Multidimensional Poverty in Sri Lanka

A Multidimensional Poverty Index (MPI) creates a comprehensive picture of poverty. It reveals *who* the poor are and *how* they are poor by focusing on a set of interlinked deprivations that poor people experience. Countries are increasingly using an MPI to chart routes out of poverty.

Some of the key findings emerging from the Sri Lankan National MPI (NMPI) and Child MPI (CMPI) include:

National MPI:

- Approximately one out of every six (16.0%) people in Sri Lanka are multidimensionally poor.

- Estate areas are pockets of poverty that require policy attention as more than half (51.3%) of all people living in these areas are living in poverty.

- Rural areas are also a key focus point as more than eight out of every ten (80.9%) people who are poor live in rural areas.

- Poverty levels in districts vary significantly from a low of 3.5% in Colombo to 44.2% in Nuwara-Eliya. Even for districts with similar MPI values, high-impact policies must consider the indicator composition of poverty, in order to plan the most cost-effective response.

- People aged 65 and older are the poorest age group in Sri Lanka, with the highest headcount ratio (17.9%) as well as intensity of poverty and MPI.

- Deprivations in health facilities, cooking fuel, drinking water, and basic facilities have the highest levels of deprivation.

- Deprivation patterns - and therefore policy and budgetary responses - vary by district and age.

Child MPI:

- Using the Child MPI, more than four out of every ten (42.2%) children under the age of five are multidimensionally poor.

- All the children poor by the National MPI are concurrently poor by individual level CMPI. In addition, the CMPI adds a fourth dimension comprising of child's nutrition and early childhood development.

- One third (33.4%) of children aged 0-4 years old are multidimensionally poor and either underweight or stunted.

- One sixth (16.4%) of children aged 0-4 years old are multidimensionally poor and deprived in early child development.

- Nearly half of children 0-11 months and 4 years old are poor, mainly due to undernutrition, and, for children who are 4 years old, not being in preschool.

- Encouragingly, there are no statistically significant differences between the poverty levels of young girls and boys in Sri Lanka.

Table of Contents

Introduction

In 2021, in close consultation with various Ministries, the Department of Census and Statistics (DCS) developed the first official National MPI for Sri Lanka. The Sri Lankan MPI is an official permanent statistic of multidimensional poverty that will be updated and published regularly, reported as SDG indicator 1.2.2, and used to complement the monetary poverty measure.

A key population of interest for poverty is young children, whose deprivations in nutrition and cognitive development have lifelong effects. To further probe and support child poverty policies, DCS crafted an individual Child MPI for children aged 0-4, which includes exactly the same indicators as the National MPI, plus undernutrition and early childhood development. Sri Lanka's CMPI is pioneering in being the first official measure of child poverty that links directly and precisely with the National MPI.

The National MPI and the Child MPI are both based on data from the Household Income and Expenditure Survey 2019 (HIES 2019). The HIES 2019 has now been modified to include key MPI indicators, and will do so in future, permitting updates of both MPIs.

The MPI is not just a statistic. It is a policy tool. It provides relevant information to accelerate poverty reduction with limited resources – by informing high-impact budget allocation, focused interventions, policy design and coordination, and poverty monitoring.

This briefing presents the main findings of the National MPI (NMPI) and the Child MPI (CMPI) and the policy implications of these findings. The policy implications come from the fact that the MPI is built from an information platform that shows the level of poverty and its composition by indicator both nationally as well as by subnational groups such as districts, age cohorts, and estates or rural/urban areas.

The National MPI for Sri Lanka

Indicators and Dimensions: A set of carefully selected indicators lie at the heart of the MPI. The MPI is built by using the profile of deprivations in these indicators that each household experiences. The National MPI in Sri Lanka has 10 indicators grouped into three dimensions (see Appendix 01 for details).

Weights: Each dimension is equally weighted, and the indicators within the health and standard of living dimensions are equally weighted. Within the education dimension, school attendance has a higher weight than the years of schooling indicator. A person who is deprived in any set of indicators whose weights add up to one-third or more is identified as multidimensionally poor.

Key Statistics and Terms: Three statistics are used to report the level of multidimensional poverty. These are:

- The **incidence or headcount ratio** of poverty (written as H), which is the percentage of people who are multidimensionally poor.

- The **intensity** of poverty (written as A), which is the average share of weighted deprivations that poor people experience.

- The **MPI** or adjusted headcount ratio (calculated as the product of H and A. That is, MPI = H x A), reflecting the deprivations experienced by poor people as a percentage of the total deprivations that would be experienced if all people were deprived in all indicators.

The MPI is the official statistic of poverty because it takes into account changes in incidence and/or intensity. It also provides incentives to 'Leave No One Behind' by making visible progress among the poorest. Incidence is the familiar poverty rate, also used for monetary poverty.

For policy purposes, it is also important to understand that the MPI value simply adds up all weighted deprivations of all poor people. This means that any policy will reduce MPI if it reduces any deprivation of any poor person. To make this information easy to use, the MPI is broken down in two convenient ways to shape policy:

- The **censored headcount** ratios show the percentage of the population who are MPI poor and are deprived in each indicator.

- The weighted **contribution of indicators** to MPI (usually pictured using a striped bar) shows which indicators contribute most to poverty (considering their weights).

The censored headcount ratios are used to understand the number of people who are poor and deprived in each indicator – for example, for budgeting purposes. The weighted contributions show which deprivations to prioritise in order to reduce poverty the most.
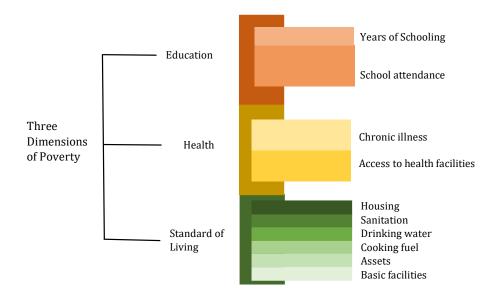
Figure 1: Structure of the National MPI in Sri Lanka

Levels of Multidimensional Poverty in Sri Lanka

Sri Lanka has a National MPI of 0.067. This shows that poor people experience 6.7% of the total possible deprivations that could be experienced if everyone was deprived in everything.
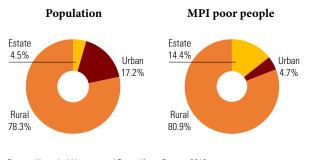
Table 1: National multidimensional poverty statistics

	Value	Confidence Interval (95%)	
NMPI	0.067	0.062	0.071
Headcount ratio (H, %)	16.0	15.0	17.1
Intensity (A, %)	41.6	41.2	42.1

Source: Household Income and Expenditure Survey, 2019

According to the headcount ratio, nearly one out of every six (16.0%) people in Sri Lanka are multidimensionally poor. The intensity of poverty indicates that each poor person is, on average, deprived in 41.6% of the weighted indicators.

Figure 2: Distribution of the population and those who are multidimensionally poor by urban, rural and estate areas

Source: Household Income and Expenditure Survey, 2019

A key strength of the MPI method is that all statistics can be decomposed by area or district, identifying disparities within the country. As a result, high poverty places and groups can be targeted by appropriate poverty reduction or eradication interventions.

Estate Areas: **Pockets of high poverty.** The urban/rural/estate divide is a unique phenomenon to Sri Lanka. While poverty levels are higher in rural than in urban areas, they are highest in estate areas. The headcount ratio is 4.4% in urban areas, 16.6% in rural areas, and 51.3% in estate areas. The intensity is also highest in estate areas (46.1%), compared to rural areas (40.9%) and urban areas (40.6%). The National MPI is 0.018 in urban areas, 0.068 in rural areas, and 0.236 in estate areas. This highlights estate areas as pockets of poverty that require policy attention.

Rural Areas: 81% of the poor. Policy responses must also consider the number of poor. As Figure 2 shows, only 4.5% of Sri Lankans live in estate areas, but these areas account for 14.4% of those living in poverty, making this a crucially important group. However, the large majority (80.9%) of poor people are living in rural areas. Therefore, rural areas must certainly be a priority.

Across Districts 3.5% to 44.2% of people are poor. At the district level, multidimensional poverty varies substantially (see Figure 3). Colombo (3.5%) and Gampaha (5.1%) have the lowest incidence of poverty, while in Nuwara-Eliya, more than two-fifths (44.2%) of the population are living in poverty according to the NMPI. Any budgetary response or targeting of districts with the highest levels of poverty must also take into account the population shares in each of the districts. So while Colombo and Gampaha have the lowest incidence of poverty, their relatively large population size means that they have higher actual numbers of people living in poverty than districts such as Vavunia and Mannar that have a higher incidence of multidimensional poverty.
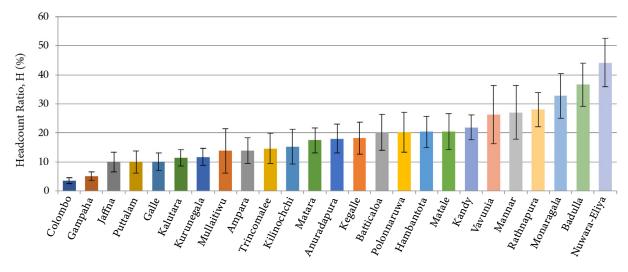
Figure 3: Incidence of multidimensional poverty by district

Source: Household Income and Expenditure Survey, 2019

Table 2: Multidimensional poverty statistics of National MPI by age group

Age group	Population Share (%)	MPI			Headcount ratio (H, %)			Intensity (A, %)		
		Value	Confidence Interval (95%)		Value	Confidence Interval (95%)		Value	Confidence Interval (95%)	
0-4	6.6	0.057	0.052	0.064	14.0	12.6	15.5	41.0	40.3	41.7
5-17	21.2	0.071	0.066	0.076	16.9	15.8	18.1	41.8	41.2	42.4
18-35	22.9	0.061	0.056	0.067	14.8	13.7	16.0	41.3	40.7	41.9
36-64	37.2	0.066	0.062	0.071	16.0	15.0	17.1	41.4	41.0	41.9
65+	12.2	0.076	0.070	0.083	17.9	16.5	19.4	42.5	41.9	43.2

Source: Household Income and Expenditure Survey, 2019

Persons 65 years and above: poorer. In addition to geographic location, the NMPI is disaggregated by other groups, which is useful for identifying priority groups. Table 2 shows that those people aged 65 and older are the poorest – they have the highest headcount ratio (17.9%), intensity, and MPI of all age groups. Considering the range of possible values (the 'confidence intervals') this eldest age group is only statistically significantly poorer than children aged 0-4, who are the least poor group by the NMPI but are the focus of the special child study in Part II of this briefing.

Disaggregating NMPI by the gender of the household head to explore gender inequality finds that female-headed and male-headed households notably have no statistically significant differences in their level of multidimensional poverty.

How to Reduce Multidimensional Poverty in Sri Lanka

To plan how to reduce the NMPI, we first look at the percentage of people who are multidimensionally poor and deprived in each of the indicators of the index. These are known as the censored headcount ratios and reducing any of these reduces poverty.

High Deprivations: Cooking fuel, drinking water, basic facilities, health facilities. Figure 4 shows that the highest deprivation is in cooking fuel, where 14.5% of the population are multidimensionally poor and deprived in that indicator. Providing clean energy alternatives to firewood, kerosene or sawdust/paddy husks for cooking will reduce this deprivation, which affects more than 3 million people in Sri Lanka. High levels of deprivation are also found in drinking water (13.5%), access to basic facilities (12.6%), and access to health facilities (11.9%).
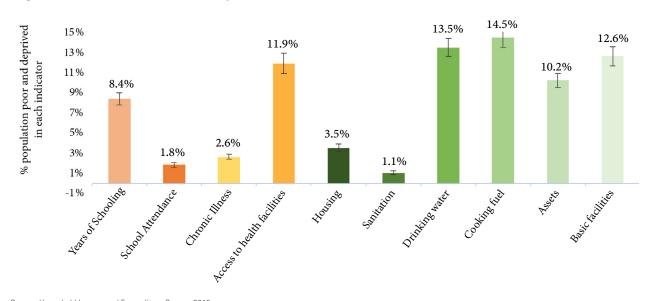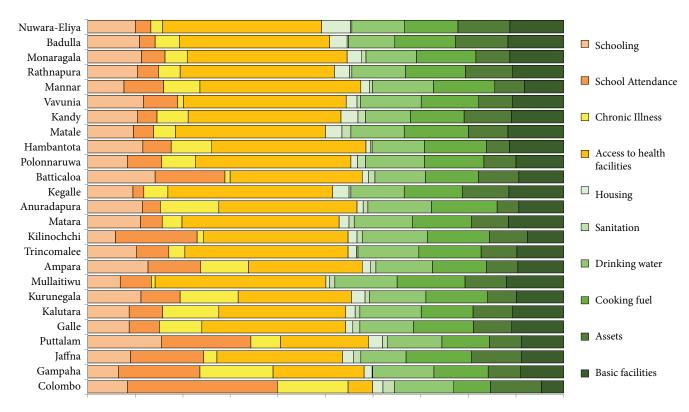
Figure 4: Censored headcount ratios for National MPI Sri Lanka

Source: Household Income and Expenditure Survey, 2019

How to use NMPI indicator composition to shape budget and policy. Deprivation patterns – and policy priorities – vary by district and age. To chart policy priorities and design high-impact policies, Figure 5 shows the percentage contributions of each of the weighted indicators to the MPI for each district. Districts are ranked from poorest to least poor. In the district with the lowest levels of multidimensional poverty, Colombo, school attendance has the largest contribution to the MPI. Years of Schooling also contributes most significantly in Puttalam, whereas access to health facilities contributes the most in all the other districts.
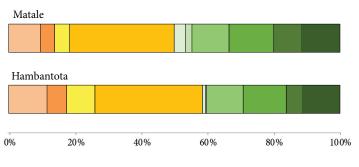

Figure 5: Percentage contribution by indicator to MPI by district (ordered by MPI)
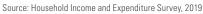

Source: Household Income and Expenditure Survey, 2019

To use the percentage contributions for policy, consider the example of Matale and Hambantota (see Figure 6), which have nearly the same MPI value. One might think that anti-poverty policies would be the same. But both education indicators (redish) and chronic illness (yellow) contribute more in Hambantota than Matale, whereas deprivations in housing, sanitation, and assets contribute more in Matale. In terms of policy this means that a uniform approach is not cost-effective, because the different composition of indicators in each district require different policy and budgetary responses.

Figure 6: Percentage contribution by indicator to MPI for Matale and Hambantota

Matale

Hambantota

Source: Household Income and Expenditure Survey, 2019

measures two deprivations of early childhood: undernutrition (being underweight or stunted) and early childhood development. Early childhood development refers to age-specific deprivations that are likely to prevent the child from healthy physical and cognitive development. The early childhood development indicator is defined differently for children of different ages and has an increasing number of sub-indicators for older children.

- **Children zero to five months old** are deprived in the early childhood development indicator if they don't live with their respective biological parents or if they are left alone in the house for more than one hour.

- **Children six to eleven months** are deprived if any of the above conditions hold or if they don't have soft toys at home or if they don't receive support from adults on their respective activities.

- **Children one to three years old** are deprived if any of the above conditions hold except that to 'lack of soft toys' lack of books was added (if they lack soft toys *and* books).

- **Children who are four years old** are deprived if they lack any of the above conditions or if they are not attending preschool.

As with the National MPI, each dimension is equally weighted, and the two indicators within the child development dimension are equally weighted. A child 0-4 years old is identified as multidimensionally poor if s/he is deprived in one dimension or more, which corresponds to a poverty cut-off of 25%. This means that every child who was already poor by the National MPI is still poor by the Child MPI. In addition, a higher percentage of children are poor because they are also deprived in one or both of the two new indicators.

The indicators tracked by the Child MPI have been chosen through extensive consultation with a wide range of government officials and international agencies, principally UNICEF, to ensure that they are representative of the context of Sri Lanka.

The Child MPI for Sri Lanka

The Child Multidimensional Poverty Index or CMPI for Sri Lanka is a policy tool to direct action towards the population of children between 0-4 years of age who live in multidimensional poverty in Sri Lanka. It measures poverty among children aged 0-4 years old, by capturing the simultaneous deprivations that each child experiences in their household and also in that child's individual development. Analysing the CMPI shows the different deprivations that poor children experience and provides insights into the differences that exist across age groups and between girls and boys. Like the NMPI, the CMPI is built using the HIES 2019 dataset. In particular, two of the four waves included unique indicators for children 0-4.

The Child MPI is composed of four dimensions (education, health, standard of living, and child development) and twelve corresponding indicators (see Figure 7, and Appendix 02). The first three dimensions are identical to the National MPI of Sri Lanka and capture the deprivations of the household. The fourth-dimension

Figure 7: Child MPI dimensions and indicators

12 Indicators

Years of Schooling | School Attendance | Chronic Illness | Access to health facilities | Housing | Sanitation | Drinking Water | Cooking Fuel | Assets | Basic Facilities | Nutrition | Early Childhood Development

Education | Health | Standard of Living | Child Development

4 dimensions of poverty

Levels of Multidimensional Poverty for Children in Sri Lanka

The results reveal that 42.2% of the 0-4 years old children are multidimensionally poor by the CMPI, and they experience, on average, 35.1% of the weighted deprivations. The overall MPI is calculated by multiplying the percentage of children who are multidimensionally poor (the incidence, H) by the average share of weighted indicators in which poor children are deprived (the intensity, A). It is 0.148, showing that poor children experience 14.8% of all possible deprivations.

Understanding the composition of multidimensional poverty among the youngest children in the country is crucial to inform the development of child poverty policies. In this sense, the analysis of the percentage of children 0-4 years old who are multidimensionally poor and also deprived in each of the indicators (the censored headcount ratios) shows those indicators in which the CMPI poor children face the highest levels of deprivations (Figure 8). A reduction in any deprivation of any poor child (that is, of any censored headcount ratio) will reduce the Child MPI and improve the lives of children during their early stages of life.

In Sri Lanka, a large percentage of children 0-4 years old are multidimensionally poor and also deprived in clean cooking fuel (34%). And one-third of the children aged 0-4 years old are multidimensionally poor and themselves personally underweight or stunted (33.4%). In addition, 32.9% of the children are multidimensionally poor and lack access

to a safe source of drinking water; and 24.4% live in a household that is at least 15 minutes away from a bus stop or at least 30 minutes away from a primary or secondary school. Confronting these deprivations are top priorities for child poverty in Sri Lanka.

Looking closer at the early childhood development indicator, we find that one in six children are deprived in it (16.4%). A first observation is that 77% or more of the children who are deprived in each component are multidimensionally poor, so these deprivations are clearly poverty-related. Among the six sub-components, the highest deprivations faced by CMPI poor children come from not receiving support from adults on their activities (6.6%), and from being left alone at home for more than one hour (neglect, 3.5%). But among children aged 4, not going to preschool is the highest deprivation.

Given the findings from the Child MPI, it is essential to implement policies that address undernutrition, safe drinking water, access to basic facilities, and preschool deprivations in order to reduce poverty among young children.
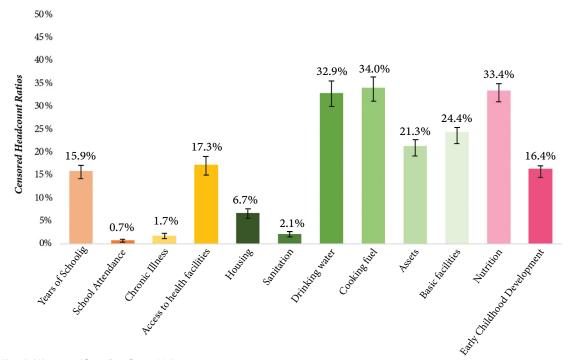
Figure 8: Percentage of children 0-4 years old who are CMPI poor and deprived in each indicator in Sri Lanka

Source: Household Income and Expenditure Survey, 2019

Reducing Multidimensional Poverty among Children in Sri Lanka

While 34.2% of the children of three years of age are multidimensionally poor, this percentage is highest among children aged 0-11 months (46.6%) and children aged 4 years old (47.5%), making these two age cohorts the poorest (and this finding is statistically significant). Intensity ranges from 34.0% in poor children of 0-11 months to 35.9% in poor four-year-old children.

In comparing policy responses across age cohorts, the confidence intervals are large, so comparisons are indicative. It seems likely that lack of access to health facilities contributes more to the overall multidimensional poverty of children aged two and three years old than to the other groups. The contribution of years of schooling is more significant for poor children aged one year old, and nutritional deprivations are highest among children under one year of age. The early childhood development indicator contributes more to the overall poverty of four-year-old children, in part due to children not attending preschool. The percentage contributions of the indicators in the standard of living dimension are very similar across age groups. The child development dimension contributes the most to multidimensional poverty in all four age groups.

A truly 'successful' part of this story is that there are no statistically significant differences between the poverty levels of the youngest girls and boys in Sri Lanka. The CMPI is not statistically different, (0.150 for girls and 0.146 for boys), and the composition of multidimensional poverty is very similar across boys and girls. This is actually a stellar accomplishment, because it reflects gender equity at that early stage in life that many countries lack.
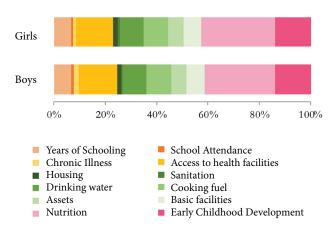
Figure 9: Percentage contribution by indicator to Child MPI by sex

Source: Household Income and Expenditure Survey, 2019

Conclusion

This briefing has provided a comprehensive and actionable snapshot of multidimensional poverty, using the new official Sri Lankan National MPI and Child MPI which were estimated from HIES 2019 data and will be reported as SDG indicator 1.2.2. Overall, 16.0% of people are poor by the National MPI, but levels vary across Sri Lanka. Poverty is highest in estate areas, where over half the population are poor, and in rural areas, where over 80% of poor people live. Multidimensional poverty is highest in districts like Nuwara-Eliya, Badulla and Monaragala, and also higher among people aged 65+. Policy priorities vary across regions and groups. In general, deprivations tend to be low in chronic illness, housing and sanitation; and high in access to health facilities, drinking water, and clean energy. But the official NMPI and its associated information platform provide action-oriented profiles of interlinked deprivations that policy actors in each sector, district, or priority area can use strategically to design high-impact activities.

The new and pioneering individual Child MPI is an official companion statistic to the NMPI. Measured at the individual level and covering children aged 0-4, the Child MPI includes every indicator of the National MPI (all poor children by NMPI remain poor) and extends it to consider two pivotally important deprivations in Sri Lanka: undernutrition and early childhood development. By this linked Child MPI, 42.2% of children 0-4 years of age are MPI poor, and an alarming one-third of young children are themselves undernourished. Shining a light on children, and profiling important gaps in preschool attendance and in active parental stimulation of cognitive development is vital because deprivations during childhood can last a lifetime. There are also positive findings, such as the fact that there are no statistically significant differences between the poverty levels of girls and boys in Sri Lanka.

The aim of the National and Child MPIs in Sri Lanka is to offer easy-to-understand, rigorous statistics that illuminate the level and shape of multidimensional poverty, provide relevant information on where to target, allocate budgetary resources, design multisectoral policies, and coordinate anti-poverty activities. While these data are before the pandemic, the next wave of data will show how the pandemic impacted the poor. In future, the National and Child MPIs will be used to monitor trends – a feature they are well able to do, because if any deprivation of any poor person is reduced, MPI will go down.

Appendix 01: Deprivation Cut-offs for the National MPI

Dimension	Indicator	Deprivation Cut-off: A household is deprived if the household (household's)…	Weight
Education (1/3)	Years of Schooling	Has at least one member (aged 17+) with less than the level of schooling that was compulsory when they were studying (age dependent) or has never attended school, or is attending special education	1/12
	School attendance	Has any school-age child (aged 5-16) who is not attending school	1/4
Health (1/3)	Chronic illness	Has any member who is suffering from chronic illness that has stopped their usual activities or job for one month or more	1/6
	Access to health facilities	Access to health facilities takes 30 minutes or more	1/6
Standard of Living (1/3)	Housing	Uses semi-permanent materials for wall, floor, or roof of the house.	1/18
	Sanitation	Facility is not improved, or it is shared with other households	1/18
	Drinking water	Has no access to safe source of drinking water, or the time/distance to collect is at least 15mins/1km, or there has been insufficient drinking water for last month, or the quality of drinking water is not improved	1/18
	Cooking fuel	Uses firewood, kerosene or saw dust/paddy husk for cooking	1/18
	Assets	Does not have **at least one** of TV, washing machine, fridge, computer, motorbike, three-wheeler, car, van, bus or lorry **and** Does not have **more than one** of land, livestock, agriculture/fishing equipment (tractor, thresher, combine harvester, fishing boat, fishing nets)	1/18
	Basic facilities	Requires at least 15 minutes or more to reach the nearest bus stop or 30 minutes or more to reach a primary or secondary school	1/18

Source: Household Income and Expenditure Survey, 2019

Appendix 02: Deprivation Cut-offs for the Child MPI

Dimension	Indicator	Deprivation Cut-off: A child 0-4 years old is deprived if…	Weight
Education (1/4)	Years of Schooling	The household has at least one member (aged 17+) with less than the level of schooling that was compulsory when they were studying (age dependent) or has never attended school, or is attending special education	1/16
	School attendance	The household has any school-age child (aged 5-16) who is not attending school	3/16
Health (1/4)	Chronic illness	The household has any member who is suffering from chronic illness that has stopped their usual activities or job for one month or more	1/8
	Access to health facilities	The household's access to health facilities takes 30 minutes or more	1/8
Standard of Living (1/4)	Housing	The household uses semi-permanent materials for wall, floor, or roof of the house	1/24
	Sanitation	The household's facility is not improved, or it is shared with other households	1/24
	Drinking water	The household has no access to safe source of drinking water, or the time/distance to collect is at least 15mins/1km, or there has been insufficient drinking water for last month, or the quality of drinking water is not improved	1/24
	Cooking fuel	The household uses firewood, kerosene or saw dust/paddy husk for cooking	1/24
	Assets	Does not have **at least one** of TV, washing machine, fridge, computer, motorbike, three-wheeler, car, van, bus or lorry **and** Does not have **more than one** of land, livestock, agriculture/fishing equipment (tractor, thresher, combine harvester, fishing boat, fishing nets)	1/24
	Basic facilities	The household requires at least 15 minutes or more to reach the nearest bus stop or 30 minutes or more to reach a primary or secondary school	1/24
Child Development (1/4)	Nutrition	s/he is underweight or stunted	1/8
	Early Childhood Development	s/he is: **Zero to five months old** and is left alone at home for more than one hour **or** if both mother and father are not living with the child **Six to eleven months old** and is left alone at home for more than one hour **or** if s/he doesn't have soft toys to play **or** if s/he doesn't receive support from adults in her/his activities **or** if both mother and father are not living with the child **One to three years old** and is left alone at home for more than hour **or** if s/he doesn't receive support from adults in her/his activities **or** if both mother and father are not living with the child **or** if s/he doesn't have books **and** soft toys to play **Four years old** and is left alone at home for more than hour **or** if s/he doesn't receive support from adults in her/his activities **or** if both mother and father are not living with the child **or** if s/he doesn't have books and soft toys to play **or** if s/he is not attending preschool	1/8

Source: Household Income and Expenditure Survey, 2019