MULTIDIMENSIONAL CHILD POVERTY IN SIERRA LEONE
Acknowledgements

The completion of the Child Poverty 2018 report would not have been achieved without the support of various institutions. Our sincere thanks go to the Consultant Aristide Kielem, who prepared the report and successfully trained members of the Child Poverty Steering Committee comprising the Ministries of Planning and Economic Development, Health, Education, Social Welfare, Gender and Children’s Affairs, Stats SL, and World Food Programme on the calculation of the child poverty estimate for Sierra Leone in the report using MICS6 data. The members of the Child Poverty Steering Committee, other Ministries and Agencies, Civil Society Organizations, the wider UN and UNICEF Section Chiefs provided feedback for improving the draft report. Financial support from UNICEF is acknowledged, and the technical contributions by the Sierra Leone Country Office Chief of Social Policy and team, and Regional UNICEF Social Policy advisors are much appreciated.
MULTIDIMENSIONAL CHILD POVERTY IN SIERRA LEONE
In 2016, Statistics Sierra Leone (Stats SL), the then Ministry of Finance and Economic Development (MOFED) and UNICEF, embarked on the preparation of Sierra Leone’s first Multidimensional Child Poverty Report. This process commenced with a regional training workshop on multidimensional poverty in Freetown, Sierra Leone, from 7 to 10 March 2016, by bringing together various institutions such as Stats SL, University of Sierra Leone (USL), MOFED, FOCUS 1000, academia, the Ministry of Health and Sanitation (MOHS), the Ministry of Social Welfare, Gender and Children’s Affairs (MSWGCA) and UNICEF (representatives from the country offices of Sierra Leone, Congo DRC and Liberia) with support provided by Gustave Nebié from the UNICEF Regional Office in Dakar, Senegal, and child poverty expert Enrique Delamonica, formerly of the UNICEF Nigeria country office.

In June 2018, the Minister of Planning and Economic Development launched the 2016 Sierra Leone Child Poverty Report at a high-level event at the Ministry of Finance (MOF). This was a major milestone for Sierra Leone, as it was the country’s first exposure to the new concept of multidimensional child poverty. A second training was organized in preparation for the second report on multidimensional child poverty in Sierra Leone using the Survey Finding Report from the six rounds of the multiple indicator cluster survey. This training was held in Makeni in September 2018.

At the end of the training a preliminary result showed that despite child poverty decreasing in Sierra Leone by 11 percentage points, a few districts showed only limited improvement compared to the 2016 report.

In March 2019, the Head of Research and Innovation at Stats SL, Mr. Sonnia-Magba Bu-Buakei Jabbi, presented the findings of the report on Multidimensional Child Poverty in Sierra Leone 2019 at the 50th Session of the UN Statistical Commission in New York. This was another major milestone for Sierra Leone as, shortly afterwards, the country was elected to serve on the United Nations Statistical Commission for a period of three years, commencing in 2020.

In 2019, the Ministry of Planning and Economic Development (MOPED), together with Stats SL, the United Nations Development Programme (UNDP), and the Oxford Policy and Human Development Initiative (OPHI), launched the ‘Sierra Leone Multidimensional Poverty Index 2019’, which established a poverty profile for Sierra Leone using the Alkire-Foster method. This Multidimensional Poverty Index (MPI) for Sierra Leone provides an alternative, yet comprehensive, measure of levels of poverty in Sierra Leone.

For consistency, we have presented the results using the old map of Sierra Leone since MICS 6, the source of the data for the analysis, did not consider Karene and Falaba Districts during the survey. The figures for Koinadugu District apply to Falaba whereas those for Karene are spread between Koinadugu and Bombali Districts. Stats SL will work on the data to ensure that future analyses will report on Falaba and Karene Districts.

I would like to thank UNICEF, the European Union, World Food Programme, World Health Organization, the Government of Sierra Leone (GoSL), and all the development partners that contributed to making MICS6, 2017, a success for Sierra Leone, as their efforts have yielded great dividends through the development of the country-level multidimensional child poverty reports. I also acknowledge the efforts and contributions of child poverty consultant Mr Aristide Kielem who provided technical guidance and support in the compilation of the report.

Professor Osman Sankoh
Statistician General
Statistics Sierra Leone (Stats SL)
The bedrock of our nation, Sierra Leone, is our children. Providing our children with a better future is the dream that all parents have. To create a better life for our young people, the first and foremost investment is that of education. It is in this light that our Government has placed education at the top of its priority list for serving the people of Sierra Leone.

Our Government, under the leadership of His Excellency, President Dr. Julius Maada Bio, committed to investing in the human capital of the people of Sierra Leone in the Medium-Term National Development Plan (MTNDP) 2019–2023, ‘Education for Development’.

The flagship programme, Free Quality School Education, removes barriers to education, so that less privileged families can afford to send their children to school. Cluster One: Human capital development of the MTNDP articulates our approach to investing in the education sector for the well-being of our children and the nation as a whole.

The Government appreciates the significant contribution of this Multidimensional Child Poverty 2019 report. Although based on 2017 data, this analytical work provides a deep understanding of child poverty dynamics in the country, which will generally inform decision-making towards the achievement of Sustainable Development Goal (SDG) 1 on ending poverty in all its forms everywhere, including child deprivation. With its commitment to meeting the SDG 2030 Global Agenda, ending child suffering will remain a central focus in the Government’s determination to make the MTNDP a success.

Underpinning this national document is credible data generated by our national statistics agency, Statistics Sierra Leone. This report utilises the 2017 Multiple Indicator Cluster Survey to describe the extent and severity of child poverty nationwide. The Government sees this report as providing a baseline from which the efforts of the MTNDP and Free Quality School Education programme can be measured in subsequent years.

Our Government is committed to fully implementing the MTNDP to deliver real change for the people of Sierra Leone. Whilst we are happy to note a drop in multidimensional child poverty in this report from 77 per cent (MICS 2010) to 66 per cent (MICS 2017), this is still unacceptably high. We therefore remain committed to working, tirelessly, in order to improve the living standards and opportunities for the young people of Sierra Leone.

The extensive contributions of UNICEF, Statistics Sierra Leone and other ministries, departments and agencies are greatly appreciated. To all other stakeholders, development partners, UN agencies, academia, the private sector, local communities and civil society, we extend our thanks for additional support to this national report.

Amb. Dr. Francis M. Kai-Kai
Minister of Planning and Economic Development
# Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPI</td>
<td>Computer Assisted Personal Interviewing</td>
</tr>
<tr>
<td>CRC</td>
<td>Convention on the Rights of the Child</td>
</tr>
<tr>
<td>DHS</td>
<td>Demographic and Health Survey</td>
</tr>
<tr>
<td>ECD</td>
<td>Early Child Development</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GoSL</td>
<td>Government of Sierra Leone</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MICS4</td>
<td>Multiple Indicator Cluster Survey Round 4</td>
</tr>
<tr>
<td>MICS6</td>
<td>Multiple Indicator Cluster Survey Round 6</td>
</tr>
<tr>
<td>MOF</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>MOFED</td>
<td>Ministry of Finance and Economic Development</td>
</tr>
<tr>
<td>MOHS</td>
<td>Ministry of Health and Sanitation</td>
</tr>
<tr>
<td>MOPED</td>
<td>Ministry of Planning and Economic Development</td>
</tr>
<tr>
<td>MPI</td>
<td>Multidimensional Poverty Index</td>
</tr>
<tr>
<td>MSWGCA</td>
<td>Ministry of Social Welfare, Gender and Children's Affairs</td>
</tr>
<tr>
<td>MTNDP</td>
<td>Medium-Term National Development Plan</td>
</tr>
<tr>
<td>OBI</td>
<td>Open Budget Index</td>
</tr>
<tr>
<td>OPHI</td>
<td>Oxford Policy and Human Development Initiative</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing Power Parity</td>
</tr>
<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>STATS SL</td>
<td>Statistics Sierra Leone</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children's' Fund</td>
</tr>
<tr>
<td>USL</td>
<td>University of Sierra Leone</td>
</tr>
<tr>
<td>WASH</td>
<td>Water, Sanitation and Hygiene</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Programme</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
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EXECUTIVE SUMMARY

In 2017, with the support of UNICEF and other partners, the Government of Sierra Leone, was the first worldwide to launch the sixth round of the multiple indicators cluster surveys (MICS6). In addition to providing information for a large number of indicators, including for the SDGs, this survey was designed to analyze child poverty and guide policies and programmes.

Seven dimensions were retained to define child poverty. The Sierra Leone definition of child poverty remains in line with the international definitions as well as with that used for the 2010 child poverty profile. Hence, a child is defined as poor if they are deprived in one or more of the following dimensions: health, nutrition, water, sanitation, education, shelter or information. MICS6 data was used to estimate child poverty and disaggregate it to better understand its extent and drivers. When possible, the trend with the estimates from MICS4–2010 have been presented.

Table 1: Child poverty trends by geographical area

<table>
<thead>
<tr>
<th>Geographical area</th>
<th>2010 (MICS4)</th>
<th>2017 (MICS6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Urban</td>
<td>46</td>
<td>32</td>
</tr>
<tr>
<td>Western Rural</td>
<td>52</td>
<td>45</td>
</tr>
<tr>
<td>Bo</td>
<td>76</td>
<td>61</td>
</tr>
<tr>
<td>Bombali</td>
<td>71</td>
<td>63</td>
</tr>
<tr>
<td>Kenema</td>
<td>77</td>
<td>64</td>
</tr>
<tr>
<td>Kono</td>
<td>80</td>
<td>73</td>
</tr>
<tr>
<td>Port Loko</td>
<td>84</td>
<td>77</td>
</tr>
<tr>
<td>Kailahun</td>
<td>78</td>
<td>78</td>
</tr>
<tr>
<td>Kambia</td>
<td>87</td>
<td>79</td>
</tr>
<tr>
<td>Tonkolili</td>
<td>87</td>
<td>82</td>
</tr>
<tr>
<td>Bonthe</td>
<td>91</td>
<td>83</td>
</tr>
<tr>
<td>Moyamba</td>
<td>88</td>
<td>84</td>
</tr>
<tr>
<td>Pujehun</td>
<td>93</td>
<td>85</td>
</tr>
<tr>
<td>Koinadugu</td>
<td>87</td>
<td>85</td>
</tr>
<tr>
<td>National</td>
<td>77</td>
<td>66</td>
</tr>
</tbody>
</table>

Results show that child poverty headcount ratio, depth and severity declined. Hence, the proportion of children who are poor dropped significantly from 77 per cent to 66 per cent between 2010 and 2017. All districts experienced a decline in the proportion of children deprived in one dimension with the exception of Kailahun in which there was no significant change. In addition, there seems to be a poverty belt stretching from Koinadugu to Pujehun, through Tonkolili, Moyamba and Bonthe. Shelter is the dimension in which children are the most deprived, while deprivation in the nutrition dimension is the lowest. Deprivations tend to overlap, meaning that policies to reduce child poverty must be systemic.
At district level, Pujehun and Moyamba have the highest deprivation rates in six out of seven child poverty dimensions. These districts necessitate systemic and integrated interventions that will target all child poverty dimensions. We note that the two districts of the Western area have deprivation rates that are the lowest in Sierra Leone for almost all dimensions.

To better understand the drivers of child poverty, the socioeconomics situation of the children and their families has been analyzed. The findings show that, counterintuitively, boys (67.0 per cent) are more deprived than girls (64.9 per cent). However, poverty has significantly declined for both girls and boys from 2010 to 2017. In addition, children living in a household headed by a man are more likely to be multidimensionally poor (66.3 per cent) than those living in women-headed households (65.4 per cent). However, counterintuitively, living with parents tends to have a negative impact on child poverty.

Analysis also provides evidence that the number of children in the household is not necessarily the main determinant of child poverty. However, it clearly appears that mother’s education is one of the main determinant socioeconomic indicators for child poverty and should therefore be targeted by policies and programmes.

Though multidimensional child poverty has declined by 11 percentage points between 2010 and 2017 some districts have shown a minimum to no decline, for instance Koinadugu and Pujehun respectively. Therefore, policies and programmes need to be deliberate in addressing inequalities in service provisions that affect children in different districts. Poverty rates are not equal to poverty headcount ratios. A holistic approach is required to reduce child poverty. Interventions, policies and programmes should, therefore, be focused on enhancing equitable access to social services, child-friendly budgets and plans, safe environment and spaces, social justice and social protection, all of which play a critical role in ensuring that every child everywhere has an equitable chance to live and that no child is left behind.
Introduction

In September 2015, the international community committed to make the world a better place by adopting the Sustainable Development Goals (SDGs). As with the former Millennium Development Goals (MDGs), the first objective of the SDGs aims at eradicating extreme poverty. However, the SDGs introduce the objective of halving the number of men, women and boys and girls living in poverty in all its dimensions. This highlights the complementarity between monetary and multidimensional poverty and calls for breaking down poverty figures in order to assess how this issue affects different groups, including children, and gender.

In the growing literature on poverty, the phenomenon is seen as multidimensional and in need of more holistic approaches to design, implement and monitor effective policies, programmes and plans. In fact, it has become obvious that children experience poverty differently from adults, and approaching and tackling poverty in all its aspects (monetary and multidimensional) is essential to improve children’s well-being and to break the intergenerational cycle of poverty.

The definition of child poverty therefore needs to be coherent with global approaches as well as being country-specific enough to reflect the levels and nature of deprivations experienced by children in Sierra Leone. For multidimensional child poverty analysis to effectively provide information on the situation of children, and influence social policies, it has to be measured consistently and frequently.
1.1 Conceptual definitions of child poverty

Different approaches to child poverty have been developed. Referring to the SDGs, two major approaches emerge:

**SDG 1.1.:** By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than USD 1.25 a day.

**SDG 1.2.:** By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.

Monetary approach to poverty has been the most prevalent approach for decades using international comparison standards (USD 1.25 a day or national poverty lines) based on the World Bank a dollar a day measure. This definition is useful for international comparisons but bears many limitations that have been documented in the literature. National poverty lines are also used to measure money-metric poverty, usually at household level.

The multidimensional poverty approach on the other hand is related to meeting material needs in the human rights declaration, and considers poverty more holistically.

The way poverty is conceived and measured is important for framing policies to overcome it. Nevertheless, there is a consensus that poverty results from social and economic processes in which people are deprived of the assets and opportunities to which all human beings are entitled. Poverty is also strongly associated with social exclusion and inequality, which contribute to a lack of justice and equity in the distribution of resources (UNICEF, 2010).

1.2 Money-metric poverty approach to child poverty

Although poverty definition and standards vary, one of the best-known elements of this concept is the low income of individuals or households, which undermines the ability to fulfill the basic needs of life including shelter, food and clothing, in addition to other health and educational needs.

The World Bank defined, a decade ago, a USD 1.25\(^1\) a day measure (in Purchase Power Parity\(^2\)) intended to facilitate cross-country comparisons. Despite the many limitations of this approach, including its disconnection with many country contexts, it has been used in various forums and has been included in the SDGs, as it remains the most relevant internationally comparable definition of monetary poverty.

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1 In 2008, the USD 1.25 line was defined as the simple average of the national poverty lines for fifteen very poor countries. It was then updated by taking the same exact lines (expressed in local currency units at 2005 prices) and inflating them to 2011 using each country’s own consumer price index. The lines were then converted into US dollars using the 2011 PPPs and averaged as before. This produced a new international poverty line of USD 1.90, adopted in October 2015 (Jolliffe and Prydz, 2016).

2 The Purchase Power Parity (PPP) is the rate at which the currency of one country would have to be converted into that of another country to buy the same amount of goods and services in each country.
The general concept of monetary poverty, absolute poverty, refers to individuals’ inability to generate sufficient income to fulfil their basic needs. Hence, a person is defined as being poor if his or her expenditures (or income) level is lower than the minimum value of a specific basic needs basket (food and non-food items): the poverty line. Relative poverty is defined in relation to the income distribution in the country, the poverty line being a percentage of the median (or average) income.

Monetary child poverty then usually refers to children living in households that are below the poverty line. However, it is recognized that this definition bears some limitations. In fact, despite household expenditure levels being instrumental in fulfilling children’s needs, money does not constitute the only and most crucial factor in children’s lives. Intra-household allocation of resources, as well as supply and demand side shortfalls in social services can play a determinant role in how children experience poverty. The monetary approach to poverty then needs to be analyzed together with a more holistic multidimensional child poverty approach.

1.3 Multidimensional poverty

The multidimensional (rights-based) approach to poverty measurement has emerged to address the limitations of a money-metric approach and the need to capture poverty more holistically.

Children experience poverty and well-being differently from adults. The long-term impacts of poverty experienced during childhood are well documented and proven to be mostly irreversible on cognitive capacities (Alderman, Hoddinott and Kinsey, 2006), chronic health situation at adult age (Daniels, 2006), and other long-term deprivations that jeopardize the future of the child.

For Amartya Sen (Sen, 1987) poverty can be approached as a deprivation of capabilities, a lack of multiple freedoms that people value and have reasons to value. This definition has guided the work on multidimensional poverty which focuses on the realization and fulfillment of basic rights and needs.

The Convention on the Rights of the Child (CRC) states that every child is entitled to live a life of dignity with an equal chance of rising through the life-course and making the best of life chances. For UNICEF, ‘Child poverty is manifested in the deprivation of children from their rights to survive, develop, and thrive’ (UNICEF 2004). The non-fulfillment of specific child rights increases the likelihoods that they will remain deprived and poor through the course of their lives.

The global report on Child Poverty in the Developing World (Gordon, 2003) is the first accurate and reliable measure of the extent and severity of child poverty in the developing world, using internationally agreed definitions of poverty that focus on children as distinct individuals. Child poverty is then defined as the deprivation in 1 out of 7 dimensions related to specific rights violations.

A child is considered poor if s/he is deprived of at least one of the following rights which constitute poverty: shelter, education, information, water, sanitation, health and nutrition.

This definition highlights two important concepts:

- There are rights that, if denied, constitute poverty: this means that not all rights can be directly linked with material deprivations, and not all violations of rights constitute child poverty.
- Children experience poverty differently from adults: while employment and income are indications of adults’ well-being, children are dependent on others for the fulfilment of their rights, do not control income, and are affected by intra-household priorities as well as the availability of services.

1.4 Operational definition of child poverty in Sierra Leone

During a national consultation process, building on the global approach to child poverty Sierra Leone has agreed on a context-specific definition of child poverty. This definition has been used to estimate child poverty using data from the fourth round of the Multiple Indicator Cluster Survey (MICS), 2010. The same definition has been maintained for the current estimates that MICS6 (2017) data uses, thus providing a consistent child poverty trend.

The table below summarizes the dimensions, indicators, thresholds and age groups that have been used to define child poverty in 2010 and 2017. Seven dimensions comprising 12 indicators have been retained to define multidimensional child poverty in Sierra Leone.

<table>
<thead>
<tr>
<th>#</th>
<th>Dimensions</th>
<th>Indicators</th>
<th>Deprivation definition (cut-off points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nutrition</td>
<td>Severe underweight</td>
<td>Deprived if less than minus three standard deviations from median weight for age of reference population</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Severe stunting</td>
<td>Deprived if less than minus three standard deviations from median height for age of reference population</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Severe wasting</td>
<td>Deprived if less than minus three standard deviations from median weight for height of reference population</td>
</tr>
<tr>
<td>4</td>
<td>Water</td>
<td>Access to improved water source</td>
<td>Deprived if household’s main source of drinking water is surface water</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Distance to water source</td>
<td>Deprived if round trip to main drinking water source is more than 30 minutes</td>
</tr>
<tr>
<td>6</td>
<td>Sanitation</td>
<td>Access to improved sanitation</td>
<td>Deprived if children have no access to any sanitation facilities whatsoever in or near their homes</td>
</tr>
<tr>
<td>7</td>
<td>Health</td>
<td>Immunization</td>
<td>Deprived if child older than 1 year and has not received the complete basic vaccinations (MMR, BCG, 3 times polio and 3 times pentavalent)</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Diarrhoea treatment</td>
<td>Deprived if the child had diarrhoea and fever in the two weeks prior to the survey, for which no medical advice nor treatment was received</td>
</tr>
<tr>
<td>9</td>
<td>Shelter</td>
<td>Overcrowding</td>
<td>Deprived if more than five people per sleeping room</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Floor material</td>
<td>Deprived if floor is made of natural material, which is not considered permanent (sand or mud)</td>
</tr>
<tr>
<td>11</td>
<td>Education</td>
<td>Compulsory school attendance</td>
<td>Deprived if child is aged between 7 and 18 (official school age) and has received no pre-primary, primary or secondary education</td>
</tr>
<tr>
<td>12</td>
<td>Information</td>
<td>Availability of information</td>
<td>Deprived if household has not reported possessing any of the following: radio, television, non-mobile phone or mobile phone</td>
</tr>
</tbody>
</table>

Note: The definitions of dimensions, indicators and thresholds were guided by the context-specific situation of child deprivation in Sierra Leone. The relevance of the international indicators and thresholds in the Sierra Leonean context was therefore considered.
This section reflects on the incidence of multidimensional child poverty in Sierra Leone. It also looks at the distribution of poverty according to the socioeconomic status of the children and their households.

2.1 Data

Multidimensional child poverty can be estimated using different data sources. However, because the number of deprivations experienced by each child must be counted, the same data source should be used, meaning that all the indicators of interest must be available for all individual children in the dataset.

The most-used datasets for multidimensional child poverty estimates in developing countries are the Demographic and Health Surveys (DHS) and the Multiple Indicators Cluster Surveys (MICS). Both surveys provide sufficient information to estimate multidimensional child poverty in a consistent and comparable manner, despite minor differences in the methodologies.

In Sierra Leone, multidimensional child poverty has been estimated using the MICS6 data. MICS is funded by UNICEF and implemented by the Government (Statistics Sierra Leone) using a standardized worldwide comparable methodology. Sierra Leone has been the first country to implement MICS6 worldwide, hence providing updated information to analyze child poverty trends. Globally, this report is also the first child poverty analysis using MICS6 data.

For Amartya Sen (1976), measuring poverty involves identification (defining who is poor), and construction of an index (how characteristics can be combined to give an aggregate measure of poverty).
2.2 Result of the estimates

Unless specified otherwise, this report will refer to a poor child if s/he is deprived in at least one of the seven dimensions that constitute poverty. Hence, the results reported below refer to the incidence of child poverty, in other words, the percentage of children who fall below any one of the thresholds defined for the following dimensions: nutrition, water, sanitation, health, shelter, education and information.

The results of the child poverty estimates show that 66 per cent of the children living in Sierra Leone experience at least one deprivation and are therefore multidimensionally poor.

Regional disparities exist in Sierra Leone. Hence, more than 8 children out of 10 are poor in Koinadugu, Pujehun, Moyamba, Bonthe and Tonkolili. However, the Western area/rural (45 per cent) and the Western area/urban (32 per cent) are the districts where child poverty is the lowest. There seems to be a poverty belt that splits the country into two with more districts in the south and north relatively more deprived than the districts in the west and east. This poverty belt goes from Koinadugu in the North to Bonthe and Pujehun in the South, through Moyamba and Tonkolili.

Figure 1: Child poverty incidence by district (Sierra Leone, MICS6 – 2017)
The child poverty trend analysis in Sierra Leone shows that poverty has significantly declined in all districts except in Kailahun where it has slightly but not significantly increased and in Koinadugu where the decrease is not statistically significant.

With a decline of 15 and 14 percentage points respectively, Bo and the Western Urban area are the districts where children's deprivation situation has improved the most.

Figure 2: Multidimensional child poverty trends 2010–2017 (with confidence intervals)

The analysis of child poverty at regional level shows that its incidence has declined in all regions. The North becomes the region with the highest child poverty headcount ratio despite a decline from 82 per cent to 76 per cent from 2010 to 2017. The South, which recorded the highest child poverty incidence, in 2010 comes second with a decline from 85 per cent to 74 per cent in its child poverty incidence. The West remains, by far, the least deprived region with a child poverty incidence of 36 per cent (down from 47 per cent), while the East, the third most deprived region recorded a decline from 78 per cent to 71 per cent.
Children living in rural areas are far more affected by child poverty than those living in urban areas. However, the urban/rural trend analysis shows that the decline in child poverty from 2010 to 2017 is induced by improvements in urban areas. In fact, the proportion of poor children significantly declined by about 24 percentage points (from 61 per cent to 37 per cent) in urban areas between 2010 and 2017, while child poverty slightly increased in rural areas from 85 per cent to 87 per cent. This shows that progress has been made in urban areas while children living in rural areas did not benefit from social progress that could have improved the chances of enjoying their rights.

**Figure 3:** Incidence of child poverty by region (2010–2017)

**Figure 4:** Child poverty incidence (urban/rural) in 2010 and 2017 (Sierra Leone)
Poverty is then mainly a rural phenomenon in Sierra Leone. However, this is consistent with most of the findings of studies that analyze rural poverty. For example, De Janvry, Murgai, and Sadoulet (2003) stated that nearly three-fourths of the 1.3 billion world poor who subsist on less than one dollar a day live in rural areas. They advocate a new approach to rural development with policies centered on the rural economic environment and the empowerment of rural households, which is also relevant as regards the Sierra Leone context.

2.3 Single deprivations trend of children in Sierra Leone

Child poverty has declined from 77 per cent in 2010 to 66 per cent in 2017 due to the improvement in children’s rights that are related to and constitute child poverty, especially in urban areas. Deprivations in the seven child poverty dimensions affect children differently.

Deprivation in the shelter dimension affects children the most, with half of the children in Sierra Leone living in shelters that are overcrowded and/or have poor flooring material.

While education is the dimension in which children were the least deprived in 2010, the progress made in the reduction of severe malnutrition (≤3 standard deviations below the median of WHO child growth standards) has induced a decline in the proportion of children deprived in malnutrition of more than half (from 27 per cent to 12 per cent) between 2010 and 2017. Severe malnutrition hence has become the dimension in which children are least deprived in Sierra Leone.

Nutrition and water dimensions are very sensitive to the deprivation definition. When moderate nutrition is considered, the deprivation rate almost triples to reach 30 per cent. This shows that even though severe malnutrition affects a relatively low proportion of children, moderate malnutrition prevalence remains very high among children aged under five years. Similarly, the Sierra Leone MICS6 survey includes water quality tests for a subsample of households. The results of the water quality testing show that 97 per cent of households use drinking water that is infected with the E. coli, a bacteria found
in feces. This means that children living in these households are vulnerable to diarrhoeal infections. These results are not included in the current child poverty estimate but show that there is a need to further address moderate nutrition and water quality that may affect children’s long-term ability to grow and thrive in a safe environment.

2.4 Child poverty depth and severity

Understanding child poverty headcount ratio variations is important for policy responses. However, another aspect of poverty often analyzed and of use in making policy decisions is the depth of poverty.

Conceptually, the poverty depth or poverty gap measures the extent to which individuals fall below the poverty line (the poverty gaps) as a proportion of the poverty line. The sum of these poverty gaps gives the minimum cost of eliminating poverty, if transfers were perfectly targeted for example. The measure does not reflect changes in inequality among the poor (Haughton and Khandker, 2009).

Adapting this concept to child poverty, Delamonica and Minujin (2007) define the child poverty depth indicator as the average number of deprivations suffered by children in a specific country or geographical location. Child poverty depth hence measures how poor those children living in poverty are in terms of distance from the poverty threshold.

The graph below shows the average number of deprivations suffered by children in Sierra Leone at national and regional levels – the measure used in this report to analyze child poverty depth.

*Figure 6: Child poverty depth by region (2010–2017)*
The depth of child poverty has reduced from 2.2 deprivations per child in 2010 to 1.2 deprivations per child in 2017 which is a major decrease in the number of deprivations experienced by children in Sierra Leone. The depth of child poverty has also declined in all regions.

Children living in the south and the north experience the highest number of deprivations (1.6 and 1.5 respectively) while children in the east experience slightly fewer deprivations (1.3 deprivations on average). The Western Region remains the area where children experience on average, fewer deprivations in Sierra Leone, with about 0.5 per child in 2017, compared to 1.3 in 2010.

At national level, children also tend to cumulate fewer deprivations. Analyses show that, while 11 per cent of children suffered at least 4 deprivations or more in 2010, this proportion has reduced to about 5 per cent in 2017.

**Figure 7: Percentage and cumulative percentage of children deprived (2010–2017)**

Poverty severity is measured mathematically as the squared poverty gap (Foster, Greer and Thorbecke, 1984). It is a measure that considers inequality among the poor (those who are further from the poverty line have a higher weight). The interpretation of this measure is not intuitive, and because it is not easy to interpret it is not used very widely (Haughton and Khandker, 2009).

Delamonica and Minujin (2007) explain that child poverty severity is not in-built. Therefore, using the standard deviation (which is an average of the distances between each observation and the average value) can help estimate child poverty severity, by adding the value of the standard deviation to the average number of deprivations. For Sierra Leone, the standard deviation is 0.47. Hence, the child poverty depth for Sierra Leone is estimated at 2.67. In order to complement this information, we also analyze the percentage of children experiencing specific numbers of deprivations.

The table below shows the average number of children deprived in at least one to six dimensions. The data is presented for 2010 (MICS4) and 2017 (MICS6). Given that this approach is consistent with that used for the 2010 child poverty report, it provides a trend analysis.
Table 3: Percentage and cumulative percentage of children deprived by number of deprivations

<table>
<thead>
<tr>
<th>Number of deprivations</th>
<th>Cumulative % children deprived 2010</th>
<th>Cumulative % children deprived 2017</th>
<th>% children deprived 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1+</td>
<td>77.4</td>
<td>66.0</td>
<td>28.5</td>
</tr>
<tr>
<td>2+</td>
<td>52.3</td>
<td>37.5</td>
<td>21.1</td>
</tr>
<tr>
<td>3+</td>
<td>28.1</td>
<td>16.4</td>
<td>11.7</td>
</tr>
<tr>
<td>4+</td>
<td>11.2</td>
<td>4.8</td>
<td>4.1</td>
</tr>
<tr>
<td>5+</td>
<td>2.2</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>6</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

The results show that the percentage of children deprived in one dimension or more has dropped from 77.4 per cent to 66.0 per cent, that is the child poverty headcount ratio discussed in the previous sections.

If more than 66 per cent of Sierra Leonean children experience one deprivation or more, a large majority of them are deprived in one (28.5 per cent) or two (21.1 per cent) dimensions and almost none of them is deprived in six or seven dimensions. About 12 per cent of children experience 3 deprivations while a relatively small proportion (4.1 per cent) are deprived in 4 dimensions and less than 1 per cent is deprived in 5 dimensions.

The depth of child poverty has reduced in Sierra Leone compared to the 2010 estimates. Therefore, in addition to having a lower proportion of children that are poor, the number of deprivations experienced by poor children is also reducing. However, children living in rural areas experience on average 1.8 deprivations, which is more than three times that of children living in urban areas (0.5 deprivation on average).

Figure 8: Percentage and cumulative percentage of children deprived by number of deprivations (2010–2017) – urban/rural comparison
Further evidence related to urban/rural disparities is that while 57.6 per cent of children in the rural areas experience two deprivations or more, about 79 per cent suffer four or more deprivations, while 9.6 per cent of children living in urban areas experience two or more deprivations and less than 0.4 per cent is deprived in four dimensions or more.

At regional level, the Southern and the Northern regions are where poverty depth is higher (1.5 and 1.6 average deprivations per poor child) while the Western region (average deprivation of 0.5 per poor child) is where children tend not to cumulate several deprivations.

Estimates show that no child in the Western region cumulates more than four deprivations while about one per cent of children in the Southern and Northern regions cumulate five or six deprivations. There are disparities among children, according to the region they live in.

**Figure 9:** Percentage and cumulative percentage of children deprived (2010–2017) – regional comparison
Profiling Poor Children in Sierra Leone

While measuring child poverty is important to understand the situation of children in Sierra Leone, it is also crucial to build a national child poverty profile and to understand its underlying drivers. Behind the poverty figures are hidden socioeconomic disparities among children. These disparities are key for policy design to alleviate child poverty.

To intuitively analyze the main drivers of child poverty, a simple probit\(^3\) regression can give the extent to which specific socioeconomic variables can influence the probability for a child to be multidimensionally poor.

\(^3\) The intent of the probabilistic estimate is to provide information on the variables that are significantly linked to child poverty. The odd ratios obtained do not necessarily predict child poverty.
### Table 4: Probit regression results for the probability of being multidimensionally poor

<table>
<thead>
<tr>
<th></th>
<th>Child poverty (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother’s education level</td>
<td>-0.347***</td>
</tr>
<tr>
<td></td>
<td>(0.0127)</td>
</tr>
<tr>
<td>Number of children under age 5</td>
<td>0.0613***</td>
</tr>
<tr>
<td></td>
<td>(0.0155)</td>
</tr>
<tr>
<td>Number of children aged 5 to 17</td>
<td>-0.0657***</td>
</tr>
<tr>
<td></td>
<td>(0.00845)</td>
</tr>
<tr>
<td>Gender of the head of the household</td>
<td>-0.0647*</td>
</tr>
<tr>
<td></td>
<td>(0.0345)</td>
</tr>
<tr>
<td>Child has a birth certificate</td>
<td>0.180***</td>
</tr>
<tr>
<td></td>
<td>(0.0277)</td>
</tr>
<tr>
<td>Natural mother lives in the household (yes = 1)</td>
<td>-0.0265</td>
</tr>
<tr>
<td></td>
<td>(0.0452)</td>
</tr>
<tr>
<td>Natural father lives in household (yes = 1)</td>
<td>0.0384</td>
</tr>
<tr>
<td></td>
<td>(0.0324)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.838***</td>
</tr>
<tr>
<td></td>
<td>(0.0785)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>11,089</td>
</tr>
</tbody>
</table>

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The estimates show that the level of education of the mother is the main determinant variable that influences the probability of children being multidimensionally poor. Its coefficient appears to be negative and significant at one per cent, meaning that when mother’s education level increases, the probability for the child to be deprived decreases.

The fact that the mother or the father lives in the household does not seem to be significantly linked to the likelihood of being multidimensionally poor. In addition, the gender of the head of the household might be determinant for child poverty but is not statistically significant above 10 per cent.

Sections below analyze individual socioeconomic characteristics of the households and how they are linked to the distribution of child poverty.
3.1 Child poverty by gender of the child

Counterintuitively, the percentage of boys who are deprived in at least one dimension is higher than the child poverty headcount ratio among girls. This difference is statistically significant.

*Figure 10: Child poverty rate by gender (MICS6–2017)*

When analyzing single deprivations for selected indicators, it appears that girls are significantly more deprived in nutrition indicators, while boys are more deprived in education. Gender disparities exist but remain low, resulting in a difference of 3 percentage points between boys and girls for the child poverty headcount ratio.

Compared to 2010, poverty has significantly declined for both girls and boys. The percentage of children deprived hence dropped by 10 percentage points for both genders. However, there is still no big gap between girls and boys.
Figure 11: Gender disparity by dimension (MICS6–2017)

3.2 Child poverty by gender of the head of household

Our analysis shows that children living in female-headed households tend to be less subject to child poverty than those living in male-headed households. In fact, 65.4 per cent of children living in female headed households are multidimensionally poor. This proportion is higher for children living in a household headed by a man, reaching 66.3 per cent.
This finding might seem counterintuitive, but results from different studies show similar trends. For example, authors found that the likelihood of using improved drinking water sources was higher in households headed by females than in those headed by men in Nigeria, Ethiopia and Cameroon (Abebaw, Tadesse and Mogues, 2010; Ahmed and Sattar, 2007; Morakinyo, Adebowale and Oloruntoba, 2015).

A more recent and holistic study conducted by Milazzo and van de Walle (2017), focuses on a 25 year-long trend, and shows that while poverty\(^4\) has declined for both male- and female-headed households, it has dropped faster for female-headed households in most countries.

This trend can be explained by the socioeconomic profile of female heads of households and the fact that women may tend to take more child-oriented decisions when they have decision-making power in the household. In addition, social transformations may have led to increased empowerment of women. In fact, Milazzo and van de Walle (2017) state that the increase of female-headed households is linked to social changes in marriage behaviour and family formation, while health and education are positively related to female headship, resulting in a growing share of female-headed households.

Carrying out a gender profile of monetary and multidimensional poverty may provide interesting research results that can help improve policies and better target the fight against poverty.

### 3.3 Child poverty according to the presence of parents in the household

The finding related to the presence of a mother and/or father in the household can be considered as highly counterintuitive.

In fact, MICS6 data show that children living with their mothers are poorer than those whose mother is not living in the household. This trend is similar for children living with their fathers. When both mother and father are present in the household the analysis shows that 68.9 per cent of children are poor. The deprivation rate among children living with both parents is higher than that of those living with only one parent. Living without either parent may also be associated with a lower child poverty rate (61.2 per cent) than living with both parents.

Interestingly, results show that children living with a father only (no mother) tend to be poorer than those living in a household with a mother only (no father). This finding is as surprising as the results showing that children living in male-headed households tend to be more deprived than those living in female-headed households. However, further investigation linking this aspect with other socioeconomic characteristics of the household could help to better understand the drivers of child poverty in Sierra Leone.

It is also important to note that more than half of children in sampled households live with both parents. Hence, the number of observations for the other categories, especially for children living with their father but not their mother, is relatively small. This might affect the consistency of the estimates.

\(^4\) The research refers to consumption-based poverty measurements (money metric) but combines consumption surveys with DHS for a set of countries accounting for 89 per cent of the Africa population.
3.4 Child poverty by number of children (below age 17) in the household

It is expected that when the number of children living in the household increases, the likelihood that children will be deprived of their rights will also increase. In Sierra Leone, the MICS6 data show that the child poverty headcount ratio increases from 66.1 per cent in households with fewer than three children to 68.7 per cent in households that have between three and five children.
Analysis also provides evidence that the number of children in the household is not necessarily the main determinant of child poverty. In fact, households with more than five children tend to be less affected by child poverty than others.

3.5 Child poverty by mother’s level of education

Different studies have shown strong correlation between mother’s education and child welfare and development (Atreyi, 1972; Magnuson, et al, 2009; Maiga, 2019).

In Sierra Leone, MICS6 data show that there is a clear link between child poverty and mother’s education. It appears clearly that one of the most important determinants of child poverty is mother’s education.

The graph below shows a clear negative correlation between child poverty and the level of mother’s education.

**Figure 15: Child poverty headcount ratio and mother’s education (MICS6–2017)**

While children of women who only attended pre-primary school are more than 75 per cent of the multidimensionally poor, the child poverty headcount ratio drastically decreases when mother’s education level increases. Hence, 33.5 per cent of children whose mother attended upper secondary school or higher are poor. This finding is particularly important for policy-makers and indicates that long-term policies and programmes against child poverty must assure consistent investments in education, especially for girls, as well as improving mothers’ literacy.
3.6 Welfare quintiles

Results of the child poverty analysis in Sierra Leone show that in 2017, child poverty was strongly linked to the welfare status of the household in which children live.

*Figure 16: Child poverty rate by welfare quintile*

Multidimensional child poverty is lower in the richest quintile, increases in the middle quintile and is highest in the poorest quintile. The analysis shows that a child living in the richest wealth quintile is four times less likely to experience deprivation of rights compared to a child living in the poorest or second-lowest quintile. A child living in the middle quintile is almost three times more likely to be poor compared to a child in the richest quintile; a child in the second poorest quintile is more than twice as likely (96.8 per cent) to be multidimensionally poor than a child living in a household in the fourth quintile (40.4 per cent).
Figure 17: Average number of deprivations by wealth quintile (MICS6–2017)

As for depth of poverty, results show that children in the richest wealth quintiles tend to be deprived in fewer dimensions than children in the poorest quintiles. About 23.8 per cent of children living in the wealthiest quintiles is poor with an average deprivation of 0.3. However, while almost all children in the poorest quintile are poor, they are deprived on average in almost three dimensions. This is double the poverty depth among children in the second quintile.

3.7 Overlapping deprivations

Child poverty analysis can also be presented based on the way the various dimensions overlap. Overlapping analysis can give interesting information on the dimensions in which children tend to be deprived at the same time and the extent to which these deprivations overlap.

Understanding whether different deprivations are experienced simultaneously – and for which combinations of the different child poverty dimensions – can provide useful information for integrated policy and legislative responses.

The figure below represents those children that are deprived in each dimension. It shows four categories:

- those deprived only in the specific dimension;
- those deprived in that specific dimension and one other;
- those deprived in that dimension and two others; and
- those deprived in that dimension and 3 to 5 others.
Results show that shelter and health are the dimensions for which the proportion of children deprived in only one dimension is the highest. About 32 per cent of multidimensionally poor children deprived in health or shelter dimensions are not deprived in any other dimension. These are the two dimensions in which children are most deprived, and which offer the highest potential for reducing child poverty with targeted policies.

It is worth noting that the sanitation and information dimensions are important to understand the deprivations trend. In fact, more than 35 per cent of children deprived in these dimensions tend to also be deprived in three dimensions. In addition, only 9 per cent of sanitation-deprived, and 11 per cent of information-deprived children have a single deprivation.

This suggests that deprivations are linked to each other and policy decisions must consider this; for example, only 9.4 per cent of children are deprived in sanitation but not in any other dimension, therefore improving sanitation services to all children should be integrated with other interventions to achieve greater reductions in poverty.

The figure below also represents overlapping deprivations, showing the proportion of children deprived in a specific dimension and the overlapping with one, two, three or more additional dimensions.
More than 18 per cent of Sierra Leonean children are deprived in shelter and at least one other dimension, providing important information that a high proportion of children deprived in shelter have overlapping deprivations.

Sanitation is the dimension in which the smallest proportion of children is uniquely deprived. Only 1.7 per cent of children living in Sierra Leone are deprived in the sanitation dimension alone.

Another finding is that only 1.8 per cent of children aged 0–5 years are deprived in the nutrition dimension and more than two other dimensions at the same time.

Analyzing overlapping deprivations differently can help understand those combinations that affect children the most. The figure below shows which dimensions children who are deprived in one, two, three and four are most likely to be deprived.

While shelter is the dimension that affects most children deprived in only one dimension, it tends to be combined with other deprivations. Hence, the combination of deprivation in shelter and water affects almost 6 per cent of Sierra Leonean children, while over 5 per cent are deprived in shelter and information at the same time.
Figure 20: Percentage of children deprived per deprivation combinations (1 to 4 dimensions)

In addition, within the 6.7 per cent of children deprived in 4 dimensions, 1.7 per cent are deprived in water, sanitation, shelter and information.
While child poverty at national level gives an indication of the dimensions in which children suffer deprivations, this can hide regional disparities that are of interest for policy-makers. This section will provide a generic poverty profile for each of the four regions in Sierra Leone.

4.1 Child poverty analysis in the Eastern Region

Despite the child poverty headcount ratio being lower in the Eastern than in almost all Regions (except the Western), the proportion of children deprived in at least one constitutive right in this Region remains higher compared to the national level, with 71 per cent of children experiencing at least one deprivation. The child poverty headcount ratio is lower in Kenema where about 64 per cent of children are deprived in at least one constitutive right, and higher in Kailahun at 78 per cent.
Children living in rural areas in the Eastern Region are almost two times more likely to be deprived in one dimension than those living in urban settings in the same region. This shows that trends in the East and nationally are similar.

Finally, and also reflecting the national level, girls tend to be less deprived than boys. The difference is not statistically significant, however.
Results show no significant difference between the Eastern Region and the national level for the proportion of children deprived in sanitation, education and nutrition.

Compared to the national level, in addition to having a child poverty rate above the national average, children living in the Eastern Region are more likely to be deprived in shelter, health and information. However, deprivations in the water dimension tend to be lower in this region.

*Figure 24: Deprivation rate by dimension and district (Eastern Region, MICS6–2017)*

While shelter is the dimension in which almost all districts record the highest deprivation rate, data show that health is the other dimension in which children experience high deprivation rates. However, the third highest deprivation rates for children are in the dimensions of water (in Kono), information (in Kenema) and sanitation (in Kailahun).

In Kono, the lowest deprivation rate is recorded for sanitation. Despite water being one of the most crucial deprivations in Kono, the neighbouring Kenema district records relatively low deprivation rates in this dimension.

Finally, analysis shows that in the district of Kailahun deprivation in nutrition tends to affect children less.
Child poverty depth in the Eastern Region

Children living in the Eastern Region experience on average 1.4 deprivations. About 31 per cent of the children are deprived in only one dimension while almost none of them cumulate more than four deprivations.

Hence, deprived children tend to be deprived in less than half of the dimensions, as about 67 per cent of them are deprived in three dimensions or fewer. However, child poverty depth is higher in the Eastern Region than at national level where children tend to experience on average 1.2 deprivations.

4.2 Child poverty analysis in the Northern Region

Single deprivation trends in the Northern Region

The Northern Region has a poverty headcount ratio that is 10 points above the national average; 76 per cent of children living in this region are deprived in at least one of their constitutive rights.
Despite the very high rate of child poverty in the north, it decreased by six percentage points from 2010 when about 82 per cent of children in the Region were considered poor. The Northern Region also has the highest child poverty headcount ratio in Sierra Leone.

However, children living in urban areas in the North are more than two times less affected by poverty than those living in rural setting. The child poverty headcount ratio is 41 per cent in urban areas while it reaches 88 per cent among children living in rural areas.

Among the five districts of the Northern Region, Koinadugu (85 per cent) and Tonkolili (82 per cent) are those where child poverty is the highest. Except for the Bombali district, where the child poverty rate is lower than the national average, all other districts in the North have child poverty rates that are at least ten percentage points higher than the national average.

Another finding is that there is no significant difference between girls and boys. Analysis shows that 77 per cent of boys are deprived in at least one of their constitutive rights, which is only 2 percentage points higher than for girls.
In 2017, 63 per cent of children living in the Northern Region did not have access to safe shelter conditions, compared to 50 per cent at national level. Except for the health and sanitation dimensions, children living in the north are more deprived in all child poverty dimensions compared to the national level.

District level analysis shows that, depending on the district where they live, there are differences in the dimensions in which children are the most deprived, except for shelter.

In Tonkolili, almost half of children are deprived in information, while about 36 per cent do not have access to safe drinking water. In addition, almost 30 per cent of children in Tonkolili did not have access to medical health care when they had diarrhoea or a cough or fever.

The situation in Port Loko is different in that only 23 per cent of children lack access to information. Otherwise, deprivation rates for water and health tend to be similar to those for Tonkolili.
Figure 29: Deprivation rate by dimension and district (Northern Region, MICS6−2017)
Analysis shows that Koinadugu is the district where shelter deprivation affects children the most, with 76 per cent lacking access to safe shelter. The proportion of children deprived in health and in information is also high in Koinadugu (around 35 per cent).

In Kambia, in addition to shelter (62 per cent) and water (36 per cent), more than 20 per cent of children suffer from sanitation, information or education deprivations. However, in Bombali, about 44 per cent of children are deprived in health, which is, with shelter, the deprivation that affects a large proportion of children. In addition, 22 per cent of children living in Bombali do not have access to water. Finally, Bombali is the district that records the lowest proportion of children deprived in nutrition and sanitation dimensions in the Northern Region.

**Child poverty depth in the Northern Region**

Child poverty depth in the Northern Region is 1.5, meaning that children suffer on average from 1.5 deprivations in this region. This is higher than at national level where children suffer on average from 1.2 deprivations.

**Figure 30: Child poverty depth in the Northern Region**

In addition, analysis shows that 55 per cent of children in the north suffer one or two deprivations while almost none of them are deprived in more than five dimensions. In addition, 15 per cent of children from the Northern Region suffer three deprivations.
4.3 Child poverty analysis in the Southern Region

Figure 31: Child poverty in the Southern Region

Single deprivation trends in the Southern Region

The Southern Region is comprised of four districts. Of these four, only Bo district has 61 per cent of children deprived in at least one dimension. It also has a poverty headcount ratio that is significantly different from that of the other districts within the same region.

Data show that the child poverty rate ranges from 83 per cent in Bonthe to 84 per cent in Moyamba and 85 per cent in Pujehun. Subsequently, all three districts have child poverty rates that are higher than that of the region’s average.

At the regional level, child poverty in the south has dropped by 11 percentage points from 85 per cent in 2010 to 74 per cent in 2017. This is a major decline in the proportion of child poverty in this region where, however, a large number of children remain deprived in at least one of their constitutive rights.

Another finding is that child poverty in the rural areas of this region is three times higher than in urban areas. About 28 per cent of children living in urban areas are poor, while a very large proportion of children living in rural areas are deemed poor, with a headcount ratio averaging 87 per cent.

Figure 32: Child poverty headcount ratio in the Southern Region (MICS6–2017)
Finally, analysis shows that in 2017, in the Southern Region, the proportion of boys who are poor is 76 per cent, which is slightly higher than the child poverty headcount ratio among girls. This trend is similar to the national rate.

**Figure 33:** Incidence of child poverty and the percentage of children deprived in each dimension (Southern Region vs national level, MICS6–2017)

Analysis of the incidence of deprivations for each of the child poverty dimensions shows that, as in the other regions, shelter is the deprivation affecting children the most in the Southern Region and is higher than the national average.

The deprivation rate is higher in the Southern Region than at national level for all child poverty dimensions. However, two dimensions call for special attention: sanitation and education.

While a relatively low proportion of 18 per cent of children are sanitation-deprived at national level, this proportion is at 34 per cent in the south. This is almost twice the proportion of children deprived in the sanitation dimension at national level.

The second dimension that shows a significant difference with the national level is education. The education deprivation rate in this region is 21 per cent, about 1.5 times greater than at national level, which is 14 per cent.
Apart from shelter, sanitation tends to be the second most critical dimension for children, except in Moyamba and Bo. In Moyamba, about half of the children aged below five are deprived in health while only 12 per cent of children living in Pujehun are deprived in health.

Bonthe district records a very high sanitation deprivation rate of about 60 per cent. This is the highest deprivation rate of the region and is almost 25 percentage points higher than the rate recorded in Pujehun which has the second highest sanitation deprivation rate of the region. Finally, Bo district records the lowest deprivation rates of the region in most of the dimensions.

**Child poverty depth in the Southern Region**

Child poverty depth in the south is 1.6 which is the highest of all regions in Sierra Leone. This means that children in the south experience on average more deprivations than those living in any other region of Sierra Leone.
The figure above shows that, for a child poverty rate averaging 74 per cent, 24 per cent of children in the south are deprived in only one dimension. This means that half of the children living in the south are deprived in two dimensions or more.

4.4 Child poverty analysis in the Western Region

The Western Region has always been the wealthiest in almost all welfare dimensions. The capital city is in this region, where social services, employment and economic activity are concentrated. This explains, among other things, why people and children enjoy greater wealth on average in this region compared to those living in other areas. However, this general reality hides large disparities between the Western Urban and Western Rural districts. In fact, there is a 12 percentage point difference in child poverty incidence between the Western Area Rural, where 45 per cent of children are considered poor, and Western Area Urban where 32 per cent of children experience at least one deprivation. Moreover, above district analysis, children living in rural settings are almost two times more affected by child poverty, compared to those who live in urban settings.
Analysis also shows that the difference between girls and boys is only two percentage points. However, girls are more affected by child poverty than boys which is the opposite of what is seen at the national level.

The figure below shows that children living in the Western Region are less deprived than the national average for all dimensions.
In particularly, children in the Western Region tend to have access to more decent shelter than those in all the other regions. A relatively low proportion of 12 per cent of children in the west are deprived in the shelter dimension compared to the national average of 50 per cent. This appears to be the only region where the poverty dimension that affects children the most is not shelter.

The health dimension affects children the most in the Western Region, with 30 per cent deprived. In addition, 17 per cent of children in the west do not have access to safe drinking water.

*Figure 39: Deprivation rate by dimension and district (Western Region, MICS6–2017)*

The Western Region has only two districts, Western Rural and Western Urban. In Western Urban, the most critical dimension on which public policies should focus is health. Despite Freetown, the capital city, being in the Western Urban district, the percentage of children deprived in health remains higher than in Western Rural and many other districts of Sierra Leone. Malnutrition tends to affect children more in Western Urban than in Western Rural as shown in the nutrition dimension.

In Western Rural, about 20 per cent of children do not have access to safe drinking water. In addition, 16 per cent of children do not live in safe dwellings and 11 per cent of them are living in households that do not have access to improved sanitation facilities.
**Child poverty depth in the Western Region**

Children living in the Western Region experience on average a deprivation of 0.5, which is half of the national average and half of the poverty depth in 2010. This is the lowest poverty depth of all regions of the country.

Data also show that from the 38 per cent children who are poor in the Western Region, 28 per cent are deprived in only one dimension. This means that only about 8 per cent are deprived in more than one constitutive right.

*Figure 40: Child poverty depth in the Western Region*

Of the 8 per cent of children deprived in two or more dimensions, almost all experience two deprivations and almost no child is deprived in more than three dimensions.

**4.5 District level distribution of deprivations by dimension**

**Nutrition**

Nationwide, disparities exist among children in the different districts on nutrition deprivations.

Results show that Koinadugu is the district with the highest deprivation rates for nutrition, with 22 per cent affected by at least one form of malnutrition. Moyamba, Pujehun and Kambia also have a very high nutrition deprivation rate, averaging 15 per cent. The other districts that have nutrition deprivation rates above the national average of 12 per cent are Port Loko and Bo.
The district in which children are less likely to experience deprivation in nutrition are Western Rural and Kono where the proportion of nutrition-deprived children is half of the national average.

**Water**

Porto Loko district in the Northern Region is where children have least access to safe drinking water, with about 38 per cent being water-deprived. Kambia and Tonkolili in the north, as well as Bonthe in the south, are also districts where 36 per cent of children do not have access to safe drinking water.

**Figure 41:** Proportion of children deprived in the nutrition dimension, by district (MICS6–2017)

**Figure 42:** Proportion of children deprived in the water dimension, by district (MICS6–2017)
Analysis shows that Kenema in the east is the district in which a large majority of children, about 90 per cent, have access to a safe drinking water source. The water deprivation rate in Kenema is hence lower than in Western Urban (15 per cent), which is the district with the lowest child poverty rate.

**Sanitation**

Sanitation deprivation refers to lack of access to an improved sanitation facility. Children who have access to an improved sanitation facility are likely to live in an environment that ensures hygienic separation of human excreta from human contact.

Figure 43: Proportion of children deprived in the sanitation dimension, by district (MICS6–2017)

According to WHO, poor management of excreta is linked to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio, and also contributes to malnutrition.

The MICS6 data show that in Sierra Leone, about 18 per cent of children are deprived in sanitation. Disparities exist among districts with Bonthe being, by far, the district in which children have less access to an improved sanitation facility. Western Urban is the district where almost all children have access to improved sanitation facilities (98 per cent). Kono (96 per cent) in the Eastern Region, as well as Bombali (94 per cent) and Koinadugu (93 per cent) in the Northern Region, are the other districts where most children have access to improved sanitation facilities with less than 10 per cent sanitation deprivation rates.

**Health**

Analysis shows that district level disparities in health are not very marked. The percentage of children deprived in the health dimension is higher than 30 per cent in many of the districts. This highlights the need for systemic health reforms, including supply and demand side policies to improve access to quality health services across the country.
Districts such as Moyamba (50 per cent), Kono (47 per cent) and Bombali (44 per cent) record very high proportions of children who do not have adequate access to health services when ill. Only Kambia and Pujehun have a rate below 20 per cent for children deprived in the health dimension. It is important to note that the Western Urban area, which has the lowest child poverty rate, records a very high health deprivation rate, with about 35 per cent of children who did not go to an appropriate health facility when suffering from fever or diarrhoea.

**Shelter**

Poor shelter conditions are considered very critical for children’s well-being. In Sierra Leone, about half the children are living in households with more than four persons per sleeping room or with poor floor or wall materials.
At district level, only Bo, and the Western Region (both rural and urban) record lower shelter deprivation rates than the national average. In fact, 44 per cent of children in Bo District live in poor shelters while a much smaller proportion of 16 per cent in Western Rural and 10 per cent in Western Urban are shelter-deprived.

Shelter appears to be a dimension in which consistent investments should be made to provide children with a safe environment to live, learn and thrive to achieve their full potential.

**Education**

Noticeable disparities exist among districts in terms of children’s access to education. At national level, a relatively low percentage of children who are more than 6 years old have never attended school. However, education deprivation rates range from 5 per cent in Western Urban to about 38 per cent in Bonthe.

The MICS6 data show that depending on the district where children live they do not have the same chance to go to school. It is important to note that education has been identified as the main factor that can break the intergenerational cycle of poverty. Monetary poverty and education are inextricably linked, for instance children who do not go to school tend to be poor when they become adults; they are more likely to have children who will grow up with several deprivations and remain poor, thus perpetuating the intergenerational cycle of poverty.

In 2017, three groups of districts could be identified when analyzing education deprivations. The first group, for which more than a quarter of children are deprived in education, is composed of Bonthe (38 per cent), Moyamba (29 per cent), Koinadugu (29 per cent) and Pujehun (26 per cent). These are the four priority districts in which consistent investments should be made to improve children’s access to quality education. The second group is composed of the districts that have more than 10 per cent of children deprived in education. This group represents more than half of the districts. Finally, in Western Rural and Western Urban districts, the proportion of children deprived in education is around 5 per cent.
Information

Information is an important indication of both material deprivations and knowledge of one’s rights and of the world. In Sierra Leone, about 22 per cent of children aged between 3 and 18 are living in households with no access to radio, television, telephone or newspapers.

Figure 47: Proportion of children deprived in the information dimension, by district (MICS6–2017)

More than a quarter of children are information deprived in the majority of districts. Tonkolili has an information deprivation rate of 47 per cent – the highest in the country. Only Bo, with 21 per cent, Western Rural, with 8 per cent and Western Urban, with 2 per cent, have deprivation rates that are below the national average of 22 per cent.

This shows that policies and programmes to improve access to information must be systemic and target all households. Improvement of the situation could be related to income-based interventions as well as the introduction of technologies to the whole country. Except for the Western Region, all districts seem to be disadvantaged.
4.6 Synthesis of district level deprivations

The table below shows the ranking of the fourteen districts for all deprivation indicators and for child poverty.

Analysis shows that Pujehun and Moyamba record deprivation rates among the highest in Sierra Leone for six of the seven dimensions that constitute child poverty. These districts necessitate systemic and integrated interventions that will target all child poverty dimensions.

It also appears that the two districts of the Western Region have deprivation rates that are the lowest in Sierra Leone for almost all dimensions.

Bo, Bombali, Kenema and Kono are ranked as highly deprived in the health dimension only. Investing in health should be the priority in these districts, except for Bo where sanitation is the dimension that ranks highest.

<table>
<thead>
<tr>
<th>Table 5: District ranked by dimension deprivation rates (MICS6–2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DISTRICTS</strong></td>
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<tr>
<td>----------------</td>
</tr>
<tr>
<td>KONADUGU</td>
</tr>
<tr>
<td>PUJEHUN</td>
</tr>
<tr>
<td>MOYAMBA</td>
</tr>
<tr>
<td>BONTHE</td>
</tr>
<tr>
<td>TONKOLILI</td>
</tr>
<tr>
<td>KAMBIA</td>
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<tr>
<td>KAILAHUN</td>
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<tr>
<td>PORT LOKO</td>
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<tr>
<td>KONO</td>
</tr>
<tr>
<td>KENEMA</td>
</tr>
<tr>
<td>BOMBALI</td>
</tr>
<tr>
<td>BO</td>
</tr>
<tr>
<td>WESTERN AREA RURAL</td>
</tr>
<tr>
<td>WESTERN AREA URBAN</td>
</tr>
</tbody>
</table>

**Note:** Colours are based on district deprivation rates in a specific dimension.

- Red: deprivation rate within the five worst in the country.
- Yellow: deprivation rate between sixth and tenth highest in the country.
- Green: deprivation rate within the four lowest in the country.
The multidimensional nature of poverty for children means that policy options need to focus on several sectors and issues to be able to reduce and ultimately eradicate child poverty in Sierra Leone. Three main policy areas have been identified to ensure that children will have a better life today and, with improved education, be able to contribute to a sustainable future for Sierra Leone.

5.1 Policy area 1: Investing in early childhood

MICS6 data show that public policies need to focus on early childhood development (ECD) to give each child a fair chance to grow and thrive. This should include all the components of ECD (nutrition, health, education and WASH). Health seems to be the dimension that affects children the most, independent of the district or area they live in.

The first 1,000 days of life are critical for survival. Recent advances in neuroscience research provide new evidence to show that the first 3 years of a child’s life is when 80 per cent of the adult brain is developed. This is a critical phase for child development and provides a window of opportunity to enhance their potential to survive and learn. Hence, children need adequate and quality nutrition, protection, and brain stimulation which includes talking, playing and responsive attention from parents and caregivers. This phase establishes the basis for a child’s future.

Hence, the first policy area focuses on early child development policies and should be based on evidence and effective monitoring and evaluation of actions taken. Public expenditures tracking and service delivery surveys of the health and education sectors will support the design and monitoring of these policies.
The early childhood development policies that emanate from this analysis are:

**Access to quality health care**

Three years after the Ebola outbreak the country struggles to repair the damaged health-care system impacted by the epidemic; Sierra Leone must therefore continue to strengthen the system to provide free, quality and effective access to health services for children, pregnant women and lactating mothers including special attention for groups with special needs, for example, people living with disabilities and HIV. Additional attention is required for human resources for health and appropriate performance-based financing options to sustain health-care facilities in the communities. Disproportionate distribution of health-care providers to the disadvantage of hard-to-reach areas is a challenge for equity; government should explore incentivized schemes for health-care professionals who agree to stay in hard-to-reach areas. For sustainability of initiatives and impact, the government and its partners should secure a fiscal space to fund the free health-care programme in Sierra Leone. Other fiscal space options for health-care provision should be explored, examples include cost recovery systems and community-based health insurance schemes as a risk-pooling mechanism.

Finally, there is a need to strengthen health systems for effective provision of reproductive, maternal, newborn, child, and adolescent health and nutrition services which includes strengthening community systems for effective service delivery.

**Expanding ECD and complementary household activities**

The government flagship education programme should include early child development as a priority through education readiness activities like creche and ECD centres for public schools and training of human resources to manage ECD programmes.

Positive parenting skills should be introduced into public discourse to ensure that parents support children at home after school. For instance, reading activities at home have significant positive influence on a range of skills including: reading performance achievement, language comprehension and exposure to language skills. Positive parenting should not be limited to involvement at home but should also include engagement of parents in school activities to monitor the progress of their children or wards and be active in school management board activities.

In addition, the government should embark on rigorous public awareness campaigns through civic education to enlighten parents on how to recognize simple signs that point to problems in the health of their children alerting them to seek medical care immediately, especially for diseases like pneumonia, malaria and diarrhoea. They should also have the necessary skills and information to be able to prevent these common diseases.

**Adequate nutrition programmes**

Despite the decline in malnutrition, the country needs to scale up evidence-based nutrition-specific and nutrition-sensitive programmes as well as create an enabling fiscal and policy environment to meet its global commitment to the 2025 World Health Assembly nutrition targets and Sustainable Development Goals.

In the nutrition sector, there is a need to intensify promotion of optimal nutrition and care practices affecting nutritionally-vulnerable groups through the legislation that regulates the marketing of

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5 Sierra Leone Multiple Indicator Cluster Survey, sixth round, page 229 quoting Gest et al.
breastmilk substitutes; enforcement and establishment of supportive guidelines, systems and facilities for optimal maternity protection in the workplace; and the scale-up of the mother- and baby-friendly hospital initiative nationwide. There is also a need to strengthen preventive and curative services such as routine vitamin A supplementation and deworming of children aged under five; establishment of national adolescent and maternal nutrition programmes; strategic implementation and support for the management of acute malnutrition; and fiscal allocation for the procurement of life-saving nutrition commodities such as vitamin A, anthelminthic, therapeutic milk, and ready-to-use therapeutic food.

The MICS6 results shows that there are disparities in the way districts are affected by malnutrition. Therefore, nutrition programmes should prioritize the worst-off groups and districts in addition to a national awareness programme to educate households on good nutritional practices in implementing a holistic programme on nutrition.

Child grants for poor households

Explore the provision of child grants in addition to the free and quality education and free health-care programme of government. Evidence has shown that even with free education some poor households may not be able to take advantage of the opportunity to send their children to school as they may not be able to afford the opportunity cost of losing the income that the child brings in to augment household income. The households will prioritize food over education and good health-seeking behaviours which can compromise the health and education of the child. Social protection therefore comes to play in ensuring that households can afford to send their children to school and still meet the basic family needs. This should be combined with awareness creation and civic education on the importance of education to children, households and the economy.

5.2  Policy area 2: Empowering families and creating an enabling environment for children

One of the most important findings is that child poverty is strongly linked to their households’ situation. This implies that addressing children’s deprivations must consider the situation of the households they live in. Adequate shelter plays a critical role in improving education, health and sanitation deprivations. Good shelter means that children can rest well, and effectively reduces exposure to health and environment hazards and sanitation challenges. Rates of shelter deprivation have been constantly bad since the 2016 child poverty analysis, indicating the need for more strategic solutions.

Access to safe shelter: pro-poor shelter policy, legal frameworks and investments

An increasingly widespread shelter policy is social shelter. The opportunity provided by social shelter is the increased availability of safe shelters at a low cost. A growing number of countries establish programmes to build and make available low-cost safe shelter in urban and rural areas. This can also be coupled with legislative initiatives in order to limit new shelter constructions that do not respect minimum standards. Finally, economical shelter programmes must strictly target those households that are in need and must avoid capture by the elite.

Both political and executive commitment is required to provide adequate shelter for poor households. Pro-poor policies and legal and financing frameworks that ensure low-cost shelter is available to the
poor are needed. Because of the economic situation, government can explore public-private partnership opportunities, including access to mortgage services, and private investment in the shelter sector. Rwanda provides South-South opportunities for Sierra Leone to learn how the country is revolutionizing rural shelter to improve living conditions and facilitate pro-poor economic growth. This is a policy chosen by many African and industrialized countries.

The Sierra Leone Medium-Term National Development Plan aims to provide the urban and rural population with improved access to safe, sustainable and affordable shelter to meet the shelter deficit. However, with recent changes in the country’s demography and increased fragility, the 10,000 shelter units planned for urban slums may not be sufficient to cover all the population in need.

While it could appear unfeasible to solve shelter deprivations (as the rate is high and potential policies are not intuitive), simple policies could help improve the environment in which children live.

**Income support for the most vulnerable households**

Sierra Leone already provides cash transfers to vulnerable households. This policy option focuses on expanding the existing cash transfer programme while ensuring that it has sufficient flexibility to use conditionality based on local specificities. To achieve this, community-based approaches could help identify the best approach to implementation of cash transfer programmes in the country. However, it is important to note that while a cash transfer programme that differs from one location to another could involve heavy administrative costs, a core programme that can be adapted to local contexts is an innovative approach that may greatly improve the effectiveness of the programme.

Experience in Sierra Leone and other countries shows that communication, like education, plays a critical role in the success of such programmes, as it ensures better knowledge and education of community members. Therefore, the communication for development component of the cash transfer programme should be strengthened and target all community members.

To improve families’ capacity to generate substantive income that will allow them to meet certain needs of their children, it is important to strengthen the food security and agriculture sector on which a large share of the population depends. It is important to strengthen initiatives to improve livelihood and social protection programmes targeting households with multiple overlapping vulnerabilities. There is also a need to improve household food security by strengthening initiatives related to crops, food diversification, and bio-diversification, scaling up appropriate technologies used to improve food quality and quantity (e.g. fortification), promoting food safety and hygiene practices including safe food preservation, storage and preparation methods. Strengthening the capacity of government institutions involved in local food production and trade will lead to the production and distribution of nutritious food items, introduce and scale up appropriate technologies for food fortification and enforce proper quality assurance and food safety measures, as per national standards.

**A protective environment for children**

Children thrive and survive better in protected environments. A safe environment, therefore enables children to explore their potential. Some possible initiatives in this area include: safe city projects, adolescent/girls’ spaces; and child-friendly city programmes. Safety for children plays a significant role in their development into confident adults. In addition, child protection modules should be introduced into the education curricula to provide children with the necessary information to know, understand, claim and defend their rights as a citizen. Finally, it is important to build the capacity of community leadership to safeguard children from harm, abuse and exploitation.
5.3 Policy area 3: Adolescent empowerment and voice

The result of this study shows that while some children are deprived in education, mother’s education is a determinant of the likelihood that a child will be poor or not. Investing in education for children as well as for young adults is imperative for Sierra Leone, not only for the short term but also to break the intergenerational cycle of poverty.

District-level analysis shows that there are disparities in children’s poverty and deprivations according to the area of residence (rural or urban). It is important that policies enable children and adolescents to express their opinions and aspirations. Some of the policy options that can be explored include:

**Improving access to quality education and vocational training**

It is of great importance that Sierra Leone, together with its partners, ensure that all children have access to quality education services in all areas of the country. Universal access to education should not be limited to primary education but also target vocational training, based on the needs of Sierra Leone’s economy and job market needs. While a free quality education policy is being implemented, a focus should be placed on the quality of education through strengthening the education management system and supporting households through cash transfers.

As part of strengthening the education system, a ‘Learning Sierra Leone’ programme could support families to address the learning barriers for children and adolescents. It will also create a programme (in schools or communities) to support vulnerable learners and/or children with special needs.

**Increasing children’s and adolescents’ voices**

Children and adolescents have to be heard when planning, programming and budgeting for development in Sierra Leone. In fact, children and adolescents are better placed to understand the reality and challenges facing them. Therefore, hearing their voice is vital when designing sound development policies, plans and budgets to respond to child poverty and its consequences.

**Institutionalizing mobile technology to support voice and participation**

Mobile technology will facilitate the participation of adolescents and children in government development processes. Some governments, for example have used U-Report to transmit information and get feedback from adolescents and young people on pertinent issues related to their development. In addition, the Government can institute research into key issues related to the well-being of adolescents and young adults to enable partners and government to understand their perspectives better.

**Strengthening district level plans and budgets**

Experience has proven that policies and plans, if not sustained by the necessary budget, are doomed to failure. Although slow, the decentralization efforts of the Government are ongoing, and development partners are supporting the process. To achieve the total decentralization of functions and budgets, the capacity of district management and sectors must be built on child-friendly and gender-sensitive participatory planning and budgeting processes. For instance, district plans should include consultative processes in collaboration with communities through the village development committees and the ward development communities. The voice of adolescents and young adults is also very important during planning and budgeting processes to ensure their needs are captured.
Building child-responsive budgets

Developing plans and budgets that integrate children’s priorities will lead to more effective and sustainable results. As part of the national budgeting process, civil society organizations, especially those working with children should be invited to participate to ensure that child-related issues are mainstreamed in the budget. This can be done through advocacy, local consultations, or the inclusion of children in all the budget processes, including identifying budget priorities, monitoring budget implementation at local and national level, and evaluation exercises.

Monitoring expenditures

In 2015 Sierra Leone scored high in the Open Budget Index (OBI), an objective survey compiled by the International Budget Partnership. The survey is based on four indexes, transparency, participation, accessibility and openness of budgets. The country moved from 39 points in 2012 to 52 points in 2015, the highest points being in transparency and participation. In the 2017 OBI, the country has relapsed to 38 points. While planning effectively for children as part of the budget process remains important, it is necessary to ensure that the plans are well implemented, and resources spent to produce equitable results for children. A combination of Unit Cost Analysis and Expenditure Performance Assessments is necessary to ensure that children and their families take full advantage of budgetary expenditures.
Conclusion

The discussion around child poverty must be led by all levels of government to gain legitimacy and ownership. This report shows that while child poverty has declined, only children living in urban settings experienced an improvement in their well-being. In fact, child poverty has significantly declined at national level but increased slightly in rural settings – evidence that the situation of children in rural areas did not improve. While girls are less affected by child poverty, it has significantly declined for both genders.

In addition to rural/urban disparities, children are not affected by child poverty in the same way, depending on the region, the district or the socioeconomic condition of the family they are living in. Child poverty is strongly linked to a household’s assets. Children living in wealthy households tend to accumulate fewer deprivations.

The MICS6 data show that deprivation in the shelter dimension affects children in a higher proportion. Another finding is that progress has been more noticeable for nutrition, with the rate declining by about 15 percentile points.

The situation has not only improved for child poverty, it appears that the average deprivation experienced by children also declined between 2010 and 2017. However, the number of deprivations experienced by children is much higher in rural than in urban areas.

In the aftermath of the Ebola crisis in Sierra Leone, this child poverty analysis appears to provide strong evidence regarding the need to invest in the long term on children’s well-being. This is the best way to ensure the country’s resilience to economic, social and environmental shocks.
This report builds on the 2010 child poverty analysis based on MICS4 data. Hence, it represents a trends analysis and introduces innovative analyses to better understand the situation of children in Sierra Leone. The identification of dimensions, variables and thresholds emanated from a workshop with main stakeholders in 2010 and 2017 and they therefore reflect the context of Sierra Leone.

These findings have ultimately led to national consultations to agree on the appropriate policy responses to tackle child poverty and build a better Sierra Leone where the nation’s children can thrive, develop their full potential and grow into adults who will, in turn, raise a future generation free of child poverty.
REFERENCES


**ANNEX I: Technical Note on the Definition of Dimensions, Thresholds and Indicators**

Child poverty estimates in Sierra Leone have contextualized the international methodology developed by Gordon et al. and used by UNICEF Office of Research Innocenti to develop the Multiple Overlapping Deprivations Analysis. The dimensions, indicators and thresholds are defined and strategic choices are described in this annex along with a sensitivity analysis.

### Education

**Education Deprivation Definition**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>MICS Variable</th>
<th>Indicators</th>
<th>Deprivation definition (cut-off points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Compulsory school attendance</td>
<td>ED4</td>
<td>Child ever attended school or any Early Childhood Education programme</td>
<td>Deprived if child is aged between 7 and 18 (official school age) and has received no pre-primary, primary or secondary education</td>
</tr>
</tbody>
</table>

### Nutrition

**Nutrition Deprivation Definition**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>MICS Variable</th>
<th>Indicators</th>
<th>Deprivation definition (cut-off points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>Severe underweight</td>
<td>WAZ2</td>
<td>Weight for age</td>
<td>Deprived if less than minus three standard deviations from median weight for age of reference population</td>
</tr>
<tr>
<td></td>
<td>Severe stunting</td>
<td>HAZ2</td>
<td>Height for age</td>
<td>Deprived if less than minus three standard deviations from median height for age of reference population</td>
</tr>
<tr>
<td></td>
<td>Severe wasting</td>
<td>WHZ2</td>
<td>Weight for height</td>
<td>Deprived if less than minus three standard deviations from median weight for height of reference population</td>
</tr>
</tbody>
</table>

### Health

**Health Deprivation Definition**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>MICS Variable</th>
<th>Indicators</th>
<th>Deprivation definition (cut-off points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Immunization</td>
<td>IM14</td>
<td>BCG</td>
<td>Deprived if child older than 1 year and has not received the complete basic vaccinations (MMR, BCG, 3 times Polio and 3 times Pentavalent)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IM26</td>
<td>Measles</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>IM18</td>
<td>Polio</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>IM21</td>
<td>Pentavalent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diarrhoea treatment</td>
<td>CA5</td>
<td>Sought advice or treatment for the diarrhoea from any source</td>
<td>Deprived if the child had diarrhoea and fever in the two weeks prior to the survey, for which no medical advice nor treatment was received</td>
</tr>
</tbody>
</table>
## Water
### Water Deprivation Definition

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>MICS Variable</th>
<th>Indicators</th>
<th>Deprivation definition (cut-off points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water</strong></td>
<td>Access to improved water source</td>
<td>WS1</td>
<td>Main source of drinking water</td>
<td>Deprived if household's main source of drinking water is surface water</td>
</tr>
<tr>
<td></td>
<td>Distance to water source</td>
<td>WS4</td>
<td>Time (in minutes) to get water and come back</td>
<td>Deprived if round trip to main drinking water source is more than 30 minutes</td>
</tr>
</tbody>
</table>

## Sanitation
### Sanitation Deprivation Definition

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>MICS Variable</th>
<th>Indicators</th>
<th>Deprivation definition (cut-off points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sanitation</strong></td>
<td>Access to improved sanitation</td>
<td>WS11</td>
<td>Type of toilet facility</td>
<td>Deprived if children have no access to any sanitation facilities whatsoever in or near their homes</td>
</tr>
</tbody>
</table>

## Shelter
### Shelter Deprivation Definition

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>MICS Variable</th>
<th>Indicators</th>
<th>Deprivation definition (cut-off points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shelter</strong></td>
<td>Overcrowding</td>
<td>HH48 HC3</td>
<td>Number of rooms used for sleeping Household size</td>
<td>Deprived if more than five people per sleeping room</td>
</tr>
<tr>
<td></td>
<td>Floor material</td>
<td>HC4</td>
<td>Main material of floor</td>
<td>Deprived if floor is made of natural material, which is not considered permanent (sand or mud)</td>
</tr>
</tbody>
</table>

## Information
### Information Deprivation Definition

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>MICS Variable</th>
<th>Indicators</th>
<th>Deprivation definition (cut-off points)</th>
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<tbody>
<tr>
<td><strong>Information</strong></td>
<td>Availability of information</td>
<td>HC7A</td>
<td>Household have: Fixed telephone line</td>
<td>Deprived if household has not reported to have any of the following: radio, television, non-mobile phone or mobile phone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HC7B</td>
<td>Household have: Radio</td>
<td></td>
</tr>
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<td>HC9A</td>
<td>Household have: Television</td>
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<td></td>
<td></td>
<td>HC12</td>
<td>Any household member has a mobile telephone</td>
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</table>
Aggregated Child Poverty Index

The choice of the aggregation methodology determines how child poverty indicators are interpreted. For Sierra Leone, aggregation within dimensions has used the union approach. The same approach is used to aggregate deprivations to construct the multidimensional child poverty index. Hence, a child is considered as poor if he is deprived in at least one dimension.
## Annex II: Detailed Statistical Tables

<table>
<thead>
<tr>
<th>Multi-dimensional Child Poverty</th>
<th>Health Dimension</th>
<th>Nutrition Dimension</th>
<th>Education Dimension</th>
<th>Water</th>
<th>Sanitation</th>
<th>Information</th>
<th>Shelter Dimension</th>
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<td>Education Dimension</td>
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<td>Sanitation</td>
<td>Information</td>
<td>Shelter Dimension</td>
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<td>38</td>
<td>10.1</td>
<td>3.4</td>
<td>9.1</td>
</tr>
</tbody>
</table>

**Gender of the child**

| Male                          | 67.2             | 32.6                | 77                  | 41.5  | 11.4        | 3.2         | 9.2              | 1.6             | 16.3           | 24.7          | 15.3          | 14.1          | 18.3          | 23.8           | 51.6           | 3.5            | 49.4          |
| Female                        | 64.9             | 33.8                | 11.9                | 40.1  | 12.4        | 4.2         | 10.3             | 1.9             | 12.5           | 23.6          | 14.4          | 13.8          | 17.5           | 21.9           | 49.3           | 4              | 46.6          |

**Type of place of residence**

| Urban                         | 37.3             | 35.5                | 13.6                | 40.7  | 9.1         | 2.7         | 7.4              | 1.7             | 5.1            | 14.2          | 2.8           | 16.1          | 4.4            | 5.2            | 18.1           | 5.4            | 13.3          |
| Rural                         | 86.7             | 31.7                | 79                  | 40.9  | 13.5        | 4.3         | 11.1             | 1.7             | 22.2           | 31.3          | 23.4          | 12.7          | 27.6           | 36.2           | 73.7           | 2.6            | 72.9          |

**Wealth index**

| Poorest                       | 99.9             | 28.7                | 8.9                 | 35.1  | 13.9        | 4.6         | 11.4             | 1.9             | 30.6           | 43.8          | 35.8          | 14.1          | 45.3           | 64.4           | 99.4           | 3.1            | 99.4          |
| Second quintile               | 96.8             | 38.3                | 10.2                | 48.3  | 13.8        | 4.5         | 11.3             | 1.7             | 21.3           | 26.8          | 19.9          | 11.7          | 22.1           | 28.8           | 85.8           | 1.7            | 85.5          |
| Middle                        | 61.5             | 30.3                | 4.5                 | 42.1  | 12.4        | 3.7         | 10.2             | 1.4             | 12.3           | 20.5          | 11.2          | 13.1          | 12.5           | 12.9           | 33.7           | 3              | 31.7          |
| Richer                        | 40.4             | 29.1                | 14.1                | 33    | 8.7         | 2.7         | 7.1              | 1.7             | 5.7            | 15.3          | 3.2           | 16.1          | 4.7            | 5.7            | 18.2           | 7              | 11.9          |
| Richest                       | 23.8             | 41.5                | 15.4                | 46.4  | 8.8         | 2.4         | 73               | 1.7             | 3.5            | 11.8          | 1             | 15.9          | 1.2            | 0.3             | 5.9            | 4.6            | 1.4           |
### ANNEX III-1: Deprivation Combinations (one to three deprivations)

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<tr>
<th>Single deprivations</th>
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<td>Water</td>
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</tr>
<tr>
<td>Sanitation</td>
<td>S</td>
</tr>
<tr>
<td>Health</td>
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<tr>
<td>Shelter</td>
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<tr>
<td>Education</td>
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### ANNEX III-2: Deprivation Combinations (four to five deprivations)

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