprived
Unprotected dug wells	Piped into dwelling
Unprotected modern well	Piped into plot or yard
Unprotected spring	Piped to neighbour
Tanker truck	Public tap/standpipe
Small cart with tank/drum	Tubewell/borehole
Surface water (river, dam, pond, lake, sea)	Well equipped with pump/hand pump
Bottled water, if source of non-drinking water is unimproved	Protected dug well
	Protected modern well
	Protected spring
	Rainwater
	Bottled water, if source of non-drinking water is improved
	Other

1.2 WATER: *Distance to water source* (0-17 years): Deprived if it takes more than 30 min to search for water (go, get, come back). WHO standards.
Water sources in own dwelling, yard/plot or at the neighbour are considered less than 30 minutes away.

2 SANITATION: *Type of toilet* (0-17 years): Deprived if unimproved toilet type. WHO standards.

Deprived	Non-deprived
Flush to somewhere else	Flush to piped sewer system
Pit latrine without slab/open pit	Flush to septic tank
Bucket toilet	Flush to pit latrine
Hanging toilet/latrine	Flush to don't know where
No facility	Ventilated improved pit latrine
Other	Pit latrine with slab
	Composting toilet

3.1 HOUSING: *Housing materials* (0-17 years): Deprived if roof, floor and walls are of natural material, which are not considered permanent. UN-HABITAT.

Deprived	Non-deprived
FLOOR	
Earth/sand	Wood Planks
Dung	Palm/Bamboo
	Parquet or polished wood
	Vinyl or asphalt
	Tiles
	Cement
	Carpet
	Other
ROOF	
No roof	Mats
Thatch/palm leaves	Palm/bamboo
Grass	Wood planks
Mud	Cardboard
	Metal/tin
	Wood
	Zinc/fibre cement
	Tiles
	Cement
	Other
WALLS	
No walls	Bamboo with mud
Cane/palm/Trunks	Stone with mud
Lumps of earth	Cardboard
	Recovered wood
	Cement
	Stone with lime/cement
	Bricks (terracotta, cement, stabilised mud)
	Blocks of cement (concrete or not)
	Covered adobe (clay wall or mud with stone foundation)
	Wood planks/shingles
	Other

3.2 HOUSING: *overcrowding* (0-17 years): deprived if on average the household has more than 4 persons per sleeping room (no adjustment scale used for children).

4.1 INFORMATION: *communication for development* (0-4 years): deprived if mother/female caretaker does not know any illness symptom which makes her bring her child to a health facility straightaway; OR if she cannot identify at least 2 occasions in which one should wash their hands.

Possible illness symptoms	Possible hand washing occasions
child is unable to drink or be breastfed	after using the toilet
child becomes sicker	before preparing food
child develops a fever	before eating
child has fast breathing	before feeding children <5 years
child has difficulty breathing	after assisting a child going to the toilet/cleaning
child has blood in stool	Other
child is drinking poorly	
child has a seizure	
Other	

4.2 INFORMATION: *availability of information devices* (5-17 years): deprived if household does not have at least one of the following devices available: tv, radio, phone, computer.

5.1 NUTRITION: *stunting* (0-4 years): Child is deprived if his/her z-score for height-for-age is more than -2 standard deviations away from the median of the reference population. WHO standards.

5.2 NUTRITION: *underweight* (0-4 years): Child is deprived if his/her z-score for weight-for-age is more than -2 standard deviations away from the median of the reference population. WHO standards.

5.3 NUTRITION: *wasting* (0-4 years): Child is deprived if his/her z-score for weight-for-height is more than -2 standard deviations away from the median of the reference population. WHO standards.

5.4 NUTRITION: *infant and young child feeding* (0-23 months):
Children 0-5 months: Deprived if no exclusive breastfeeding;
Children 6-8 months AND breastfed: Less than 2 feedings in the last 24 hours;
Children 9-23 months AND breastfed: Less than 3 feedings in the last 24 hours;
Children 6-23 months NOT breastfed: Less than 4 feedings of which one should be milk.

6.1 HEALTH: *skilled birth attendant* (0-2 years): deprived (all children in household) if no or an unskilled birth attendant assisted with the birth of the last-born child (in last 2 years).

Deprived	Non-deprived
Matrone	Doctor
Traditional birth attendant	Midwife
No one	Obstetrician
Other	Other nurse

6.2 HEALTH: *Vaccinations* (0-4 years):
Children 0-23 months: Deprived if BCG vaccine is not received (at birth);
Children 24-59 months: Deprived if DPT3 is not received.

6.3 HEALTH: *Availability of health card* (24-59 months): Deprived if child does not have a health/vaccination card presented/is said that he/she has one or had one.

7.1 CHILD PROTECTION: *Birth registration* (0-4 years): Child is deprived if no birth certificate or is not registered.

7.2 CHILD PROTECTION: *Negligence* (0-23 months): Deprived if child is left alone or left with a child under the age of 10 for more than an hour.

7.3 CHILD PROTECTION: *Left alone* (24-59 months): Deprived if child is left alone for more than an hour.

8.1 EDUCATION: *school enrolment* (5-14 years): deprived if child is not attending school in the current school year. *School enrolment* (15-17 years): deprived if child is not attending school in the current school year and if he or she has not obtained his/her primary school certificate yet.

8.2 EDUCATION: *grade-for-age* (5-14 years): deprived if child is 2 or more years behind with his/her schooling.

8.3 EDUCATION: *literacy* (15-17 years): deprived if child cannot read or write in any language.

9.1 CHILD LABOUR: *child labour* (5-17 years): deprived if more than:
Child 5-11 years: 1h of economic work or 28h of domestic work per week;
Child 12-14 years: 14h of economic work or 28h domestic work;
Child 15-17 years: 43h of economic or domestic work.
Domestic work: time spent to help with household chores
Economic work: time spent fetching water or collecting fire wood; worked for someone not a household member; other paid or unpaid work in family business.

Appendix 3.1 - Correlation between deprivation indicators for children 0-23 months

	IYCF (incl. exclusive breastfeeding)	Wasting	Stunting	Under-weight	Birth assistant	BCG	Negligence	Birth certificate	Knowledge on illnesses	Knowledge on hand washing	Water source	Distance to water	Type of toilet	Over-crowding	Housing material
IYCF (incl. exclusive breastfeeding)	1.00														
Wasting	0.02	1.00													
	0.10														
Stunting	-0.01	0.13	1.00												
	0.25	0.00													
Underweight	0.01	0.49	0.53	1.00											
	0.55	0.00	0.00												
Birth assistant	0.02	0.05	0.08	0.07	1.00										
	0.04	0.00	0.00	0.00											
BCG	0.04	0.05	0.00	0.01	0.24	1.00									
	0.00	0.00	0.70	0.53	0.00										
Negligence	-0.08	-0.02	0.03	-0.01	-0.02	-0.10	1.00								
	0.00	0.03	0.00	0.50	0.02	0.00									
Birth certificate	0.01	0.05	0.01	0.03	0.20	0.30	-0.07	1.00							
	0.25	0.00	0.16	0.01	0.00	0.00	0.00								
Knowledge on illnesses	0.01	0.02	0.02	0.01	0.01	0.00	-0.05	0.00	1.00						
	0.37	0.08	0.02	0.14	0.57	0.66	0.00	0.68							
Knowledge on hand washing	0.03	0.03	0.05	0.05	0.20	0.14	-0.07	0.10	0.10	1.00					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Water source	0.05	0.03	0.02	0.03	0.29	0.17	-0.04	0.15	-0.02	0.17	1.00				
	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.05	0.00					
Distance to water	0.03	0.02	0.00	0.01	0.06	0.09	-0.02	0.10	0.00	0.06	0.05	1.00			
	0.00	0.02	0.97	0.19	0.00	0.00	0.02	0.00	0.96	0.00	0.00				
Type of toilet	0.02	0.03	0.07	0.07	0.43	0.18	-0.04	0.14	0.01	0.19	0.29	0.06	1.00		
	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00			
Overcrowding	0.01	0.00	0.01	0.00	-0.05	0.04	0.01	0.08	0.01	0.04	0.03	0.04	0.00	1.00	
	0.13	0.66	0.56	0.62	0.00	0.00	0.53	0.00	0.44	0.00	0.01	0.00	0.78		
Housing material	0.03	0.02	0.05	0.06	0.28	0.13	0.00	0.15	-0.03	0.09	0.16	0.08	0.29	-0.05	1.00
	0.00	0.03	0.00	0.00	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

* 1st row of each indicator is the correlation coefficient, 2nd row the significance level.

Source: MICS 2009-10

Appendix 3.2 - Correlation between deprivation indicators for children 24-59 months

	Wasting	Stunting	Under-weight	Health card	DPT3	Left alone	Birth certificate	Knowledge on illnesses	Knowledge on hand washing	Water source	Distance to water	Type of toilet	Overcrowding	Housing material
Wasting	1.00													
Stunting	0.05	1.00												
	0.00													
Underweight	0.33	0.51	1.00											
	0.00	0.00												
Health card	0.01	0.06	0.04	1.00										
	0.25	0.00	0.00											
DPT3	0.02	0.05	0.04	0.59	1.00									
	0.09	0.00	0.00	0.00										
Left alone	-0.01	-0.05	-0.04	-0.01	-0.03	1.00								
	0.15	0.00	0.00	0.18	0.00									
Birth certificate	0.01	0.06	0.06	0.37	0.30	-0.03	1.00							
	0.12	0.00	0.00	0.00	0.00	0.00								
Knowledge on illness symptoms	0.00	0.00	0.01	0.00	0.01	-0.05	-0.01	1.00						
	0.61	0.62	0.56	0.71	0.47	0.00	0.11							
Knowledge on hand washing	-0.01	0.10	0.05	0.16	0.13	-0.10	0.13	0.10	1.00					
	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Water source	-0.01	0.09	0.03	0.17	0.12	-0.01	0.19	-0.01	0.19	1.00				
	0.20	0.00	0.00	0.00	0.00	0.45	0.00	0.20	0.00					
Distance to water	0.00	0.01	0.01	0.11	0.09	0.01	0.12	0.00	0.08	0.06	1.00			
	0.69	0.19	0.51	0.00	0.00	0.13	0.00	0.90	0.00	0.00				
Type of toilet	0.00	0.13	0.07	0.18	0.13	-0.04	0.19	0.00	0.21	0.29	0.07	1.00		
	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00			
Overcrowding	0.01	-0.01	0.00	0.09	0.08	0.03	0.10	-0.01	0.04	0.03	0.06	0.01	1.00	
	0.25	0.31	0.95	0.00	0.00	0.00	0.00	0.54	0.00	0.00	0.00	0.16		
Housing material	0.00	0.08	0.07	0.12	0.09	0.06	0.17	-0.04	0.10	0.17	0.07	0.29	-0.07	1.00
	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

* 1st row of each indicator is the correlation coefficient, 2nd row the significance level.

Source: MICS 2009-10

Appendix 3.3 - Correlation between deprivation indicators for children 5-14 years

	School enrolment	Grade for age	Child labour	Information devices	Drinking water source	Distance to source	Type of toilet	Overcrowding	Housing material
School enrolment	1.00								
Grade for age		1.00							
	0.00								
Child labour	0.18	-0.05	1.00						
	0.00	0.00							
Information devices	0.10	0.04	0.06	1.00					
	0.00	0.00	0.00						
Drinking water source	0.13	0.06	0.09	0.12	1.00				
	0.00	0.00	0.00	0.00					
Distance to source	0.06	0.02	0.03	0.11	0.08	1.00			
	0.00	0.01	0.00	0.00	0.00				
Type of toilet	0.15	0.10	0.10	0.12	0.28	0.08	1.00		
	0.00	0.00	0.00	0.00	0.00	0.00			
Overcrowding	0.04	0.00	0.02	0.17	0.05	0.08	0.01	1.00	
	0.00	0.64	0.00	0.00	0.00	0.00	0.11		
Housing material	0.12	0.09	0.10	0.05	0.15	0.06	0.28	-0.05	1.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

* 1st row of each indicator is the correlation coefficient, 2nd row the significance level.

Source: MICS 2009-10

Appendix 3.4 - Correlation between deprivation indicators for children 15-17 years

	School enrolment & attainment	Illiteracy	Child labour	Information devices	Drinking water source	Distance to source	Type of toilet	Overcrowding	Housing material
School enrolment & attainment	1.00								
Illiteracy	0.82	1.00							
	0.00								
Child labour	0.19	0.19	1.00						
	0.00	0.00							
Information devices	0.12	0.13	0.02	1.00					
	0.00	0.00	0.17						
Drinking water source	0.20	0.19	0.02	0.15	1.00				
	0.00	0.00	0.20	0.00					
Distance to source	0.08	0.09	0.05	0.11	0.07	1.00			
	0.00	0.00	0.00	0.00	0.00				
Type of toilet	0.21	0.20	0.00	0.16	0.33	0.07	1.00		
	0.00	0.00	0.98	0.00	0.00	0.00			
Overcrowding	0.02	0.03	-0.02	0.13	0.04	0.05	0.00	1.00	
	0.07	0.02	0.13	0.00	0.00	0.00	0.82		
Housing material	0.17	0.18	0.04	0.11	0.19	0.08	0.34	-0.04	1.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

* 1st row of each indicator is the correlation coefficient, 2nd row the significance level.

Source: MICS 2009-10

Appendix 4 – Monetary child poverty (poor and ultra poor) by various characteristics - 0-17 years

		Ultra poor, in %	Poor, in %
	National	23.6	45.9
Area	Urban	8.4	22.8
	Rural	28.2	52.9
Asset index	Wealthiest 20% - urban	2.3	10.4
	Wealthiest 20% - rural	10.2	26.2
	Poorest 20% - urban	17.5	36.0
	Poorest 20% - rural	31.4	58.5
Orphanhood	orphan	22.7	43.8
	non-orphan	24.0	46.6
Gender household head	Female	10.2	27.7
	Male	24.5	47.2
Parent's employment sector	Independent	10.0	24.4
	Agricultural sector	32.3	59.2
	Employed	5.0	17.7
	Unemployed	11.6	31.1
Mother's education	No education	26.6	50.8
	Primary	17.5	36.7
	Secondary/higher	5.7	15.1
	Mother not in hld	13.4	30.6
Father's education	No education	28.5	52.6
	Primary	22.9	45.2
	Secondary/higher	7.1	21.1
	Father not in hld	19.3	41.2
Region	Bamako	2.7	10.4
	Kidal	5.5	15.7
	Gao	11.0	29.1
	Tombouctou	12.4	32.6
	Mopti	20.1	48.8
	Ségou	26.2	48.5
	Sikasso	59.5	85.3
	Koulikoro	18.3	44.0
	Kayes	7.5	28.1

Source: MICS-ELIM 2009-10

Appendix 5.1 – Deprivation level by dimension and profiling characteristics – 0-23 months

		Nutrition	Health	Child Protection	Information	Water	Sanitation	Housing
	National	82.0	72.1	38.9	53.7	37.3	68.7	50.5
Area	Urban	79.4	30.4	31.4	43.2	10.3	29.9	30.1
	Rural	82.8	84.8	41.2	56.9	45.6	80.5	56.7
Gender	Male	82.9	72.5	38.2				
	Female	81.0	71.6	39.6				
Asset index	Wealthiest 20% - urban	77.5	19.8	34.6	36.2	0.5	9.4	18.9
	Wealthiest 20% - rural	81.5	64.2	25.8	41.5	21.5	42.5	22.0
	Poorest 20% - urban	81.8	47.2	37.2	50.9	18.2	48.0	42.5
	Poorest 20% - rural	84.3	91.1	53.0	58.5	53.4	90.5	75.3
Monetary poverty	Poor	84.0	86.1	41.8	63.8	46.2	83.7	59.6
	Non-poor	81.9	59.4	38.1	44.8	28.1	55.6	43.3
	Ultra poor	84.2	90.6	43.4	70.3	49.3	88.3	62.2
	Not ultra poor	82.4	65.6	38.6	48.1	32.2	62.2	47.1
Orphanhood	Orphan	77.9	59.3	31.9	47.5	33.1	61.7	48.5
	Non-orphan	82.1	72.4	39.1	53.8	37.4	68.8	50.5
Gender household head	Female	81.8	55.7	41.3	48.6	31.4	59.3	48.0
	Male	82.0	72.9	38.8	53.9	37.6	69.1	50.6
Parent's employment sector	Independent	80.0	45.0	33.1	44.3	22.0	42.9	32.6
	Agricultural sector	84.5	87.8	43.6	58.6	46.1	85.1	61.4
	Employed	80.2	39.3	31.1	43.0	12.4	29.0	30.7
	Unemployed	79.5	50.5	39.4	51.3	26.9	55.5	36.3
Mother's education	No education	82.7	78.2	41.0	56.3	41.5	74.4	54.9
	Primary	80.8	60.6	33.0	46.6	27.0	58.1	39.4
	Secondary/higher	76.4	29.8	27.2	39.2	12.7	29.2	24.2
Father's education	No education	82.5	80.0	40.9	56.5	41.8	75.7	55.3
	Primary	81.7	65.3	33.7	52.3	33.9	64.9	46.1
	Secondary/higher	76.6	39.6	28.5	39.4	16.6	35.0	22.4
	Father not in hld	83.0	66.8	40.3	52.3	35.4	65.1	51.0
Region	Bamako	77.4	14.5	32.6	34.7	6.0	18.1	24.8
	Kidal	91.6	86.4	69.4	64.5	58.6	72.7	62.6
	Gao	87.1	74.4	39.4	41.9	33.7	72.8	65.6
	Tombouctou	77.6	86.6	69.6	57.0	35.9	81.3	77.4
	Mopti	88.0	83.8	53.1	72.2	54.2	74.1	70.5
	Ségou	86.0	74.9	40.7	63.0	39.7	72.0	65.0
	Sikasso	79.7	88.8	31.6	67.9	41.9	82.6	43.8
	Koulikoro	82.5	71.9	31.5	42.7	42.9	73.5	44.4
	Kayes	78.5	79.7	39.0	40.3	34.0	72.7	42.9

Source: MICS 2009-10

Appendix 5.2 – Multidimensional deprivation indices, by profiling characteristics – 0-23 months

		Deprivation headcount							Average no. of deprivations among the deprived					
		K=1	K=2	K=3	K=4	K=5	K=6	K=7	K=1	K=2	K=3	K=4	K=5	K=6
	National	98.8	92.4	80.3	63.6	42.8	20.3	4.6	4.1	4.3	4.6	5.1	5.6	6.2
Area	Urban	96.0	75.7	47.1	22.9	9.6	2.8	0.4	2.7	3.1	3.8	4.6	5.3	6.1
	Rural	99.7	97.5	90.4	76.0	53.0	25.7	5.9	4.5	4.6	4.8	5.1	5.6	6.2
Asset index	Wealthiest 20%-urban	93.6	63.4	29.1	9.6	1.2	0.0	0.0	2.1	2.6	3.4	4.1	5.0	
	Wealthiest 20% - rural	97.7	85.0	62.8	34.6	13.6	4.6	0.9	3.1	3.4	3.9	4.6	5.4	6.2
	Poorest 20% - urban	98.2	86.5	66.3	41.7	23.4	8.6	1.2	3.3	3.6	4.1	4.8	5.4	6.1
	Poorest 20% - rural	100	99.9	98.4	90.6	69.9	38.1	8.7	5.1	5.1	5.1	5.3	5.7	6.2
Monetary poverty	Poor	99.8	98.2	93.2	81.1	57.2	28.4	7.0	4.7	4.7	4.9	5.1	5.6	6.3
	Non-poor	97.8	87.2	69.4	48.8	30.4	14.6	2.8	3.6	3.9	4.4	5.0	5.6	6.2
	Ultra poor	99.9	98.8	96.3	87.4	64.7	33.5	7.6	4.9	4.9	5.0	5.2	5.6	6.2
	Not ultra poor	98.4	90.1	75.2	56.1	35.6	16.9	3.8	3.8	4.1	4.5	5.0	5.6	6.2
Orphan-hood	Orphan	94.4	83.3	71.3	56.3	38.7	13.7	1.5	3.8	4.2	4.6	5.0	5.4	6.1
	Non-orphan	98.9	92.6	80.5	63.8	42.9	20.5	4.7	4.1	4.3	4.6	5.1	5.6	6.2
Gender hld head	Female	98.9	84.9	65.8	52.7	37.4	19.4	6.8	3.7	4.1	4.8	5.2	5.7	6.4
	Male	98.8	92.8	81.0	64.2	43.1	20.4	4.5	4.1	4.3	4.6	5.1	5.6	6.2
Parent's employment sector	independent	97.2	83.1	58.3	33.8	17.3	7.3	2.6	3.1	3.4	4.1	4.8	5.6	6.4
	agricultural sector	99.9	98.8	94.2	81.5	57.5	28.9	6.1	4.7	4.7	4.9	5.1	5.6	6.2
	employed	95.7	76.7	50.7	26.6	11.5	3.6	0.9	2.8	3.2	3.8	4.6	5.4	6.3
	unemployed	97.9	82.0	61.4	44.6	31.9	15.8	5.8	3.5	4.0	4.6	5.2	5.7	6.4
Mother's education	No education	99.3	95.2	85.8	70.6	48.7	23.7	5.4	4.3	4.5	4.7	5.1	5.6	6.2
	Primary	98.3	88.7	71.7	48.1	26.8	9.9	1.9	3.5	3.8	4.2	4.8	5.4	6.2
	Secondary/ higher	94.3	70.8	39.9	19.6	10.1	3.4	0.6	2.5	3.0	3.8	4.7	5.4	6.2
Father's education	No education	99.5	95.8	87.1	71.8	49.0	23.9	5.3	4.3	4.5	4.7	5.1	5.6	6.2
	Primary	98.8	92.6	76.3	56.6	35.1	16.0	2.2	3.8	4.0	4.4	4.9	5.5	6.1
	Secondary/ higher	95.7	74.6	45.6	25.5	12.0	3.9	0.7	2.7	3.2	3.9	4.7	5.4	6.2
	Father not in hld	98.2	90.4	77.7	60.4	42.1	19.4	5.4	4.0	4.3	4.6	5.1	5.6	6.3
Region	Bamako	93.8	65.3	33.4	12.0	3.0	0.4	0.0	2.2	2.8	3.5	4.3	5.2	6.0
	Kidal	99.5	95.9	89.1	79.3	66.7	49.0	25.6	5.1	5.2	5.5	5.8	6.1	6.5
	Gao	99.8	95.7	85.7	67.8	44.0	18.2	3.7	4.2	4.3	4.6	5.0	5.5	6.2
	Tombouctou	99.7	97.4	92.8	84.1	66.9	34.1	10.2	4.9	5.0	5.1	5.3	5.7	6.3
	Mopti	99.9	98.5	93.0	85.2	67.4	41.0	10.6	5.0	5.0	5.2	5.4	5.8	6.3
	Ségou	99.7	97.1	88.0	72.1	51.6	26.5	6.2	4.4	4.5	4.8	5.2	5.6	6.2
	Sikasso	99.6	97.4	89.5	74.5	51.0	20.7	3.5	4.4	4.5	4.7	5.0	5.5	6.2
	Koulikoro	98.7	92.0	78.6	60.4	38.1	17.2	3.8	3.9	4.2	4.5	5.0	5.6	6.2
	Kayes	99.6	96.2	84.5	60.7	32.4	11.6	1.8	3.9	4.0	4.3	4.8	5.4	6.2

Source: MICS 2009-10

Appendix 5.3 – Monetary poverty and multidimensional deprivation overlap – 0-23 months

		Poor and deprived	Poor, not deprived	Not poor, deprived	Not poor, nor deprived
	National	**38.3**	**8.7**	**26.8**	**26.2**
Area	Urban	10.4	12.1	14.2	63.3
	Rural	45.8	7.7	30.2	16.3
Asset index	Wealthiest 20% - urban	1.1	10.4	9.0	79.5
	Wealthiest 20% - rural	14.5	12.8	16.6	56.1
	Poorest 20% - urban	23.1	12.3	20.6	43.9
	Poorest 20% - rural	55.8	4.6	35.7	3.9
Orphanhood	orphan	35.4	11.6	20.6	32.4
	non-orphan	38.4	8.6	27.0	26.0
Gender household head	Female	24.7	8.0	31.3	36.0
	Male	39.1	8.7	26.6	25.6
Parent's employment sector	Independent	14.8	10.3	20.4	54.5
	Agricultural sector	51.0	8.3	30.7	10.0
	Employed	9.0	8.5	19.1	63.4
	Unemployed	28.9	6.3	17.6	47.3
Mother's education	No education	42.8	8.2	29.0	20.0
	Primary	26.9	10.8	23.4	38.9
	Secondary/higher	9.9	9.4	9.5	71.3
Father's education	No education	42.9	8.2	29.7	19.2
	Primary	38.5	9.1	20.8	31.6
	Secondary/higher	13.2	9.8	12.8	64.2
	Father not in hld	35.4	9.4	27.4	27.8
Region	Bamako	2.0	6.8	10.0	81.2
	Kidal	12.3	0.0	66.7	21.1
	Gao	24.4	6.1	44.3	25.2
	Tombouctou	34.2	1.2	51.5	13.2
	Mopti	44.4	4.4	41.9	9.3
	Ségou	43.3	8.3	28.2	20.2
	Sikasso	69.8	17.7	4.3	8.2
	Koulikoro	34.6	7.9	25.6	31.9
	Kayes	21.0	6.8	41.3	30.8

Source: MICS-ELIM 2009-10

Appendix 6.1 – Deprivation level by dimension and profiling characteristics – 24-59 months

		Nutrition	Health	Child Protection	Information	Water	Sanitation	Housing
	National	**33.1**	**27.6**	**50.6**	**51.1**	**35.7**	**67.4**	**50.6**
Area	Urban	23.7	18.5	42.2	42.9	9.3	29.0	28.4
	Rural	36.2	30.7	53.4	53.8	44.5	80.2	58.0
Gender	Male	33.4	28.0	49.6				
	Female	32.7	27.3	51.7				
Asset index	Wealthiest 20% - urban	13.0	11.6	42.1	40.0	0.8	9.4	22.3
	Poorest 20% - urban	25.3	21.5	37.8	39.3	22.2	44.1	23.4
	Wealthiest 20% - rural	30.1	26.7	50.4	49.6	18.0	47.8	42.2
	Poorest 20% - rural	36.4	40.5	66.7	55.9	52.8	89.5	74.7
Monetary poverty	Poor	41.1	29.1	50.6	60.5	45.2	82.7	61.4
	Non-poor	27.4	27.6	50.7	43.8	27.2	55.7	43.9
	Ultra poor	43.8	30.7	50.2	67.2	48.7	88.3	62.3
	Not ultra poor	30.6	27.6	50.8	46.7	31.4	62.0	48.8
Orphanhood	Orphan	33.0	32.4	50.6	49.1	32.3	65.4	51.9
	Non-orphan	33.1	27.5	50.6	51.1	35.8	67.5	50.6
Gender hld head	Female	32.3	29.0	51.0	39.5	28.7	56.8	47.0
	Male	33.1	27.5	50.6	51.7	36.1	68.0	50.8
Parent's employment sector	independent	26.1	23.5	46.0	44.5	21.9	41.9	34.5
	agricultural sector	38.5	31.8	55.0	55.8	45.1	84.7	62.5
	employed	23.2	20.6	40.0	42.7	11.5	31.9	32.5
	unemployed	27.2	21.2	40.7	44.2	24.4	50.1	34.4
Mother's education	No education	35.0	30.0	52.5	52.8	39.4	73.0	55.1
	Primary	28.4	20.6	46.3	45.1	26.9	56.4	39.7
	Secondary/higher	19.9	13.2	36.5	42.2	9.7	24.5	20.0
Father's education	No education	34.5	29.3	53.1	54.5	40.4	74.5	55.8
	Primary	31.1	22.4	45.5	51.5	31.9	63.4	48.2
	Secondary/higher	19.0	14.6	38.4	41.4	17.0	33.0	23.6
	Father not in hld	36.4	31.4	52.0	45.7	32.9	64.9	49.4
Region	Bamako	20.9	18.9	42.6	35.6	4.9	18.8	23.4
	Kidal	28.0	71.3	73.8	65.1	65.7	79.3	70.8
	Gao	37.0	20.8	55.6	44.8	32.4	74.7	66.9
	Tombouctou	45.3	62.2	77.5	58.8	35.2	79.1	76.2
	Mopti	34.5	35.2	64.4	67.0	49.3	73.5	68.4
	Ségou	35.5	26.9	54.0	58.8	37.7	70.7	62.5
	Sikasso	42.9	20.5	30.2	64.3	41.0	81.0	44.4
	Koulikoro	30.5	26.9	45.2	41.5	41.9	74.1	44.7
	Kayes	24.9	28.9	65.1	34.4	34.3	71.4	47.6

Source: MICS 2009-10

Appendix 6.2 – Multidimensional deprivation indices, by profiling characteristics – 24-59 months

		Deprivation headcount							Average no. of deprivations among the deprived					
		K=1	K=2	K=3	K=4	K=5	K=6	K=7	K=1	K=2	K=3	K=4	K=5	K=6
	National	**96.1**	**82.9**	**65.0**	**41.8**	**21.0**	**7.1**	**1.5**	**3.3**	**3.6**	**4.1**	**4.7**	**5.4**	**6.2**
Area	Urban	88.5	58.4	30.5	11.3	3.4	0.9	0.2	2.2	2.8	3.5	4.4	5.3	6.2
	Rural	98.7	91.1	76.4	51.9	26.8	9.2	1.9	3.6	3.8	4.2	4.7	5.4	6.2
Asset index	Wealthiest 20% - urban	80.8	40.3	13.6	3.3	0.5	0.0	0.0	1.7	2.4	3.3	4.2	5.0	
	Wealthiest 20% - rural	92.3	64.9	35.1	14.4	4.3	1.8	0.5	2.3	2.9	3.6	4.5	5.5	6.3
	Poorest 20% - urban	94.1	77.9	51.7	25.7	10.3	3.4	0.9	2.8	3.2	3.8	4.6	5.4	6.3
	Poorest 20% - rural	99.9	97.6	89.1	68.4	41.1	15.7	3.7	4.2	4.2	4.5	4.9	5.5	6.2
Monetary poverty	Poor	99.0	92.9	80.5	56.1	29.1	10.3	2.0	3.7	3.9	4.2	4.7	5.4	6.2
	Non-poor	93.7	74.9	53.7	31.9	15.3	5.1	1.0	2.9	3.4	4.0	4.7	5.4	6.2
	Ultra poor	99.5	95.6	84.6	63.0	34.1	12.0	1.7	3.9	4.1	4.3	4.8	5.4	6.1
	Not ultra poor	95.1	79.4	60.4	37.0	17.9	6.1	1.4	3.1	3.6	4.0	4.7	5.4	6.2
Orphanhood	Orphan	96.6	85.0	65.7	39.2	18.8	6.5	1.6	3.2	3.6	4.0	4.7	5.4	6.3
	Non-orphan	96.1	82.8	64.9	41.9	21.0	7.1	1.5	3.3	3.7	4.1	4.7	5.4	6.2
Gender hld head	Female	92.1	72.6	54.4	36.8	19.1	6.5	1.3	3.1	3.6	4.2	4.7	5.4	6.2
	Male	96.4	83.5	65.6	42.1	21.1	7.1	1.5	3.3	3.7	4.1	4.7	5.4	6.2
Parent's employment sector	independent	91.9	68.4	42.0	21.5	9.9	3.2	0.8	2.6	3.1	3.8	4.7	5.4	6.2
	agricultural sector	99.5	94.0	81.9	56.6	28.9	10.0	1.9	3.8	3.9	4.2	4.7	5.4	6.2
	employed	88.0	59.5	33.1	14.6	5.2	1.5	0.2	2.3	2.9	3.7	4.5	5.3	6.1
	unemployed	90.2	61.2	39.7	26.1	16.3	6.3	1.7	2.7	3.5	4.3	4.9	5.5	6.3
Mother's education	No education	97.6	87.5	70.8	47.0	24.1	8.4	1.8	3.5	3.7	4.2	4.7	5.4	6.2
	Primary	93.2	73.3	52.5	28.5	11.7	3.1	0.6	2.8	3.3	3.8	4.5	5.3	6.2
	Secondary/higher	85.3	48.8	21.7	7.3	1.9	0.2	0.2	1.9	2.6	3.4	4.3	5.2	7.0
Father's education	No education	97.8	88.5	72.3	48.1	24.5	8.4	1.7	3.5	3.8	4.1	4.7	5.4	6.2
	Primary	95.7	80.3	60.0	35.9	15.4	4.9	1.1	3.1	3.5	4.0	4.6	5.4	6.2
	Secondary/higher	86.8	53.9	28.1	13.0	4.1	0.6	0.0	2.2	2.9	3.6	4.4	5.2	6.0
	Father not in hld	95.9	81.6	63.3	40.0	21.4	7.6	1.7	3.3	3.6	4.1	4.8	5.4	6.2
Region	Bamako	84.7	50.3	21.4	6.3	1.6	0.1	0.0	1.9	2.6	3.4	4.3	5.1	6.0
	Kidal	99.3	92.8	84.2	74.1	60.5	34.6	7.1	4.6	4.8	5.1	5.4	5.7	6.2
	Gao	97.6	87.6	71.7	46.3	20.8	5.9	0.9	3.4	3.7	4.0	4.6	5.3	6.2
	Tombouctou	99.2	96.6	89.7	72.2	46.9	21.6	5.8	4.4	4.5	4.6	5.0	5.6	6.3
	Mopti	99.2	93.9	82.9	61.9	36.0	14.4	3.8	4.0	4.1	4.4	4.9	5.5	6.3
	Ségou	98.1	88.8	72.4	48.3	26.3	9.4	1.9	3.5	3.8	4.2	4.8	5.4	6.2
	Sikasso	97.6	87.7	71.0	43.9	17.6	4.9	0.7	3.3	3.6	4.0	4.5	5.3	6.2
	Koulikoro	96.4	81.5	61.4	39.5	19.0	5.6	0.8	3.2	3.6	4.1	4.6	5.3	6.2
	Kayes	98.1	86.4	66.8	35.7	15.0	3.3	0.5	3.1	3.4	3.8	4.5	5.3	6.2

Source: MICS 2009-10

Appendix 6.3 – Monetary poverty and multidimensional deprivation overlap – 24-59 months

		Poor and deprived	Poor, not deprived	Not poor, deprived	Not poor, nor deprived
	National	**26.1**	**20.0**	**18.0**	**36.0**
Area	Urban	5.7	16.4	6.8	71.1
	Rural	31.8	21.0	21.1	26.0
Asset index	Wealthiest 20% - urban	0.3	9.3	2.2	88.2
	Wealthiest 20% - rural	6.3	18.8	8.4	66.4
	Poorest 20% - urban	14.7	20.3	12.8	52.1
	Poorest 20% - rural	41.9	15.6	26.5	16.1
Orphanhood	orphan	22.9	21.9	20.4	34.9
	non-orphan	26.2	19.9	17.9	36.0
Gender household head	Female	18.0	17.1	20.5	44.5
	Male	26.5	20.2	17.8	35.5
Parent's employment sector	independent	9.6	14.6	13.0	62.8
	agricultural sector	35.3	23.3	21.3	20.0
	employed	4.8	11.9	10.8	72.6
	unemployed	18.2	16.5	9.9	55.4
Mother's education	No education	29.2	20.4	19.7	30.7
	Primary	17.1	20.3	14.8	47.8
	Secondary/higher	4.0	14.1	2.3	79.7
Father's education	No education	29.7	21.1	19.8	29.4
	Primary	24.2	18.9	15.3	41.7
	Secondary/higher	8.1	12.9	6.1	72.9
	Father not in hld	24.5	20.5	19.1	35.9
Region	Bamako	0.9	8.7	5.3	85.1
	Kidal	16.2	0.5	56.7	26.6
	Gao	15.3	11.9	34.0	38.8
	Tombouctou	28.0	4.9	46.8	20.2
	Mopti	36.7	13.9	26.3	23.2
	Ségou	29.5	18.6	20.2	31.8
	Sikasso	44.5	41.5	2.2	11.8
	Koulikoro	24.0	21.6	16.6	37.8
	Kayes	11.1	15.0	23.9	50.0

Source: MICS-ELIM 2009-10

Appendix 7.1 – Deprivation level by dimension and profiling characteristics – 5-14 years

		Education	Child labour	Information	Water	Sanitation	Housing
	National	**39.7**	**32.7**	**14.9**	**35.5**	**66.6**	**49.9**
Area	Urban	24.6	20.4	10.2	10.3	28.2	28.9
	Rural	44.6	36.6	16.4	43.6	79.1	56.7
Gender	Male	37.9	30.1				
	Female	41.5	35.2				
Asset index	Wealthiest 20% - urban	19.7	13.2	0.0	1.0	8.1	19.2
	Wealthiest 20% - rural	31.8	26.4	7.5	21.9	44.0	24.9
	Poorest 20% - urban	35.9	25.7	33.1	19.7	50.7	45.0
	Poorest 20% - rural	54.5	41.6	36.2	52.5	88.8	73.4
Monetary poverty	Poor	45.1	35.2	16.0	43.8	81.3	59.5
	Non-poor	35.5	31.2	14.8	27.0	54.1	43.1
	Ultra poor	46.7	35.8	16.3	46.3	87.3	62.1
	Not ultra poor	37.8	32.3	15.1	31.1	60.3	47.1
Orphanhood	Orphan	48.0	32.6	16.8	36.0	65.7	47.6
	Non-orphan	38.8	32.7	14.8	35.5	66.8	50.2
Gender household head	Female	37.4	29.9	34.6	27.5	56.3	45.6
	Male	39.8	32.8	13.6	36.0	67.3	50.2
Parent's employment sector	independent	31.6	27.3	14.9	21.3	40.7	34.4
	agricultural sector	46.8	37.2	16.6	44.3	83.4	61.3
	employed	21.6	23.9	9.0	12.6	29.3	28.2
	unemployed	29.9	25.9	15.9	21.5	49.5	35.9
Mother's education	No education	43.0	34.5	16.2	38.9	72.0	53.9
	Primary	26.7	26.8	10.3	23.7	51.6	36.6
	Secondary/higher	16.5	17.2	4.3	9.1	19.2	18.5
Father's education	No education	43.8	35.6	15.7	40.9	74.7	55.7
	Primary	28.9	28.6	12.4	31.4	62.1	49.4
	Secondary/higher	11.8	20.1	4.4	16.8	33.8	24.3
	Father not in hld	43.0	31.5	17.2	30.9	60.9	45.5
Region	Bamako	19.9	18.3	9.4	5.6	16.1	24.5
	Kidal	46.6	34.2	63.0	66.1	79.2	70.5
	Gao	34.3	56.3	19.3	30.7	71.9	68.3
	Tombouctou	51.6	40.1	24.4	35.8	77.8	77.6
	Mopti	47.8	39.3	25.7	50.2	72.6	70.9
	Ségou	45.4	32.3	14.6	37.7	68.3	63.1
	Sikasso	38.7	31.7	9.3	39.3	79.2	40.6
	Koulikoro	37.4	29.8	10.4	41.3	73.8	44.2
	Kayes	43.9	35.7	17.8	31.1	71.1	41.6

Appendix 7.2 – Multidimensional deprivation indices, by profiling characteristics – 5-14 years

		Deprivation headcount						Average no. of deprivations among the deprived				
		K=1	K=2	K=3	K=4	K=5	K=6	K=1	K=2	K=3	K=4	K=5
	National	88.4	71.0	47.4	23.3	7.2	1.0	2.7	3.1	3.7	4.4	5.1
Area	Urban	66.6	35.1	14.7	4.7	0.8	0.1	1.8	2.6	3.4	4.2	5.1
	Rural	95.4	82.7	58.0	29.4	9.3	1.3	2.9	3.2	3.7	4.4	5.1
Asset index	Wealthiest 20% - urban	44.9	13.9	1.7	0.0	0.0	0.0	1.4	2.1	3.0	4.0	
	Wealthiest 20% - rural	77.7	46.5	21.6	7.7	2.2	0.1	2.0	2.7	3.5	4.3	5.1
	Poorest 20% - urban	88.5	65.4	36.8	15.0	3.2	0.5	2.4	2.9	3.5	4.3	5.2
	Poorest 20% - rural	99.6	96.0	79.4	48.2	19.3	3.5	3.5	3.6	3.9	4.5	5.2
Monetary poverty	Poor	95.6	83.5	59.5	30.6	9.4	1.2	2.9	3.2	3.7	4.3	5.1
	Non-poor	82.8	60.6	37.6	17.8	5.3	0.7	2.5	3.0	3.6	4.3	5.1
	Ultra poor	97.7	86.7	64.0	33.5	10.5	1.2	3.0	3.3	3.7	4.4	5.1
	Not ultra poor	86.0	66.4	42.7	20.7	6.2	0.9	2.6	3.1	3.7	4.3	5.1
Orphanhood	Orphan	88.0	71.5	49.6	26.3	8.9	1.2	2.8	3.2	3.7	4.4	5.1
	Non-orphan	88.4	71.0	47.2	23.1	7.1	1.0	2.7	3.1	3.7	4.4	5.1
Gender hld head	Female	83.2	65.0	45.7	25.6	9.2	1.9	2.8	3.3	3.8	4.4	5.2
	Male	88.7	71.4	47.5	23.2	7.1	0.9	2.7	3.1	3.7	4.4	5.1
Parent's employment sector	independent	77.2	49.6	27.0	11.8	3.3	0.3	2.2	2.9	3.6	4.3	5.1
	agricultural sector	97.6	86.5	61.8	31.7	9.8	1.3	3.0	3.2	3.7	4.4	5.1
	employed	67.0	36.0	15.4	4.8	0.7	0.0	1.9	2.6	3.4	4.1	5.1
	unemployed	75.2	49.6	30.7	16.4	5.3	0.9	2.4	3.1	3.7	4.4	5.2
Mother's education	No education	92.4	77.0	52.6	26.2	8.3	1.2	2.8	3.2	3.7	4.4	5.1
	Primary	77.4	52.2	29.9	12.7	2.5	0.2	2.3	2.9	3.5	4.2	5.1
	Secondary/higher	52.5	22.5	6.8	2.0	0.5	0.0	1.6	2.4	3.4	4.2	5.0
Father's education	No education	94.3	79.7	54.6	27.3	8.6	1.1	2.8	3.2	3.7	4.4	5.1
	Primary	84.0	63.1	40.5	18.4	5.2	0.8	2.5	3.0	3.6	4.3	5.2
	Secondary/higher	58.3	30.2	15.5	5.5	1.1	0.1	1.9	2.7	3.4	4.2	5.1
	Father not in hld	86.2	67.5	44.0	21.9	7.0	1.0	2.6	3.1	3.7	4.4	5.1
Region	Bamako	58.1	25.1	8.1	1.8	0.0	0.0	1.6	2.4	3.2	4.0	5.0
	Kidal	94.8	84.4	75.2	59.7	34.1	10.7	3.8	4.1	4.4	4.8	5.3
	Gao	94.5	82.8	60.1	31.6	9.5	2.0	3.0	3.3	3.7	4.4	5.2
	Tombouctou	97.0	88.0	67.7	37.4	14.2	2.4	3.2	3.4	3.8	4.4	5.2
	Mopti	96.9	87.7	66.4	38.3	13.9	2.3	3.2	3.4	3.8	4.4	5.2
	Ségou	91.7	78.2	54.2	27.4	8.0	1.0	2.8	3.2	3.7	4.3	5.1
	Sikasso	91.4	73.7	47.1	20.0	5.5	0.5	2.6	3.0	3.6	4.3	5.1
	Koulikoro	89.6	71.0	46.4	22.0	6.3	0.6	2.6	3.1	3.6	4.3	5.1
	Kayes	92.3	73.7	45.8	20.9	6.1	0.8	2.6	3.0	3.6	4.3	5.1

Source: MICS 2009-10

Appendix 7.3– Monetary poverty and multidimensional deprivation overlap – 5-14 years

		Poor and deprived	Poor, not deprived	Not poor, deprived	Not poor, nor deprived
	National	28.5	19.1	20.5	31.9
Area	Urban	7.1	17.3	9.0	66.6
	Rural	34.5	19.6	23.7	22.2
Asset index	Wealthiest 20% - urban	0.3	10.8	1.3	87.6
	Wealthiest 20% - rural	9.1	19.7	11.3	60.0
	Poorest 20% - urban	17.9	19.9	20.4	41.7
	Poorest 20% - rural	48.0	11.6	31.9	8.5
Orphanhood	orphan	29.3	16.7	22.0	32.0
	non-orphan	28.5	19.3	20.4	31.9
Gender household head	Female	19.0	8.8	27.6	44.6
	Male	29.2	19.8	20.0	31.1
Parent's employment sector	independent	11.5	14.0	16.6	57.8
	agricultural sector	38.3	21.8	23.6	16.3
	employed	5.2	14.1	11.1	69.6
	unemployed	17.5	14.4	15.1	53.0
Mother's education	No education	31.6	19.7	22.2	26.5
	Primary	17.1	18.9	14.5	49.4
	Secondary/higher	3.0	10.0	4.2	82.7
Father's education	No education	33.3	20.5	22.2	24.0
	Primary	24.9	20.7	18.1	36.3
	Secondary/higher	9.1	12.2	8.6	70.0
	Father not in hld	25.0	17.6	20.9	36.5
Region	Bamako	2.0	9.7	7.2	81.1
	Kidal	16.2	0.4	56.9	26.4
	Gao	20.3	8.8	41.4	29.6
	Tombouctou	27.1	6.2	41.3	25.4
	Mopti	36.0	13.7	30.5	19.8
	Ségou	31.6	18.2	23.2	27.1
	Sikasso	46.1	40.1	2.5	11.3
	Koulikoro	27.1	18.7	18.7	35.6
	Kayes	17.4	11.8	30.5	40.3

Source: MICS-ELIM 2009-10

Appendix 8.1 – Deprivation level by dimension and profiling characteristics – 15-17 years

		Education	Child labour	Information	Water	Sanitation	Housing
	National	**55.5**	**14.3**	**11.8**	**30.8**	**57.3**	**42.2**
Area	Urban	38.7	13.3	6.6	8.8	23.7	22.9
	Rural	65.0	14.8	14.8	43.3	76.4	53.1
Gender	Male	47.7	10.0				
	Female	63.9	19.0				
Asset index	Wealthiest 20% - urban	40.0	17.3	0.0	2.9	9.8	15.5
	Wealthiest 20% - rural	45.0	11.0	3.7	24.2	37.1	20.0
	Poorest 20% - urban	55.4	12.1	28.6	21.2	45.7	39.9
	Poorest 20% - rural	80.4	16.5	37.2	53.6	88.5	72.7
Monetary poverty	Poor	64.5	14.4	13.0	41.1	77.2	54.6
	Non-poor	50.4	15.4	11.7	23.6	44.3	35.6
	Ultra poor	68.2	15.9	14.3	45.2	86.3	56.2
	Not ultra poor	53.0	14.8	11.8	26.9	50.2	39.8
Orphanhood	Orphan	54.4	13.0	16.0	26.8	54.2	42.3
	Non-orphan	55.4	14.6	11.1	31.8	57.9	42.4
Migrant	Migrant	73.6	31.3	8.2	15.7	30.0	22.6
	Non-migrant	53.3	12.3	12.3	32.8	60.9	44.6
Gender household head	Female	46.0	17.5	24.1	17.8	40.9	37.5
	Male	56.3	14.0	10.7	31.9	58.7	42.6
Parent's employment sector	independent	47.5	15.1	8.7	18.1	28.2	27.1
	agricultural sector	67.7	14.6	15.6	44.4	82.2	58.7
	employed	37.2	15.6	6.1	11.3	25.1	21.6
	unemployed	42.5	16.3	13.8	15.0	43.8	31.7
Mother's education	No education	58.0	12.3	13.8	38.7	70.7	52.3
	Primary	33.8	13.1	8.1	24.2	45.9	32.1
	Secondary/higher	11.0	3.7	3.6	12.0	20.4	14.1
	Mother not in hld	59.4	17.5	10.8	24.6	47.2	34.8
Father's education	No education	60.8	12.6	13.6	40.8	72.4	52.9
	Primary	42.4	9.7	8.2	28.5	58.8	43.7
	Secondary/higher	12.3	5.3	3.3	14.3	31.3	17.6
	Father not in hld	58.2	17.3	11.8	24.9	48.1	36.3
Region	Bamako	42.7	15.9	5.7	5.7	15.3	19.4
	Kidal	64.2	15.1	58.8	63.1	73.1	63.3
	Gao	47.9	20.8	20.2	27.8	71.9	64.4
	Tombouctou	75.1	20.3	20.0	36.6	71.6	72.4
	Mopti	70.6	12.9	25.3	45.5	70.0	68.4
	Ségou	61.4	13.1	10.7	35.1	59.9	54.1
	Sikasso	53.5	13.1	8.6	35.1	73.0	35.5
	Koulikoro	48.0	14.1	9.1	39.1	67.0	37.0
	Kayes	65.4	12.3	13.4	32.6	65.5	40.8

Source: MICS 2009-10

Appendix 8.2 – Multidimensional deprivation indices, by profiling characteristics – 15-17 years

		Deprivation headcount						Average no. of deprivations among the deprived				
		K=1	K=2	K=3	K=4	K=5	K=6	K=1	K=2	K=3	K=4	K=5
	National	**84.6**	**62.5**	**39.5**	**18.9**	**4.8**	**0.5**	**2.5**	**3.0**	**3.6**	**4.3**	**5.1**
Area	Urban	66.1	32.5	11.3	2.8	0.6	0.0	1.7	2.5	3.3	4.2	5.0
	Rural	95.1	79.7	55.6	28.1	7.2	0.8	2.8	3.2	3.7	4.3	5.1
Asset index	Wealthiest 20% - urban	58.6	23.0	2.7	0.0	0.0	0.0	1.4	2.1	3.0		
	Wealthiest 20% - rural	78.9	40.7	15.5	4.3	0.7	0.0	1.8	2.5	3.3	4.2	5.0
	Poorest 20% - urban	88.5	62.4	35.3	13.0	3.0	0.0	2.3	2.8	3.5	4.2	5.0
	Poorest 20% - rural	99.8	95.4	80.6	49.2	19.8	2.9	3.5	3.6	3.9	4.5	5.1
Monetary poverty	Poor	94.5	78.8	54.9	28.5	6.5	0.7	2.8	3.2	3.7	4.3	5.1
	Non-poor	79.6	52.4	30.2	13.8	3.7	0.3	2.3	2.9	3.6	4.3	5.1
	Ultra poor	97.9	84.1	61.9	32.2	8.2	1.0	2.9	3.2	3.7	4.3	5.1
	Not ultra poor	82.5	57.6	34.7	16.5	4.0	0.4	2.4	3.0	3.6	4.3	5.1
Orphanhood	Orphan	83.5	58.9	39.0	18.6	5.4	0.4	2.5	3.1	3.6	4.3	5.1
	Non-orphan	85.1	63.4	39.7	19.0	4.8	0.6	2.5	3.0	3.6	4.3	5.1
Migrant	Migrant	88.9	56.8	24.0	8.1	2.9	0.4	2.0	2.6	3.5	4.4	5.1
	Non-migrant	84.4	63.7	41.6	20.5	5.1	0.6	2.6	3.1	3.6	4.3	5.1
Gender hld head	Female	77.2	53.1	30.9	16.5	4.8	0.4	2.4	3.0	3.7	4.3	5.1
	Male	85.3	63.4	40.3	19.1	4.8	0.5	2.5	3.0	3.6	4.3	5.1
Parent's employment sector	independent	76.3	41.2	18.3	6.6	1.1	0.0	1.9	2.6	3.4	4.2	5.0
	agricultural sector	97.3	84.9	60.5	31.1	7.6	0.9	2.9	3.2	3.7	4.3	5.1
	employed	67.7	30.8	12.7	4.4	0.5	0.0	1.7	2.6	3.4	4.1	5.0
	unemployed	72.0	46.8	24.9	13.3	5.4	0.0	2.3	2.9	3.8	4.4	5.0
Mother's education	No education	90.8	73.2	49.9	24.4	6.1	0.7	2.7	3.1	3.6	4.3	5.1
	Primary	71.4	47.8	25.1	9.8	2.4	0.1	2.2	2.8	3.5	4.3	5.0
	Secondary/higher	43.5	15.6	4.3	1.3	0.0	0.0	1.5	2.4	3.3	4.0	
	Mother not in hld	83.1	56.8	33.1	15.6	4.0	0.5	2.3	2.9	3.6	4.3	5.1
Father's education	No education	92.8	75.8	51.6	25.3	6.4	0.6	2.7	3.1	3.6	4.3	5.1
	Primary	83.4	58.9	32.8	12.3	3.1	0.4	2.3	2.8	3.5	4.3	5.1
	Secondary/higher	50.6	19.8	9.6	3.3	0.4	0.0	1.7	2.7	3.4	4.1	5.0
	Father not in hld	82.4	57.7	34.3	16.3	4.2	0.5	2.4	3.0	3.6	4.3	5.1
Region	Bamako	63.6	29.9	8.4	1.6	0.4	0.0	1.6	2.4	3.2	4.2	5.0
	Kidal	94.6	83.0	66.4	58.9	30.6	3.3	3.6	3.9	4.4	4.6	5.1
	Gao	92.6	75.2	47.1	25.8	9.9	1.6	2.7	3.1	3.8	4.4	5.2
	Tombouctou	95.5	84.8	65.0	36.6	11.1	1.9	3.1	3.4	3.8	4.4	5.2
	Mopti	95.6	84.1	62.2	36.6	11.7	1.2	3.1	3.3	3.8	4.4	5.1
	Ségou	89.0	69.2	47.6	22.0	5.2	0.6	2.6	3.1	3.6	4.3	5.1
	Sikasso	86.8	65.8	43.1	18.4	3.8	0.3	2.5	3.0	3.5	4.2	5.1
	Koulikoro	86.5	62.0	40.5	19.8	4.5	0.4	2.5	3.1	3.6	4.2	5.1
	Kayes	91.7	73.2	42.6	17.8	3.0	0.3	2.5	2.9	3.5	4.2	5.1

Source: MICS 2009-10

Appendix 8.3 – Monetary poverty and multidimensional deprivation overlap – 15-17 years

		Poor and deprived	Poor, not deprived	Not poor, deprived	Not poor, nor deprived
	National	**21.9**	**17.5**	**19.3**	**41.3**
Area	urban	4.0	16.0	7.5	72.6
	rural	30.5	18.2	24.9	26.4
Asset index	Wealthiest 20% - urban	0.3	8.1	1.8	89.9
	Wealthiest 20% - rural	4.9	14.7	7.2	73.3
	Poorest 20% - urban	13.0	20.5	24.1	42.4
	Poorest 20% - rural	40.9	10.6	39.1	9.3
Orphanhood	Orphan	21.0	15.1	20.4	43.5
	non-orphan	22.1	18.1	18.9	40.9
Migrant	Migrant	9.3	8.7	19.9	62.1
	non-migrant	23.5	18.3	19.1	39.1
Gender household head	Female	9.0	10.2	23.5	57.3
	Male	23.2	18.2	18.9	39.8
Parent's employment sector	Independent	5.9	13.8	13.5	66.9
	Agricultural sector	36.0	21.0	24.6	18.4
	Employed	2.2	13.0	10.9	73.9
	Unemployed	10.6	13.3	16.1	60.1
Mother's education	No education	28.9	20.1	21.9	29.2
	Primary	17.4	19.1	10.0	53.5
	Secondary/higher	0.0	10.1	5.1	84.9
	Mother not in hld	15.9	14.7	18.6	50.8
Father's education	No education	30.4	21.1	21.9	26.6
	Primary	20.0	22.6	16.7	40.7
	Secondary/higher	3.9	11.6	7.5	77.0
	Father not in hld	17.1	14.5	18.7	49.6
Region	Bamako	1.3	8.2	6.8	83.7
	Kidal	15.7	0.0	48.1	36.2
	Gao	17.4	13.8	33.8	35.0
	Tombouctou	22.3	4.5	44.0	29.3
	Mopti	27.5	15.8	32.3	24.4
	Ségou	25.9	14.9	22.1	37.0
	Sikasso	40.4	39.0	3.1	17.5
	Koulikoro	22.5	16.4	17.5	43.6
	Kayes	13.3	12.1	31.6	43.0

Source: MICS-ELIM 2009-10

Appendix 9.1 - Early marriage, early pregnancy and FGM by various characteristics, 15-17 years

		Early pregnancy	Early marriage	FGM
	National	14.1	28.2	89.8
Area	Urban	10.9	20.4	90.0
	Rural	16.4	33.6	89.6
Asset index	Wealthiest 20% - urban	6.6	15.2	88.9
	Wealthiest 20% - rural	9.8	20.3	93.6
	Poorest 20% - urban	15.9	31.8	87.6
	Poorest 20% - rural	15.9	39.8	88.9
Monetary poverty	Poor	15.8	27.2	91.0
	Non-poor	12.8	26.8	89.8
	Ultra poor	15.8	24.6	93.4
	Not ultra poor	13.4	27.4	89.7
Orphanhood	Orphan	12.4	22.2	88.8
	Non-orphan	13.1	27.5	89.6
Migrant	Migrant	8.6	17.8	94.7
	Non-migrant	14.5	28.8	88.6
Gender household head	Female	14.3	21.1	88.0
	Male	14.1	28.9	89.9
Parent’s employment sector	Independent	13.2	24.4	92.7
	Agricultural sector	15.8	32.4	89.0
	Employed	9.9	18.5	88.9
	Unemployed	14.0	24.6	92.5
Mother's education	No education	8.8	13.7	90.4
	Primary	6.9	14.6	86.8
	Secondary/higher	2.1	8.7	73.9
	Mother not in hld	19.3	41.1	90.7
Father's education	No education	7.8	12.4	90.7
	Primary	13.2	9.1	91.6
	Secondary/higher	3.3	14.6	80.1
	Father not in hld	18.6	38.9	90.3
Region	Bamako	9.7	22.4	94.0
	Kidal	5.4	24.0	10.1
	Gao	12.2	33.0	3.9
	Tombouctou	17.5	45.9	48.3
	Mopti	15.1	25.2	82.1
	Ségou	12.8	17.0	95.5
	Sikasso	11.7	19.3	96.5
	Koulikoro	17.5	35.3	97.3
	Kayes	22.2	50.9	98.3

Source: MICS 2009-10

Appendix 9.2 - Girls' deprivation and early marriage, early pregnancy and FGM, 15-17 years

	Early pregnancy	No pregnancy	Early marriage	No marriage	FGM	No FGM
School enrolment & attainment	74.9	60.2	77.4	56.3	63.0	52.0
Illiteracy	67.8	54.8	70.5	51.1	57.1	48.5
Child labour	28.1	17.6	24.1	17.2	19.2	18.2
Information devices	13.9	10.7	12.0	10.8	10.3	15.7
Drinking water source	29.3	22.6	29.9	21.1	23.4	22.2
Distance to source	7.6	6.0	8.2	5.5	6.2	5.4
Type of toilet	64.2	50.0	61.5	48.3	50.8	59.8
Overcrowding	14.0	12.1	9.9	13.3	11.9	14.1
Housing material	37.2	28.3	38.2	26.2	28.0	36.3

Source: MICS 2009-10

Appendix 10 – Monetary poverty and multidimensional deprivation overlap – 0-17 years

		Poor and deprived	Poor, not deprived	Not poor, deprived	Not poor, nor deprived
	National	**28.9**	**17.5**	**20.9**	**32.7**
Area	urban	6.9	16.2	9.1	67.8
	rural	35.5	17.8	24.4	22.3
Asset index	Wealthiest 20% - urban	0.4	10.0	2.5	87.1
	Wealthiest 20% - rural	9.0	17.8	11.2	62.0
	Poorest 20% - urban	17.7	18.7	19.3	44.2
	Poorest 20% - rural	47.5	11.1	32.1	9.2
Orphanhood	Orphan	27.3	16.6	21.5	34.7
	non-orphan	29.1	17.5	20.9	32.5
Gender household head	Female	18.2	10.2	26.4	45.3
	Male	29.7	17.9	20.5	31.9
Parent's employment sector	independent	11.0	13.5	16.2	59.2
	agricultural sector	39.6	19.8	24.4	16.2
	employed	5.3	12.7	12.2	69.9
	unemployed	18.0	13.5	14.8	53.7
Mother's education	No education	32.7	18.1	22.8	26.4
	Primary	19.0	17.7	16.0	47.3
	Secondary or higher	4.4	10.7	4.9	80.0
	Mother not in hld	15.9	14.7	18.6	50.8
Father's education	No education	34.0	18.6	22.9	24.4
	Primary	27.0	18.3	17.9	36.9
	Secondary or higher	9.2	11.9	8.7	70.2
	Father not in hld	24.8	16.4	21.1	37.7
Region	Bamako	1.7	8.9	7.2	82.3
	Kidal	15.6	0.4	57.4	26.6
	Gao	19.5	9.6	39.4	31.5
	Tombouctou	28.0	5.0	44.2	22.8
	Mopti	36.6	12.5	31.6	19.3
	Ségou	32.5	16.4	23.3	27.8
	Sikasso	49.0	36.6	2.8	11.5
	Koulikoro	27.2	17.3	19.3	36.2
	Kayes	16.5	11.6	31.3	40.6

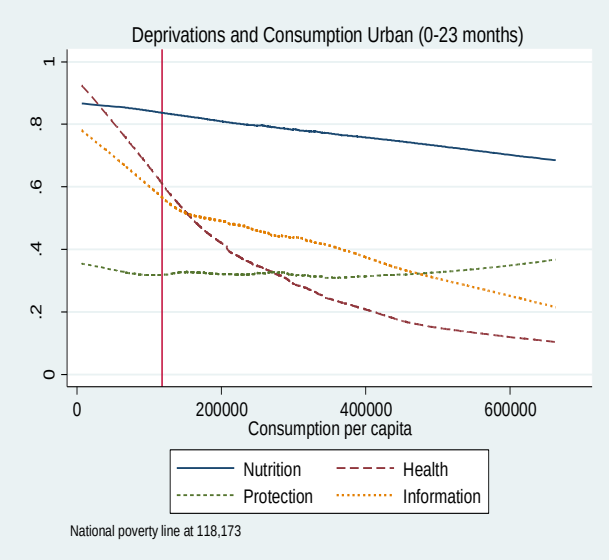
Source: MICS-ELIM 2009-10

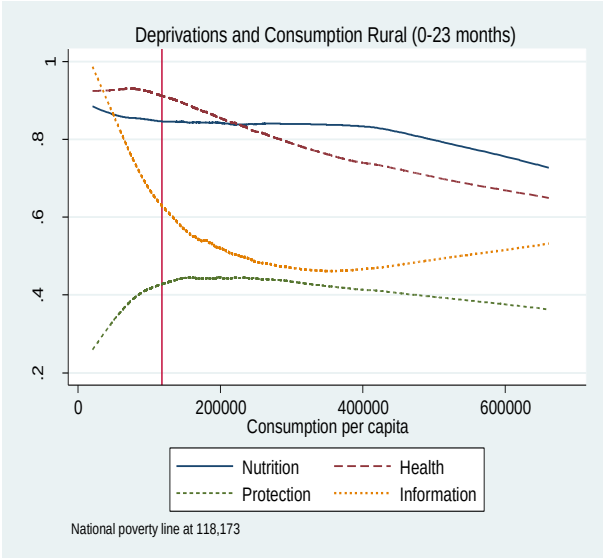
Appendix 10 – Monetary poverty and multidimensional deprivation overlap – 0-17 years

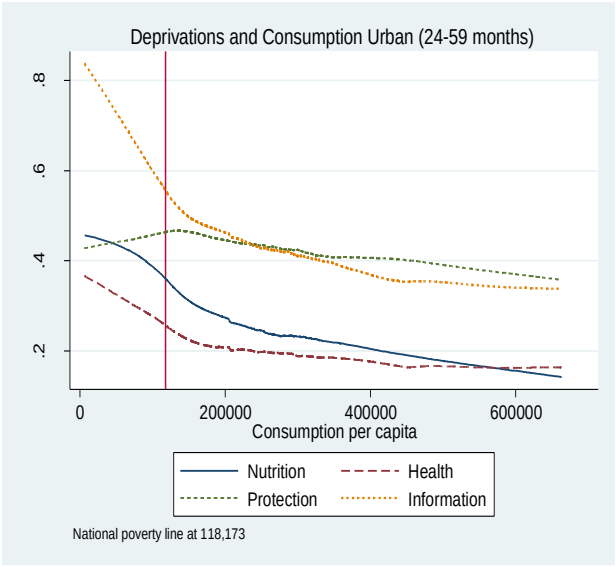
		Poor and deprived	Poor, not deprived	Not poor, deprived	Not poor, nor deprived
	National	**28.9**	**17.5**	**20.9**	**32.7**
Area	urban	6.9	16.2	9.1	67.8
	rural	35.5	17.8	24.4	22.3
Asset index	Wealthiest 20% - urban	0.4	10.0	2.5	87.1
	Wealthiest 20% - rural	9.0	17.8	11.2	62.0
	Poorest 20% - urban	17.7	18.7	19.3	44.2
	Poorest 20% - rural	47.5	11.1	32.1	9.2
Orphanhood	Orphan	27.3	16.6	21.5	34.7
	non-orphan	29.1	17.5	20.9	32.5
Gender household head	Female	18.2	10.2	26.4	45.3
	Male	29.7	17.9	20.5	31.9
Parent's employment sector	independent	11.0	13.5	16.2	59.2
	agricultural sector	39.6	19.8	24.4	16.2
	employed	5.3	12.7	12.2	69.9
	unemployed	18.0	13.5	14.8	53.7
Mother's education	No education	32.7	18.1	22.8	26.4
	Primary	19.0	17.7	16.0	47.3
	Secondary or higher	4.4	10.7	4.9	80.0
	Mother not in hld	15.9	14.7	18.6	50.8
Father's education	No education	34.0	18.6	22.9	24.4
	Primary	27.0	18.3	17.9	36.9
	Secondary or higher	9.2	11.9	8.7	70.2
	Father not in hld	24.8	16.4	21.1	37.7
Region	Bamako	1.7	8.9	7.2	82.3
	Kidal	15.6	0.4	57.4	26.6
	Gao	19.5	9.6	39.4	31.5
	Tombouctou	28.0	5.0	44.2	22.8
	Mopti	36.6	12.5	31.6	19.3
	Ségou	32.5	16.4	23.3	27.8
	Sikasso	49.0	36.6	2.8	11.5
	Koulikoro	27.2	17.3	19.3	36.2
	Kayes	16.5	11.6	31.3	40.6

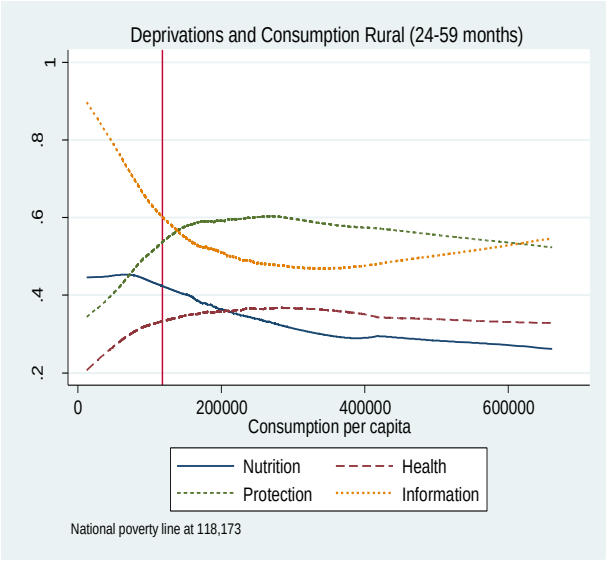
Source: MICS-ELIM 2009-10

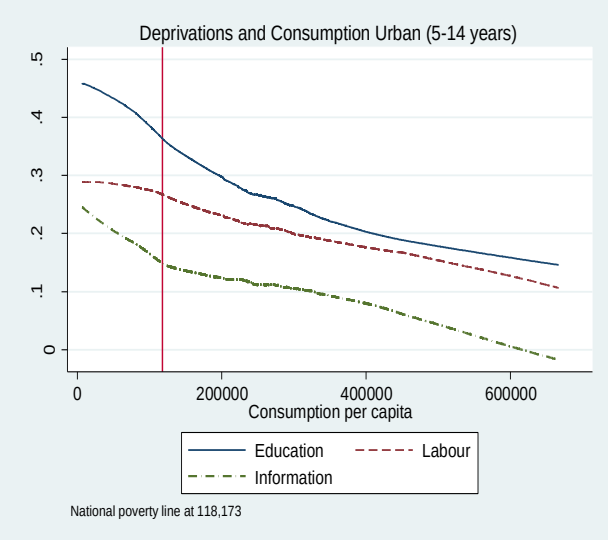
Appendix 11 – Relationship deprivations and consumption, by age group and dimension

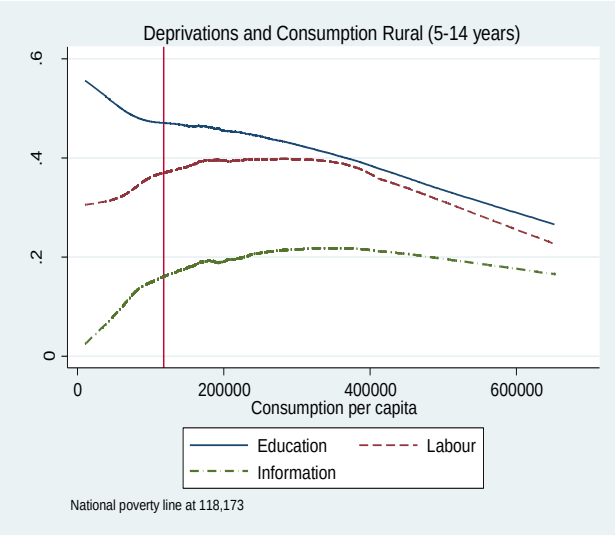


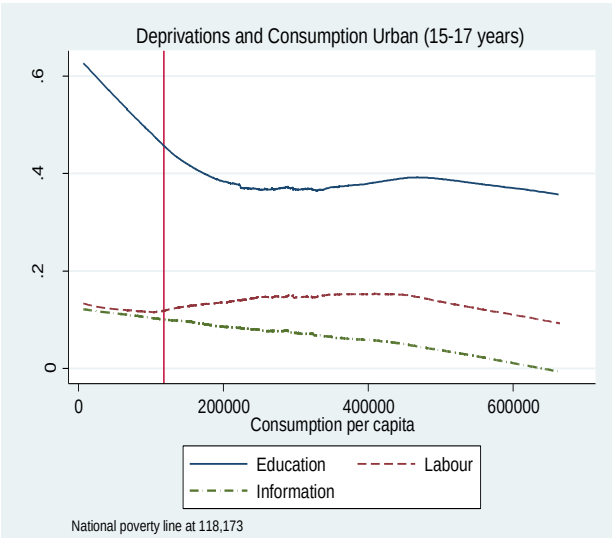


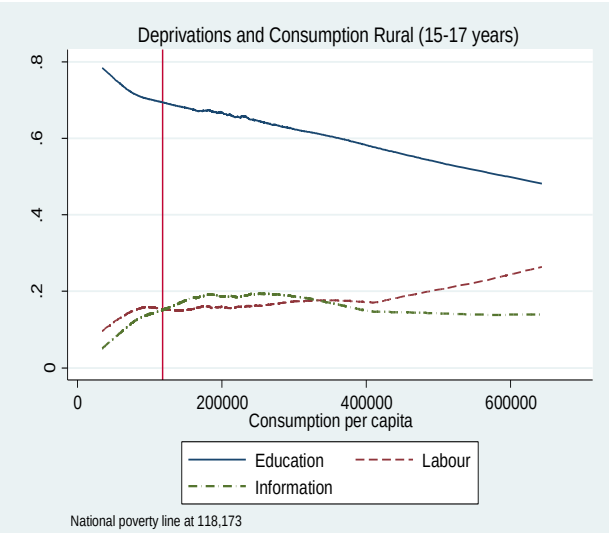


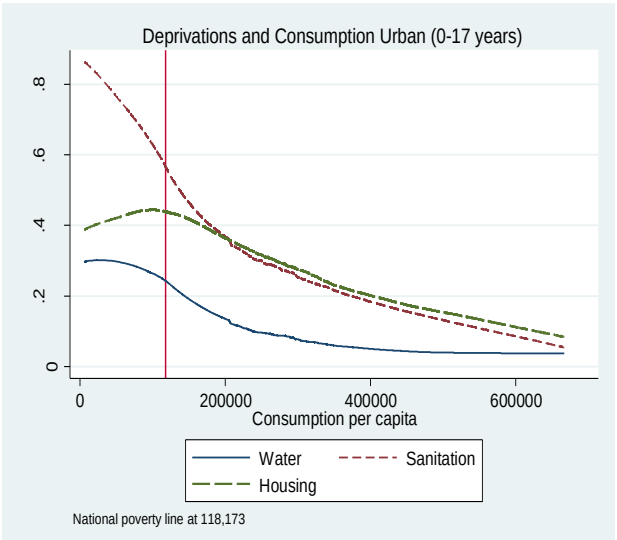


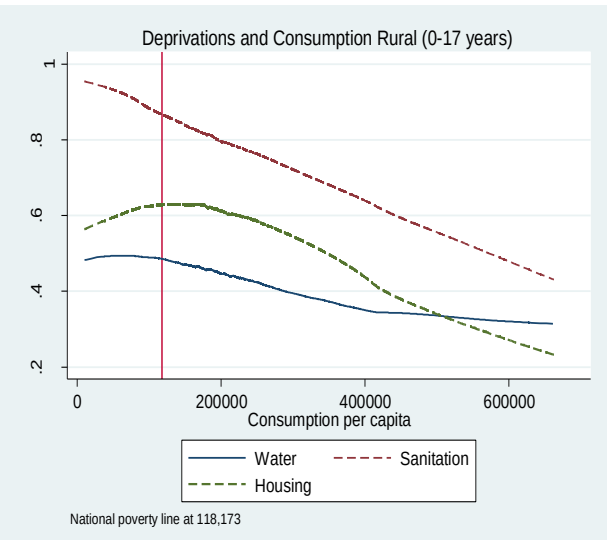












Source: MICS-ELIM 2009-10