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The State of Multidimensional Child Poverty and Deprivations in Addis Ababa and Dire Dawa



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POLICY STUDIES INSTITUTE



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The State of Multidimensional Child Poverty and Deprivations in Addis Ababa and Dire Dawa is based on the Child Focused Data collected as part of National Poverty Data Analysis

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Foreword

Ethiopia ratified the CRC in 1991, the Optional Protocols in 2014, and the African Charter on the Rights and Welfare of the Child in 2000. These commitments were integrated into national frameworks, culminating in the 2017 National Children's Policy. This policy strengthens child rights and is incorporated across sectors like health, education, nutrition, social protection, child protection and WASH to ensure comprehensive enforcement and protection of children's rights.

The target for Sustainable Development Goals 1.2 aims to reduce poverty in all its dimensions by 2030, focusing not only on income but also on access to education, healthcare, and basic services. Governments are urged to address poverty comprehensively using national poverty analyses.

Ethiopia has taken bold steps to combat child poverty through a range of strategies and programs that target its complex, multidimensional nature. These initiatives prioritize improving health, education, nutrition, child protection, WASH and social protection services for vulnerable children across the country. While children in rural Ethiopia often face severe hardships, the challenges faced by the most deprived children in urban areas are overlooked often. This oversight leaves their growing needs and vulnerabilities unaddressed, creating a pressing and increasingly visible problem.

Urban child deprivation is a rising concern, posing a significant challenge for Ethiopia as it strives for equitable development. Recognizing this, the study aims to shine a spotlight on the extent of deprivation among urban children, raising awareness among the government, donors, and partners. By identifying critical gaps, the study seeks to advocate for urgent, actionable solutions to protect the rights of these children and address the injustices they face.

As Ethiopia advances toward its goal of becoming a middle-income nation, urbanization is set to accelerate, reshaping the landscape of its cities. This rapid growth will deeply affect the safety and well-being of children in urban areas, particularly if the unique needs of vulnerable groups—such as children in street situation and those children in slums or informal settlements—remain neglected. Ignoring the challenges faced by these children not only increases their risks and vulnerabilities but also threatens to derail efforts to create inclusive and sustainable urban living conditions. To ensure no child is left behind in Ethiopia's urban development journey, it is crucial to address these pressing issues with urgency and compassion.

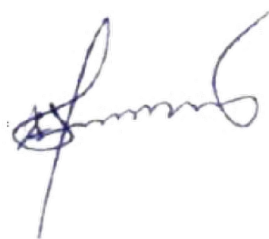
The analysis, conducted in collaboration with key government partners, reveals a concerning reality: 41.1% of children in Addis Ababa and 40.2% in Dire Dawa experience deprivation in five or more essential needs and services. This equates to approximately 800,000 children in these two cities alone, unable to access the basic resources required for their full development. These findings highlight a troubling trend—an increasing number of urban children are being left without the support they need to thrive.

This study serves as a crucial tool for tracking the well-being of children in Ethiopia's urban areas, with plans to expand research to additional cities in the future. By highlighting the distinct dimensions of multidimensional poverty among urban children, the findings seek to motivate policymakers, donors, and program implementers to take targeted action. Addressing these critical deprivations—regardless of location—is essential to ensuring that every child has the opportunity to thrive.

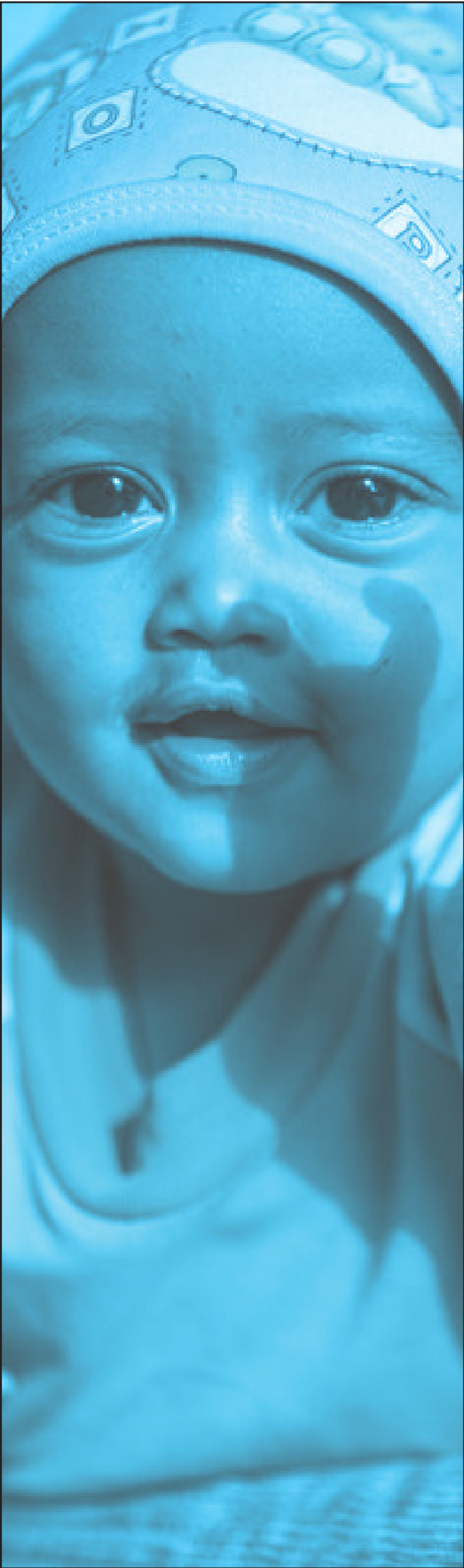
To achieve this, efforts must focus on reducing child deprivation in both rural and urban areas. With the right mix of strategies and an expansion of social services, the Government of Ethiopia can work toward meeting the Sustainable Development Goal 1.2 target of halving multidimensional child poverty nationwide by 2030.

A blue ink signature, likely of Aboubacar Kampo, consisting of stylized, overlapping loops and strokes.

Aboubacar Kampo, UNICEF Ethiopia Representative

A blue ink signature, likely of Alebel Dessie, featuring a prominent, sweeping horizontal stroke with a loop at the end.

Alebel Dessie, Deputy Director General of Policy Studies Institute



Executive Summary

Despite economic advances in Ethiopia, substantial reductions in multidimensional child poverty have not materialized in recent years. Millions of children in Ethiopia experience multidimensional poverty, and lack basic necessities across various aspects of life. This report paints a concerning picture of urban multidimensional child poverty in Ethiopia, revealing a web of deprivations hindering not only their immediate well-being but also their future prospects. This summary highlights the state of multidimensional child poverty and deprivations using survey data from a total of 4,422 children (2,745 from Addis Ababa and 1,677 from Dire Dawa). Analysing child poverty in these major urban centres provide valuable insights into a significant proportion of the country's urban child population.

Key dimensions

- Multidimensional child poverty (MCP) analysis in this report encompasses deprivations in health, nutrition, education, protection, water, sanitation, housing, information and participation, and leisure.

Ethiopia's situation

- **High prevalence of MCP:** Progress in reducing multidimensional child poverty has been slow in recent years. The two city administrations are grappling with an alarmingly high rate of multidimensional child poverty, affecting an estimated 41 per cent of children under 18. This translates to a total of roughly 800,000 children lacking fulfilment of basic needs in at least five crucial dimensions of child rights out of the nine considered in the study. Thus, two-fifths of children in Addis Ababa and Dire Dawa are deprived of at least five of the nine child rights.

- **Variation in prevalence of MCP:** Incidence of multidimensional child poverty is slightly higher in Addis Ababa (41.1 per cent) than in Dire Dawa (40.2 per cent). However, this difference is not statistically significant. Therefore, children in Addis Ababa do not face significantly higher deprivation rates than their counterparts in Dire Dawa.
- **Overlapping deprivations:** Deprivations often overlap: they rarely occur in isolation, and children experience a combination of them. A staggering 97 per cent of children experience deprivations in two or more dimensions simultaneously, creating a complex web of deprivations.
- **Determinants of MCP:** Deprivations in water, leisure, housing and nutrition are the top four determinants of multidimensional child poverty incidence in urban areas, regardless of the gender of the child and city of residence. Further exploration of child- and household-level determinants of MCP incidence reveals that the number of deprivations and/or incidence of MCP is significantly higher among girls, children with disabilities, orphaned children, children in households whose heads are engaged in unskilled jobs and whose heads are illiterate, and children living in asset-poor households and with a large number of children under 5.
- **Vulnerability by wealth:** Children from asset-poor households are disproportionately affected by MCP, highlighting the link between income and access to basic necessities and services. As such, wealth disparity plays a significant role, with children from asset-poor households more likely to be multidimensionally poor. Overall, around 20 per cent of multidimensionally poor children (18.7 per cent of those in Addis Ababa and 28.4 per cent of those in Dire Dawa) live in asset-poor households.



Moving forward

This study highlights the need for immediate and comprehensive action towards tackling multidimensional child poverty. By acknowledging the global scope, and focusing on specific challenges like those in Ethiopia, we can work towards a future in which all children have the opportunity to thrive. In this light, the report concludes by outlining recommendations for policymakers and stakeholders to combat multidimensional child poverty. These recommendations include:

- **Combine interventions to result in complementarities:** Multiple deprivations can be addressed simultaneously by combining effective interventions that focus on resolving deprivation in any of the dimensions.
- **Invest in social protection programmes that address various deprivations:** As there is a strong link between wealth and multidimensional child deprivation (MCD), income poverty and inequality should be addressed to empower families and break the cycle of poverty in all its forms.
- **Strengthen child protection and family support services:** Families at risk require support to help prevent children from resorting to street life. Moreover, child protection interventions should identify and take actions in cases of neglect, abuse, or abandonment to prevent children from running away or being forced onto the streets. Safe and supported reintegration with families should be facilitated whenever possible, or street children should be assisted to find permanent housing and integrate into society.
- **Conduct data-driven monitoring and evaluation:** Data should be collected and utilized to track progress on the fight against MCP over time. Utilizing timely and accurate data facilitates monitoring and evaluating interventions, to ensure their effectiveness in halting single or overlapping deprivations and adapt strategies as needed.
- **Mainstream multidimensional measures of poverty:** In addition to policies that promote economic growth and reduce income inequality, it is crucial to mainstream multidimensional child poverty indicators into national development plans, targeting multiple deprivations simultaneously, taking into account geographic disparities and the needs of the most vulnerable.

By taking a holistic approach, Ethiopia can create a future in which all children have the opportunity to thrive, free from the constraints of multidimensional deprivations.

1. Introduction

1.1. Background

Multidimensional urban child poverty is a complex issue affecting millions of children worldwide. It refers to a condition in which the well-being and future prospects of children in urban areas are affected by poverty across multiple dimensions. The dimensions of multidimensional poverty and deprivation include health, nutrition, education, protection, water, sanitation, housing, information and participation, and leisure. In urban settings, poverty can be particularly challenging for children, due to the high cost of living, limited access to essential services, and exposure to various forms of violence, exploitation and discrimination. Multidimensional poverty exacerbates these challenges by creating a vicious cycle of disadvantage that can persist across generations.

Several factors contribute to multidimensional urban child poverty, including income inequality, discrimination, conflict and natural disasters. In many urban areas, there is a large gap in income and resources between the rich and the poor (Chzhen & Ferrone, 2017). When the cost of living rises, low-income families find it hard to meet their basic needs, such as food, shelter and education. Moreover, exposure to violence, crime, and child labour are more prevalent in some urban areas, with a negative effect on a child's well-being and development. Regarding intersectionality, children from marginalized groups – such as children from minority ethnic groups and children with disabilities – are more likely to experience multidimensional poverty. Furthermore, situations of armed conflict and violent areas or natural disasters, such as floods and earthquakes, can also lead to displacement and multidimensional poverty of children.



In Ethiopia, progress in reducing MCD and poverty remains insufficient. Previous reports have shown that child deprivation and poverty in the country have continued to be among the highest in sub-Saharan Africa. The Central Statistical Agency (CSA) and UNICEF (2018) report shows that MCD in three to six dimensions fell by only about two percentage points in a five-year period, from 90 per cent in 2011 to 88 per cent in 2016. The same source reveals that in 2016 MCD was 94 per cent in rural areas and 42 per cent in urban areas. The average deprivation intensity was 4.5 in rural areas and 3.2 in urban areas, indicating that MCD is far higher in rural areas than in urban areas. One can anticipate that many children in the country are now facing multiple deprivations due to covariate shocks, such as the COVID-19 pandemic, the current political instability and war, and the Russia-Ukraine war, all of which are likely to have exacerbated multidimensional child poverty. Today, forced internal displacements caused by armed conflict are increasing alarmingly across all corners of the country. The prevalence of such shocks will more likely increase the incidence of poverty in urban areas, which are the destinations of people leaving their homes to escape the current circumstances. Consequently, as children are particularly vulnerable, measuring children's multidimensional poverty in urban settings is crucial. Therefore, there is a need to update the MCD estimates using recent data to shed light on the current situation of Ethiopian children in general and urban children in particular.

There are four main reasons why studying urban child poverty and deprivation is essential. First, children living in urban areas are also vulnerable, and deserve to live free from poverty and deprivation. Studying urban child poverty and deprivations helps raise awareness about injustices and inequalities faced by children and can help mobilize action to address these moral and ethical issues. Second, the United Nations Convention on the Rights of the Child (CRC) recognizes the right of every child – regardless of where they stay – to live a life free from poverty and to access basic services such as education, health care, and adequate housing. Studying child poverty and deprivation helps with monitoring of progress toward fulfilling these rights, and can help hold governments accountable for their commitments. Third, child poverty and deprivation can negatively affect social cohesion and community well-being. Children who experience poverty and deprivations are more likely to experience social exclusion and discrimination, leading to crime, social unrest and instability. Fourth, child poverty and deprivations have long-term economic costs for individuals, families and societies. Children who experience poverty and deprivations are more likely to experience poor health, lower educational attainment, and reduced income in adulthood (Agyire-Tettey et al., 2021). This can lead to reduced economic productivity and increased social costs, such as greater health-care and criminal justice expenses, in urban areas. In summary, studying urban child poverty and deprivation is necessary for promoting social justice, protecting human rights, fostering economic development, and strengthening social cohesion.

To address multidimensional urban child poverty, it is important to adopt a comprehensive and integrated approach, considering the various factors contributing to poverty and their interrelationships. This includes investing in education, health care, housing, and social protection programmes to provide children and their families with the resources and support they need to thrive. Therefore, urban multidimensional poverty analysis plays a huge role in addressing the root causes of child deprivation, inequality, discrimination and social exclusion, and promoting inclusive and sustainable development that benefits all members of society.

1.2. Purpose and objectives

The specific objectives of this study are to:

- Calculate the proportion of urban children that are multidimensionally poor in Addis Ababa and Dire Dawa city administrations of Ethiopia;
- Examine heterogeneities to examine the proportion of urban multidimensionally deprived and poor children, based on various profiling variables (such as; gender, age group, disability status, employment, city, social assistance, and so on); and
- Hear urban children's voices (including the voices of children living in poor urban communities and slums and children in street situations) on child poverty and deprivations.

1.3. Scope

This report assesses multidimensional child poverty in Addis Ababa and Dire Dawa cities using primary quantitative and qualitative data collected between 15 November and 17 December 2023. The analysis and the results of this report focus only on the two city administrations, and thus other urban areas are not included in this study.

1.4. Organization of the report

The remaining sections of the report are organized as follows. Chapter 2 provides a definition and theoretical background of MCD, the national context and existing policy frameworks. Chapter 3 outlines the methods of data collection and analysis. Chapters 4 to 9 presents the main quantitative and qualitative findings of the study, and chapters 10 and 11 provide concluding remarks and policy recommendations.

2. Concepts and context

2.1. Defining and conceptualizing the MCD and MODA

The conceptual framework of multidimensional child poverty provides a holistic view of the problem of child poverty. The multidimensional understanding of poverty recognizes that poverty is not just a matter of income but also of deprivation in other areas of life (Thorbecke, 2013; Alkire et al., 2015). It also acknowledges that children are more vulnerable to poverty than adults. This framework can be used to develop policies and programmes that address key deprivations and ensure that all children have the opportunity to reach their full potential. Following Gordon et al. (2003), the conceptual framework for the multidimensional child poverty assessment in Ethiopia is based on the following key concepts:

Children are rights holders

Children have the same rights as adults, including the rights to survival, development, protection, and participation and inclusion. The understanding of 'children as right holders' underpins the CRC and identifies the civil, political, economic, social and cultural rights of every child, regardless of their gender, race, religion, abilities or geographical location. State parties to the CRC, including Ethiopia, have committed to redressing all forms of barriers and discriminatory actions that prohibit children from reaching their full development potential and contribute to nation building in all spheres of life. Thus, this study follows the human and child rights approach to ensure that children are treated as rights holders.

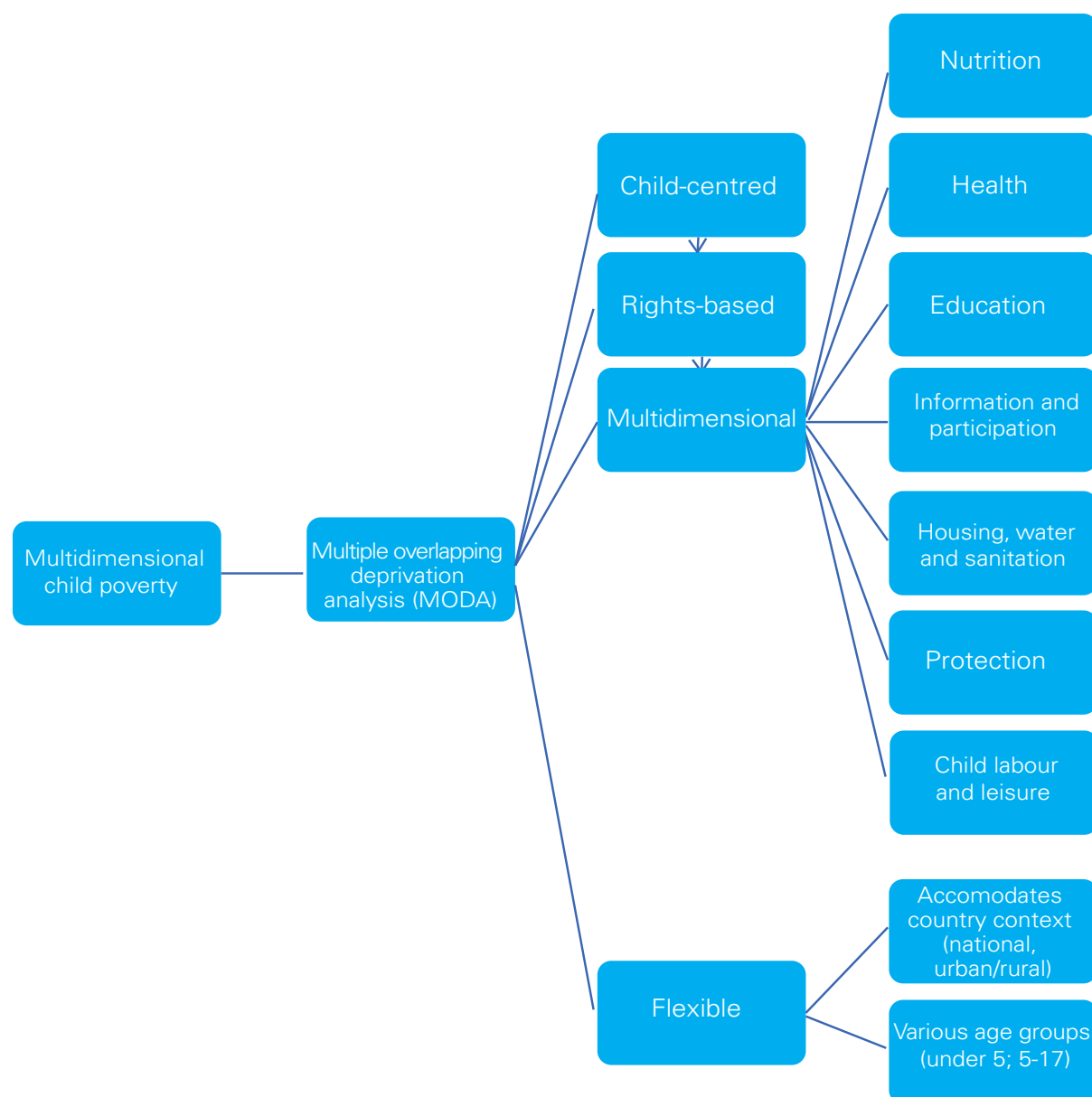
Poverty is multidimensional

The Sustainable Development Goals (SDGs) start with pursuing poverty reduction of all types and everywhere by 2030. Poverty is not just about income or lack of material resources: it also includes deprivation in other areas of life, such as health, education, nutrition, shelter, and water and sanitation. SDG target 1.2 directly addresses multidimensional poverty in all forms, including overcoming child poverty. Under Article 1 of the CRC, a child is someone less than 18 years of age. Child poverty denotes the lack of basic needs such as nutrition, education, health, water, and shelter services, resulting in lifetime deficits (UNICEF, 2023). Measuring and understanding

child poverty serves as a handrail of policy, encourages sustained attention, and insights on warning of failure, sharpens accountability, assists in effective and efficient resource allocation for vulnerable children, and keeps efforts on track toward achieving SDG goals and targets. Children's wellbeing can be evaluated in various dimensions, such as material, health, safety, education, family and peer relationships, behaviour and risks, and children's subjective sense of wellbeing. Children's well-being includes nutrition, educational opportunities, and general physical and psychological status (Dercon, 2012).



Figure 1: Conceptual Framework for Urban Child Multidimensional Poverty Analysis



Source: Representation developed for this report

There are two extensively used frameworks in the literature to measure and analyse children's multidimensional poverty: the UNICEF Multiple Overlapping Deprivation Analysis (MODA) and the Oxford Poverty and Human Development Initiative (OPHI) framework (Hjelm et al. 2016). This study adopted the MODA framework to empirically examine multidimensional child poverty in two urban centres in Ethiopia. Figure 1 above presents the framework showing that MODA has key features: it is child-centred, flexible, right-based, and can be managed per country-specific context. It mainly focuses on children's deprivation of basic needs, goods, and services needed for their protection, participation, survival, and development. Besides, the analysis can be done at national level or in the context of an urban-rural setup. Our analyses focus on the context of urban settings in Addis Ababa and Dire Dawa city

administrations. Using MODA, our analyses address the basic dimensions of child welfare, including nutrition, health, education, participation, housing, water and sanitation, protection, child labour, and other global and country-specific child welfare-related features (see Figure 1).

Children are more vulnerable to poverty than adults

Children are more vulnerable to poverty because they depend on adults for their survival and well-being. They are also less able to cope with the adverse effects of poverty, such as malnutrition, disease, and violence. In the absence of adequate protection mechanisms to buffer children from those adverse effects, the situation of children can worsen to the point that they end up on the streets. The life cycle approach recognizes that children's vulnerabilities change over time, and that different stages of childhood require different types of support. For example, early childhood is a critical period for development, and children in this age group need access to good nutrition, health care, and education. Meanwhile, adolescents face new challenges such as puberty, peer pressure, and the transition to adulthood. They need support to develop their social and emotional skills, and to make informed decisions about their future. MODA aligns with the life cycle approach as it is used to identify the different stages of childhood and children who are experiencing multiple deprivations at each stage, and to track changes in child poverty over time.

Therefore, there is a need to holistically address children's development following a life cycle approach, addressing social norms, parental practices, and institutional support, focusing more on the most disadvantaged children. Interventions that target children are long-term economic investments that have favourable effects on economic outcomes during adulthood (Hoddinott et al., 2008) and, in most contexts, have the highest rates of returns (Alderman et al., 2017). The dynamic nature of the life cycle approach implies a continued need to strengthen the coherence of policies and programmes over time, primarily to address temporal and intergenerational cycles of deprivations and disparities.¹

¹ Deprived childhood not only worsens immediate well-being but also determines lifetime socioeconomic status due to its irreversible long-lasting effects.

Urban child poverty is distinct from overall national child poverty

Deprivations children face in urban areas differ from what they face in rural areas. Poverty rates also vary significantly within a single urban centre. Wealthy neighbourhoods might exist alongside slums, highlighting the need for geographically specific analysis across major urban centres. Moreover, urban poverty can be hidden from plain sight. Slum areas or informal settlements might not be well-documented, making it difficult to accurately assess the number of children living in poverty. By understanding these differences, policymakers and programme designers can develop more targeted and effective interventions to address the specific challenges faced by children living in poverty in urban centres.

2.2. National context

Ethiopia faces a significant challenge in addressing multidimensional child poverty. The first national estimates on multidimensional child poverty, using the 2016 Ethiopia Demographic and Health Survey (EDHS), provide a glimpse into the situation of the country. The study found that a staggering 88 per cent of Ethiopian children under 18 (roughly 36.2 million children) were experiencing multidimensional poverty (CSA & UNICEF, 2018). This means they lack basic needs and services across several crucial dimensions of child rights. Children in Ethiopia face more than one deprivation. The CSA & UNICEF (2018) report revealed that 95 per cent of children are deprived in 2 or more of 6 dimensions, highlighting the interconnected nature of deprivations across dimensions. MCD varies across regions, with Afar, Amhara, the former Southern Nations, Nationalities, and Peoples' Region (SNNPR), Oromia, Somali and Benishangul-Gumuz having the highest rates above the mean headcount rate, and these regions also rank first to sixth in prevalence of MCD. Unsurprisingly, children in rural areas are more likely to experience multidimensional poverty than those in urban areas. There is also a strong link between wealth and multidimensional child deprivation. Children in the poorer wealth quintiles are more likely to be multidimensionally deprived.



2.3. Policy analysis

Ethiopia has implemented various policies and legal frameworks related to children's rights and development. These policies and legal frameworks focus on enhancing child well-being, ensuring child rights and protection, and promoting children's immediate and future development prospects. In this light, in 1991 Ethiopia signed the 1989 United Nations Convention on the Rights of the Child (CRC). The CRC focuses on areas such as child survival, development, access to basic needs, protection, participation, and child-friendly governance. In turn, Ethiopia has aligned its policies and legal frameworks – including the 1995 Constitution – with the CRC.

The Constitution of Ethiopia focuses on provision of fundamental rights and freedoms, non-discrimination and equal treatment and opportunities for all children, rights to access education, health, food and shelter, and protection from harm and exploitation. The Constitution enshrines the principle that the best interests of the child should be considered in all actions concerning children by public and private welfare institutions, courts, administrative authorities and legislative bodies. Thus, Ethiopia addresses the rights of children in the national Constitution, from which various legal frameworks have been designed. Accordingly, the National Child Policy of Ethiopia provides a complete framework for promoting and protecting the rights and well-being of children in alignment with the CRC, as well as with the African Charter on the Rights and Welfare of the Child. The policy is intended to ensure that all children enjoy their rights and have access to essential services. Appendix 1 highlights the provisions on child rights outlined in the policy and legal framework documents.

3. Data and methods

This study used a mixed methods research design to assess multidimensional child poverty, combining quantitative and qualitative data collection and analysis methods to understand the phenomenon comprehensively. After clearly defining the research objectives that the study is intended to address (see section 1.2) and developing the conceptual framework to guide the study (see section 2), the steps that this study takes to implement a mixed methods approach are as follows:

3.1. Data sources and type

Quantitative data were collected through household surveys. Our survey questionnaire included structured questions to capture household and child-level deprivations across the dimensions and indicators presented in Table 3.1.

Table 3.1: The dimensions and indicators of multidimensional child poverty

.No	Dimension	Indicators	Under 5	5 - 17 years
1	Health	More than 30 minutes to nearest health facility *	X	X
		Unskilled birth attendance	X	
		Adequacy of antenatal care (ANC) services: mother had less than 4 ANC visits during pregnancy or 4+ ANC visits were performed by an unskilled health professional	X	
		Incomplete vaccination	X	
		knowledge on oral rehydration salts (ORS) for treatment of diarrhoea: mother does not have knowledge	X	
		OR child lives in a household where no adolescent or adult female knows about ORS for treatment of diarrhoea		
		Knowledge about HIV and AIDS: a child aged 5-14 years lives in a household where none of the adolescent or adult members has knowledge about HIV transmission and prevention; a child aged 15-17 years does not have knowledge of HIV transmission and prevention		X
2	Nutrition	Child is not exclusively breastfed for the first 6 months of life	X	
		Infant and young child feeding (IYCF) practices: child is not fed a minimum acceptable diet (MAD)	X	
		Stunting (height-for-age less than "-2 standard deviation" from WHO reference)	X	
		Wasting (weight-for-height less than "-2 standard deviation" from WHO reference)	X	
		Underweight (weight-for-age less than "-2 standard deviation" from WHO reference)	X	
		Child has not received a vitamin A supplement during the last 6 months	X	
		Child has not received a deworming medication	X	
		Child is not fed at minimum meal frequency (MMF) *	X	X
		Child lives in a household that worried about having enough food over the past 7 days *	X	X
3	Education	Over the past three days, a child was not engaged by an adolescent or adult in at least four of the following activities: reading books; telling stories; singing songs; being taken outside; playing together; naming/counting or drawing) *	X	
		It is more than 30 minutes to the nearest school appropriate for the child's grade level *		X
		Child aged 5-6 years is not currently attending pre-primary school (0 class) *		X
		Child aged 7-17 years is not currently attending school		X
		Child of primary school age, between 9 and 14 years, is two or more years behind; a child of secondary school age, between 15 and 17 years, is three or more years behind		X
		Child cannot read a full sentence		X

4	Housing	Roof, walls and/or floor made of non-permanent material/natural material	X	X
		Multiple housing problems (for example leaky roof/damp walls) *	X	X
		Child is living in a household with more than 4 people per room (excluding kitchen) *	X	X
		Indoor pollution (the child is exposed to indoor pollution from usage of unclean cooking fuels (for example, kerosene, coal/lignite, charcoal, wood, straw/ shrubs/grass, animal dung or agricultural crop residue) for cooking inside the house with no separate kitchen	X	X
5	Water	Household uses an unimproved water source (unprotected wells, unprotected springs, surface water (for example, river, dam or lake); vendor-provided water; bottled water, if water for other uses such as cooking and personal hygiene is from unimproved source; and tanker truck-provided water)	X	X
		Time to water source is more than 15 minutes: the child's dwelling is located more than 15 minutes away (in rainy or dry season) from reaching the main drinking water source (that is, 30 minutes to go and come back).	X	X
		Water availability from the drinking water source in the past two weeks: deprived if five days or less*	X	X
6	Sanitation	Household has access to an unimproved toilet type (public or shared latrine; flush/pour flush to elsewhere (not into a pit, septic tank, or sewer); a pit latrine without a slab; bucket latrines; hanging toilet/latrine; and no facilities/bush/field (open defecation))	X	X
		Child's dwelling is exposed to environmental pollution from inadequate solid waste disposal: dug out, thrown away, burning of waste, or other*	X	X
		Menstrual health products not available to girls when needed*		X
7	Child protection*	Child aged 0-59 months is left alone at home for more than one hour	X	
		Child aged 1-14 years experienced either being shouted, yelled or screamed, or being called dumb, lazy or another name OR	X	X
		Child aged 1-14 years experienced any of the following: being hit or slapped on the face, head or ears; being beaten up as hard as possible		
		Engages in child labour according to the ILO-UNICEF definition		X
		Female genital mutilation/harmful practices for girls	X	X
		Child's birth is not registered at civil registration and vital statistics woreda/ kebele bureau	X	
8	Information and participation	No information device (television, radio, phone or mobile phone) available in the household	X	X
		Child aged 5-17 years does not participate in celebrations on special occasions (birthday, name days or religious events) *		X
		Child aged 5-17 years does not have friends around to play and hang out with *		X
		Child aged 15-17 years has not heard family planning messages in the last few months through participation in community events or conversations		X
9	Leisure *	Child aged 1-17 years does not possess any recreation items or materials (outdoor or indoor)	X	X
		No safe space outside the house where child aged 1-17 years can play	X	X
		Child aged 1-17 years does not engage in regular leisure activity	X	X

* New indicator or dimension compared to the CSA and UNICEF (2018) report, using the 2016 EDHS data.

The questionnaire also includes sections to capture household and child-level characteristics that can serve as profiling variables for disaggregated urban multidimensional child poverty assessment. The main survey respondents were primary caregivers of children in the household. Our measure of multidimensional child poverty is a measure of the sum of unmet child rights to survival, development, protection, and participation aspects. Therefore, our survey captures the dimensions of child poverty to be examined and the indicators that are used to measure them. The survey questionnaire was based on the EDHS, with added modules on child deprivation dimensions that were considered essential for child wellbeing during stakeholder consultation meetings. The additional modules are based on internationally tested survey modules derived mainly from UNICEF's survey programme, the Multiple Indicator Cluster Survey (MICS).

Qualitative data are collected using the photovoice method, in-depth interviews (IDIs) with parents and caregivers, key informant interviews (KIIs) with experts from sector bureaus, and focus group discussions (FGDs) to supplement survey data and strengthen the assessment of the situation of the most disadvantaged children in urban communities. The FGDs target children in street situations to explore their lived experience of the adverse effects of poverty, and uncover the main reasons for them ending up on the streets.

3.2. Sample design and size

In accordance with the ToR, the study's location is in Addis Ababa and a few selected cities. To this end, our quantitative household survey was conducted in Addis Ababa and Dire Dawa city areas. We used a similar sample design and selection method as the 2016 EDHS to determine the number of sample households from each city.² Accordingly, using a stratified multistage sampling technique, as explained in Appendix B, a total of 2,243 households with children below 18 years were randomly selected from a list of households from both city administrations (see Table 3.2). Following a similar sampling design and method as EDHS 2016 to determine our sample size ensured the comparability of this study's findings with those of the first report by CSA and UNICEF Ethiopia (2018) on multidimensional child deprivation in Ethiopia, which used the 2016 EDHS. Table 3.3 shows the distribution of sample children, based on sex and age group.

Table 3.2: Sample distribution for the survey

Cities	Number of sample clusters	Number of sample households
Addis Ababa	53	1,388
Dire Dawa	32	855
Total	85	2,243

Table 3.3: Descriptive statistics on the analytical sample of children

Sex of the child	Age group				Total
	0-4 years	5-9 years	10-14 years	15-17 years	
Female	639	691	529	330	2189
	29.19	31.57	24.17	15.08	100.00
Male	725	766	492	250	2233
	32.47	34.30	22.03	11.20	100.00
Total	1364	1457	1021	580	4422
	30.85	32.95	23.09	13.12	100.00

Note: The first row sets out frequencies and the second row percentages.

² A detailed description of the sampling design used under the EDHS 2016 is presented in Appendix B.

For the qualitative data, we used a photovoice method that used photography to collect data and to empower participants to share their perspectives and lived experiences. Photovoice can be a powerful tool for giving voice to those often silenced and catalysing social change (Wang and Burris, 1997). Photovoice has been used to study various issues, including health, education, poverty, and environmental justice. It has worked particularly effectively with marginalized groups, such as children, youth, and people with disabilities.

Table 3.4: Sample distribution for the qualitative data collection

Method of qualitative data collection	Study location		Total
	Addis Ababa	Dire Dawa	
Qualitative data from children (using photovoice method*)	5	3	8
IDIs with parents and caregivers of children	14	8	22
KIIs with stakeholders	11	6	17
Qualitative data from children in street situations in FGDs	3	2	5

Therefore, this study used photovoice methods to work with child participants. Children participating in the study were given cameras and asked to take photographs of issues that are important to them and their families. They then met with the research team to discuss their pictures and what they mean to them. The photographs and captions were then used to create a photovoice report, to visually represent the participants' experiences related to multidimensional child deprivation. From the two cities, a total of 32³ children participated in this participatory, visual and flexible method of qualitative data collection. Our sample participants included children from poor urban communities and slums to adequately represent these areas of Addis Ababa and Dire Dawa city administrations.

As part of the qualitative data collection, we also conducted IDIs with 22 sample parents and caregivers, and 17 KIIs with governmental stakeholders in the two cities to increase data sources and facilitate triangulation of findings (see Table 3.4). Furthermore, we conducted 5 FGDs (with four participants in each FGD) with children living in street situations in the two cities to equally hear their voices and understand the lives and perspectives of these children. The FGDs included male-only groups, mixed groups, and female-only groups.

³ Based on previous experience from similar studies, this is a fairly large sample size to reach saturation.

3.3. Computation of MCD indices

Like CSA & UNICEF (2018), this study uses the UNICEF MODA methodology of de Neubourg et al. (2012), which contains both single-dimension deprivation analysis (which calculates the proportion of children deprived in each dimension and each of its constituting indicators), and multidimensional deprivation analysis (which counts the number of dimensions that each child is deprived in to calculate the deprivation distribution, overlaps between deprivations and MCD indices). The MCD indices are calculated by giving each dimension an equal weight, as each represents a right and every one of them is an equally important contributor to children's overall well-being. This study also ran logistic regressions to gain an insight about factors associated with children's likelihood of being multidimensionally deprived. The formulas used to compute the MCD indices are presented as follows.

MCD headcount rate

The MCD headcount rate (H) is the proportion of children in the total reference population who are deprived in a number of dimensions that is equal to or above the chosen cut-off point (equivalent to the poverty line). The calculation is based on the formula below:

$$H = \frac{q_k}{n_a}, q_k = \sum_{i=1}^n Y_k$$

where, H – multidimensional child deprivation rate; q_k – number of children deprived in at least K dimensions in the age group; n_a – total number of children in the age group; y_k – deprivation status of a child depending on the cut-off point K; D_i – number of deprivations that each child i experiences; K – cut-off point.

The analysis in this study calculates the MCD rate for all the possible cut-off points – from one to nine dimensions. However, the report focuses on presenting findings calculated using a cut-off point of five dimensions.

Average intensity of multidimensional deprivation

The average intensity of multidimensional deprivation (A) is equivalent to poverty depth in monetary poverty analysis and measures the breadth of deprivation among multidimensionally deprived children. It is calculated as the sum of all deprivations that multidimensionally deprived children (that is, children deprived in five or more dimensions) experience as a share of all possible deprivations among those deprived in at least K dimensions (that is, 9). This measure can be reported in two different forms: (i) The average number of deprivations experienced by multidimensionally deprived children in absolute numbers, or (ii) The proportion of deprivations experienced out of the total number of dimensions analysed, using the following formulas:

$$A \text{ in absolute number} = \frac{\sum c_k}{q_k} \qquad A \text{ in ratio} = \frac{\sum c_k}{q_k \times d}$$

where, A – average intensity (in number or as ratio) of multidimensional deprivation according to the cut-off point K; q_k – number of children deprived in at least K dimensions in the age group; d – total number of dimensions considered per child; c_k – number of deprivations each multidimensionally deprived child i experiences, with $c_k = D_i^* y_k$; n – total number of children in the age group; K – cut-off point.

Adjusted MCD Index

The Adjusted Multidimensional Child Deprivation Index (M0) is a composite measure that integrates both MCD headcount rate and average deprivation intensity. The Index ranges between 0 and 1, with 0 denoting that no child is multidimensionally deprived and 1 denoting that all children are multidimensionally deprived, and that the average deprivation intensity is nine. M_0 is called the 'adjusted' multidimensional poverty index, as it satisfies the 'dimensional monotonicity' property of poverty measures, meaning that it is sensitive to changes in the depth of deprivation even if the multidimensional headcount ratio does not change. For instance, if a child who was previously deprived in three dimensions is now deprived in four of them, the Index increases. Likewise, if the proportion of children who are multidimensionally deprived increases while average deprivation intensity remains the same, the Index will also increase. The adjusted MCD index is calculated as:

$$M = HxA = \frac{\sum_1^{q_k} c_k}{n_a \times d}$$

3.4. Profiling

Aggregated data can mask significant differences between subgroups. Disaggregated analysis is intended to move beyond broad averages and understand the nuances within a dataset by pinpointing which subgroups are most affected by a certain phenomenon. As such, trends observed in the whole dataset may not hold true for all subgroups. In this respect, profiling variables are the tools that unlock the power of disaggregated analysis. They enable researchers and analysts to move beyond a one-size-fits-all approach and gain a deeper understanding of the variations within the data, leading to more meaningful insights and impactful actions.

Profiling variables – like demographics, locations, or income levels – enable the segmenting of data and identification of patterns that may be invisible at aggregate level. For instance, national MCP incidence might miss the higher disparity across age groups, genders or regions. Profiling by these variables reveals this hidden pattern and helps uncover biases. At aggregate level, there could be a negative correlation between MCP and wealth (measured as household asset holding). Analysing by gender of the child might reveal that this correlation might be weaker for girls, highlighting a potential gender bias.

3.5. Trend analysis

The trend analysis of multidimensional child poverty paints a complex picture, with both positive advances and persistent challenges. Analysing data from MCD surveys over time can reveal:

- Changes in overall incidence: whether national rates of multidimensional child poverty are increasing, decreasing, or stagnating.
- Shifting deprivations: whether specific dimensions and indicators therein are showing improvement while others remain areas of concern.
- Sub-group variations: whether disparities across regions or other key profiling variables are widening or narrowing.

To ensure comparability between the results in the CSA and UNICEF (2018) report and this study, we used a similar sampling technique as the 2016 EDHS, based on which the results in the 2018 are produced. Moreover, we used similar questions in this study's survey tool as in the EDHS 2016 for the indicators that the 2018 report used to measure MCD. By monitoring

trends, policymakers and NGOs can adapt their strategies and target resources more effectively to create a future in which all children can escape multidimensional poverty and reach their full potential.

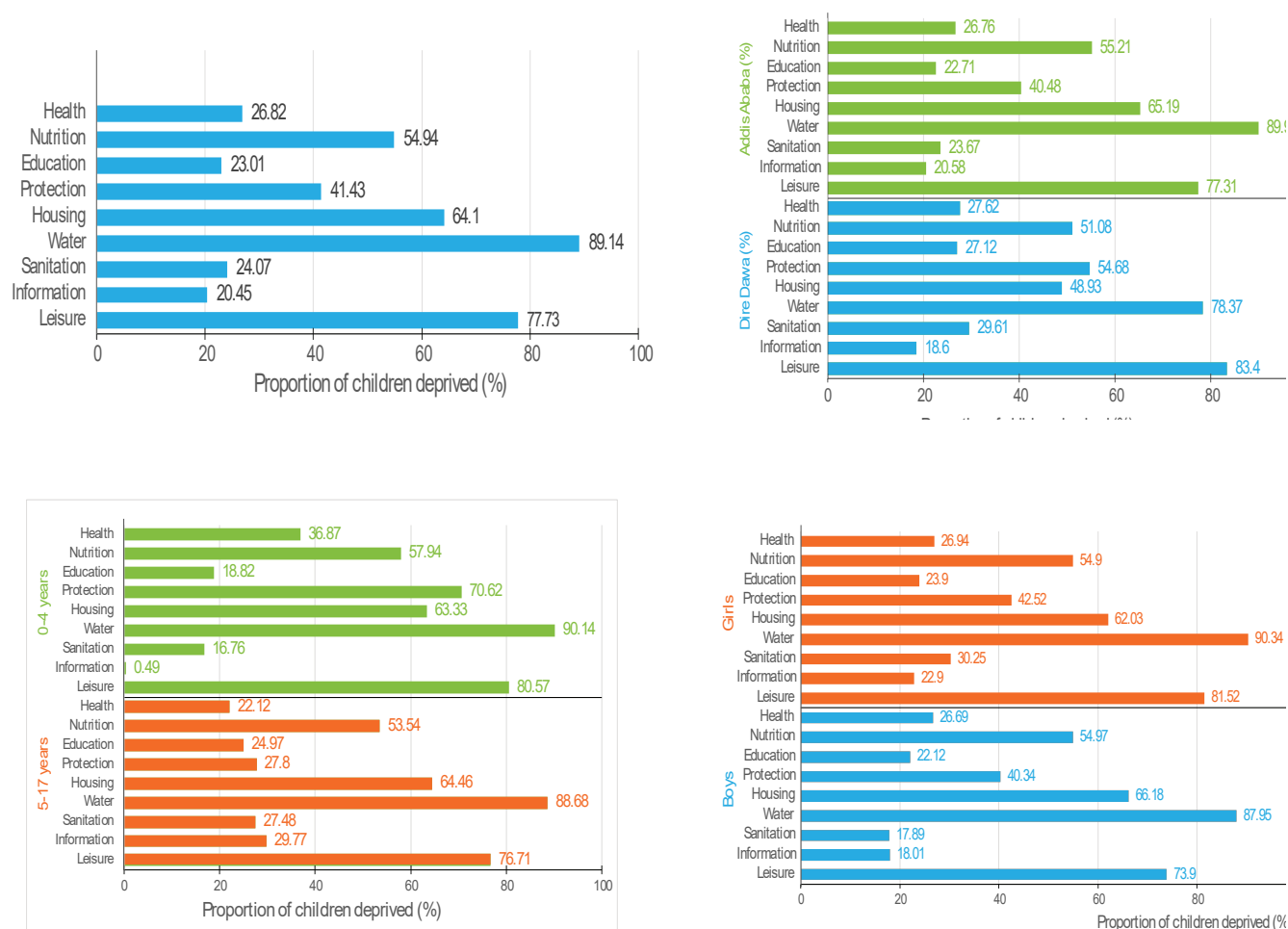
4. Single dimension deprivation analysis for all dimensions by age groups

4.1. Single deprivation analysis

The analysis of single deprivation delineates the outcomes for each individual indicator and dimension selected for evaluating the wellbeing of children. These outcomes offer insights into which areas necessitate focused attention. The areas of health, nutrition, education, housing/shelter, water, sanitation, child protection, information and participation, and leisure are examined (see Figure 4.1).

Our single deprivation analyses are further disaggregated by age group, gender and region (in each context city). Overall, in the two cities the highest deprivation rates that children experience are related to water (89.14 per cent), leisure (77.73 per cent), housing (64.1 per cent) and nutrition (54.94 per cent). About a quarter of children in the two cities are deprived in the remaining dimensions except in the child protection dimension, in which the deprivation rate is 41.43 per cent.

Figure 4.1: Deprivation incidence by dimension



When we disaggregate the deprivations by age group and city, as shown in Table 4.1, for children under five years the five most prevalent deprivations identified are water (90.3 per cent for Addis Ababa, 82.3 per cent for Dire Dawa), leisure (81.3 per cent for Addis Ababa, 87.9 per cent for Dire Dawa), protection (69.8 per cent for Addis Ababa, 78.1 per cent for Dire Dawa), nutrition (59.7 per cent for Addis Ababa, 64.1 per cent for Dire Dawa) and housing (64.3 per cent for Addis Ababa, 49.4 per cent for Dire Dawa). On the other hand, children are least deprived in information dimension for both cities. For 5-17, a similar trend is also observed where children experience the largest deprivations in the five dimensions. The least deprivation levels for this age group are observed in the information dimension in Addis Ababa (0.5 per cent) and Dire Dawa (2.2 per cent).

Table 4.1 Deprivation by dimension by age group and city, percentages

Dimensions	Addis Ababa		Dire Dawa	
	Years 0-4	Years 5-17	Years 0-4	Years 5-17
Health	32.3	19.6	36.6	25.9
Nutrition	59.7	55.1	64.1	48.0
Education	18.9	25.3	12.5	34.6
Protection	69.8	21.3	78.1	43.8
Housing	64.6	67.3	49.5	50.1
Water	90.2	89.6	82.3	78.7
Sanitation	19.0	30.3	24.9	33.7
Information	0.5	30.9	2.2	26.5
Leisure	81.3	77.8	87.9	81.9

4.2. Deprivation rates by dimension and indicator, disaggregated by profiling variables

4.2.1. Nutrition

Improving child survival and fostering healthy growth and development hinges significantly on nutrition. Although the CRC does not explicitly delineate nutrition as an independent entitlement, numerous articles underscore its significance for children's health, well-being, and development, particularly evident in Articles 6, 24, and 27. Ethiopia has embraced various strategies and policies to uphold children's rights, including the National Health Sector Strategic Plan for Early Childhood Development (ECD) in Ethiopia (2020/21-2024/25), the National Nutrition Programme (NNP II), the Health Sector Transformation Plan (HSTP II), and the National Food and Nutrition Policy (NFNP). Consequently, this dimension plays a crucial role in identifying child poverty.

In this report deprivation in nutrition for children under five years of age is measured using the indicators exclusive breastfeeding, stunting, underweight, wasting, vitamin A supplementation, deworming, minimum meal diversity and minimum meal frequency. From these indicators only minimum meal frequency is measured for both age groups, children under the age of 5 and children aged 5-17. Overall, deprivation in the nutrition dimension, as seen from Table 4.1, is among the highest rates of all deprivations (54.94 per cent). When comparing the rates between the two cities, for ages 0-4 years there is a slightly higher proportion of children deprived in this dimension in Dire Dawa (64.1 per cent) than in Addis Ababa (59.7 per cent).

In-depth interviews with parents and caregivers reveal contrasting views on access to nutrition for children. On the one hand, some children are accessing adequate nutrition. In this regard, one respondent describes the situation as: *“Our family provides balanced food for children, like fruits, meat, and other vegetables each day.”* In contrast, other caregivers believe that as food becomes more expensive due to the high cost of living, many children cannot get access to the necessary diet or nutritional food during their developmental stages. One respondent expresses her experience as *“shortages of income that restricted nutritional foods for the children. The children often eat the same type of food at breakfast, lunch, and dinner. They often eat potatoes.”*

Exclusive breastfeeding

Exclusive breastfeeding is part of the IYCF indicator used to measure nutritional deprivation among children under 6 months of age. Children are categorized as deprived in this indicator if they are not receiving breast milk, or if they are given any other form of liquid, solid, or semi-solid food alongside breastfeeding, excluding ORS and vaccines.

This indicator, as shown in Figure 4.2, reveals a 3.5 per cent deprivation among children under 6 months, which is the smallest proportion with deprivation in the nutrition dimension. Children in Addis Ababa (3.54 per cent) have a higher deprivation rate than children in Dire Dawa (2.55 per cent).

Figure 4.2: Deprivation rate by nutrition indicators

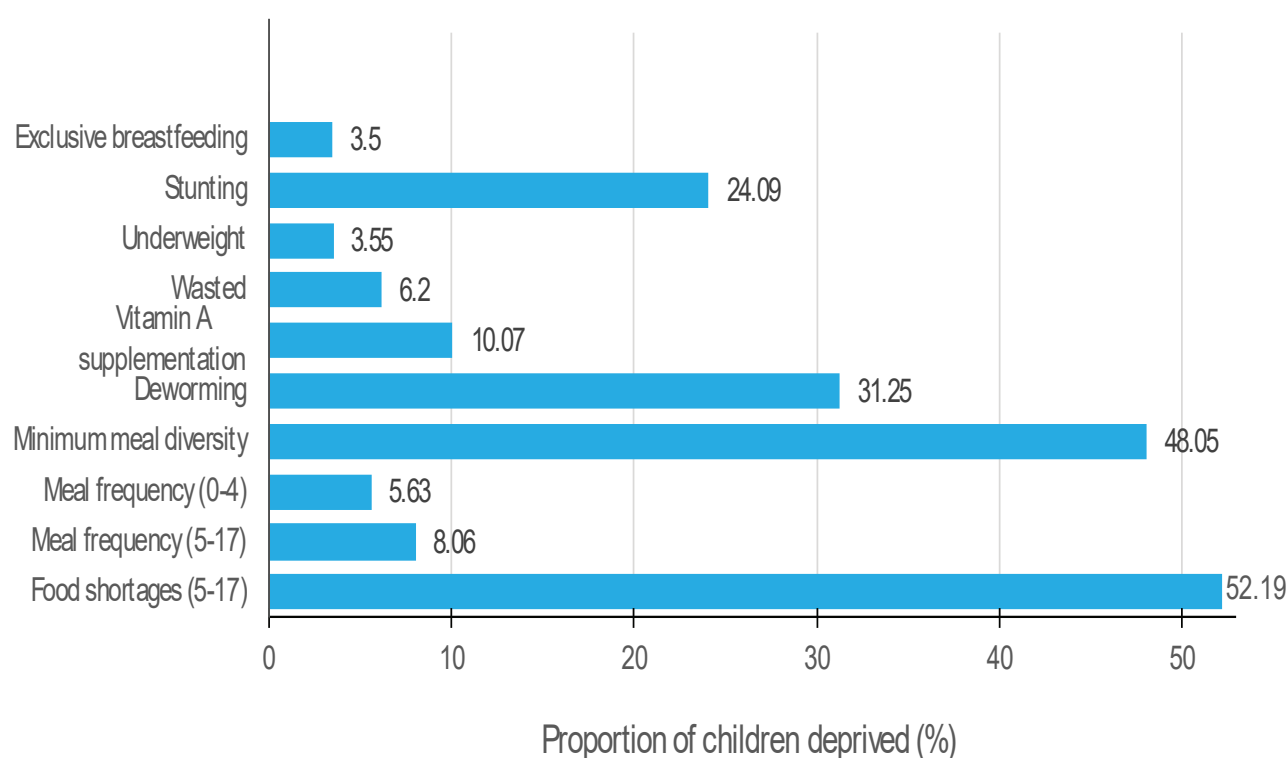
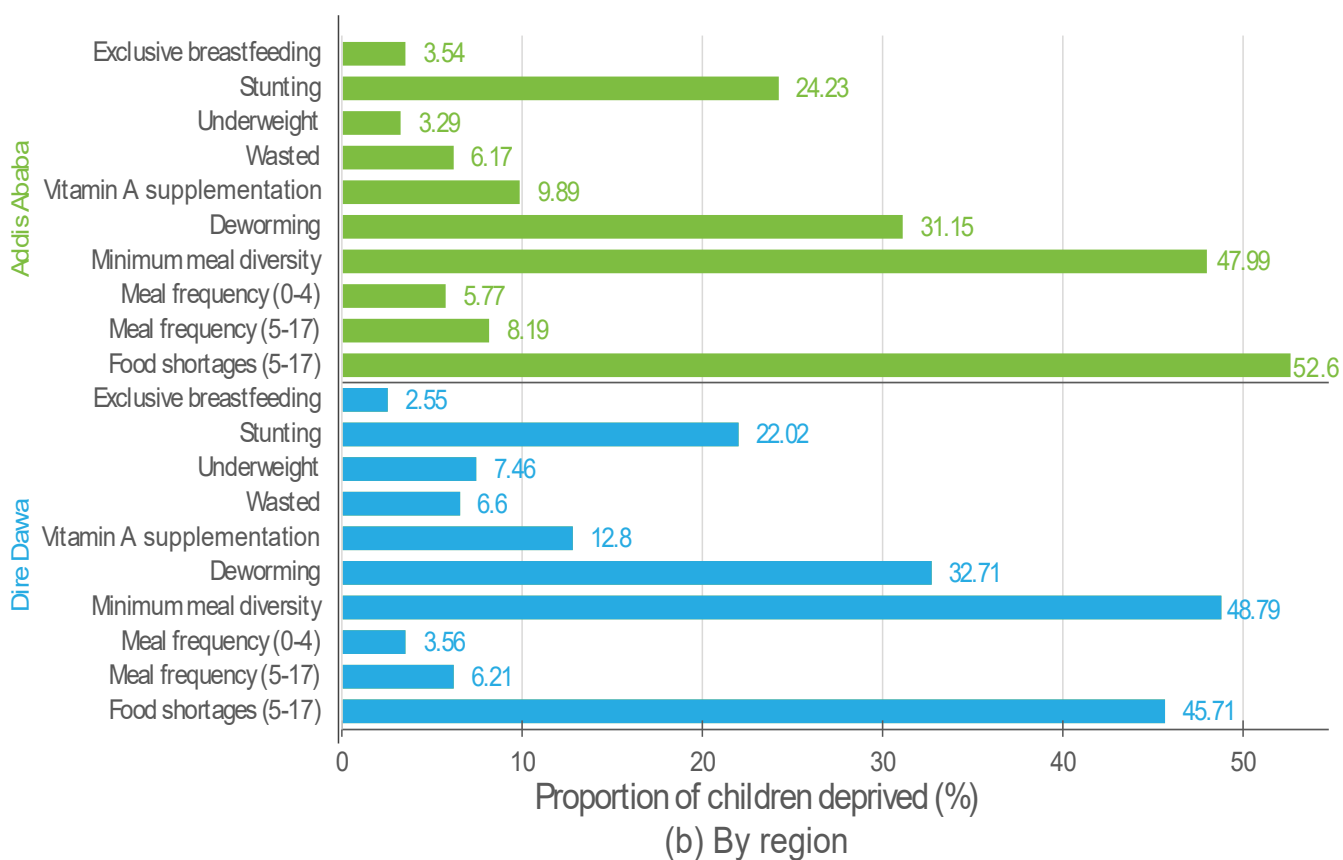
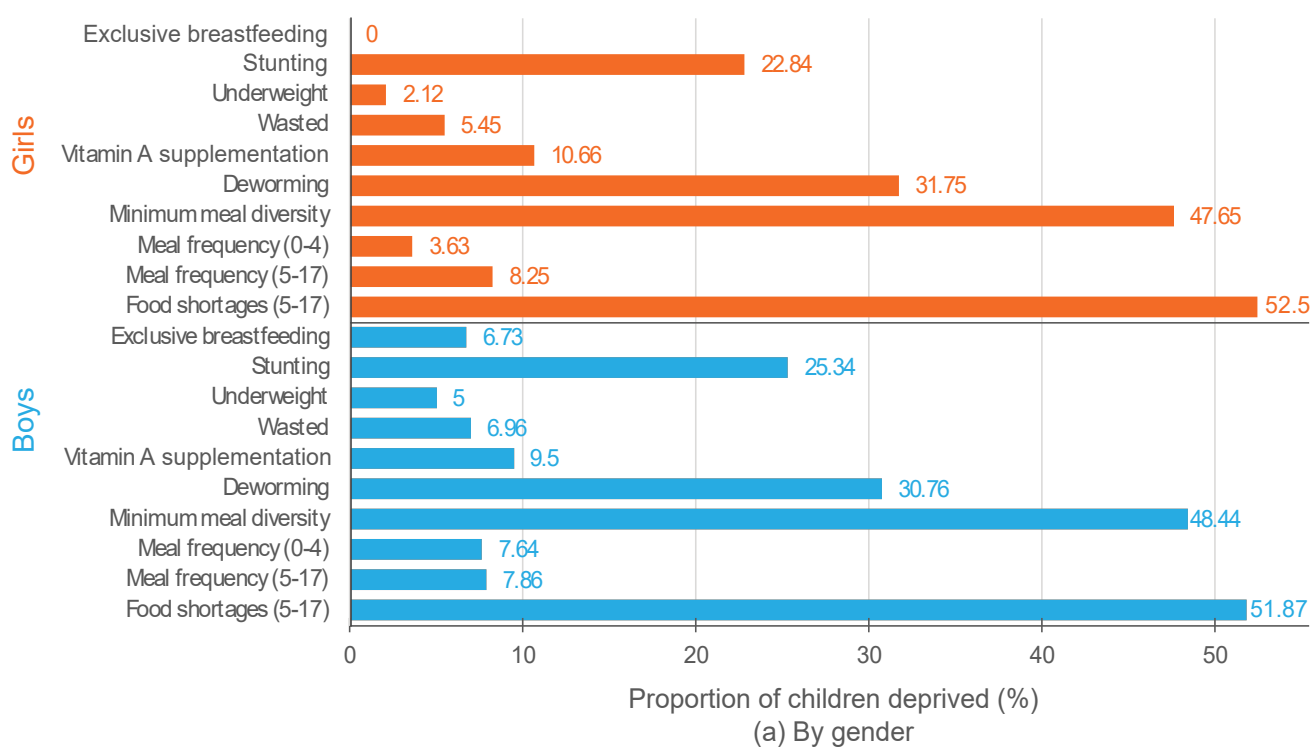


Figure 4.3: Deprivation in nutrition indicators, by gender and city



Stunting

The stunting indicator assesses linear growth among children under the age of 5, identifying children whose height-for-age falls two standard deviations (-2SD) below the median of the WHO reference population. Stunted children are considered to have experienced sustained episodes of undernutrition and poor health in the past.

Stunting exhibits the fourth highest deprivation rate of indicators in the nutrition dimension, reaching 24 per cent, as illustrated in Figure 4.2. Addis Ababa has a slightly higher deprivation rate (24.2 per cent) than Dire Dawa (22 per cent) (Figure 4.3)

Underweight

The indicator for underweight among children under 5 is determined by analysing their weight and age. Children with a weight-for-age Z-score falling two standard deviations (-2SD) below the median of the WHO reference population are identified as underweight or too thin for their age.

In Figure 4.2, a deprivation rate of 3.6 per cent is observed for this indicator. This rate is slightly lower than the figure for exclusive breastfeeding, positioning underweight among the indicators with the lowest deprivation rates within this dimension. Unlike previous indicators, deprivation in this indicator is notably lower in Addis Ababa (3.3 per cent) than in Dire Dawa (7.5 per cent).

Wasting

Wasting among children under 5 is determined by analysing their height and weight. Children with a weight-for-height Z-score falling two standard deviations (-2SD) below the median of the WHO reference population are classified as too thin for their height, indicating acute malnutrition, or wasting. A deprivation rate of 6.2 per cent is observed for this specific indicator. The level of deprivation for this indicator is slightly lower in Addis Ababa than in Dire Dawa, as indicated in Figure 4.3.

Vitamin A supplementation

Vitamin A and iron are critical micronutrients vital for children's immune systems and overall development. In this study, children aged 7-59 months are classified as deprived of vitamin A if they have not received a supplement of this micronutrient during the six months leading up to the survey.

A deprivation rate of 10.7 per cent is recorded for this indicator. As depicted in Figure 4.3, children in Addis Ababa (9.9 per cent) experience a slightly lower rate of deprivation than those in Dire Dawa (12.8 per cent).

Deworming

Deworming involves administering safety-tested, single-dose, oral anthelmintic drugs to reduce the morbidity associated with worm infections, both subtle and overt. Children who have not received deworming medication are classified as deprived in this indicator.

Not receiving deworming ranks as the second most prevalent deprivation within the nutrition dimension, with a deprivation rate of 32 per cent. The deprivation rates in the two cities are quite close, with Dire Dawa having slightly more (2 per cent).

Minimum meal diversity and frequency

IYCF practices are one of the indicators employed to gauge deprivation in nutrition among children. This encompasses the minimum acceptable diet (MAD), which integrates minimum dietary diversity (MDD) and minimum meal frequency (MMF) based on the child's age. Failure to meet either MDD or MMF renders the child deprived in IYCF practices.

The **minimum dietary diversity** indicator is exclusively assessed for children under 5 years old, and measures diversity based on food groups: breast milk; grains, roots, and tubers; legumes and nuts; dairy products; flesh foods like meat and fish; eggs; vitamin-A-rich fruits and vegetables, and other rich fruits and vegetables. As shown in Figure 4.3, this indicator has the highest deprivation rate in the nutrition dimension, standing at 48 per cent. However, there is no significant deviation between the cities. Conversely, the **minimum meal frequency** is measured for both age groups: under 5 and 5-17. There is a noticeable disparity between the two age groups, as illustrated in Figure 4.2. Nevertheless, in both age groups, the highest deprivation rate is recorded for children in Addis Ababa, at 5.8 per cent for those under 5 and the higher 8.2 per cent for those aged 5-17.

Food shortage

This indicator is measured by the household's experience of worrying about shortages of food in the last seven days. This aligns with the initial tier of the household food insecurity experience scale. The measurement of this nutrition component is applicable to children of all age groups, ranging from 0 to 17 years old. Compared to other indicators in the nutrition dimension, food shortage shows the first highest deprivation rate, reaching 52.2 per cent, as illustrated in Figure 4.2. When analysed by city, Addis Ababa (52.8 per cent) shows a higher deprivation rate than Dire Dawa (45.7 per cent) (Figure 4.3)

4.2.2. Health

Ethiopia prioritizes improving child health outcomes through various policies, strategies, and programmes. The national health policy outlines the government's commitment to ensuring equitable access to preventive, curative, and rehabilitative health services for children. The Health Sector Transformation Plan (HSTP) guides the health sector's development, with a focus on improving access to quality health care for all Ethiopians, including children. The National Strategy for Newborn and Child Survival (NCS) focuses on reducing child mortality and morbidity from preventable causes. It emphasizes interventions like immunization, integrated management of childhood illnesses (IMCI), and improved maternal health to ensure healthy newborns. The National Adolescent and Youth Health Strategy (NAYHS) addresses the specific health needs of adolescents (aged 10-19 years), including sexual and reproductive health, nutrition, and mental health.

Children's health deprivation is assessed through various indicators, including access to basic health-care services for both children and mothers. For infants aged 0-4 months, indicators encompass skilled birth attendance, receipt of essential vaccines, adequacy of antenatal care for mothers, and maternal knowledge regarding the use of ORS for treating diarrhoea. For children aged 5-14, analysis includes mother's knowledge about HIV and family planning. In addition, for girls and boys aged 15-17 knowledge on HIV transmission and prevention is also considered. Physical access to health-care facilities is measured by the time it takes the mother to reach the nearest health facility.

Overall, 26.8 per cent of children under 18 in the two cities are deprived in the health dimension. A higher proportion of under-five children (36.8 per cent) than children aged 5-17 (22 per cent) are deprived in the health dimension. There are slight differences (less than one percentage point) by city in deprivation in this dimension.

The in-depth interviews with parents and caregivers reveal that children have good access to health centres and hospitals. For instance, one respondent explains the situation as: *"My children never experienced serious illness. When they become ill, we go to the health station we can afford."* There are also cases where children are receiving inadequate health services. One respondent reveals that: *"my daughter dropped out of school due to an eye problem. The family tried to access governmental health centre services but failed to afford adequate treatment."* The findings from key informant interviews show that health services are accessible to children in Dire Dawa. There are also a few social safety net programmes targeting vulnerable children in urban areas. The Gender Coordinator and Project Officer of the Construction Bureau at Dire Dawa states that: *"Children receive health services from health centres fairly."* Similar results are obtained from key informants in Addis Ababa. According to the Health Office in Addis Ababa: *"health-care facilities are readily accessible. Health-care facilities are conveniently located in close proximity to every resident."* The FGD with children in street situations shows that children in street situations can access health-care services. In Addis Ababa, they can get medical services from certain hospitals and clinics free of charge. A boy in Addis Ababa says: *"A clinic called Sister Clinic located around Sidist Kilo provides free medical services to street children. The clinic does not need ID or any other document. It also provides better-quality food until children get rehabilitated. Moreover, children can access medical services from Zewditu Hospital for free."* However, the FGDs found that there is no such privilege for children in street situations in Dire Dawa. A girl in Dire Dawa explains: *"We don't receive any treatment freely. For example, recently my leg was hurt, and I went to the health station to get medical treatment. However, after a medical examination, a doctor referred me to a private clinic or laboratory for a blood test. Unfortunately, the cost of the blood test service at the private clinic or laboratory is expensive, so I terminated the treatment."*

Figure 4.4: Deprivation rate by health indicators

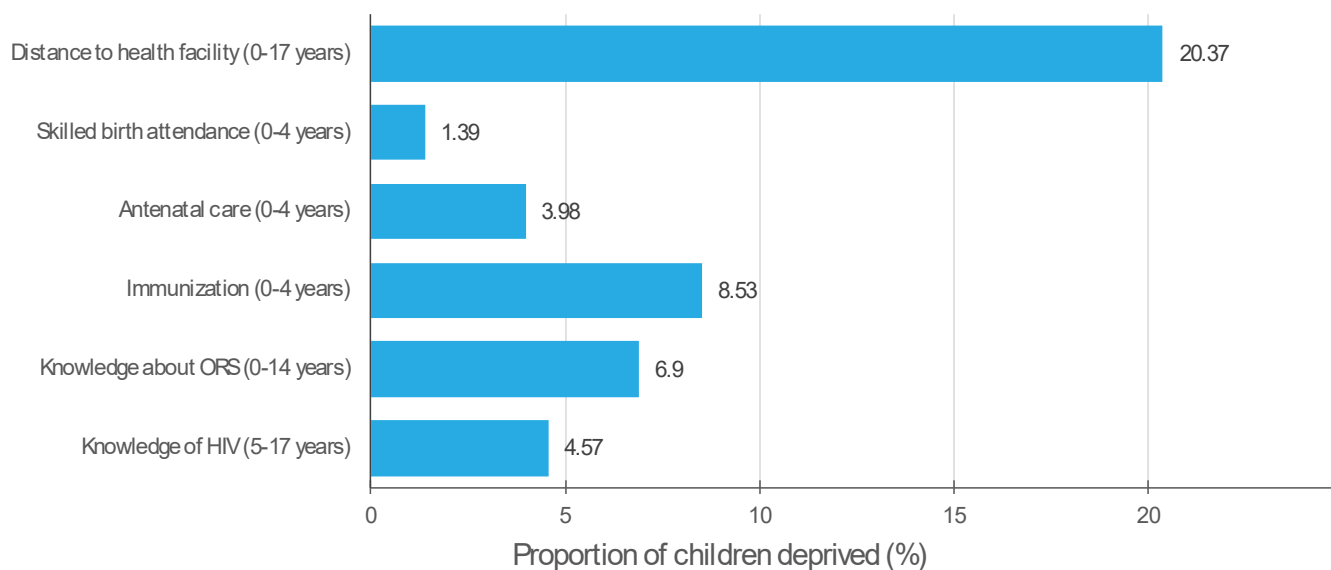
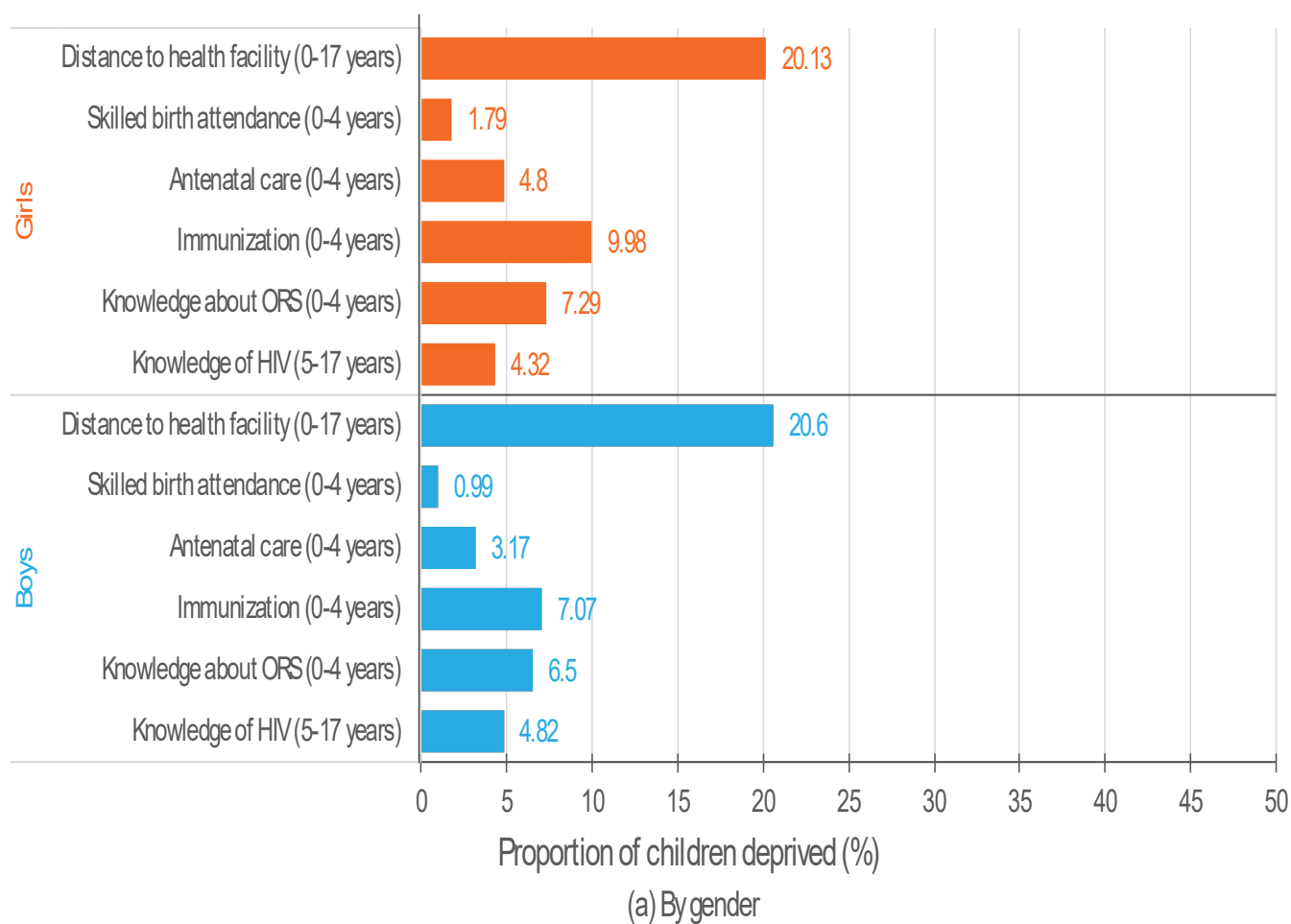
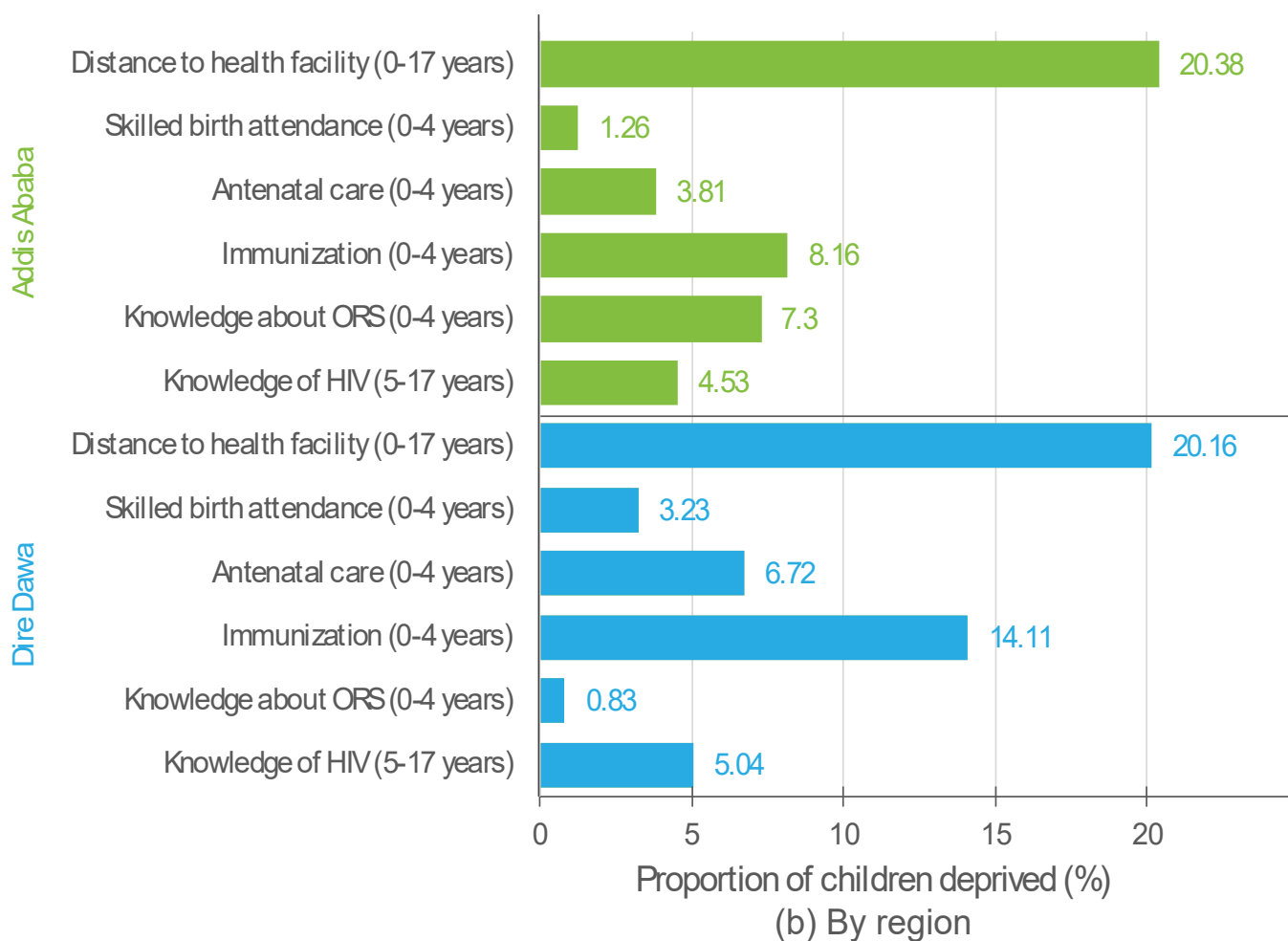


Figure 4.5: Deprivation in health indicators by gender and city





Skilled birth attendance

Figure 4.4 shows the proportion of children aged 0-4 whose births lacked skilled health professionals or occurred outside health-care facilities. About 1.3 per cent of children experienced this, indicating a low level of deprivation regarding skilled birth attendance and health-care access during childbirth. Notably, there are slight variations between the two cities (1.26 per cent for Addis Ababa and 3.23 per cent for Dire Dawa), suggesting a slightly different trend in health-care access between the cities (see Figure 4.5).

Vaccination

The second indicator for measuring health deprivation in children under 5 is vaccination status. Children without vaccination cards, or those missing any of the recommended national vaccines, are considered deprived in this aspect. Overall, results indicate that 8.5 per cent of children in the two cities combined are not vaccinated. However, there is a moderate disparity between the cities, with Dire Dawa having a slightly higher proportion of unvaccinated children (14 per cent) than Addis Ababa (8 per cent).

Antenatal care

Access to health care for children under 5 is also assessed based on the adequacy of antenatal care (ANC) services received during pregnancy. A child is considered deprived in this indicator if their mother had fewer than four ANC visits during pregnancy, or if the four or more ANC visits were conducted by unskilled health professionals. Across both cities combined, less than 4 per cent of mothers of children under five did not receive the recommended ANC visits. However, there is a notable difference between the cities, with a higher proportion of mothers in Dire Dawa (6.7 per cent) than in Addis Ababa (3.8 per cent) not receiving adequate ANC.

Knowledge of ORS

Familiarity of mothers or household members with oral rehydration solution (ORS) for children under five is paramount, facilitating prompt treatment of dehydration, notably caused by conditions like diarrhoea. This knowledge is pivotal in reducing the likelihood of complications and mortality associated with dehydration episodes. Notably, lack of awareness regarding ORS treatment signifies deprivation, affecting about 7 per cent of mothers of children under five or adolescents, or adult females within households. Noteworthy discrepancies in ORS knowledge exist between the two cities, with less than 1 per cent of individuals lacking awareness in Dire Dawa, compared to 7 per cent in Addis Ababa. Addressing this knowledge gap is imperative, particularly in resource-limited settings, to ensure that caregivers can effectively safeguard children's health. Efforts to enhance education and awareness about ORS, its importance, and its proper use are essential components of comprehensive public health initiatives intended to reduce child morbidity and mortality rates associated with dehydration-related illnesses.

Knowledge of HIV

A thorough grasp of HIV is indispensable for adolescents to avert transmission, combat stigma, make informed sexual health decisions, and champion HIV-related causes, thereby nurturing healthier communities. Children aged 5-14 are identified as deprived if household members lack HIV knowledge, while those aged 15-17 are directly assessed. A twentieth (4.6 per cent) of children aged 5-17 experience this deprivation, with insignificant differences in prevalence between Addis Ababa (4.5 per cent) and Dire Dawa (5 per cent). Addressing the knowledge gap is imperative for empowering both adolescents and their communities to effectively tackle the HIV epidemic and foster a supportive environment for those affected by the virus.

Distance to health facility

Access to health-care facilities is crucial for prompt medical care, particularly during emergencies. Proximity greatly affects accessibility, with closer distances facilitating preventive measures, early detection and prompt treatment, ultimately reducing morbidity and mortality rates, and fostering community well-being. Children living more than 30 minutes away from health-care facilities are considered deprived: 21 per cent of those under 18 are in this category, with no noticeable variations observed between the cities.

4.2.3. Education

Deprivation in education is calculated as a measure of six indicators. These are early childhood development (ages 0-4), preschool attendance (ages 5-6), school attendance (ages 7-17), grade level delays (ages 9-17), literacy (ages 10-17), and distance to school (ages 5-17). A closer look at indicators shows that children under 5 are more deprived than other children, with 19 per cent not accessing early childhood development opportunities. More children are deprived of this right in Addis Ababa city (19 per cent) than in Dire Dawa (13 per cent). More boys are deprived of this right (21 per cent) than girls (17 per cent). The second highest deprivation of children is in distance to school, at 14 per cent overall, and there are no noticeable differences across gender of child and city. The third highest deprivation is delay in highest grade completed relative to age, where 11.3 per cent children are deprived overall. A gender lens on this deprivation shows that almost twice as many girls (14.3 per cent) as boys (8.1 per cent) are deprived in this indicator. Furthermore, the proportion of children in Dire Dawa deprived in this indicator (22.5 per cent) is more than twice that of Addis Ababa (10.5 per cent). These results suggest that both gender and geographic location introduce variation in the fulfilment of attaining age-appropriate grade levels as a right.

Despite the quality concern, children have educational opportunities in Dire Dawa, mainly at public schools. One parent in an in-depth interview says, *"I have two children, and both of them attend school."* The key informant interviews also indicate that education is accessible to children in the city. The gender expert in the city Education Bureau explains: *"The accessibility of education services in both urban and rural areas is a positive aspect. However, a concerning issue arises when children living on the streets do not have adequate access to the service."* The focus group discussion with children in street situations confirmed that they have very few education opportunities due to a lack of basic needs and registration requirements at schools. A boy says: *"There is no education opportunity due to lack of basic needs."*

In Addis Ababa, child educational opportunities are better than anywhere in the country, despite the quality. A respondent in-depth interview in the city states: *"My children are attending school, but I doubt the quality of education. State school is not as effective as private school, as it lacks good educators."* Similar results are obtained from key informants. The Child Protection Expert at the Women, Children, and Social Affairs Office at Addis Ababa explains: *"Education facilities are easily accessible for economically able people."* Children in street situations reveal that education opportunities are very rare due to a lack of basic needs and registration requirements at schools. A girl explains: *"It is very difficult to get educational opportunities here as a street child. Schools need clearance from our community back home, as well as a guarantor to get registered. Besides, education needs a proper place to study and income to manage the rest of life, including housing, food, and clothing. Thus, we cannot manage and think about education in general in this situation."*

Key informant interview results show that affordable early childhood care facilities are being introduced at the workplace or in the neighbourhood in Dire Dawa. According to the Child Support Team Leader of the city Women and Children Affairs Office: *"We are working to expand good early childhood care facilities at different workplaces. The government is supporting the building of daycare in the various organizations."* Similarly, in Addis Ababa, affordable early childhood care facilities are currently being established in the workplace. The Child Protection Expert of the city Women, Children, and Social Affairs Office states: *"A lot of daycare centres are being established around offices. Daycare centres have also been established around slum areas."*

Figure 4.6: Deprivation rate by education indicators

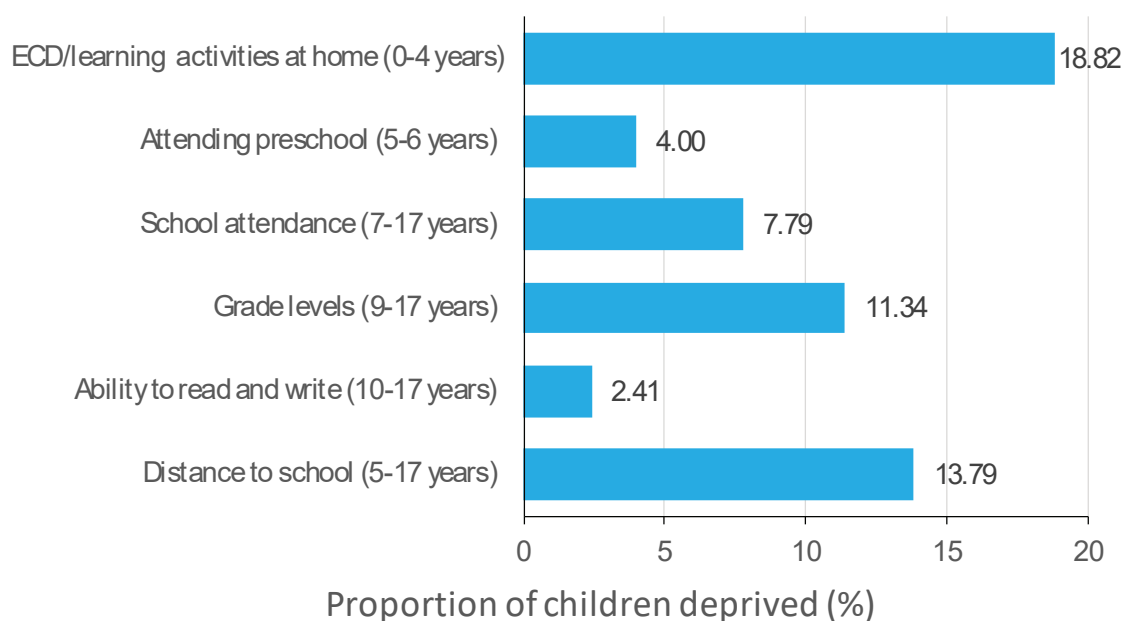
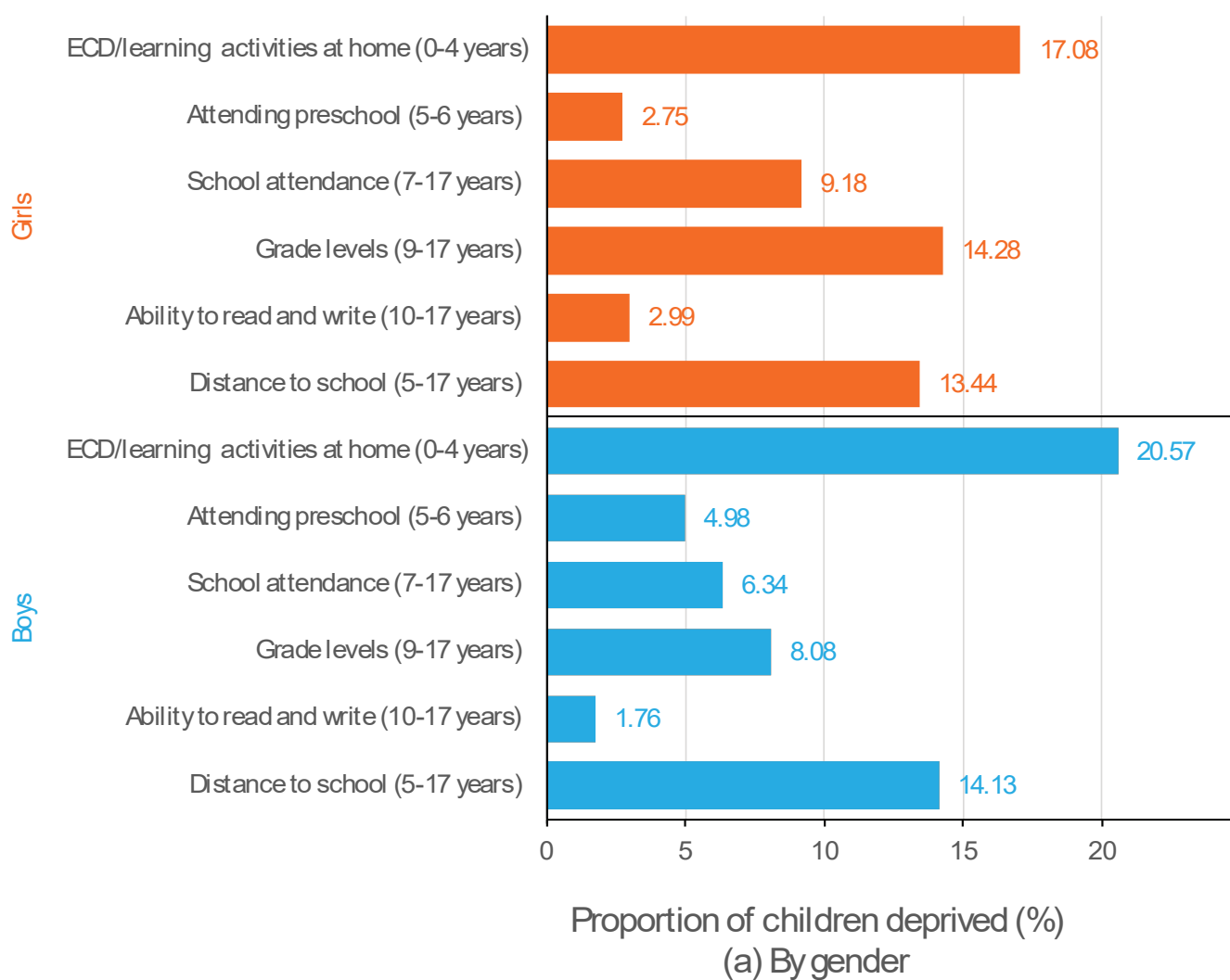
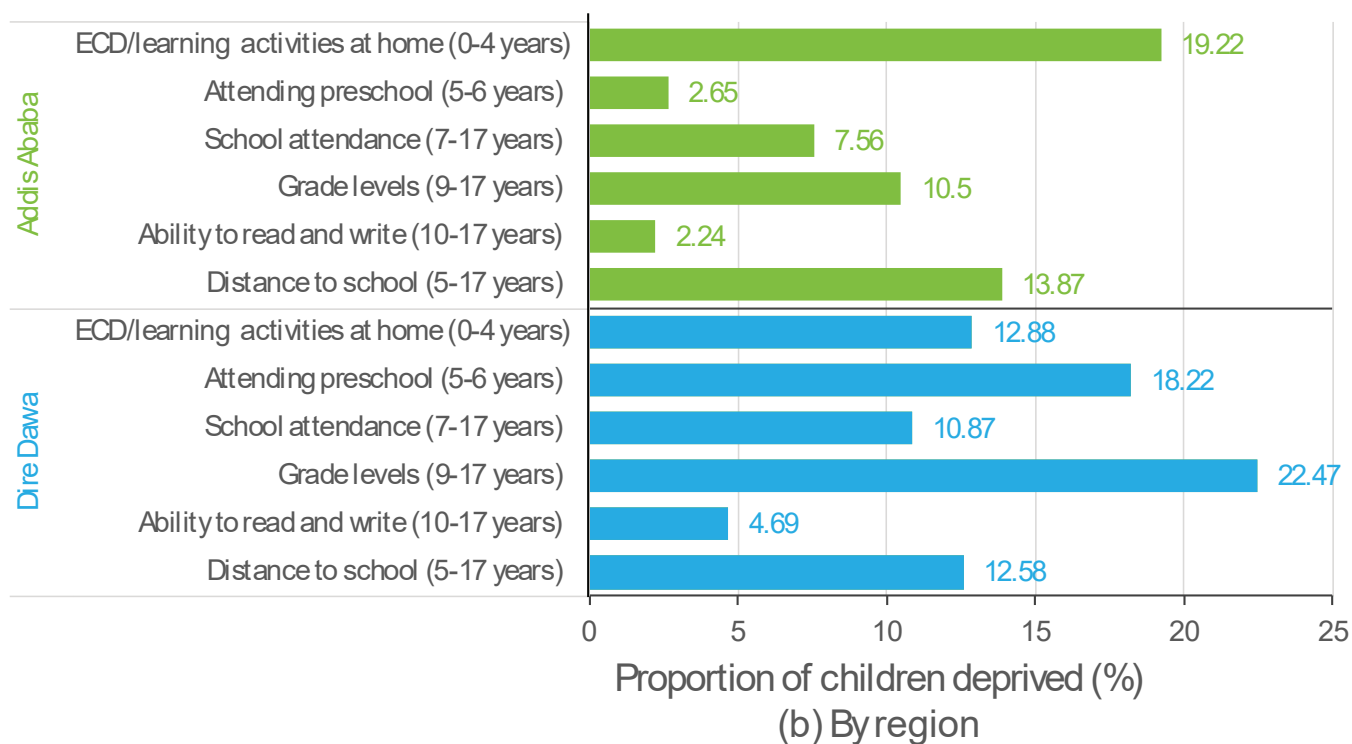


Figure 4.7: Deprivation in education indicators by gender and city





4.2.4. Housing

Children are classified as deprived of housing if their dwellings exhibit multiple issues like leaky roofs, dilapidated walls, or construction from non-permanent materials. Additionally, exposure to indoor pollution from solid fuel usage for cooking or overcrowded living conditions (two or more people per room) contributes to deprivation. Overall, 64 per cent of children under 18 face housing deprivation. Notably, Addis Ababa reports a higher percentage at 65 per cent, compared to 48.9 per cent in Dire Dawa. These findings underscore the urgent need for targeted interventions to address housing deficiencies and ensure the well-being of children in urban environments (figures 4.8).

The in-depth interview results reveal that most of the respondents live in rented accommodation and/or in below-standard dwellings made of poor materials such as mud, canvas or plastic. One of the female respondents in the Addis Ababa city administration explained the housing situation as: *"We don't have a home. I live with my husband and two children in a shelter made of canvas outside the compound of a house we used to rent in the past. Consequently, we don't have access to water and electricity."* There are also interviewees who live in good-standard housing. The focus group discussions revealed that street children do not have adequate shelter, so they usually sleep on the street, in car parks, in abandoned buildings, at workplaces, and so on. Sometimes, they sleep in low-priced rental rooms, charging ETB 50 to 100 per day, together with others in the same room with a separate bed. A girl in Addis Ababa explains: *"We sleep here, anywhere convenient for us on the street. But when we have money, we sleep in Washington, D.C., a place in Addis Ababa where many individuals sleep in bunk beds in a small room. The area has the cheapest beds in Addis Ababa, costing close to ETB 50–100 per day. The bed is not clean, but the price is very reasonable for us."* A boy in Dire Dawa states: *"I sleep outside in Bajaji parking because I don't have options."*

Figure 4.8: Deprivation rate by housing indicators

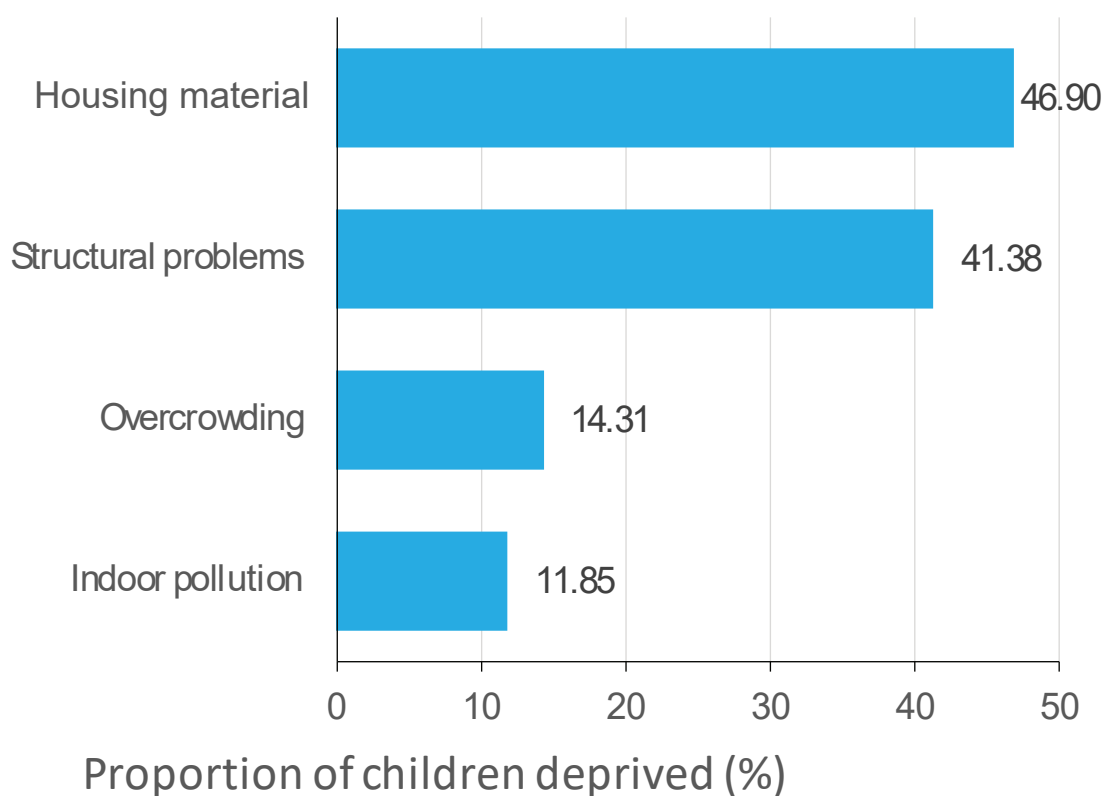
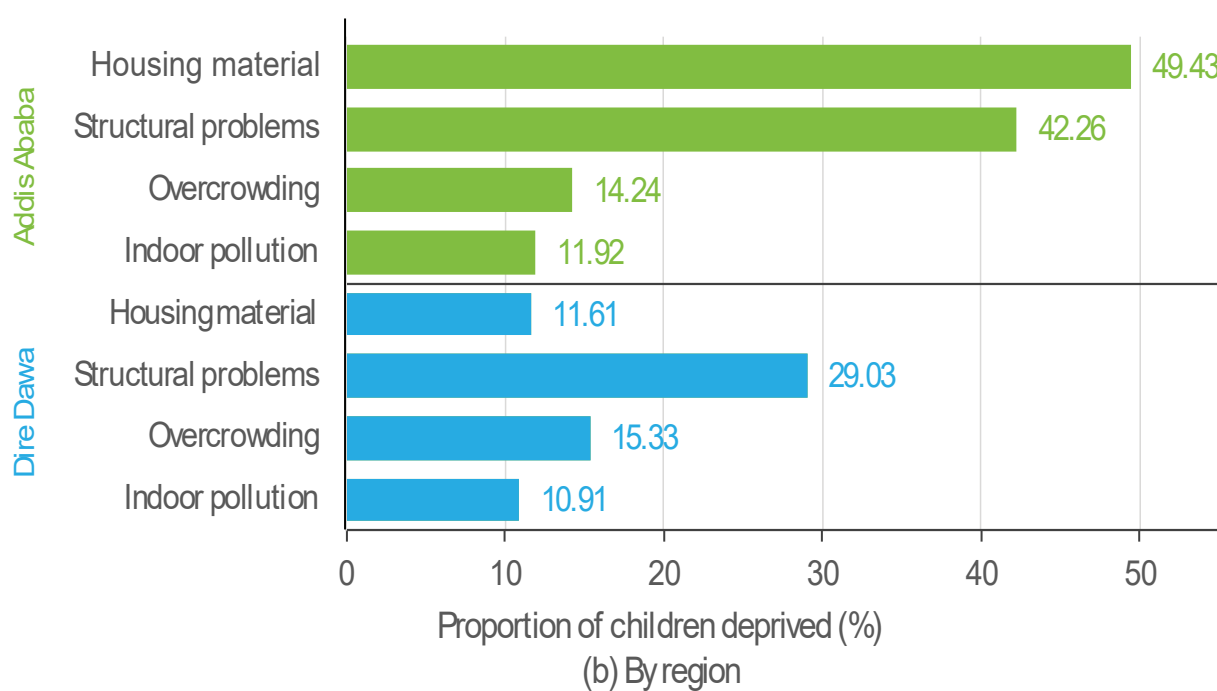
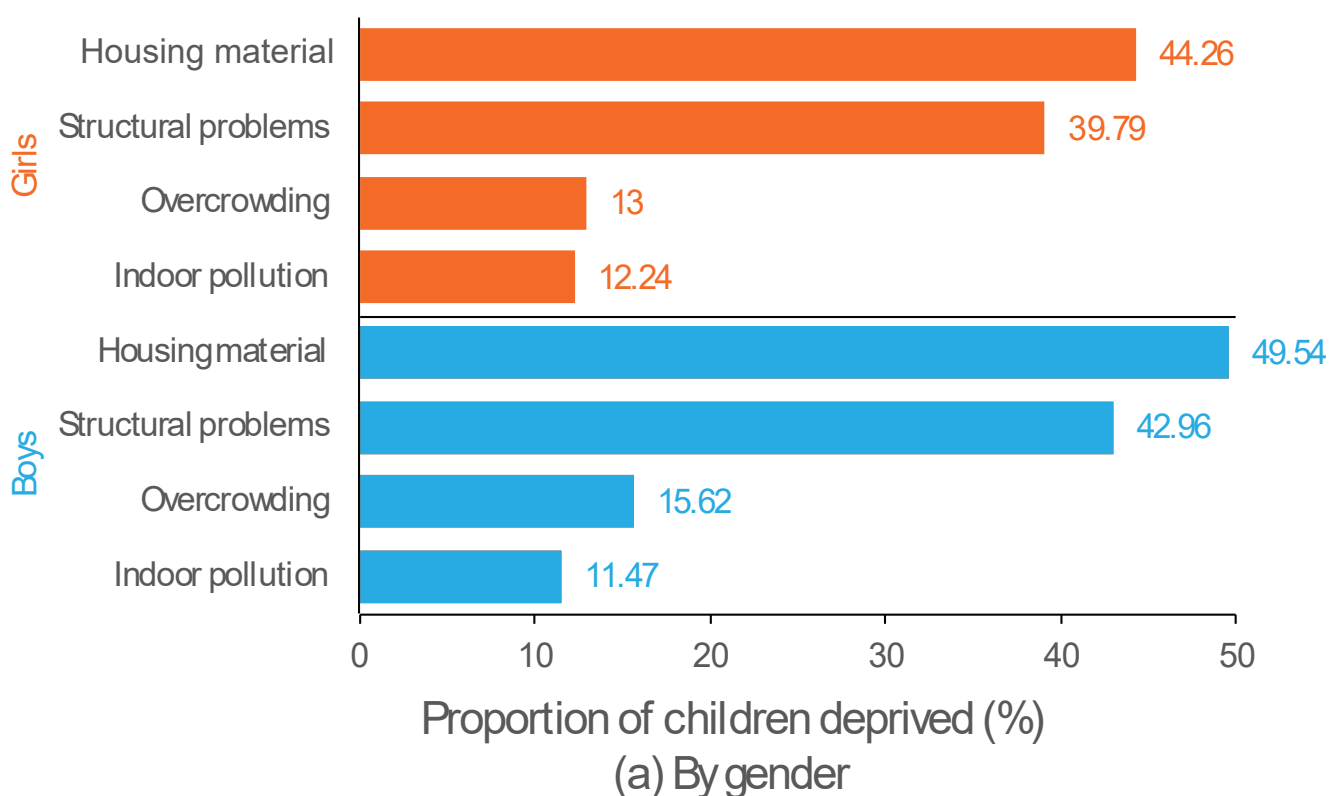


Figure 4.9: Deprivation in housing indicators by gender and city



Housing material

Forty-seven per cent of children under 18 reside in homes constructed with natural materials, lacking permanent structures to shield them against severe weather conditions. Inadequate housing conditions disproportionately affect children, with a notably higher percentage in Addis Ababa (49.4 per cent) than in Dire Dawa (11.6 per cent). This disparity underscores the urgent need for targeted efforts to improve housing infrastructure, particularly in urban areas, and ensuring that all children have access to safe and adequate living environments conducive to their health and well-being.

Housing problem

Forty-two per cent of children live in substandard housing, with issues like leaky roofs or damp walls. Prevalence is higher in Addis Ababa (42 per cent) than in Dire Dawa (29 per cent), indicating a pressing need for improved housing conditions in more urbanized areas.

Overcrowding

UN Habitat defines overcrowding as too many people in a limited space, causing social, economic, and environmental issues. They stress the need for effective housing policies and urban planning to tackle this, ensuring that everyone – particularly children – has safe living conditions. The study identifies a child as deprived if two or more people share a room. Across the two cities, 14 per cent of children live in overcrowded homes (Dire Dawa 15 per cent and Addis Ababa 14 per cent).

Indoor pollution

Indoor pollution poses a significant threat to children's health, highlighting the urgent need to mitigate its effects. Safeguarding their well-being necessitates a concerted effort to reduce indoor pollutants, and create healthier living spaces. In the two cities, approximately 12 per cent of children are vulnerable to indoor pollution, with only one percentage point of difference between the cities. This underscores the importance of targeted interventions to address indoor pollution and its disparate impact, ensuring that every child has access to clean and safe environments conducive to their growth and development.

4.2.5. Water

Access to safe drinking water and sanitation are essential for human health and overall well-being. Together, they not only support livelihoods and facilitate school attendance, but also preserve dignity and foster the development of resilient communities in healthy environments. Therefore, access to improved water and sanitation is important for reducing poverty and other forms of development as it minimizes time and money spent, improving health and productivity. Water and sanitation are not explicitly mentioned in the CRC. However, the principles outlined in Article 24 and 27 of the Convention recognize this crucial dimension for children's well-being. In addition, Ethiopia also has several strategies and programmes such as the One WASH National Programme (OWNP) and the Urban Water Supply and Sanitation Programme (UWSSP), which advance the right to access safe water and sanitation.

The in-depth interviews revealed that access to water is critical for the respondents, while the FGD with street children revealed that children in street situations have no regular access to water. They access drinking water through households and the generosity of businesses. A boy in Addis Ababa says: *"We get leftover food from hotels and cafeterias mainly for free, but some hotels and cafeterias sell it. Sometimes, if we do not get food for some reason, we order it from the cafeteria or hotel. We get water from generous households and business organizations."* A girl in Dire Dawa explains: *"We obtain food from restaurants. After we wash equipment or materials, restaurants provide us with food and water."*

The in-depth interviews revealed that many neighbours share toilets. The FGDs also showed that children in street situations do not have access to toilet facilities. They usually try to use public toilets or those in hotels and cafeterias, but are often forced to use inappropriate places because they cannot afford toilets. A boy in Addis Ababa says: *"We use public toilets paying five birrs a time. In addition, we also try to use hotel and cafeteria toilets, but they sometimes do not allow us. Thus, we use open fields, buildings under construction, the bridge, water lines or rivers, and roadsides with limited traffic movement."* A girl in Dire Dawa explains: *"When we attempt to use others' toilets, we face insults. As a result, we resort to using open fields."*

Figure 4.10: Deprivation rate by water-related indicators

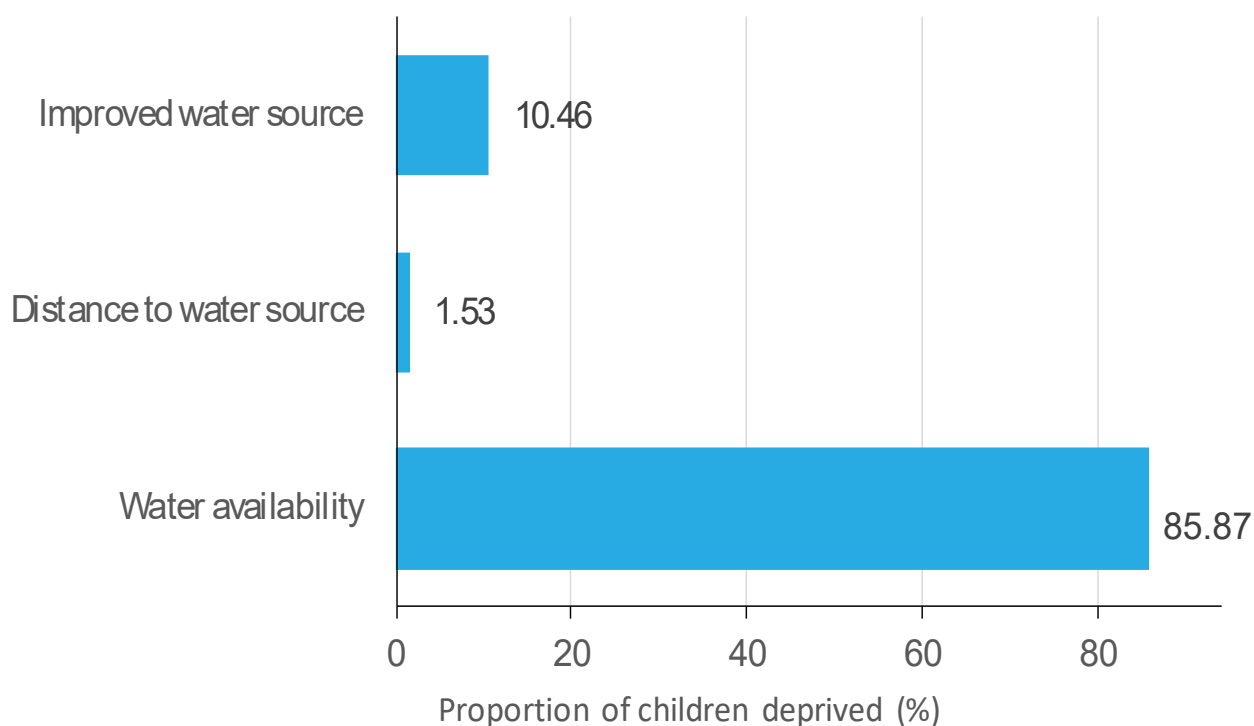
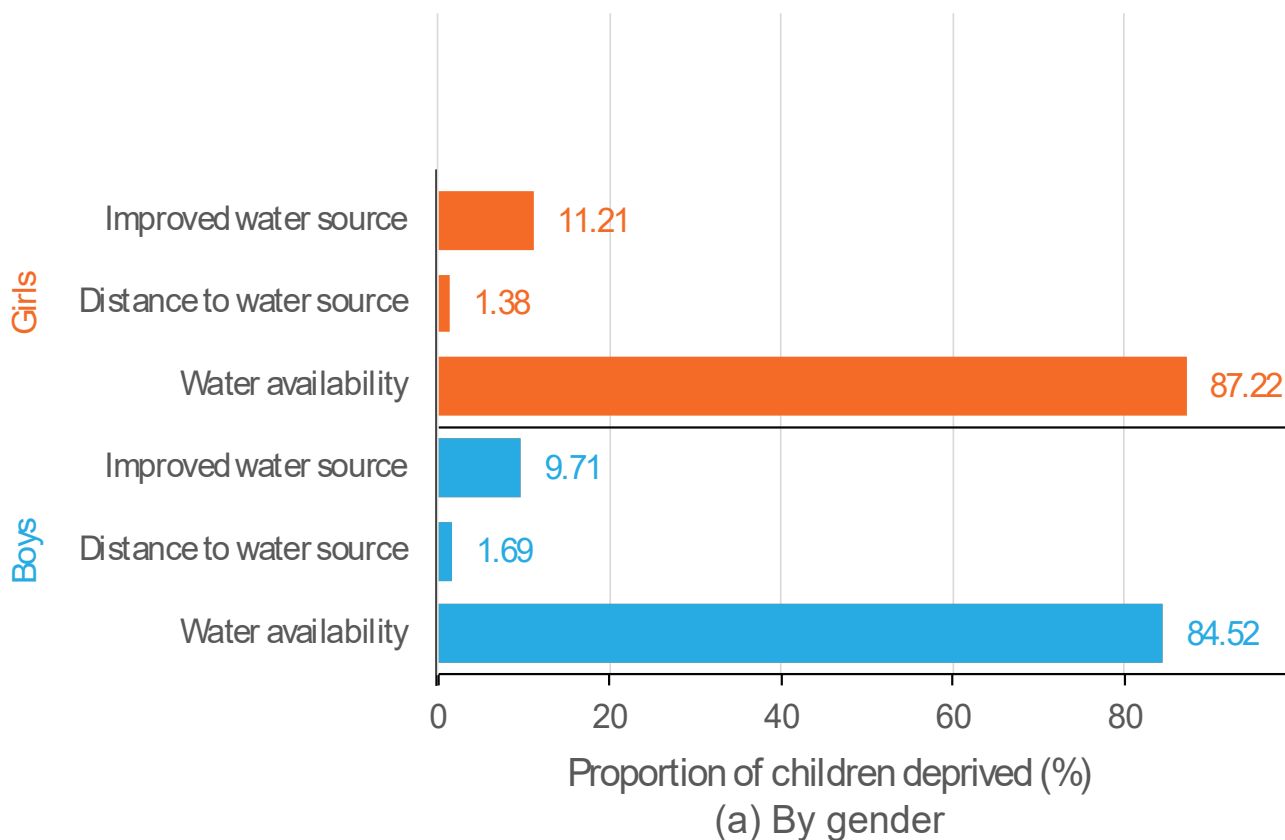
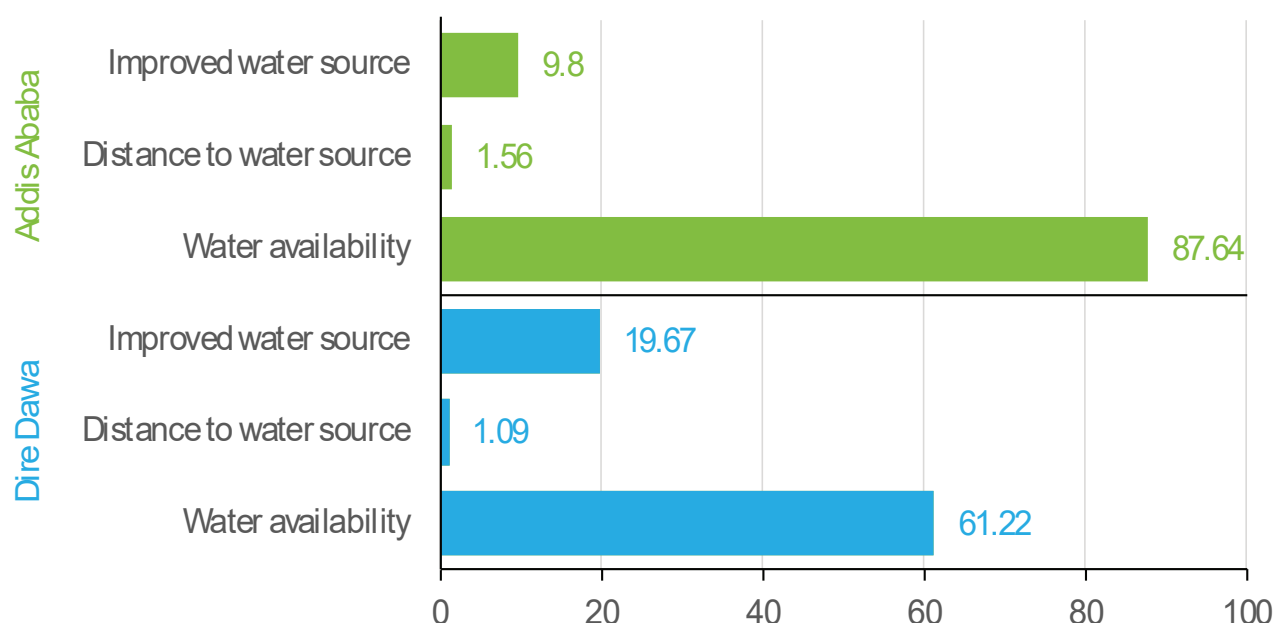


Figure 4.11: Deprivations in water- and sanitation-related indicators by gender and city





Proportion of children deprived (%)
(b) By region

Deprivation in this dimension is measured using indicators of improved water source, availability of water source, and distance to water source. As depicted in Figure 4.1, the water dimension exhibits the highest rate of deprivation, at 89.1 per cent. This dimension is measured at household level. Nevertheless, it is segmented by age, as illustrated in Table 4.1, which reveals that households with children under 5 and those with children aged 5-17 encounter nearly identical deprivation rates.

Improved water sources

Children are deemed deprived if their households utilize unimproved water sources, such as unprotected wells, springs, surface water (like rivers or lakes), vendor-supplied water, or bottled water for purposes like cooking and personal hygiene, or if water for other uses is from an unimproved source, including tanker-truck supplied water. According to Figure 4.10, this indicator has the third lowest rate recorded within the water dimension. Despite being one of the lowest rates, it still contributes to the overall high deprivation rate for this dimension. When comparing cities, Addis Ababa (9.8 per cent) exhibits a significantly lower deprivation rate than in Dire Dawa (19.7 per cent).

Availability of water sources

This indicator measures the availability of water from the drinking water source within the past two weeks. Children are classified as deprived if water is unavailable in the household for more than two days. According to Figure 4.10, availability of water sees the highest rate of deprivation recorded within the water dimension, with a slight variation observed between Addis Ababa and Dire Dawa.

Distance to water sources

This indicator measures how long it takes the households to reach the main drinking water source. The study identifies a child as deprived if it takes 15 minutes or more to walk from the household to the main water source. According to Figure 4.10, the distance to water source sees the lowest rate of deprivation recorded within the water sub-dimension, with very similar deprivation rates observed in Addis Ababa and Dire Dawa.

4.2.6. Sanitation

Sanitation is crucial for children to maintain healthy and dignified lifestyles. It significantly affects children's well-being in two ways: first, by directly influencing their level of happiness, and second, by indirectly shaping their social interactions, self-confidence, school attendance, and academic achievements.

Figure 4.12: Deprivation rate by sanitation-related

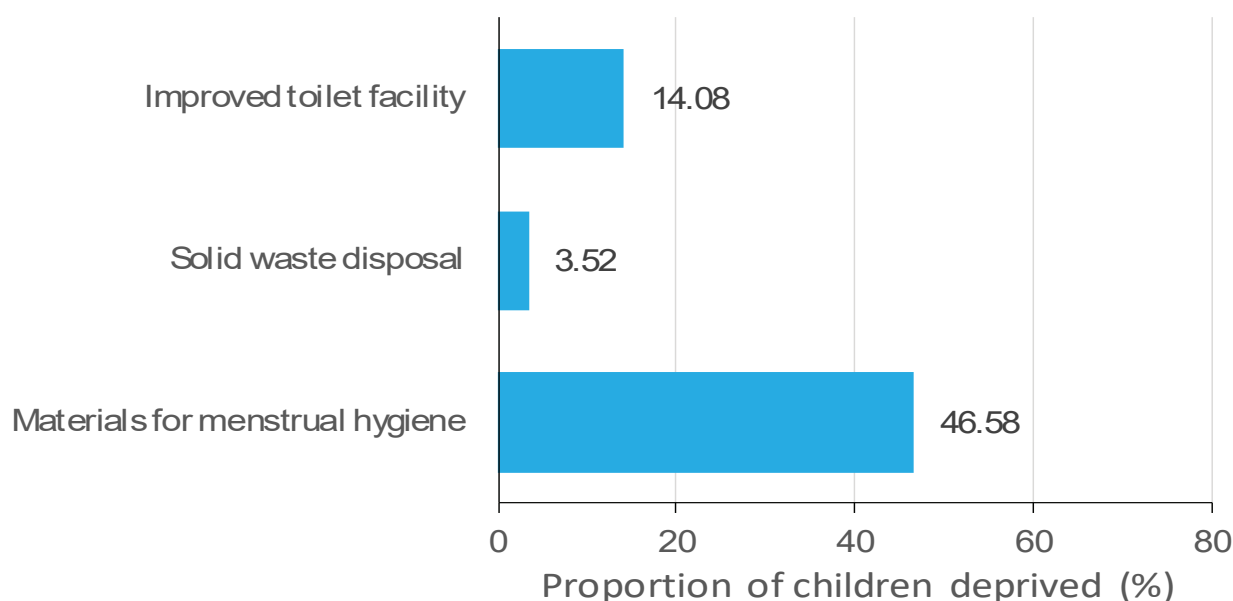
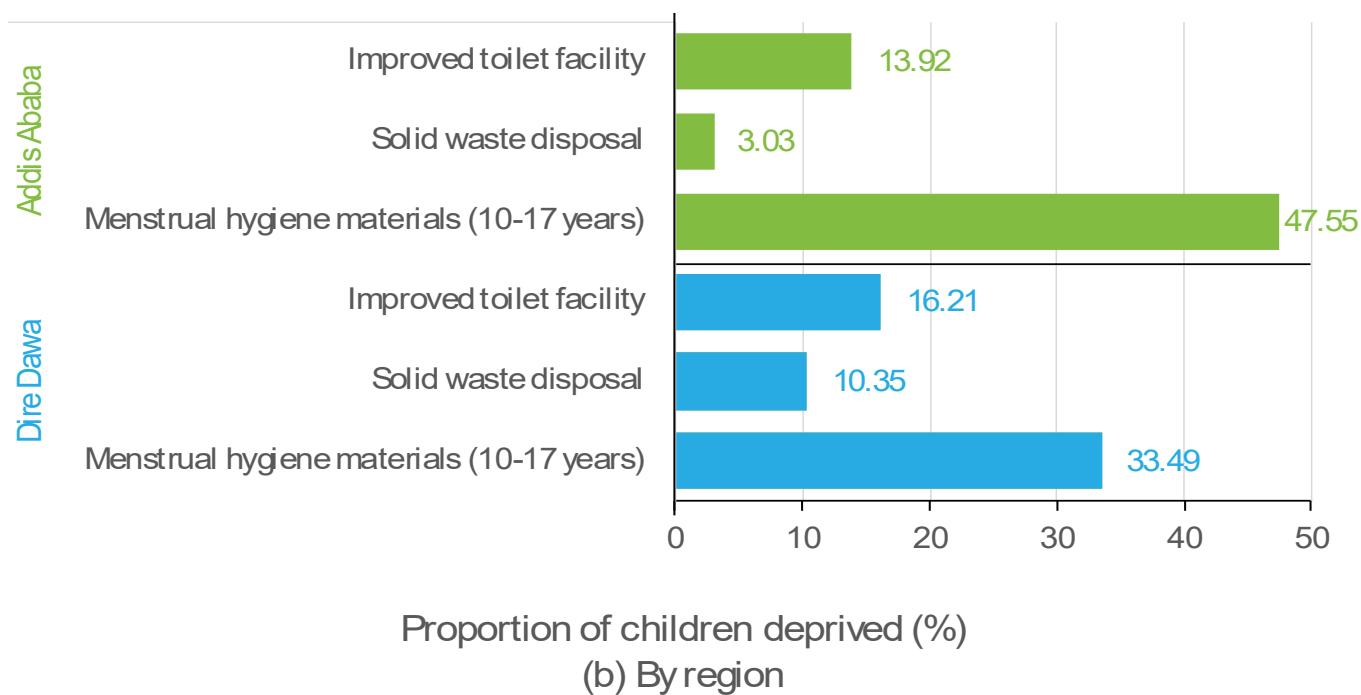
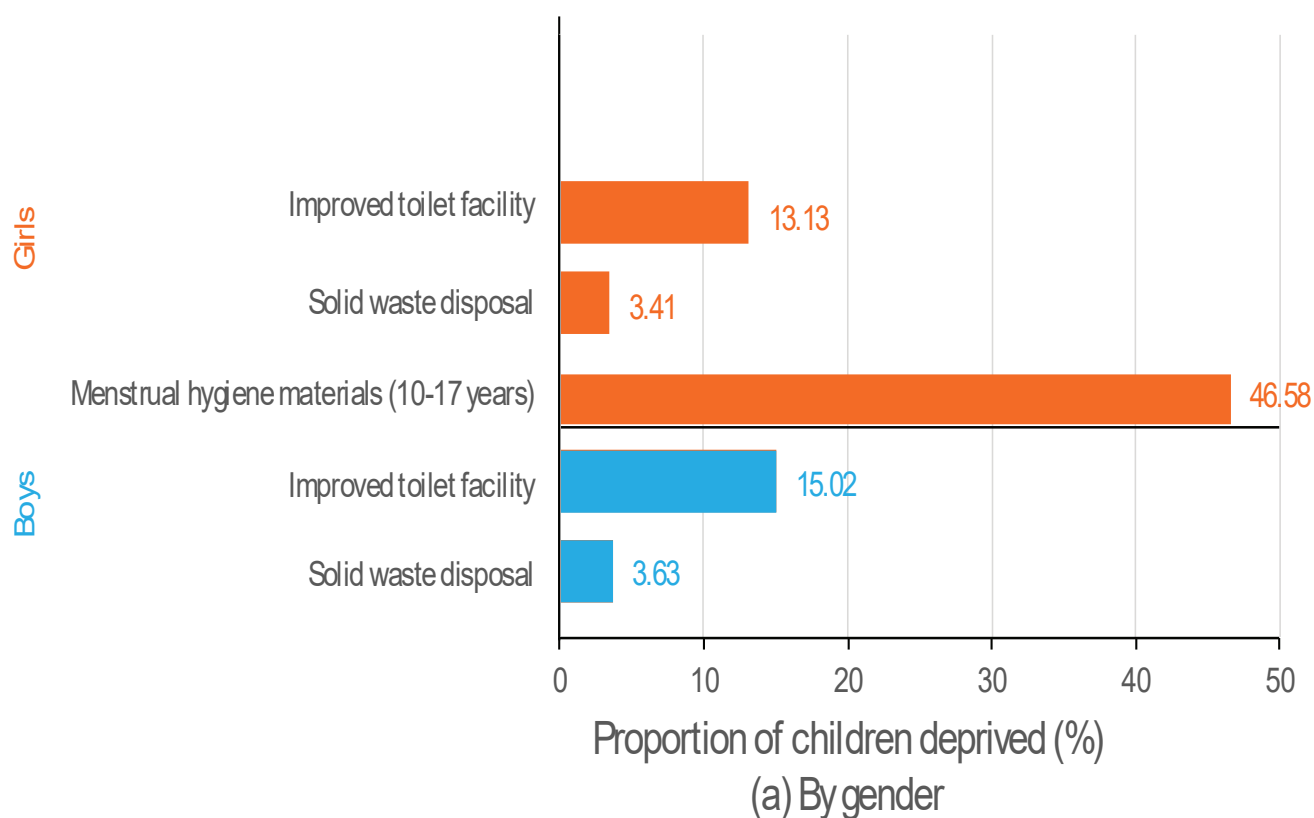


Figure 4.13: Deprivations in sanitation indicators by gender and city



Toilet facilities and waste disposal

This indicator assesses access to an improved toilet type within households. Children are classified as deprived if they are exposed to public or shared latrines; flush systems that do not lead to pits, septic tanks or sewers; pit latrines without slabs; bucket latrines; hanging toilets; or open defecation. Figure 4.12 reveals a deprivation rate of 14 per cent in access to improved toilet facilities, with Dire Dawa reporting a relatively higher rate (16.2 per cent) than Addis Ababa (14 per cent).

Solid waste disposal

Access to solid waste disposal is measured based on whether a child's dwelling is affected by environmental pollution due to inadequate solid waste disposal methods, such as dumping, burning, or other inappropriate methods. This indicator sees the lowest rate of deprivation (3.5 per cent) within the water and sanitation dimension, with the deprivation rate significantly higher in Dire Dawa than in Addis Ababa (see Figure 4.13).

Menstrual material

Effective menstrual hygiene management is essential for empowering women and girls to achieve their full potential. Access to safe and affordable menstrual materials reduces the risk of infection, underscoring the importance of this indicator for female children. This indicator assesses deprivation based on the availability of menstrual health products to girls aged 10-17 when needed. According to Figure 4.13, nearly 50 per cent of girls lack access to menstrual health materials. Addis Ababa exhibits a higher rate of deprivation than Dire Dawa, with figures of 48 per cent and 33.5 per cent, respectively.

4.2.7. Information and participation

Information and participation of children encompasses more than just having informed voices; it also involves engagement and influence in decisions affecting one's life, both in private and public spheres, be this within the family, at school, in the community, or in broader governance processes. Within the overall deprivation dimensions for poverty, this aspect registers the lowest rate, at 20.5 per cent (see Figure 4.1). This dimension is a right enshrined in the CRC (Article 12 and 13), which affirms the rights of children to access information, express their views, and participate in decision-making processes, both within their families and communities and at the national and international levels.

To measure this dimension, the study employed indicators such as the availability of information devices, participation of children in social events, children's friendships, and exposure to family planning messages. Among these indicators, only the availability of information devices is measured at household level. The remaining indicators are measured for children aged 5-17. Figure 4.15 illustrates a significant difference in deprivation rates between the two age groups, which can be attributed to the distinct indicators used for each age group.

Information devices

This indicator operates at household level, assessing deprivation for all children aged 0-17. It evaluates the availability of information devices such as television, radio, or mobile phones. Children are classified as deprived in the information devices indicator if they reside in households lacking all of these devices. The deprivation rate for this indicator is notably low within the dimension, at 0.6 per cent, with no significant deviation observed between Addis Ababa and Dire Dawa.

Participation in celebrations

This indicator was assessed for children aged 5-17, with deprivation defined as non-participation in celebrations for special occasions such as birthdays, name days and religious events. It ranks as the second highest indicator within this dimension, with a rate of 17.2 per cent. Figure 4.15 indicates that children in Dire Dawa participate more in such celebrations than those in Addis Ababa. This discrepancy may reflect differences in community dynamics between the two cities.

Hanging out with friends

Childhood friendships play a crucial role in children's social and emotional development. This indicator evaluates deprivations for children aged 5-17, considering children deprived if they lack friends to play and hang out with. With 11.1 per cent of children classified as deprived in this indicator, it ranks as the second lowest deprivation rate in the information and participation dimension. Notably, Addis Ababa exhibits a higher rate of deprived children than Dire Dawa, as seen in Figure 4.15.

Family planning messages

Children aged 5-14 years are considered deprived of community participation and information if they themselves have not been exposed to family planning messages through participation in community conversations or events in the last few months. This holds the highest rate of deprivation for the dimension, at a rate of 57 per cent. Dire Dawa recorded a higher rate of deprivation than Addis Ababa.

Figure 4.14: Deprivation in information and participation indicators

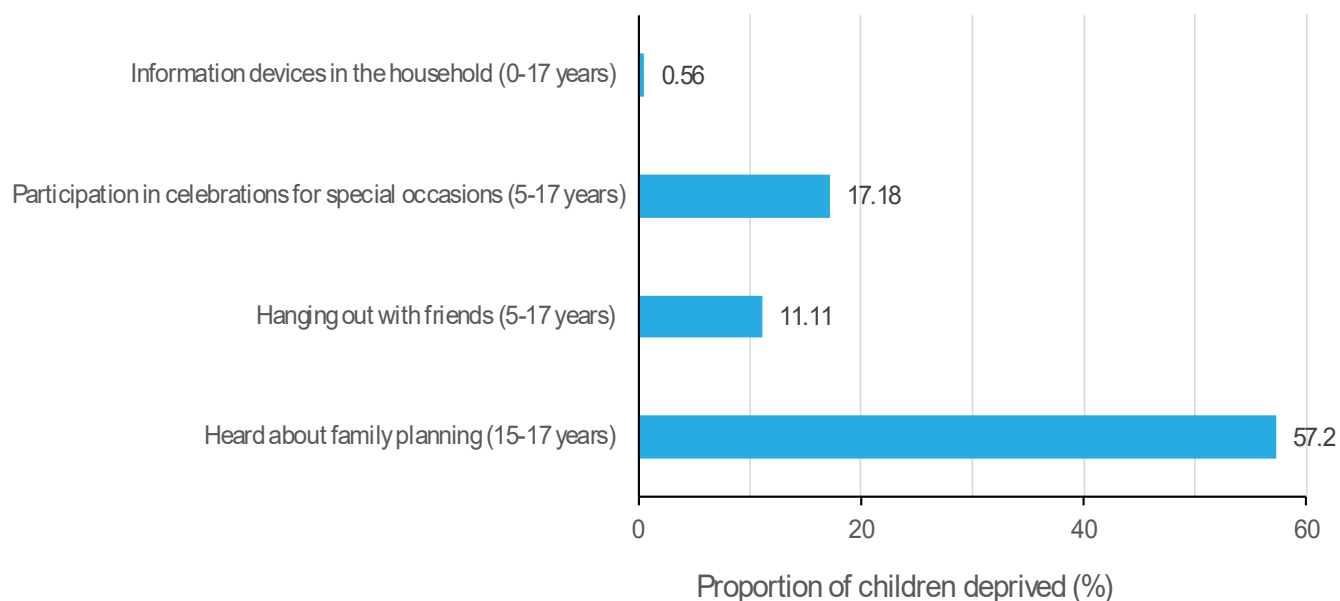
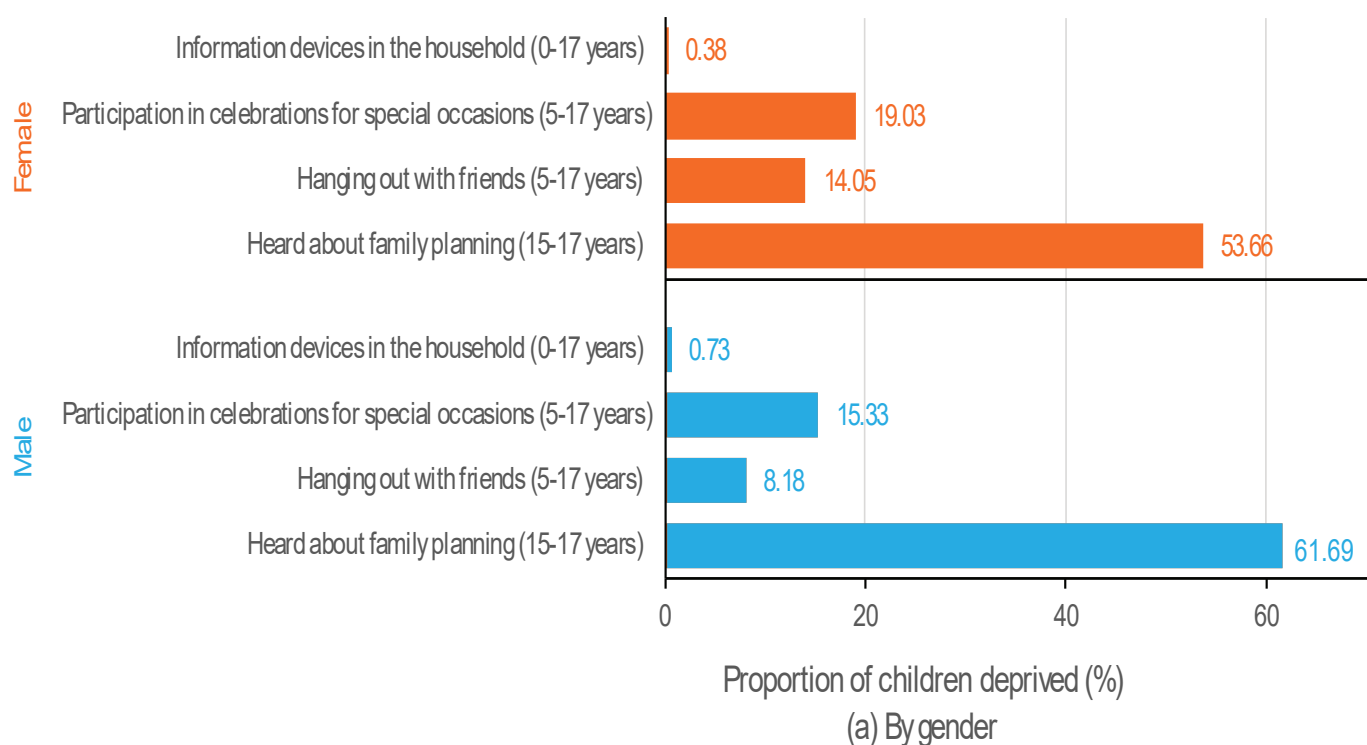
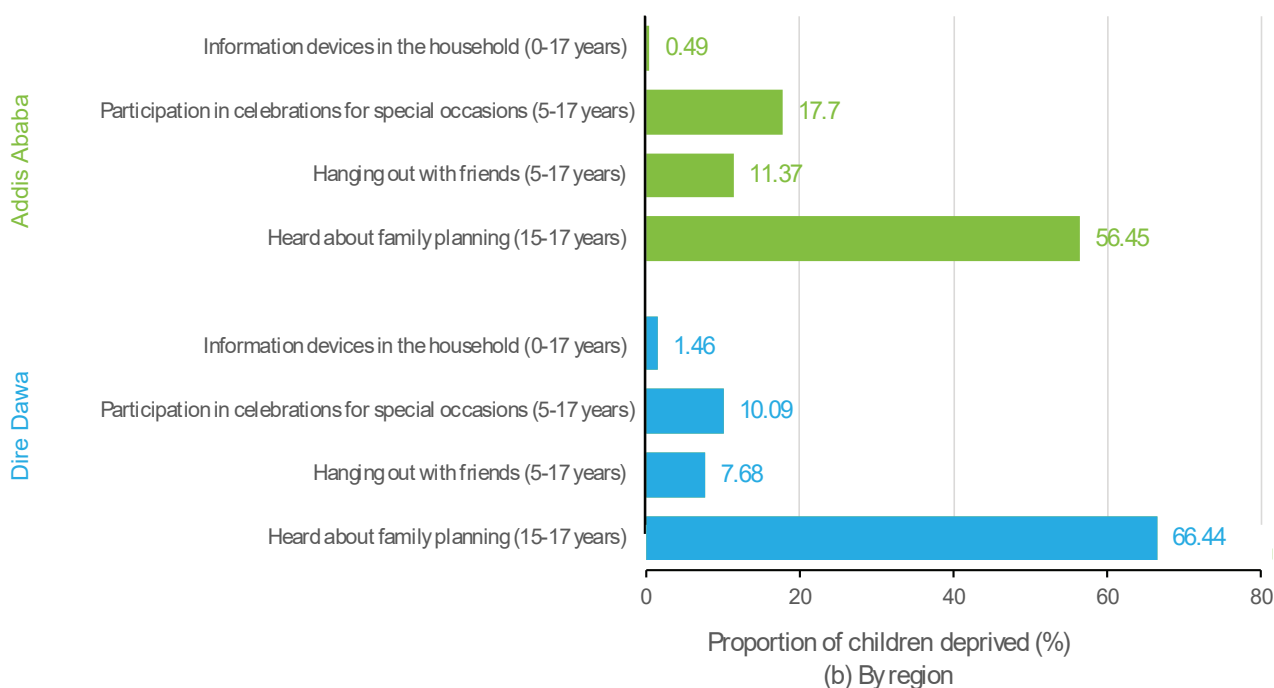


Figure 4.15: Deprivation in information and participation indicators, by gender and city





4.2.8. Child protection

Ethiopia ratified the CRC in 1991. Article 36 of the national Constitution (1994) accords every child the right to name and nationality, to be cared for by parents or legal guardians, not to be subjected to exploitative practices, not to be required nor permitted to perform hazardous or harmful work, and to be free of corporal punishment or cruel and inhumane treatment. Article 36 also states that the best interest of the child is the primary consideration for all actions concerning children.

In this report, deprivation in child protection is calculated as a measure of six indicators. These include female genital mutilation for girls aged 0-17, child labour for children aged 5-17, early marriage of children aged 10-17, children aged 0-59 months who are left home alone for longer than one hour, physical or psychological aggression against children aged 1-14, and birth registration for children aged 0-4.

The in-depth interview results show that children are less likely to engage in labour activities. For instance, one respondent explained: *"Most of the time, my kids are at school full time. After school, I let them do their homework and study hard. Then, they relax by watching films. Sometimes, I take them out to get some fresh air."* However, the interview findings also indicate that some children do participate in labour. One respondent said: *"Most of the time, my kids spend their time studying. Then, they work on different tasks at home, like cooking, cleaning the home, and buying various things from the shops."* Similarly, the FGDs indicate that children in street situations do various activities for a living, including washing cars, street vending with mobile shops, shoe shining, renting small bicycles, working as a bicycle trainer, working in a garage, begging, gambling, being a daily labourer, loading and unloading cargo from a taxi or taxi assistant, collecting plastic and cans from waste sites and selling them, and washing materials at restaurants to earn food. A boy in Addis Ababa says: *"I do wash cars, vend with a mobile shop, shine shoes, and rent out small bicycles for children, but now it is restricted to similar work here around the stadium. Whatever the type of work could be, I just do it for my daily expenses."* A girl in Dire Dawa says: *"I wash materials at restaurants and cotton to earn food."*

In Dire Dawa, the frequency of violence against children has been increasing, but physical and psychological services to support victims are improving. The Child Support Team Leader of the Women and Children Affairs Office at Dire Dawa states: *"Children exposed to various forms of violence receive physical and psychological treatments and legal aid in various centres."* The same holds true in Addis Ababa, to a broader extent. A representative of the Nutrition Department of the Health Office in Addis Ababa states that: *"It is indeed a serious concern that child abuse, including cases of rape, and such distressing incidents, are reported through various media outlets. Children face various forms of abuse, including physical harm, verbal insults, and related issues."* According to the Budget and Planning Department in Addis Ababa: *"Victims of physical, psychological, economic, sexual abuse, and so forth, get support at rehabilitation centres."* The FGD findings indicate that children in street situations experience psychological aggression, such as insults and being labelled as thieves and crazy, physical aggression, such as police beatings, and sexual abuse or violence. A girl in Addis Ababa explains: *"Physical, as well as sexual, violence is very common, and is very frequent unless we have our own sexual partner. This happens mainly after we drink together. By the way, our close friends faced a case."* A boy in Dire Dawa explains that: *"insults and physical violence are very common."*

Figure 4.16: Deprivation rate by child protection indicators

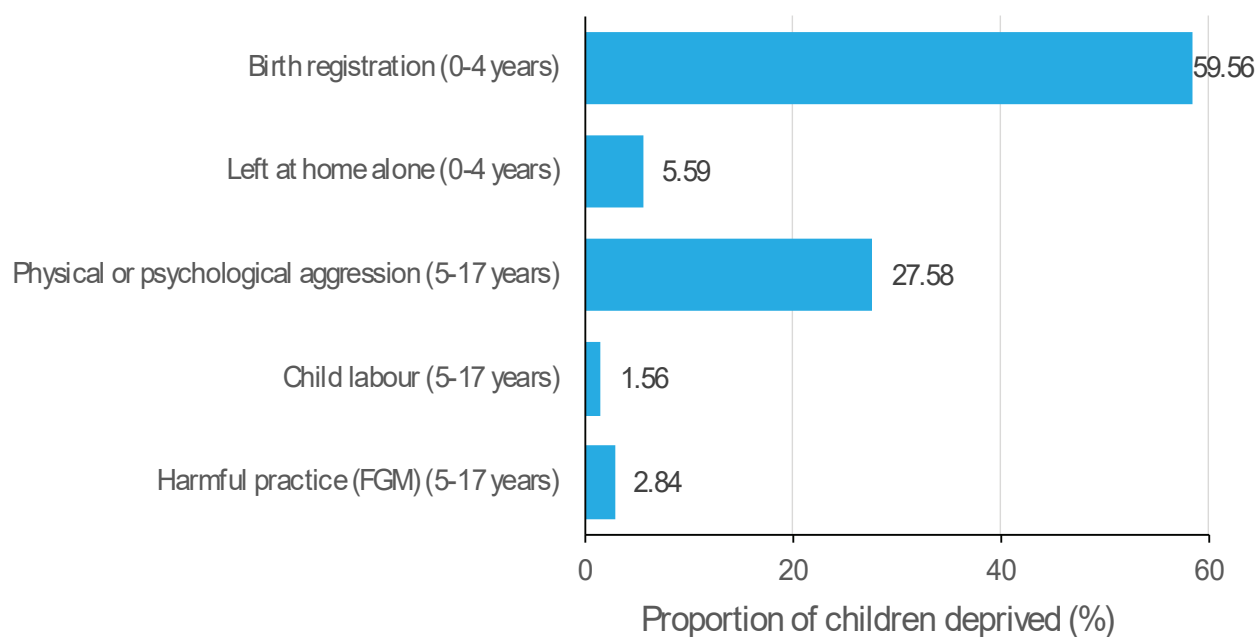
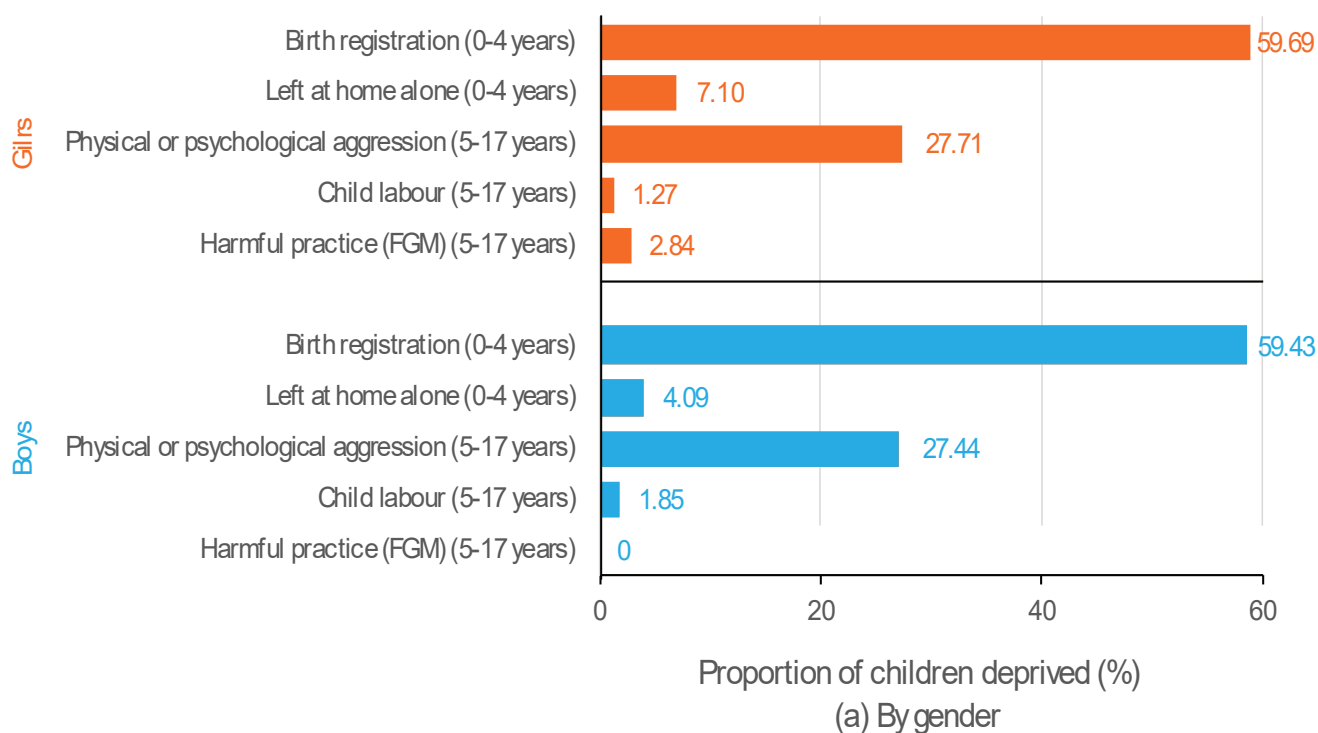
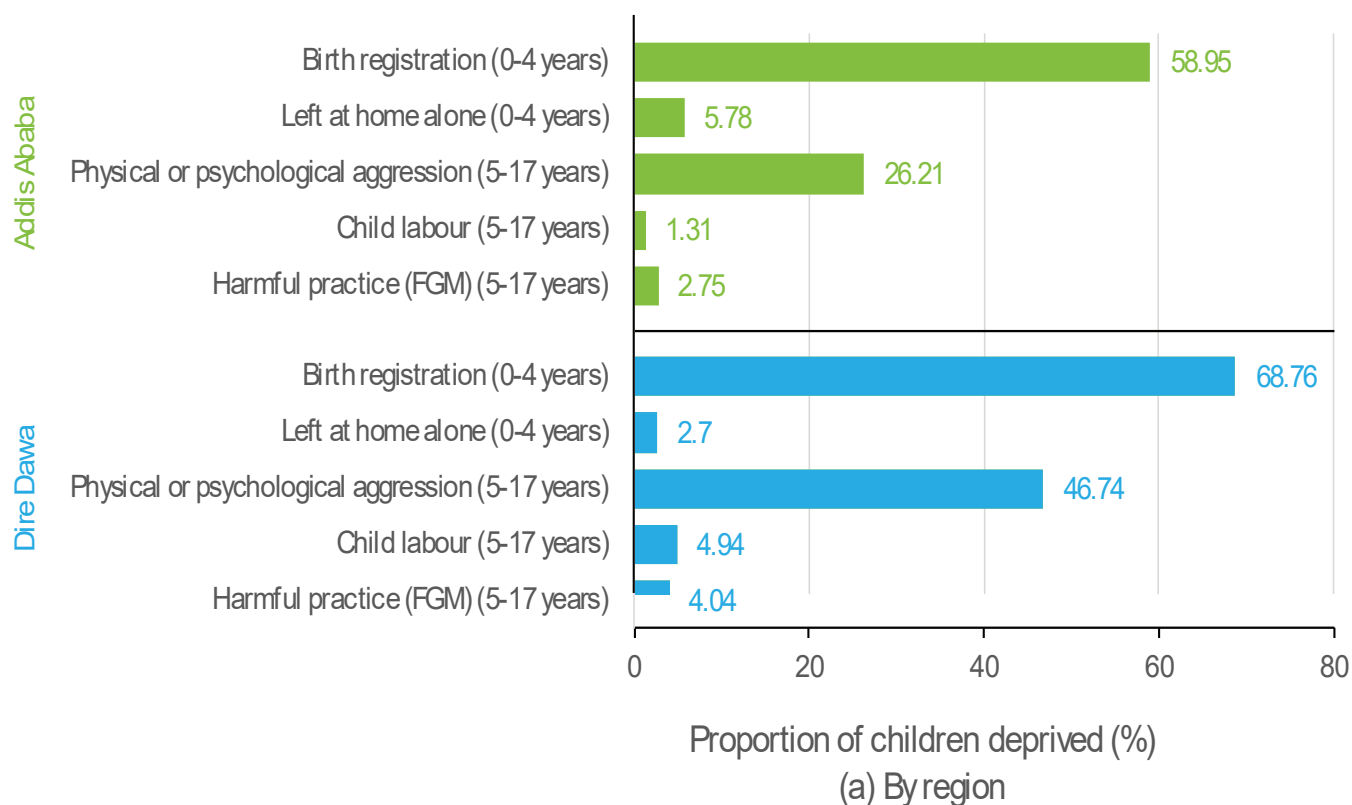


Figure 4.17: Deprivation rate by child protection indicators, by gender and city





Birth registration

UNICEF defines birth registration as “the continuous, permanent and universal recording, within the civil registry, of the occurrence and characteristics of births in accordance with the legal requirements of a country”.⁴ The Registration of Vital Events and National Identity Card Proclamation (No. 760/2012) and its amendment (Proclamation 1049/2017) provide for the form, time, procedure and responsible bodies to register the birth of a child, including a child born out of wedlock, abandoned child, child born of refugee parents and other foreigners residing in Ethiopia, those born in Ethiopian ships, and so on. Article 66 of Proclamation 760/2012 provides that failure to declare the birth of an infant is punishable with a fine not exceeding ETB 1000, or simple imprisonment up to a maximum of six months.

Overall, 41 per cent of children are deprived in this dimension of child protection (see Figure 4.1). The highest deprivation is experienced by children aged 0-4, where 60 per cent of children’s births are not registered with the civil authorities. Children living in Dire Dawa are more likely to be deprived than those living in Addis Ababa. Figure 4.16 shows that around 59 per cent of children aged 0-4 living in Addis Ababa and around 69 per cent in Dire Dawa have not had their births registered.

⁴ United Nations Children’s Fund (2013), *Every Child’s Birth Right: Inequities and trends in birth registration*.

While deprivation in birth registration remains high, introduction of the Registration of Vital Events and National Identity Card Proclamation and establishment of civil registration and vital events infrastructure has brought significant changes since 2016. The Ethiopia Demographic and Health Survey (2016) showed that 76 per cent of children under age 5 living in Addis Ababa had not had their births registered with the civil authorities, while in Dire Dawa 81 per cent of children under age 5 had not had their births registered. While children living in Dire Dawa are less likely to have had their births registered than those living in Addis Ababa, boys and girls are equally likely not to have had their births registered, a trend that has persisted since 2016.

Left home alone

Leaving young children without adult supervision for more than one hour was taken as a measure of neglect. For children aged 0-4, being left without adult supervision can lead to life-threatening events including accidents. Leaving young children without adult care or supervision makes the children highly vulnerable to violence. Overall, 6 per cent of children aged 0-4 were left without adult care or supervision for more than one hour. While this is also true for Addis Ababa, children in Dire Dawa are twice as less likely to be left without adult care or supervision.

Physical or psychological aggression

Physical aggression or violence is “any deliberate, unwanted and non-essential act that uses physical force against the body of a child and that results in or has a high likelihood of resulting in injury, pain or psychological suffering.”⁵

Psychological aggression or violence is “any deliberate, unwanted and non-essential act, verbal and non-verbal, that harms or has a high likelihood of harming the development of a child, including long-term physiological harm and mental health consequences.”⁶

In Ethiopia, 27.58 per cent of children aged 1-14 experience physical or psychological aggression, indicating that this is a significant form of violence affecting children. However, there are geographic variations. In Addis Ababa around 26 per cent of children experience physical or psychological aggression, while around 47 per cent of children in Dire Dawa are subjected to similar forms of violence. Therefore, children in Dire Dawa are almost twice as likely to experience this type of violence as children in Addis Ababa. Girls and boys are equally likely to experience physical or psychological aggression.

⁵ United Nations Children’s Fund, *International Classification of Violence against Children*, 2023

⁶ Ibid.

Child labour

Labour Proclamation 1156/2019 sets the minimum age of employment at 15 years, while restricting young workers from dangerous activities. Ethiopian Overseas Employment Proclamation 923/2016 protects children from exploitation in overseas employment. The Criminal Code (Proclamation 414/2004) criminalizes child abuse, slavery, and the worst forms of child labour.

Child labour is not a major deprivation for children aged 5-17 living in Addis Ababa and Dire Dawa, with only 1.5 per cent of children experiencing this deprivation. However, children living in Dire Dawa are almost four times more likely to experience this deprivation than children in Addis Ababa. It should also be noted that the quantitative survey excludes children in street situations, a population unaccounted for in most demographic surveys despite high vulnerability to protection risks. It is also commonplace to see children in urban areas engaged in gainful employment. The qualitative study unravels the experiences of these children.

Harmful Practice: Female genital mutilation

Female genital mutilation (FGM) comprises “all procedures involving partial or total removal of the external female genitalia or other injury to the female genital organs for non-medical reasons.”⁷ The interagency joint statement on FGM also classifies FGM into four types:

- Type I: Partial or total removal of the clitoris and/or the prepuce (clitoridectomy).
- Type II: Partial or total removal of the clitoris and the labia minora, with or without excision of the labia majora (excision).
- Type III: Narrowing of the vaginal orifice with creation of a covering seal by cutting and appositioning the labia minora and/or the labia majora, with or without excision of the clitoris (infibulation).
- Type IV: All other harmful procedures to the female genitalia for non-medical purposes, for example: pricking, piercing, incising, scraping and cauterization.

⁷ World Health Organization, *Eliminating Female Genital Mutilation: An interagency statement*.

All forms of female genital mutilation performed on a child of any age are crimes under the Criminal Code, and perpetrators are liable to up to 10 years of rigorous imprisonment, depending on the type of FGM performed and the consequences for the girl or woman. However, 2.84 per cent of children aged 0-17 do experience FGM (2.75 per cent in Addis Ababa and 4.04 per cent in Dire Dawa).

Ethiopia has developed its first-ever evidence-based, comprehensive, and multisectoral plan, the National Costed Roadmap to End Child Marriage and Female Genital Mutilation/Cutting (2020-2024). The National Roadmap stipulates the key strategies, approaches, and evidence-based interventions that will be employed to achieve the national target of eliminating FGM.

4.2.9. Leisure

Leisure activities are fundamental to children's rights, as underscored by the CRC. Beyond mere entertainment, leisure fosters holistic development, stimulates creativity, and nurtures social skills. Through play, children explore interests, develop problem-solving abilities, and build emotional resilience, laying the groundwork for lifelong learning and fulfilment.

Access to leisure is not a luxury but a cornerstone of childhood well-being. It allows children to relax, recharge, and discover passions, enhancing overall happiness. Moreover, leisure fosters vital peer interactions, teaching cooperation and fostering friendships crucial for social growth.

Acknowledging the significance of leisure emphasizes the need to prioritize diverse recreational opportunities for children. Governments, communities, and families must ensure access to safe spaces and resources for leisure activities. By upholding this right, children are empowered to thrive and actively shape their futures.

Figure 4.1 shows that, in the two cities, 78 per cent of children face deprivation in leisure activities (Dire Dawa 83.4 per cent and Addis Ababa 77.3 per cent). Age-disaggregated data reveal higher deprivation among children under five (81 per cent) than those aged 5-17 (77 per cent). These data underscore the urgency of addressing disparities and ensuring all children enjoy their right to leisure.

Some of the key informants argued that across the city, boys and girls have easy access to playgrounds, public spaces, green spaces, walkways and bikeways, and safe public transportation, with safety features such as safe school environments, crossings, and lighting of public areas. According to the Child Support Team Leader of the Women and Children Affairs Office in Dire Dawa: *"The topography of the city is not bad for children to play. The schools in the city have many places where children play together. However, there is not enough green space in the city."* The Gender Coordinator and Project Officer of the Construction Bureau in Dire Dawa reported: *"It is challenging to provide government-owned green areas where our children can play in their break times. Privately owned green places have unaffordable entrance fees for everyone. The city has had a scarcity of walkways for a long time."* The same holds true in Addis Ababa. For instance, a representative of the Nutrition Department of the Health Office in Addis Ababa reveals: *"In Addis Ababa, schools don't have free spaces and playgrounds. In recent times, however, we have adopted a new programme known as Early Childhood Care and Development at the city administration level, providing services and facilities for children at public institutions like schools and health centres."* Thus, recreational materials and safe outdoor playing spaces for children are sometimes available.

Figure 4.18: Deprivation rate by leisure indicators

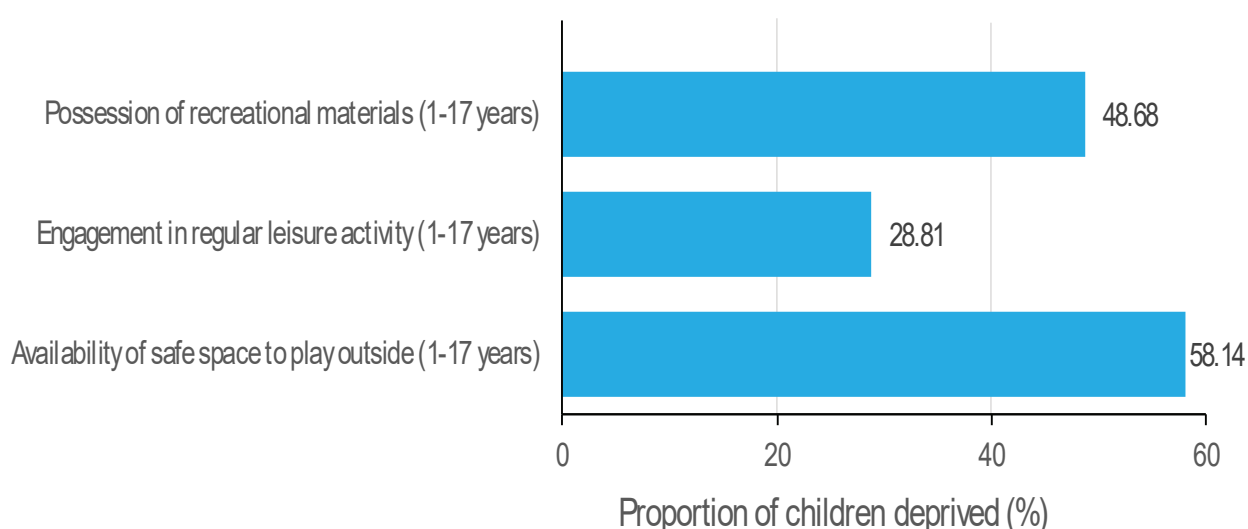
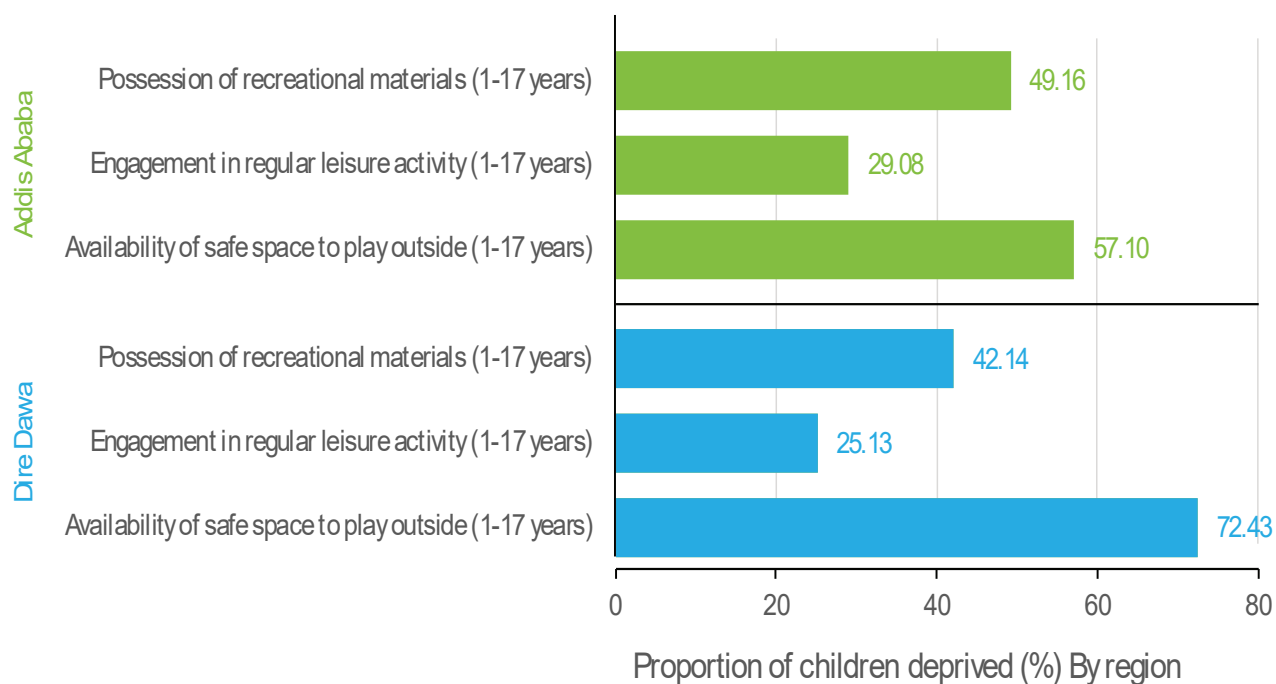
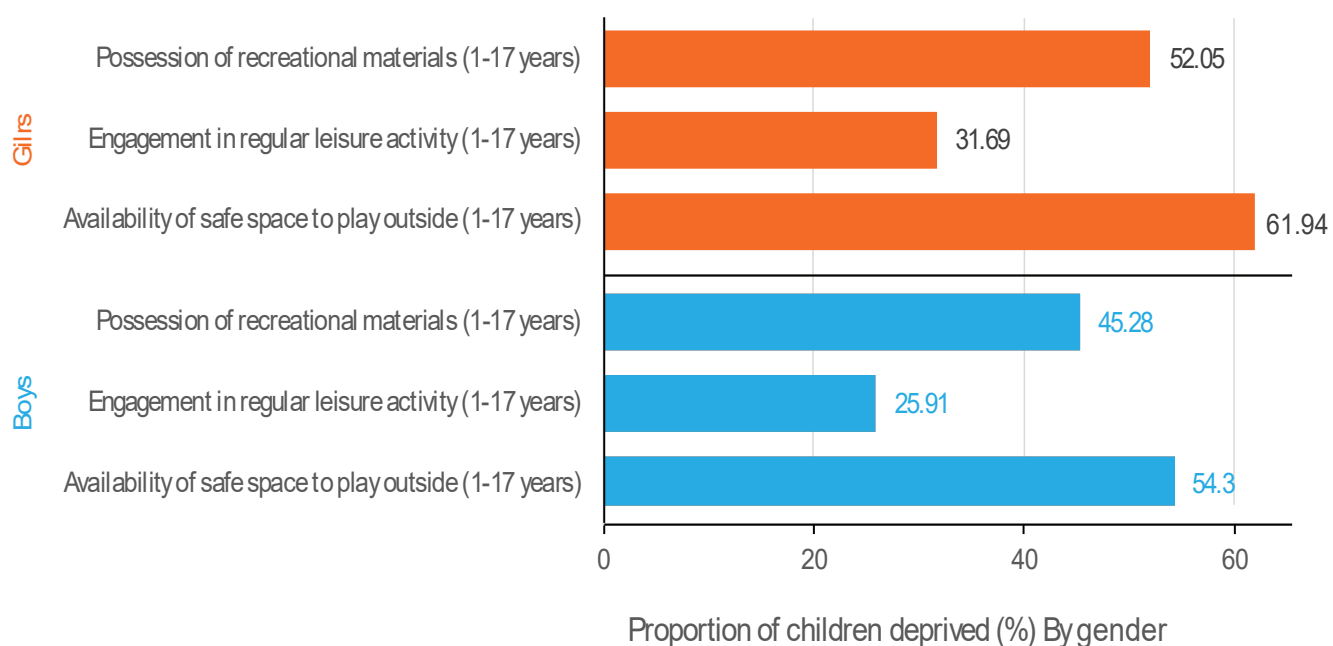


Figure 4.19: Deprivation rate by leisure Indicators, by gender and city



Possession of recreational materials

Possessing recreational materials, suitable for indoor and outdoor use, are crucial for the growth and development of children aged 1-17. Unfortunately, in the two cities, a significant proportion (48.7 per cent) lack access to such resources (Addis Ababa: 49.2 per cent and Dire Dawa: 42.1 per cent). Further disaggregation by sex reveals a concerning trend: 52 per cent of female children and 45 per cent of male children are deprived of these essential resources. Addressing these discrepancies is vital for ensuring equitable opportunities for all children.

Engagement in leisure activity

Leisure is vital for children's development, supported by the CRC, which guarantees their right to play, relax, and learn. It fosters physical, cognitive, and social growth, reducing stress and promoting happiness. Ensuring access to leisure activities is essential for a balanced and fulfilling childhood. In the two cities, 29 per cent of children aged 1-17 are not able to engage in such activities, (29 per cent in Addis Ababa and 25 per cent in Dire Dawa). Additionally, female children (32 per cent) are more deprived than male children (26 per cent).

Safe outdoor playing spaces

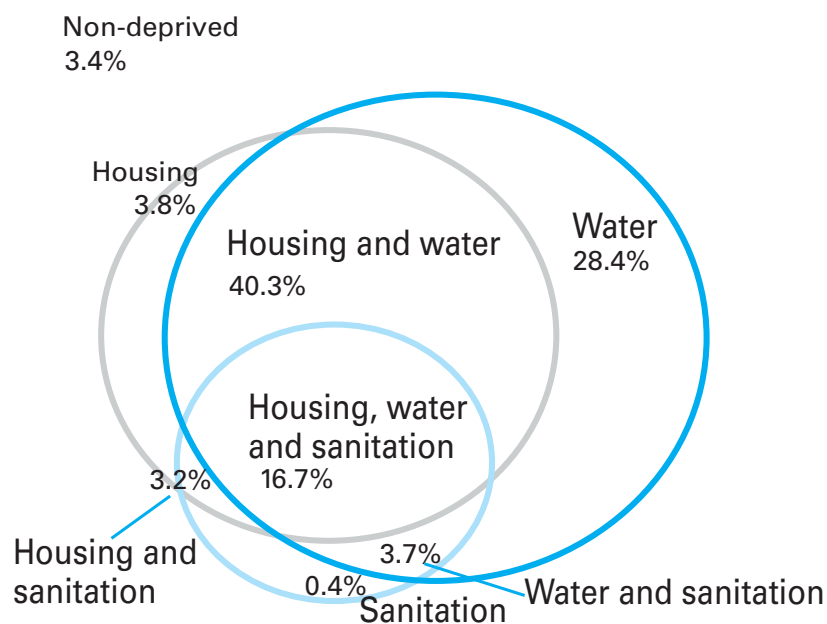
Outdoor playing spaces are crucial in urban areas, supporting physical activity, social interaction, and child development. However, urbanization often results in limited green areas, safety risks and overcrowding, curtailing children's access to outdoor play. This contributes to sedentary lifestyles, negatively affecting health. In both cities, 58 per cent of children lack safe outdoor play spaces (girls 62 per cent and boys 54 per cent). Dire Dawa faces a more severe situation (72 per cent) than Addis Ababa (57 per cent).

5. Deprivation overlap analysis

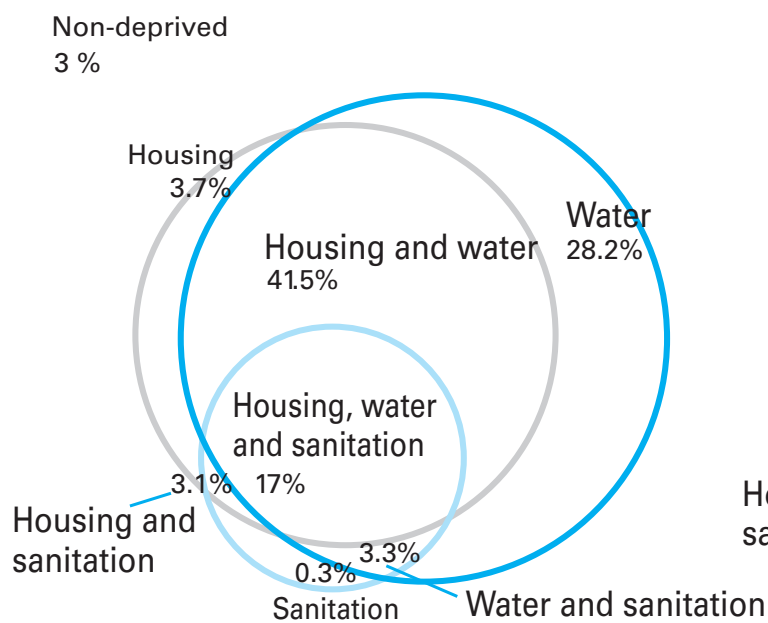
Figure 5.1 panel (a) depicts the overlap analysis for deprivation in housing, water, and sanitation for all children residing in the two cities. As the figure shows, only 3.4 per cent of children are not deprived in any of the three dimensions. However, around 17 per cent of children are deprived in housing, water, and sanitation dimensions simultaneously. The overlap in deprivations in housing and water (but not sanitation) dimensions is 40 per cent, while less than 5 per cent of children are deprived in housing and sanitation (but not water) dimensions, and water and sanitation (but not housing) dimensions. Overall, the results imply that a high proportion of children are deprived in both housing and water at the same time, and this calls for integrated multisectoral interventions to minimize multidimensional child deprivation in both cities.

Figure 5.1 panels (b) and (c) illustrate the overlap for deprivation in housing, water, and sanitation affecting children in Addis Ababa and Dire Dawa. The figure reveals that around 3 per cent of children in Addis Ababa and 8 per cent of children in Dire Dawa are not deprived in any of the three dimensions. The analysis shows that a relatively higher proportion (17 per cent) of children in Addis Ababa are deprived in all three dimensions, compared to around 14 per cent of children in Dire Dawa. Similarly, a higher proportion (42 per cent) of children in Addis Ababa are deprived in housing and water (but not sanitation) simultaneously, compared to 24 per cent in Dire Dawa. However, the overlaps in deprivations in housing and sanitation (but not water) and water and sanitation (but not housing) are higher in Dire Dawa than in Addis Ababa. Overall, the results imply that housing, water, and sanitation are serious deprivations for children in the two cities, with varying degree of overlap among these dimensions, requiring targeted policy action in the two city administrations.

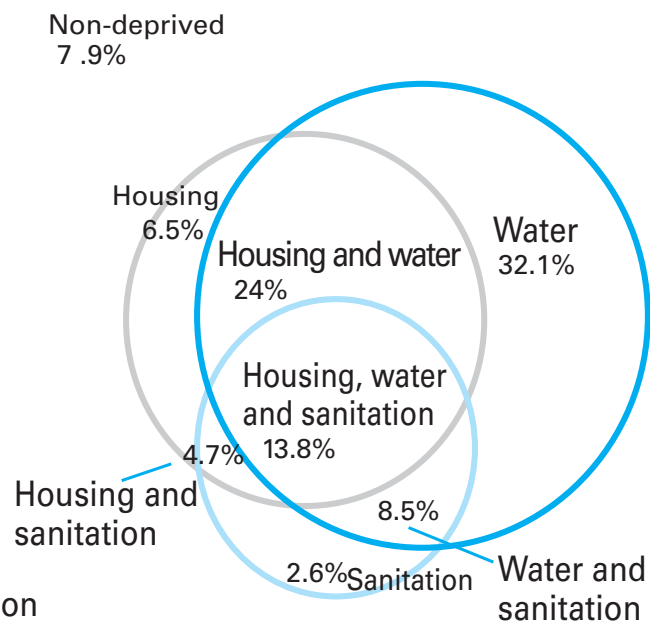
Figure 5.1 (a)-(c): Deprivation overlap between housing, water, and sanitation, disaggregated by city



(a) Total sample



(b) Addis Ababa



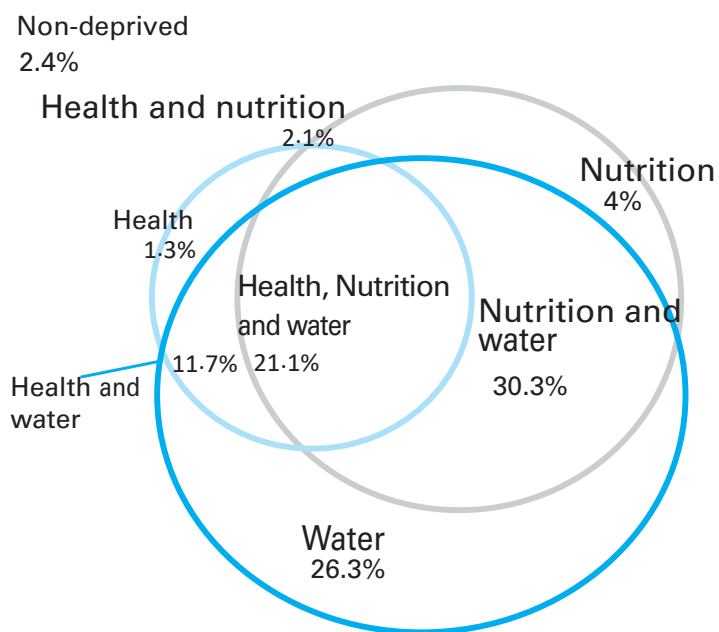
(c) Dire Dawa

5.1. Deprivation overlap analysis for children aged under 5

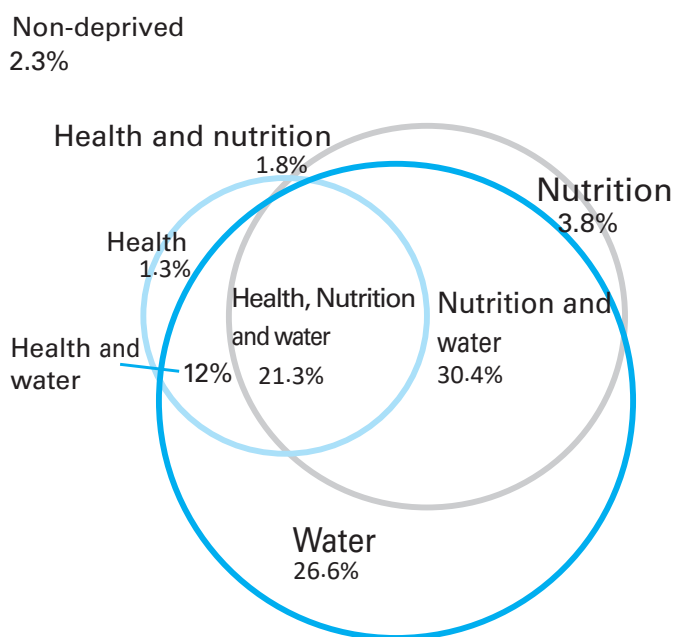
To evaluate the intensity of deprivation, it is vital to investigate how deprivations relate to one another and determine how many simultaneous deprivations children face. This section elaborates a deprivation overlap analysis for three selected dimensions for children under 5.

Figure 5.2 panel (a) illustrates the overlap analysis for deprivation in the health, nutrition, and water dimensions for children in the overall sample, and disaggregated across the two cities. The figure shows that only 2.4 per cent of these children are not deprived in any of the three dimensions. More importantly, it shows that around 20 per cent of children living in the two cities are deprived in nutrition, health and water dimensions simultaneously, while around 30 per cent are deprived in nutrition and water (but not health). Moreover, around 12 per cent of children are deprived in health and water (but not nutrition). Around 26 per cent of children in the two cities are only deprived in water, while 1.3 per cent are only deprived in health and 4 per cent are only deprived in nutrition. Therefore, multisectoral interventions are necessary to tackle multidimensional child deprivation in the cities, emphasizing the role of the water dimension in the deprivation overlap.

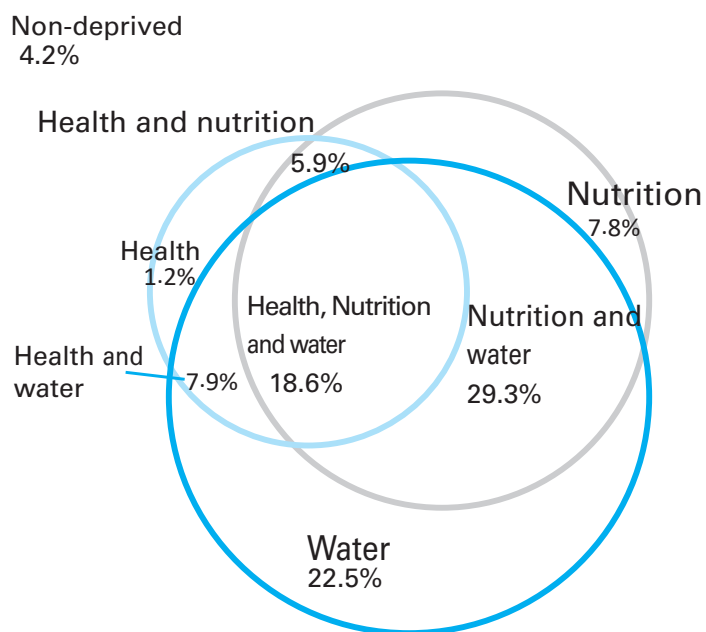
Figure 5.2 (a)-(c): Deprivation overlap between nutrition, health, and water, children under 5, disaggregated by city



(a) Total sample



(b) Addis Ababa

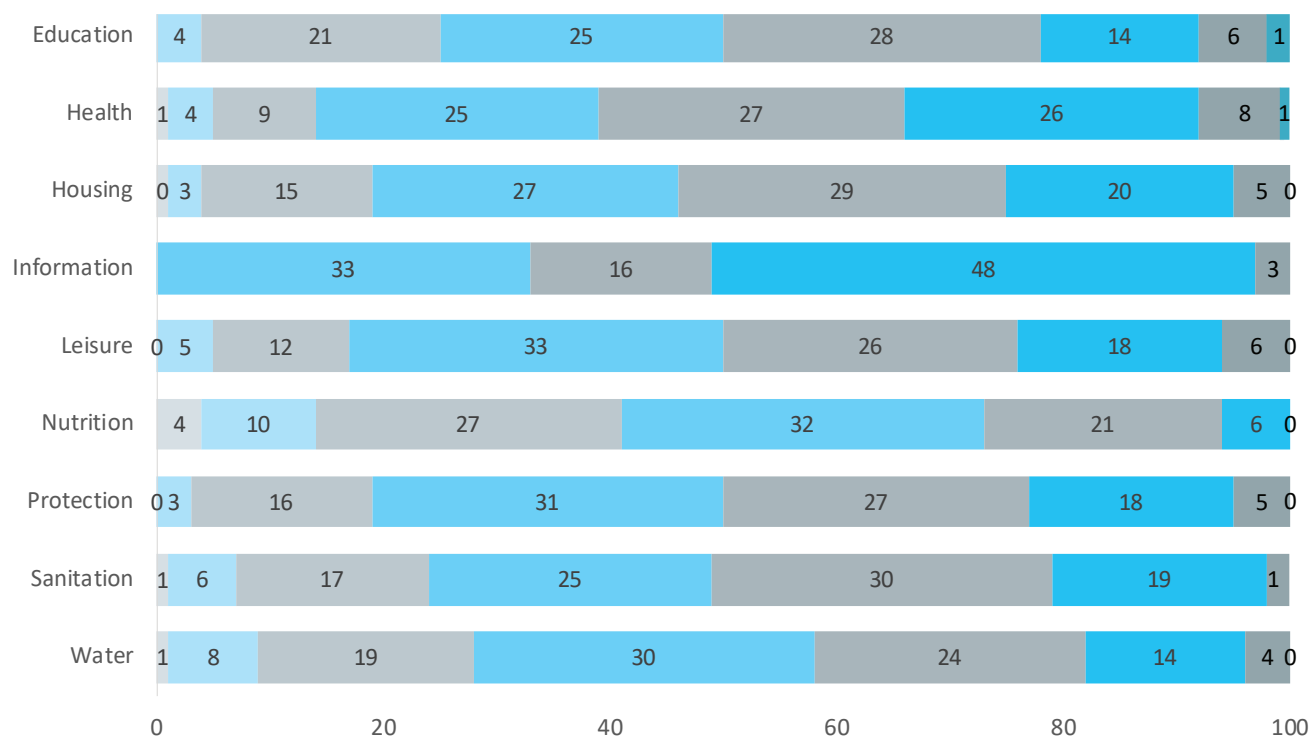


(c) Dire Dawa

Figure 5.2 panels (b) and (c) show the overlap analysis for deprivation in health, nutrition, and water for children residing in Addis Ababa and Dire Dawa. The survey shows that 2.3 per cent of children under 5 in Addis Ababa and 4.2 per cent in Dire Dawa are not deprived in any of the three dimensions. By contrast, 21 per cent of children living in Addis Ababa and 19 per cent of Dire Dawa are deprived in nutrition, health, and water simultaneously. Moreover, around 30 per cent of children in the two cities are deprived in nutrition and water (but not health), while 12 per cent in Addis Ababa and 8 per cent in Dire Dawa are deprived in both health and water (but not nutrition). Around 30 per cent of children in Addis Ababa and Dire Dawa are deprived in nutrition and water (but not health), while around 27 per cent of children in Addis Ababa and 23 per cent in Dire Dawa are only deprived in water. Nearly 1 per cent of children in both city administrations are only deprived in health, while the proportion of children only deprived in nutrition in Dire Dawa is more than double that of Addis Ababa.

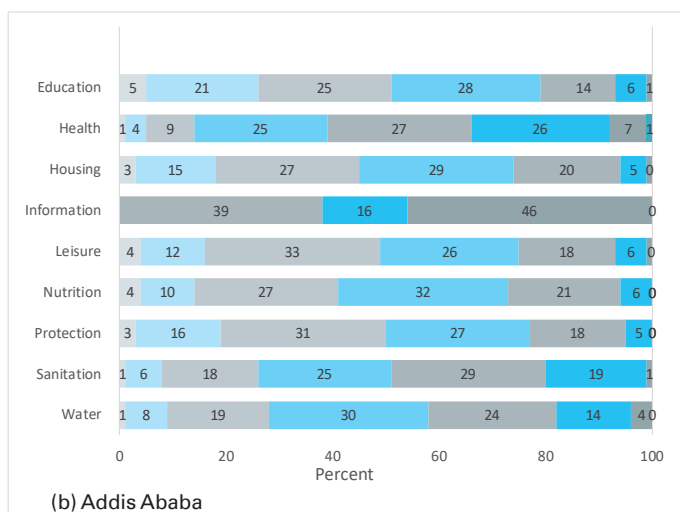
Figure 5.3 (a) reveals both the proportion of children deprived in each dimension and the extent to which these children are deprived in one to eight other dimensions. As an illustration, if we consider the dimension of water, the figure shows that 1 per cent of children under 5 are only deprived in water and none of the other 8 dimensions; 8 per cent are deprived in one other dimension besides water; 19 per cent are deprived in water and two additional dimensions; 30 per cent are deprived in water and three additional dimensions; and so on. In other words, around 60 per cent of children under 5 are deprived in water and three or more additional dimensions. The figure also shows that the percentage of children only deprived in one dimension was less than or equal to 1 per cent for the water, protection, and nutrition dimensions, while no children were deprived in only one dimension for the remaining dimensions. Figure 5.3 panels (b) and (c) display the dimension deprivation overlap by city of residence, showing the deprivation overlap. For instance, in Addis Ababa, no children under 5 were deprived in the education dimension only, and 51 per cent of children were deprived in education and up to three additional dimensions. Meanwhile, in Dire Dawa, no children were deprived in the education and only one additional dimension, while 47 per cent of children were deprived in education and in two or three additional dimensions. The picture is similar for the remaining dimensions.

Figure 5.3 (a) - (c): Deprivation overlap by dimension, children under 5, disaggregated by city

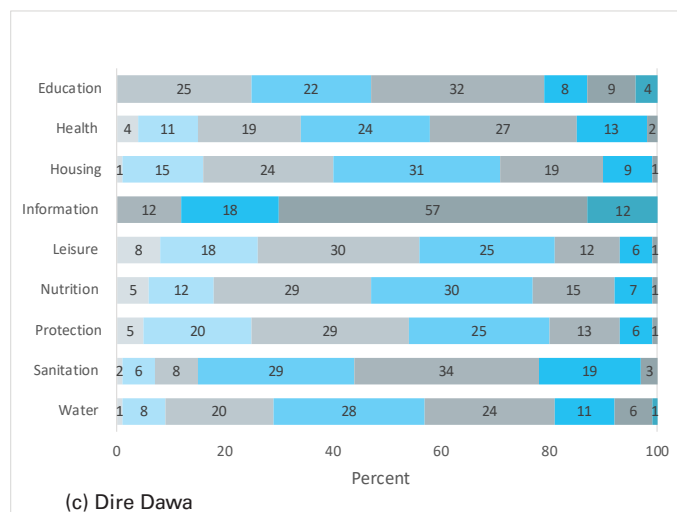


(a) Total sample

■ Deprived only in given dimension
 ■ Deprived in 1 other dimension
 ■ Deprived in 2 other dimensions
 ■ Deprived in 3 other dimensions
 ■ Deprived in 4 other dimensions
 ■ Deprived in 5 other dimensions
 ■ Deprived in 6 other dimensions
 ■ Deprived in 7 other dimensions



(b) Addis Ababa



(c) Dire Dawa

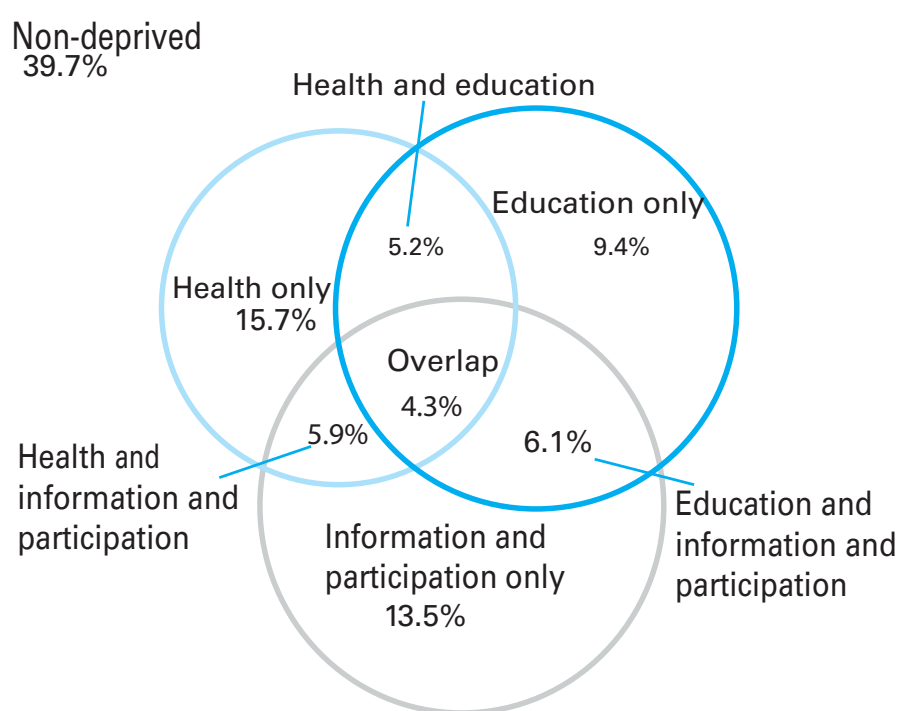
■ Deprived only in given dimension
 ■ Deprived in 1 other dimension
 ■ Deprived in 2 other dimensions
 ■ Deprived in 3 other dimensions
 ■ Deprived in 4 other dimensions
 ■ Deprived in 5 other dimensions
 ■ Deprived in 6 other dimensions
 ■ Deprived in 7 other dimensions

5.2. Deprivation overlap analysis for children aged 5-17 years

This section offers a deprivation overlap analysis for three selected dimensions for children aged 5-17.

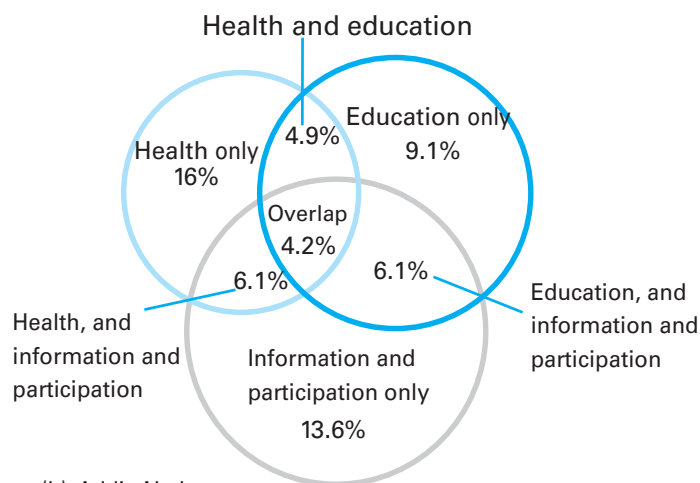
Figure 5.4 panel (a) illustrates the overlap analysis for deprivation in education, health, and information and participation for children aged 5-17 years residing in the two cities. The figure shows that nearly 40 per cent of these children are not deprived in any of the three dimensions. Meanwhile, 4.3 per cent of children who reside in the two city administrations are deprived in the education, health, and information and participation dimensions simultaneously. The results also show that about 6 per cent of children aged 5-17 years are deprived in education and information and participation (but not health) at the same time, and a similar proportion (6 per cent) of these children are also deprived in health and information and participation (but not in education). Also, 9.4 per cent of children aged 5-17 in the city administrations are only deprived in education and about 16 per cent of these children are only deprived in health, while about 14 per cent are only deprived in information and participation. These results suggest that multisectoral interventions are necessary to tackle multidimensional child deprivation in the two cities.

Figure 5.4 (a)-(c): Deprivation overlap between education, health, and information and participation, disaggregated by city



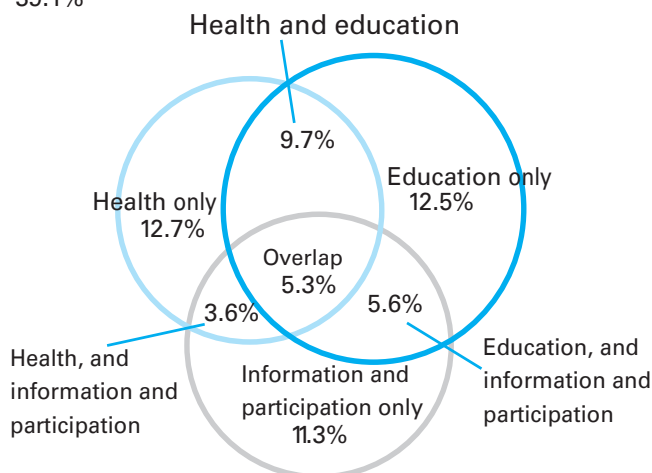
(a) Total sample

Non-deprived
39.8%



(b) Addis Ababa

Non-deprived
39.1%



(c) Dire Dawa

Figure 5.4 panels (b) and (c) illustrate the overlap analysis for deprivation in education, health, and information and participation for children aged 5-17 residing in Addis Ababa and Dire Dawa. The analysis shows that around 40 per cent of children in Addis Ababa and Dire Dawa are not deprived in any of the three dimensions. At the same time, 4.2 per cent of aged 5-17 in Addis Ababa and 5 per cent in Dire Dawa are deprived in the education, health and information, and participation dimensions simultaneously. Around 6 per cent of children aged 5-17 years in the two cities are deprived in education and information and participation (but not health), while around 6 per cent of children in Addis Ababa and 4 per cent in Dire Dawa are deprived in health and information and participation (but not education). Near equal proportions (around 13 per cent) of children aged 5-17 years in Dire Dawa are only deprived in education or health, while in Addis Ababa around 9 per cent of children are only deprived in education and 16 per cent are only deprived in health. Moreover, the figures reveal that around 14 per cent of children in Addis Ababa and around 11 per cent in Dire Dawa are only deprived in information and participation.

Figure 5.5 panel (a) illustrates the overlap analysis for deprivation in education, protection, and leisure for children aged 5-17 residing in the two cities. The analysis shows that fewer than 2 per cent of these children are not deprived in any of the three dimensions. The results show that 9.4 per cent of children residing in the two cities are deprived in education, protection, and leisure simultaneously. Meanwhile, about 29 per cent of children aged 5-17 are deprived in protection and leisure (but not education), while 26 per cent of these children are deprived in education and leisure (but not protection). Only about 2 per cent of children aged 5-17 in the city administrations are only deprived in education or protection, while a high percentage (30 per cent) of these children are only deprived in leisure.

Figure 5.5 (a)-(c): Deprivation overlap between education, child protection, and child labour, disaggregated by city

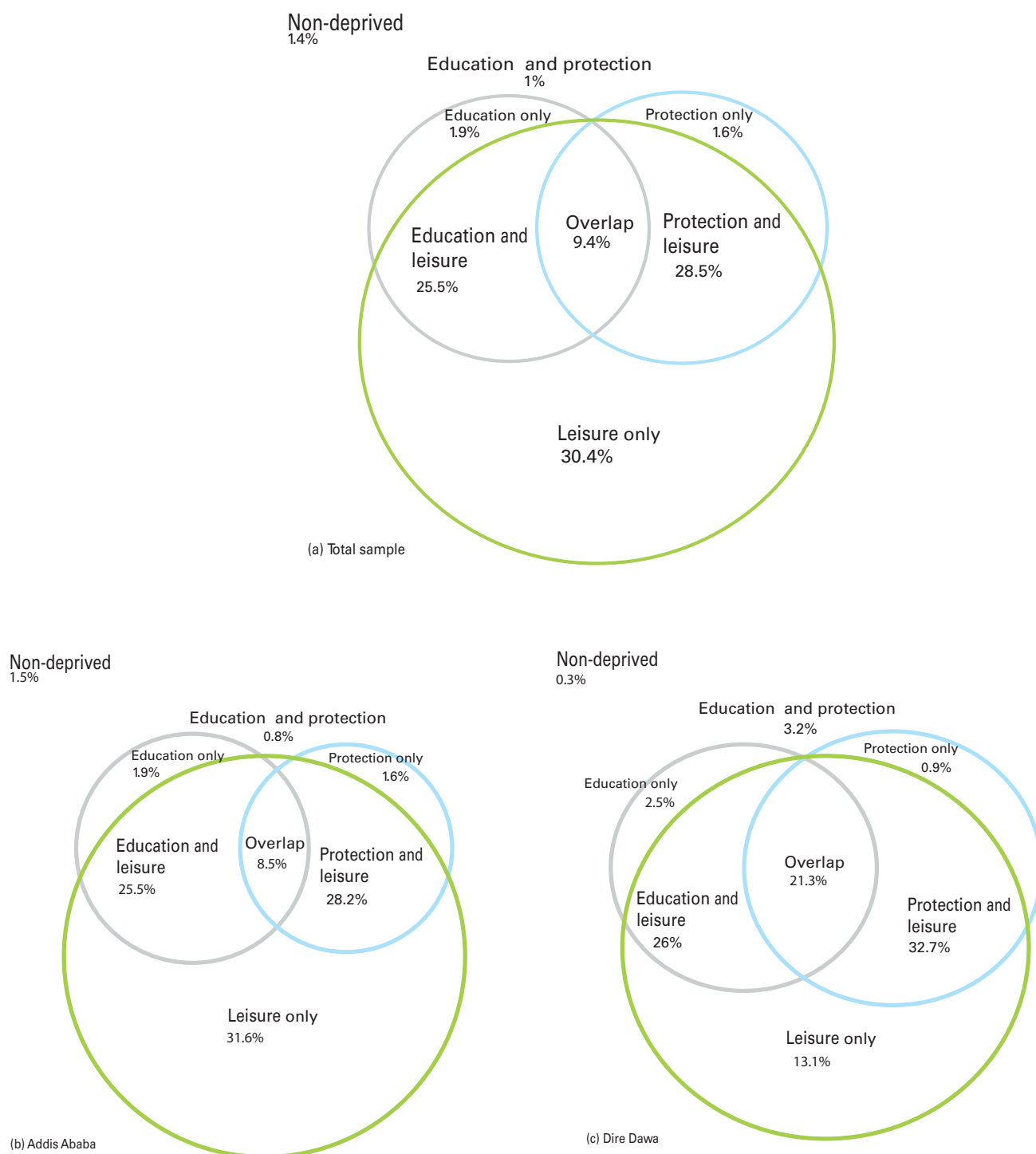
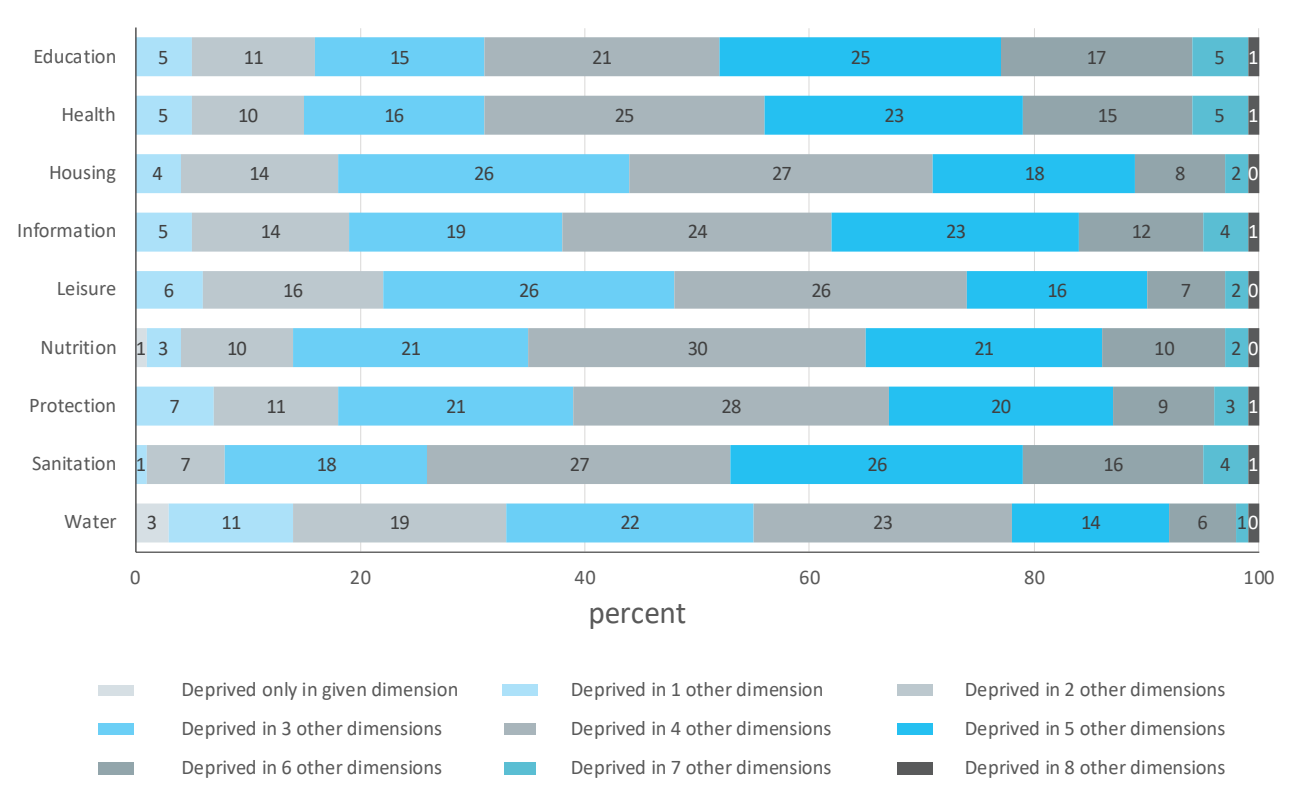


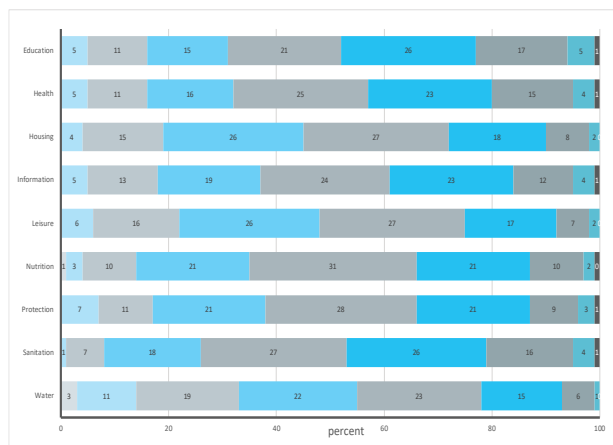
Figure 5.5 panels (b) and (c) show the results of the overlap analysis for children aged 5-17 who are deprived in education, protection, and leisure in Addis Ababa and Dire Dawa. The study found that around 2 per cent of children in Addis Ababa and only 0.3 per cent in Dire Dawa are not deprived in any of the three dimensions, implying that Addis Ababa is relatively better on the three indicators combined. The figure shows that about 9 per cent of children in Addis Ababa but 21 per cent in Dire Dawa are deprived in

education, protection, and leisure simultaneously. A nearly equal proportion of children (26 per cent) in Addis Ababa and in Dire Dawa are deprived in education and leisure (but not protection), while 28 per cent in Addis Ababa and 33 per cent in Dire Dawa are deprived in protection and leisure (but not education). Also, 2 per cent of children aged 5–17 in Addis Ababa and 3 per cent in Dire Dawa are deprived in education only, while 2 per cent of children in Addis Ababa and less than 1 per cent of children in Dire Dawa are deprived in protection only. A much higher percentage in Addis Ababa (32 per cent) than in Dire Dawa (13 per cent) are deprived in leisure only.

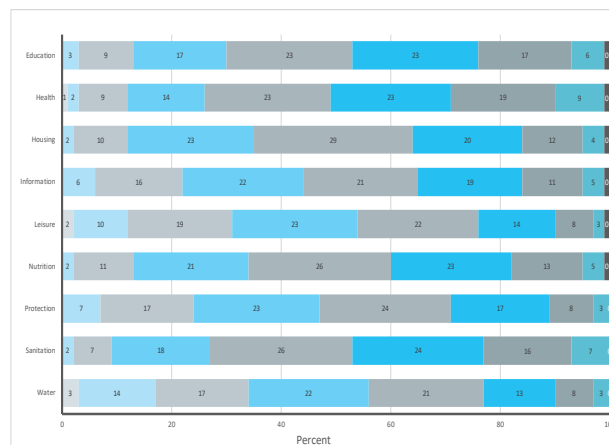
Figure 5.6 (a)-(c): Deprivation overlap by dimension, children aged 5-17, disaggregated by city



(a)Total sample



(b) Addis Ababa



(c) Dire Dawa

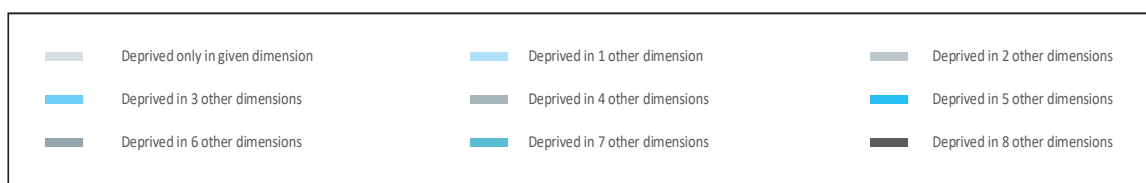


Figure 5.6 (a) reveals both the proportion of children deprived in each dimension and the extent to which these children are deprived in one to eight other dimensions. As an illustration, if we consider the housing dimension, the figure first shows that no children aged 5-17 are only deprived in housing; 4 per cent are deprived in one other dimension besides housing; and 14 per cent are deprived in housing and two additional dimensions. Meanwhile, 26 per cent of children 5-17 are deprived in housing and three additional dimensions, and 55 per cent are deprived in housing and four or more dimensions. Figure 5.6 panels (b) and (c) show that deprivation overlaps are observed in both cities. Accordingly, most children in both cities experience overlapping deprivations.

6. Multiple deprivation analysis

6.1. Deprivation count and distribution

Figure 6.1 shows that 41 per cent of children are deprived in five or more dimensions, while more than 85 per cent are deprived in three or more dimensions. Further disaggregation shows that the number of deprivations children experience varies across age groups, gender and city of residence. Specifically, children aged 5-17 years, girls, and children in Addis Ababa experience higher levels of deprivation in five or more dimensions than the other groups (children under 5, boys, and children in Dire Dawa, respectively). The difference in the mean number of deprivations across gender is statistically significant (Appendix Table 3).

Overall, depicting the number of deprivations per child sheds light on the incidence of multidimensional child poverty using various cutoffs and thresholds. Accordingly, as shown in Figure 6.1 (a), almost all children between 0-17 years experienced deprivations in at least one dimension. Meanwhile, around 97 per cent, 86 per cent, and 66 per cent, of children aged 0-17 years are deprived in two or more, three or more, and four or more dimensions respectively.

6.2. Multidimensional child deprivation incidence, intensity and adjusted index

MCD measures can be calculated using various numbers of deprivations in the dimensions. MCD incidence, intensity and the adjusted index using cutoffs ranging between deprivations in at least one dimension to deprivations in all dimensions are presented in Table 6.1 for the whole sample, and in Table 6.2 disaggregated for the two city administrations. Accordingly, MCD incidence is as high as 99.6 per cent (98.6 per cent in Addis Ababa and 99.8 per cent in Dire Dawa) when we use a cutoff of one or more dimensions, and it is as low as 0.1 per cent (0.2 per cent in Addis Ababa and 0.03 per cent in Dire Dawa) when the cut off is set at deprivations in all nine dimensions.

The cutoff used in this study for MCD estimates is deprivation in five or more dimensions. The choice of 50 per cent or more of deprivations in the dimensions to identify multidimensionally deprived children is in line with the CSA and UNICEF (2018) study. Using a threshold of five dimensions to identify multidimensionally poor children, the MCD incidence rate is 41 per cent (41 per cent in Addis Ababa and 40 per cent in Dire Dawa (Tables 6.1 and 6.2)). Table 6.2 further shows a slight difference in average deprivation intensity between the two cities. Average deprivation intensity in absolute numbers is 5.6 in Addis Ababa and 5.7 in Dire Dawa. In percentages, on average 62.2 per cent of children are multidimensionally poor in Addis Ababa, as are 63.3 per cent in Dire Dawa.

Figure 6.1: Deprivation count and distribution, for the whole sample and disaggregated by age, gender and city

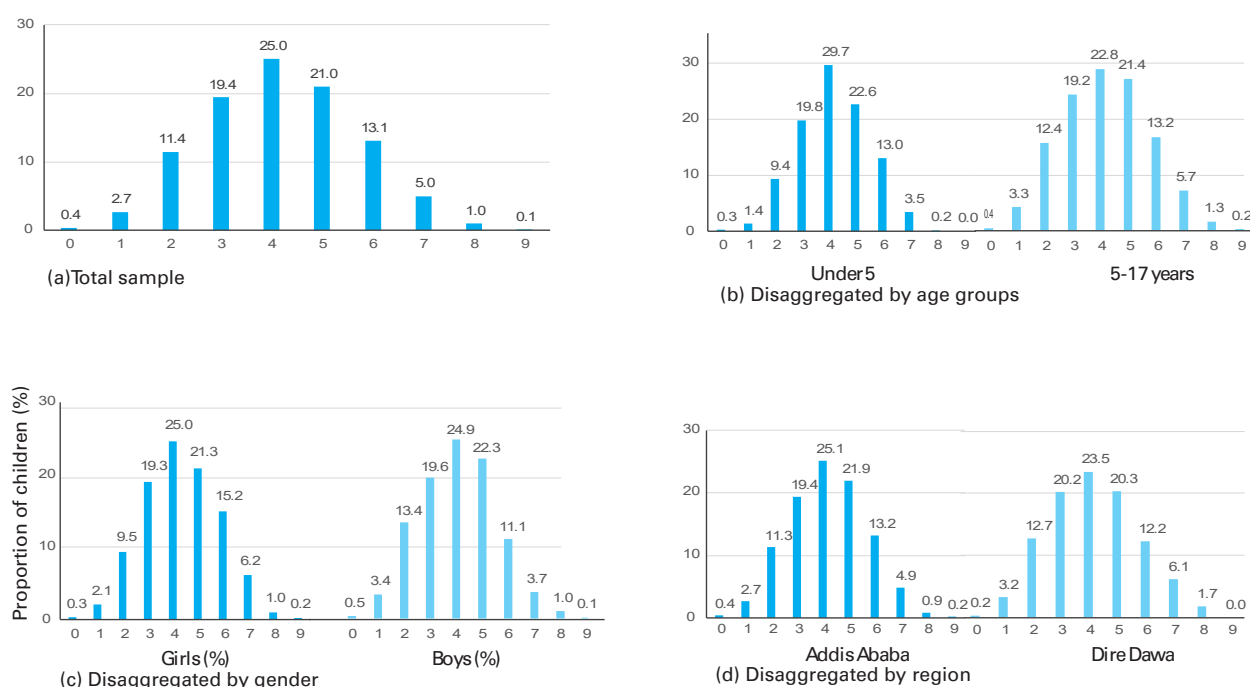


Table 6.1: Multidimensional child deprivation incidence, intensity, and adjusted MCD index by dimensional cut-off, all children under 18

Cut-off (K dimensions)	Multidimensional child deprivation rate (H), %	Multidimensionally deprived children (in absolute numbers)	Average deprivation intensity (A) (in number)	Average intensity among the deprived (A) (in percentage)	Adjusted multidimensional child deprivation index (M0)
1-9 deprivations	99.6	1,865,549	4.2	46.7	0.47
2-9 deprivations	96.9	1,814,588	4.3	47.8	0.46
3-9 deprivations	85.5	1,600,598	4.6	51.1	0.44
4-9 deprivations	66	1,236,735	5	55.6	0.37
5-9 deprivations	41	768,716	5.6	62.2	0.26
6-9 deprivations	19.2	360,229	6.4	71.1	0.14
7-9 deprivations	6.1	114,342	7.2	80.0	0.05
8-9 deprivations	1.1	21,192	8.1	90.0	0.01
9 deprivations	0.1	2,776	9	100.0	0.00
Total Children	1,873,043				

Table 6.2: Multidimensional child deprivation incidence, intensity, and adjusted MCD index by dimensional cut-off, all children under 18, by city

Cut-off K (dimensions)	Multidimensional child deprivation rate (H), %		Multidimensionally deprived children in absolute numbers		Average deprivation intensity (A) (in number)		Average intensity among the deprived (A) (in %)		Adjusted multidimensional child deprivation index (M0)	
	Addis Ababa	Dire Dawa	Addis Ababa	Dire Dawa	Addis Ababa	Dire Dawa	Addis Ababa	Dire Dawa	Addis Ababa	Dire Dawa
1-9 deprivations	99.6	99.8	1,740,507	125,041	4.2	4.1	46.7	45.6	0.46	0.45
2-9 deprivations	96.9	96.5	1,693,611	120,977	4.3	4.3	47.8	47.8	0.46	0.46
3-9 deprivations	85.6	83.9	1,495,488	105,110	4.6	4.6	51.1	51.1	0.44	0.43
4-9 deprivations	66.2	63.7	1,156,947	79,788	5	5.1	55.6	56.7	0.37	0.36
5-9 deprivations	41.1	40.2	718,342	50,374	5.6	5.7	62.2	63.3	0.26	0.25
6-9 deprivations	19.2	20	335,177	25,052	6.4	6.5	71.1	72.2	0.14	0.14
7-9 deprivations	6	7.8	104,536	9,805	7.2	7.2	80	80	0.05	0.06
8-9 deprivations	1.1	1.8	18,970	2,221	8.1	8	90	88.9	0.01	0.02
9 deprivations	0.2	0.03	2,737	40	9	9	100	100	0.00	0.00
Total Number of Children:			1,747,721	125,321						

6.3. Deprivation intensity by age group and city

As shown in Table 6.3, the proportion of children under 5 who experienced deprivations in any number of dimensions is higher than that of children aged 5-17 years, except for the number of deprivations in five or more dimensions.⁸ This implies that incidence of multidimensional child deprivation is higher among children aged under 5 than for those aged 5-17 years for cutoffs of one or more to four or more dimensions.

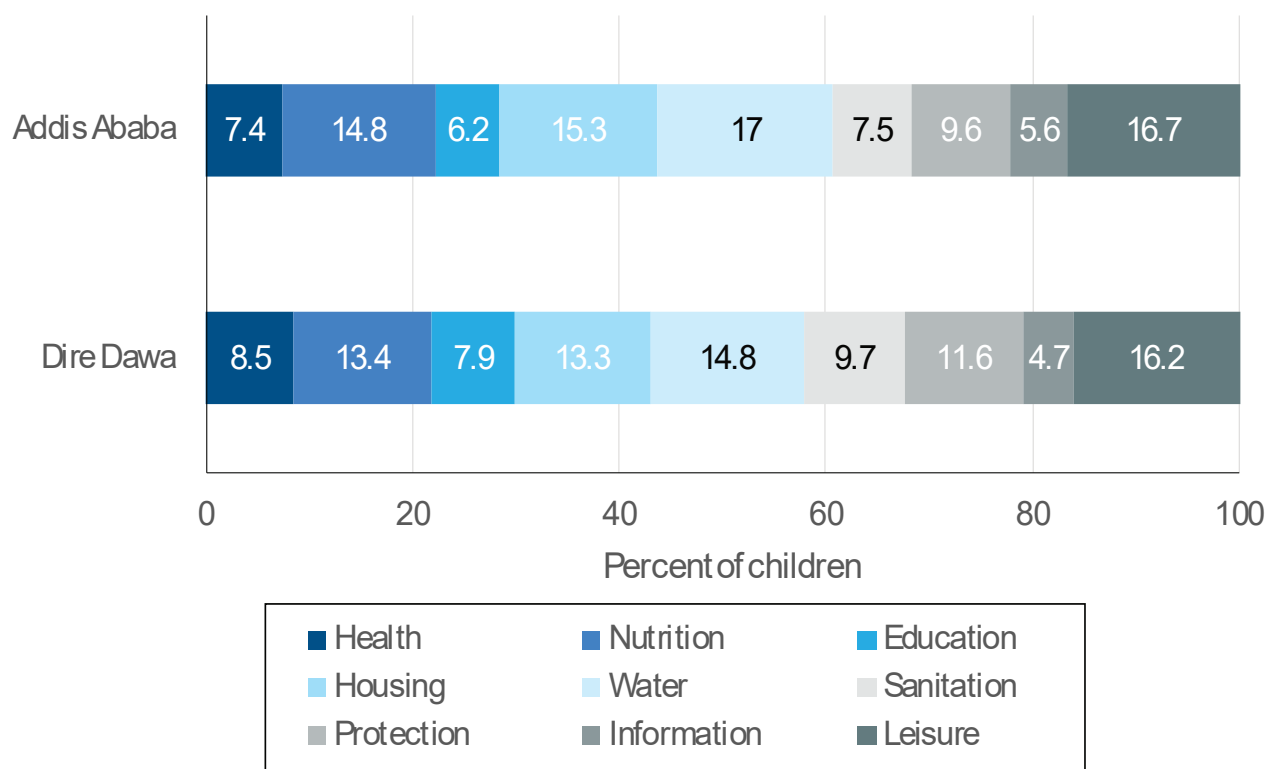
Table 6.3: Deprivation intensity, children deprived in dimensions by age group

Dimensions	Under 5		years 5-17	
	Multidimensional child deprivation rate (H), %	Average number of deprivations	Multidimensional child deprivation rate (H), %	Average number of deprivations
1-9 dimensions	99.7	4.2	99.6	4.2
2-9 dimensions	98.3	4.2	96.2	4.3
3-9 dimensions	88.8	4.5	83.9	4.6
4-9 dimensions	69	4.9	64.6	5.1
5-9 dimensions	39.3	5.5	41.8	5.7
6-9 dimensions	16.7	6.2	20.4	6.4
7-9 dimensions	3.7	7.1	7.2	7.2
8-9 dimensions	0.2	8	1.5	8.1
9 dimensions	0	-	0.2	9

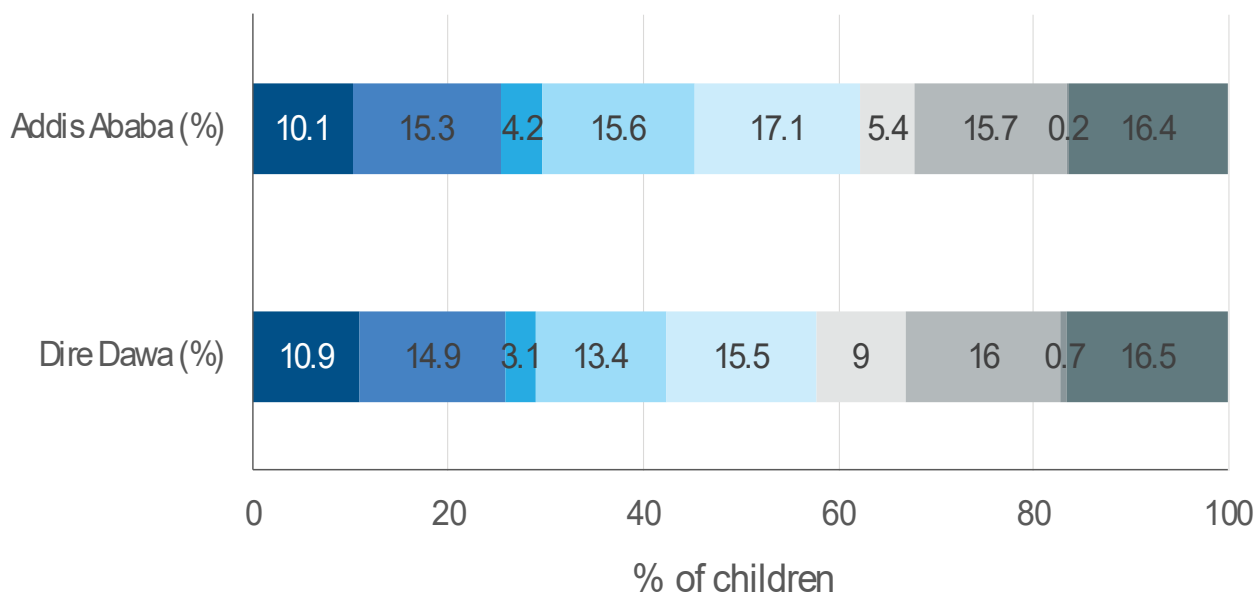
⁸ Several indicators are not applicable to children under 1 year of age, which means they have less chances of being deprived in all the dimensions.

As shown in Figure 6.2 (a), water, leisure, housing, and nutrition are the top four contributors to MCD incidence for children under 18 years of age in Addis Ababa and Dire Dawa. These four dimensions collectively account for around two thirds of MCD incidence. The disaggregation across the age groups also reveals a similar story (Figure 6.2 b and c).

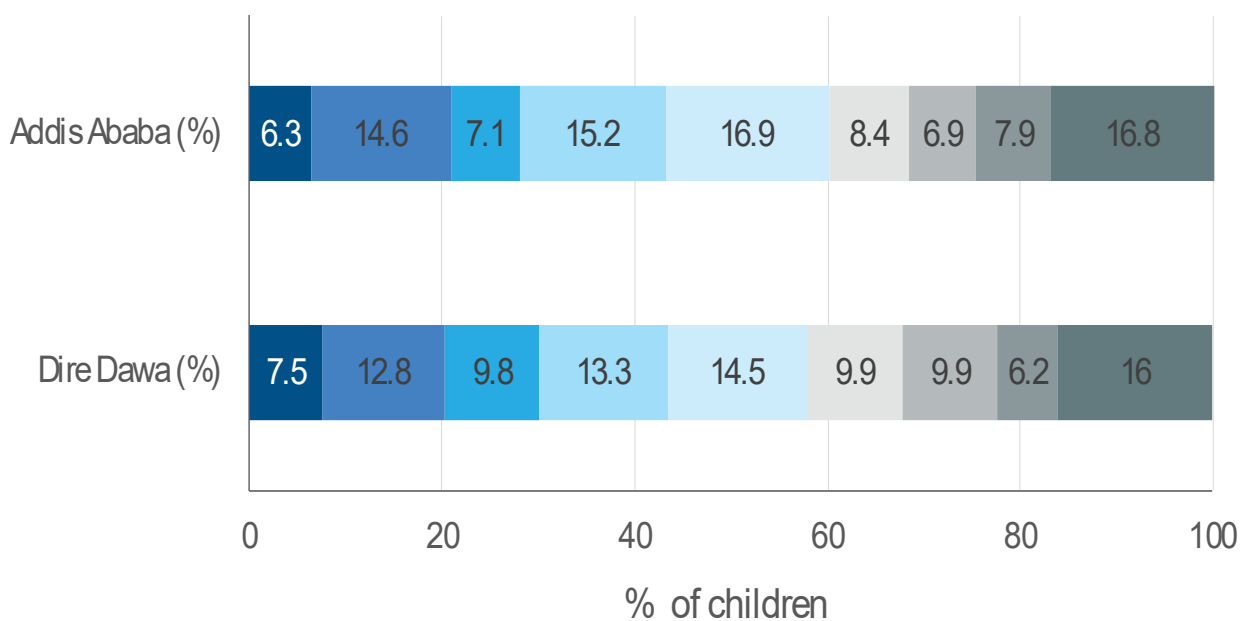
Figure 6.2 (a)-(c): Deprivation composition among children in 5-9 dimensions, by age group and city



(a) All children



(b) Under 5



(C) 5-17

6.4. Determinants of multidimensional child poverty

This section presents the determinants of multidimensional child poverty in Addis Ababa and Dire Dawa cities. We begin our analysis by exploring the association between deprivation in any of the dimensions and incidence of multidimensional child poverty. Figure 6.3 shows the incidence of multidimensional poverty as a result of deprivation in a given dimension. Accordingly, 39 per cent, 37 per cent, 36 per cent and 34 per cent of children that are deprived in water, leisure, housing, and nutrition respectively end up being multidimensionally poor. Put differently, deprivations in these four dimensions are highly associated with incidence of multidimensional child poverty. The remaining dimensions can be ranked as follows, based on their contribution to the likelihood of multidimensional child poverty incidence: child protection (23 per cent), sanitation (17.8 per cent), health (17.5 per cent), education (15 per cent), and information and participation (13 per cent).

Figure 6.3: Probability of a child being multidimensionally poor associated with deprivation in a dimension (overall sample, by gender and city)

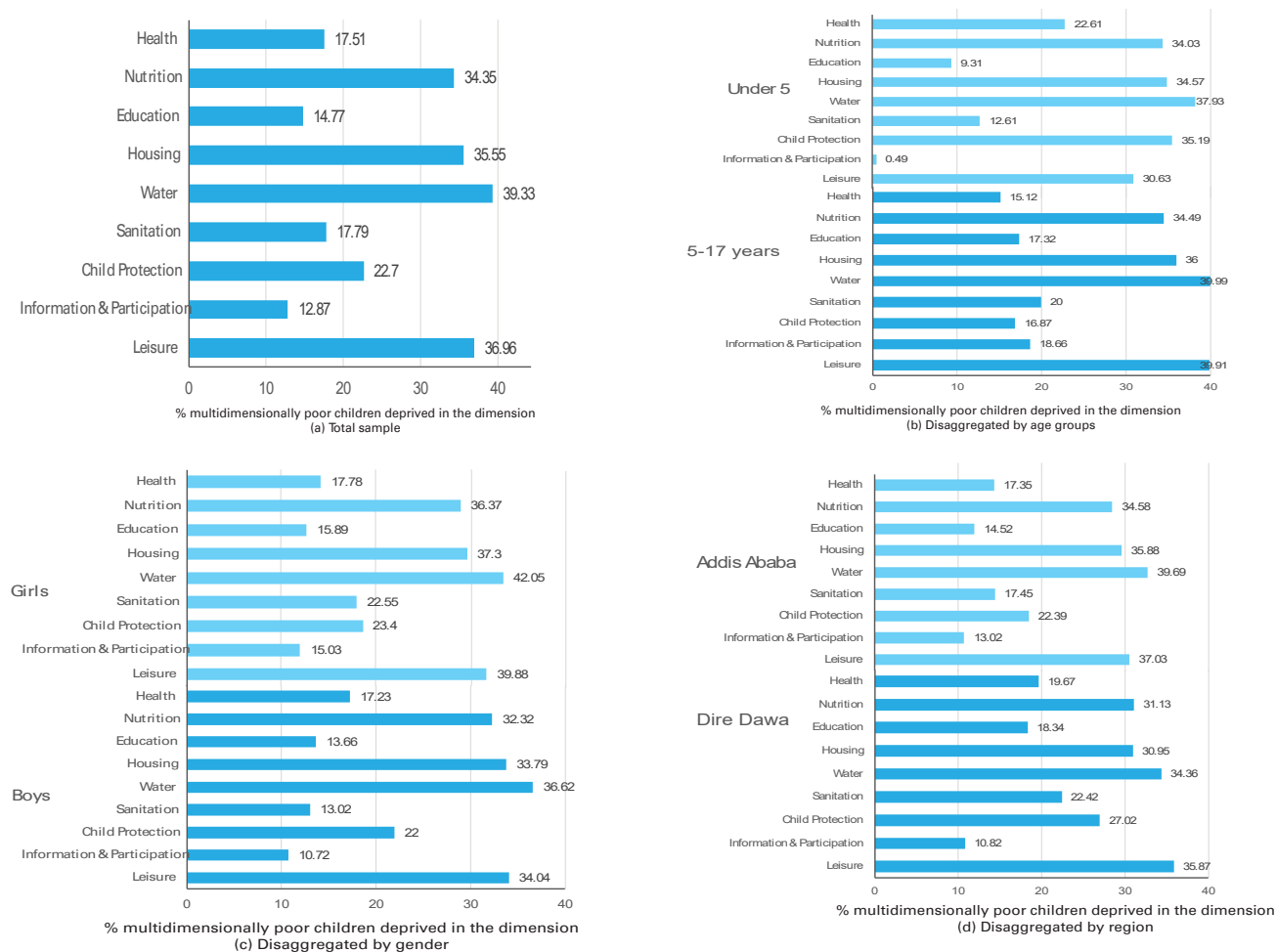
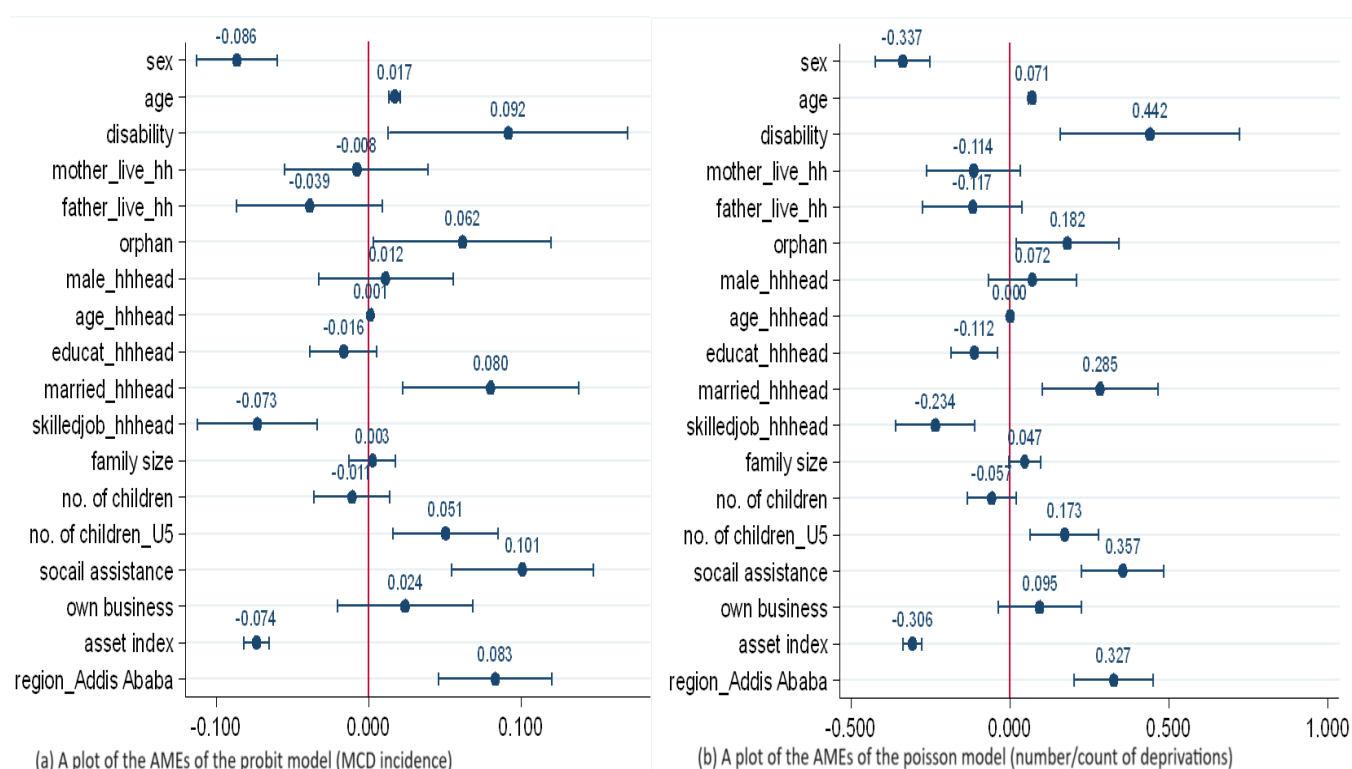


Figure 6.3 panels (b)-(d) show that the water, leisure, housing, and nutrition dimensions continue to be the key contributors to incidence of multidimensional child poverty, regardless of the gender of the child or city of residence. However, disaggregation by age group reveals a slightly different story for children under 5. For this age group, child protection is a greater contributing factor to multidimensional child poverty than leisure.

We then proceed to looking into statistically significant mean differences in child- and household-level observable characteristics across deprived and non-deprived children. As shown in Appendix Table 4, there are statistically significant mean differences in more than two thirds of the observable characteristics between deprived and non-deprived children. We further explore correlations between the observable characteristics and incidence of MCD using logistic and poisson regression analyses to detect the strength of correlation for the different potential factors of the state of multidimensional child poverty.

Appendix Table 5 presents the correlates of multidimensional deprivation. In column 2, the average marginal effects (AMEs) are shown, which represent the incremental changes in probabilities resulting from a unit change in the correlate variables. Meanwhile column 4 presents the marginal effects of changes in the correlate variables on the number of deprivations. The results demonstrate a correlation between the state of multidimensional child poverty and the characteristics of both the children and their parents. Figure 6.4 summarizes the AMEs of the probit and poisson models.

Figure 6.4: Plots of the AMEs of the probit and poisson models



As shown in Figure 6.4, female children generally experience more deprivation than male children. Male children are around 9 percentage points less likely to experience multidimensional poverty, and they encounter 0.34 fewer deprivations than their female counterparts. Furthermore, the presence of an additional child under the age of 5 within a household raises the probability of a child experiencing multidimensional poverty by 5 percentage points, and increases the average number of deprivations faced by a child by 0.17. Children with disabilities also experience on average 9.2 percentage points higher probability of falling into multidimensional poverty and 0.44 more deprivations than their counterparts without disabilities.

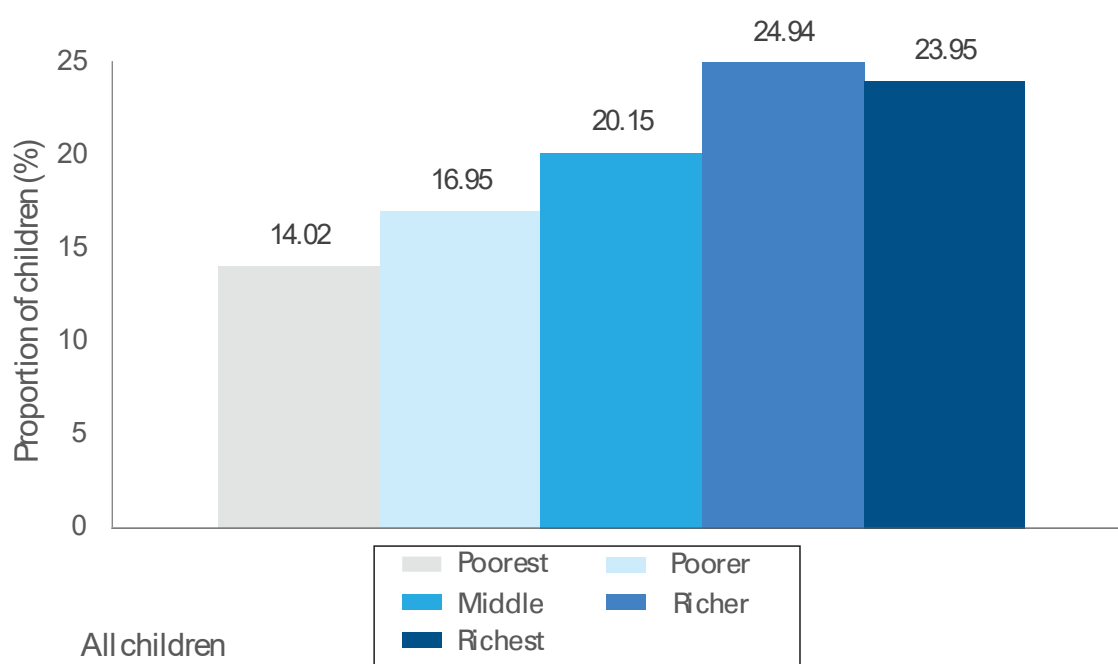
Higher educational attainment of the household head reduces the average number of dimensions of deprivation by 0.11. The death of a parent (mother or father) increases the likelihood of a child experiencing multidimensional poverty by 6 percentage points, and raises the average number of deprivations by 0.18. On the other hand, when parents engage in skilled work, the likelihood of a child being multidimensionally poor falls by 7.3 percentage points and the average number of deprivations falls by 0.23. Moreover, a unit increase in the asset index of households is associated with 7.4 percentage points lower probability of multidimensional child poverty and 0.31 fewer deprivations. Children residing in Addis Ababa have an average 8.3 percentage-point higher probability of being multidimensionally poor and 0.33 more deprivations than their counterparts in Dire Dawa. Age of the child, marital status of household heads, and social assistance recipient status are all positively correlated with the probability of children being multidimensionally poor and the number of deprivations they experience.

7. Multidimensional Child Poverty and Household Asset Index

Figure 7.1 illustrates the distribution of children across asset (wealth) quintiles of households.⁹ The figure shows that the number of children is generally positively related to wealth. Close to half of the children reside in the fourth and fifth quintiles, which represent relatively wealthy households. While around 20 per cent of the children live in households in the third quintile, the other approximately 30 per cent are in the poorer two quintiles. This suggests that relatively fewer children live in asset-poor families. Overall, the results demonstrate a positive correlation between level of wealth and the proportion or number of children in the overall sample.

Figure 7.2 provides a more detailed breakdown of the distribution of children across different wealth quintiles, categorized by age group. The distribution of children under the age of 5 appears to have an inverted-U shape, with households in the third and fourth quintiles having the highest proportion of children, accounting for approximately 23 per cent each. In contrast, the first (poorest), second and fifth (richest) quintiles make up about 16 per cent, 18 per cent, and 20 per cent of the total number of children respectively. The number of children aged 5-17 generally increases as household wealth increases. The proportion of children in each wealth quintile is approximately 13 per cent, 16 per cent, 19 per cent, 26 per cent, and 26 per cent, respectively, for the first, second, third, fourth and fifth quintiles, suggesting that most children aged 5-17 years live in households in the richest top two quintiles.

Figure 7.1: Number of children by wealth quintile



⁹ The asset index is constructed using principal components analysis of 29 household asset items, following the DHS wealth index, except for indicators that are used as MODA indicators.

Figure 7.2: Population distribution by wealth quintile (under 5, and 5-17 years)

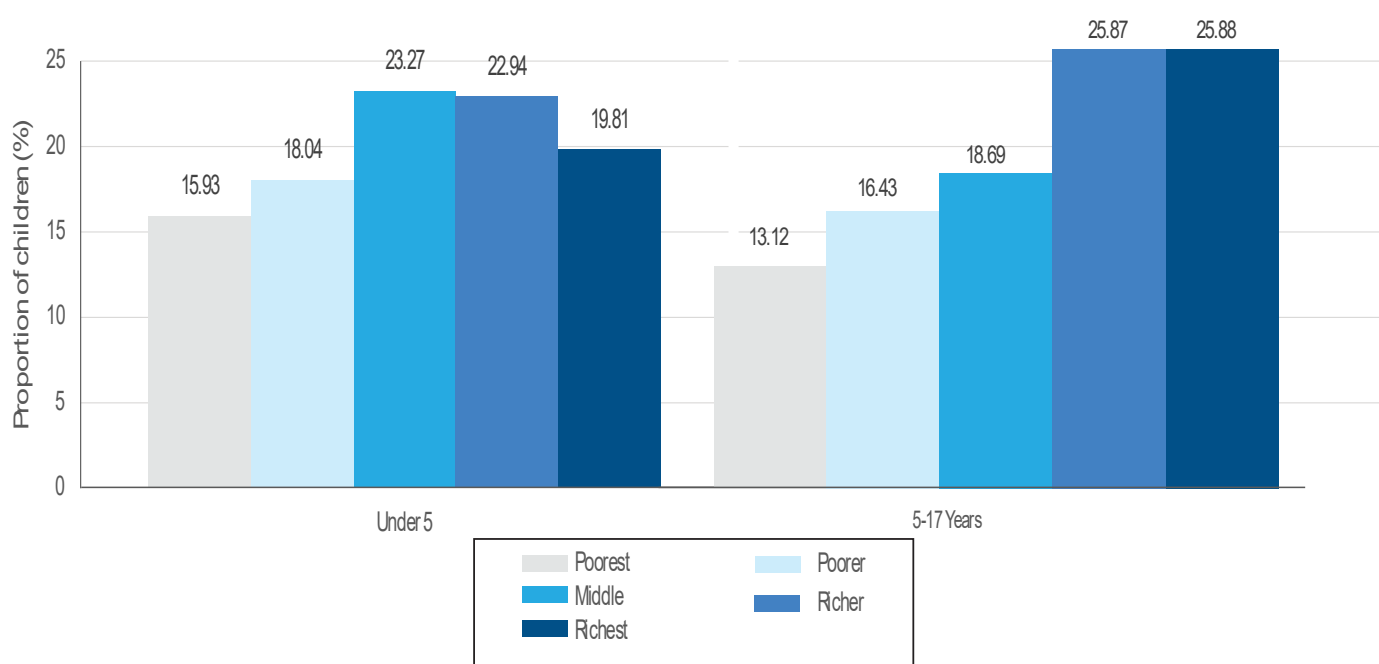


Figure 7.3: Population distribution by wealth quintile by city

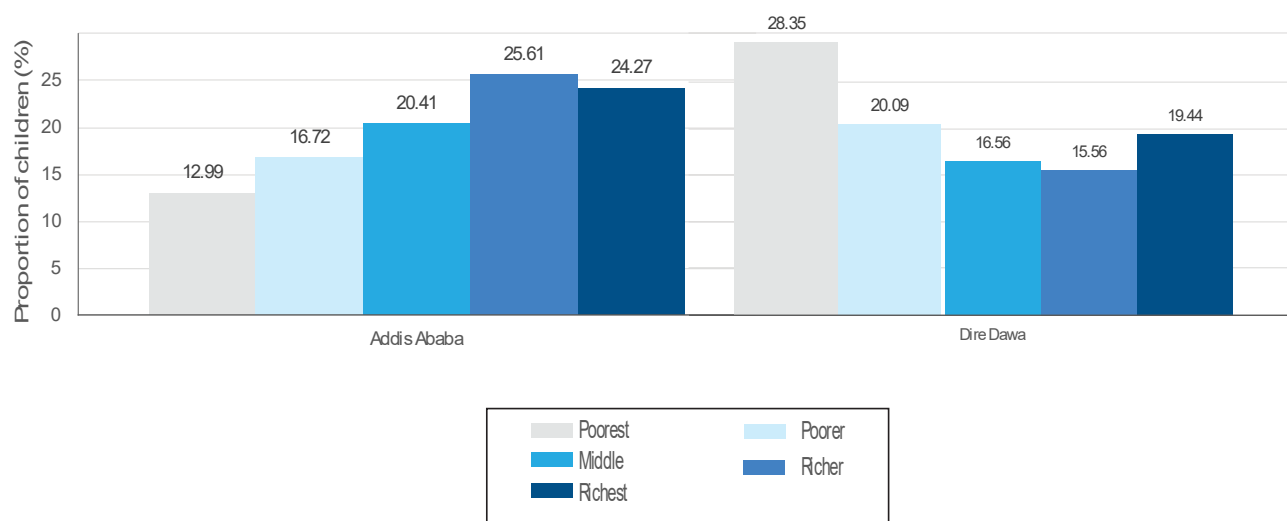


Figure 7.3 illustrates the distribution of children across wealth quintiles, disaggregated by city. In Addis Ababa, there is a positive relationship between number of children and wealth quintile. Conversely, in Dire Dawa, the distribution appears to be left-skewed, U-shaped, or polarized. In Dire Dawa, the proportion of children is highest in the first (poorest) quintile (28 per cent), then progressively decreases until the fourth quintile (16 per cent), before increasing again to 19 per cent in the wealthiest quintile. The distribution of children in these two cities is markedly different.

This implies that, based on asset-based measures, poorer households in Addis Ababa tend to have fewer children than wealthier households. Conversely, poorer households in Dire Dawa tend to have larger numbers of children. The pattern observed in Addis Ababa may be attributed to the high cost of raising children, such as high housing rents, school fees, and so on. However, the concentration of children in poor households in Dire Dawa may make them more vulnerable to deprivations.

Figure 7.4 panels (a), (b), and (c) depict the extent of overlap between incidence of multidimensional poverty among children and asset poverty within households. Panel (a) reveals that around 20 per cent of children living in asset poverty also experience multidimensional deprivation. On the other hand, 22 per cent of deprived children are not affected by asset poverty. Furthermore, 47 per cent of children who are not multidimensionally deprived also do not live in asset poverty. Lastly, 12 per cent of children living in asset poverty are not deprived.

The results indicate a significant level of overlap between multidimensional child poverty and household asset poverty. Numerically, around 20 per cent of asset-poor children are also multidimensionally poor. Nevertheless, it is pertinent to emphasize that around 22 per cent of children experiencing multidimensional poverty live in households that do not exhibit asset poverty, while 12 per cent of children in asset-poor households are not multidimensionally deprived. These results suggest that wealth (in terms of asset ownership) only partially accounts for MCD.

Figure 7.4 (a)-(c): Overlap between MCD and children in the poorest two wealth quintiles, by city

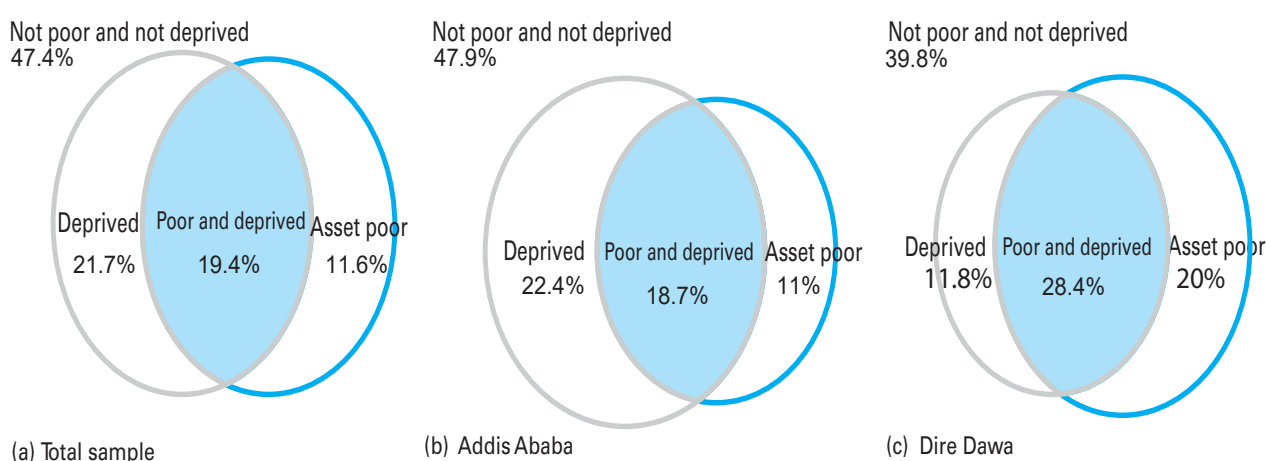


Figure 7.4 panels (b) and panel (c) illustrate the distinct patterns of overlap between household asset poverty and child deprivation in Addis Ababa and Dire Dawa respectively. Panel (b) reveals that around 19 per cent of multidimensionally deprived children in Addis Ababa also live in asset-poor households. Conversely, around 22 per cent of children are deprived but not asset-poor. Among asset-poor children in Addis Ababa, 11 per cent are not multidimensionally poor. The data presented in panel (c) reveal that, in Dire Dawa, 28.4 per cent of children are experiencing both multidimensional deprivation and asset poverty. Additionally, around 20 per cent of children live in poor households and are not deprived. Meanwhile, around 12 per cent of multidimensionally deprived children in Dire Dawa are from non-poor households.

Overall, the findings on the overlap between MCD and asset poverty align with Appendix Figure 1, which shows a strong positive association between the number of deprivations children experience and household wealth, as measured using the asset index. As such, the number of deprivations experienced by children decreases as asset ownership in the household they reside in increases. Similar findings are reported in Table 6.4, which shows that asset holdings are negatively correlated with incidence of multidimensional child poverty and the number of deprivations that children experience.

8. Trend analysis

To ensure comparability, this report's trend analysis examines dimensions similar to those covered in the 2016 MCD report, using the same indicators.¹⁰ The data in Table 8.1 and Table 8.2 indicate an overall reduction in child deprivation rates across all dimensions covered in both reports that use identical indicators in each dimension. However, there is a notable increase in deprivations in child development, health and water dimensions in Addis Ababa (see Table 8.1). On the contrary, there are reductions in deprivation levels in nutrition, sanitation and housing by 36.7, 4.5 and 3.4 percentage points respectively. In Dire Dawa, deprivations in sanitation, nutrition, and housing showed significant improvement for children under 5, with reductions of 35, 30.4 and 30.2 percentage points respectively. Moreover, deprivation in the health, development/stunting and water dimensions for the same age group and city fell by 19, 17.8 and 9 percentage points respectively.

¹⁰ Appendix Table 2 identifies the indicators that are the same as the CSA and UNICEF (2018) report, which uses the 2016 EDHS data.

The large reductions in deprivations in all six dimensions in Dire Dawa could be due to slight variations in the analytical sample used in the CSA and UNICEF (2018) report and this study. The 2018 report is based on the 2016 EDHS data, which include both urban and rural clusters in Dire Dawa. However, for this study, we only selected urban clusters in Dire Dawa, as the main focus is assessing MCD in large urban centres, considering the case of the two cities.

Table 8.1: Trend of deprivation (%) by dimension, under 5, by city

	Addis Ababa		Dire Dawa	
Dimensions	2016	2023	2016	2023
Development / stunting	14.7	24.2	39.8	22
Health	13.5	22.3	43	24
Nutrition	62.5	25.8	64.2	33.8
Housing	54.4	51	54.5	24.3
Water	3.3	13.4	34.4	25.4
Sanitation	18.7	14.2	51.3	16.3

Table 8.2 demonstrates a decline in deprivation in dimensions among children aged 5-17 years in Addis Ababa, except for housing and water. There has been a 33-percentage-point increase in deprivation in housing and 8.2 percentage points increase in deprivation in the water dimension in the city among children aged 5–17. Table 8.2 also illustrates the fall in deprivations in all of the six dimensions considered for children aged 5–17 years in Dire Dawa between 2016 and 2023. Notably, the biggest fall in dimensional deprivation is observed for the health-related knowledge and information and participation dimensions, followed by the sanitation and housing dimensions.

Table 8.2: Trend of deprivation (%) by dimensions, 5-17 years by city

	Addis Ababa		Dire Dawa	
Dimensions	2016	2023	2016	2023
Health-related knowledge	39.3	14.3	70.2	6.8
Education	19.9	13.7	36.2	25.8
Information and participation	58.9	10.5	70.4	14.4
Housing	19.8	52.8	52	20
Water	2.1	10.3	32.2	18.7
Sanitation	18.7	13.8	50	16.2

9. Poverty from the perspectives of children

9.1. Poverty captured through photovoice

This section presents the results of the qualitative study conducted using a photovoice approach with children in Addis Ababa and Dire Dawa. In this approach, a group of children used cameras to capture photos to reflect what poverty means for them, and described the photos to their peers in the group. At the end, the group participants selected one photo. In addition, they were tasked with defining poverty and explaining the causes and consequences of poverty. The descriptions of the photos and the overall understanding of poverty and experiences of children revealed in the FGD are presented below.

The evidence from the FGD on the photovoice method shows that children understand poverty differently based on their observations and experiences. To begin with, a FGD of boys and girls in Addis Ababa on photovoice described poverty as something that limits the ability to achieve goals. This is a multidimensional problem that might include a lack of housing, education, nutrition, and so on, as the discussants revealed. For instance, a girl defines poverty as: *“Something that limits our ability to achieve our dreams, preferences, and interests. For instance, I want to visit many other countries and even visit my place of origin back home, but I cannot do that. These are all the results of poverty. Poverty is the worst thing a human being can face. It snatches everything that enables us to achieve and [meet] our basic needs and goals. Poverty is more painful for boys than girls, because boys are expected to bring home money and spend it on the family.”* To best explain poverty, the group participants selected an image of a household living on a pedestrian road experiencing a lack of housing and other necessities, including food and protection.

According to this group, the causes of poverty are lack of hard work, limited commitment to work, youth unemployment, and addictions to substances such as khat, cigarettes or others. In this regard, a boy related that: *“poverty is the result of a lack of hard work and commitment to work. We are always in poverty as a result of working fewer hours a day than expected. We sleep longer and waste most of our time. Youths are unemployed and addicted. Youth addicted to khat, cigarettes, or other substances cannot do their jobs effectively. In general, the poor work culture is the main cause of poverty.”*

The same group discussion results demonstrate that poverty can have psychological impacts, aggravate mental illness, and increase vulnerability to rape and sexual abuse for girls. A girl in this group described the effects of poverty: *"Poverty has a psychological impact and can cause mental illness. Due to poverty, an individual lacking a job or the initial capital to engage in business activities may end up with psychological disorders."* A boy, on the other hand, explains: *"Poverty makes girls more vulnerable to sexual abuse. We hear that girls are raped and abused sexually, especially when they go out to the street for business or other reasons."*

SHOWED Exercise Narrative

Dimensions: housing and nutrition

Would you please describe this photo? What do you see here?

- In the picture, there are slum areas and houses made of mud and plastics along the road.
- The area is where poor people live. The road infrastructure, as well as the house itself, is a sign of poverty.
- Poverty is about not being able to meet basic needs, including housing, food, and others. Thus, the individuals who live in this house suffer because it may not protect them from rainfall and other factors. The picture really symbolizes poverty.
- People live in this situation because of their economic problems or poverty.
- Accessing housing services for those who live in poverty is really important.



Caption: Slum house on a pedestrian road

Photo credit: A male participant, Addis Ababa

Another photovoice FGD, comprising both boys and girls in Addis Ababa, described poverty as not being able to meet basic needs. Poverty is a complex, multifaceted issue that includes lack of housing, health, safety, and other aspects of life. For instance, a girl revealed: *"Poverty means not being able to have basic things at home. For example, a lack of play, entertainment, and basic needs. There isn't much difference in the definition between girls and boys. But girls might be affected by poverty much more than boys."* A boy in this group stated: *"Poverty means feeling hungry and being unable to fulfil the basic needs of the household. I don't think the definition differs based on gender."* The image on the next page best describes their perspectives regarding poverty.

The evidence obtained from the participants in this group demonstrates that joblessness, illiteracy, conflict, and war or instability in the country are the main causes of poverty. Regarding the causes of poverty, a girl participant said: *"The first cause of poverty is joblessness. When you waste your youth doing unnecessary activities or doing nothing, you will experience poverty."* Another girl stated that: *"illiteracy is one cause of poverty. The other causes of poverty are conflict or war in the country. People are forced to migrate from their homes to avoid the war, and they become aid seekers. So, instability in the country is the main cause of poverty."*

The consequences of poverty, according to FGD participants, include not realizing one's potential, weakening, or having psychological problems. In this case, a boy stated: *"Poverty makes you lose your potential or may make you too weak to do something."* On the other hand, a girl explains: *"Poverty brings psychological problems. For example, if a child from a poor family enters a private school, he may not be equal to a student from a rich family. The child might not have the same food, the same shoes, or a similar style as students from wealthier families. This causes psychological problems for children."*

SHOWED Exercise Narrative

Dimensions: protection and health

Would you please describe this photo? What do you see here?

- The picture shows impoverished street vending places where chips, salad, and the like are being sold in an open space. The vendor is working at this impoverished place because she could not afford a shop. The picture explains briefly how poor she is.
- The picture shows our living conditions. Because of financial problems, we sell things on the street. This might have health consequences.
- The best solution is to build their capacity and open a shop for them. It should be clean and attractive for customers.



Caption: Impoverished street vending place

Photo credit: A female participant, Addis Ababa

A girls-only FGD in Addis Ababa, in the photovoice, described poverty as being unable to meet basic human needs like nutrition, shelter, protection, health, and clothing. One discussant explained: *"Poverty means not being able to meet basic human needs like food, clothing, and shelter. I think there is a difference based on gender. Naturally, a girl has something she needs every month that costs more, like hygiene materials, hair oil, and the like."* Another discussant explained: *"Poverty is when parents are unable to fulfil basic needs. I don't think poverty is different based on gender."* The picture that this group chose to best explain poverty is presented below.

This FGD concluded that the main causes of poverty are inaccessibility of jobs, child marriage, population growth and corruption. A participant says: *"I think the main cause of poverty is the inaccessibility of jobs. Currently, it is very difficult to give a job to everybody. In addition, child marriage is the cause of poverty. Similarly, population growth is a reason for poverty."* Another participant stated, *"The cause of poverty is corruption. A job is accessible if you have a relative. Otherwise, there are no job opportunities after graduation, leading to a rise in the number of poor graduates."*

This FGD indicated that the consequences of poverty may include theft, begging, migration, instability, suicide, depression, divorce, or family disintegration. In this regard, one discussant said: *"Theft is the first consequence of poverty; beggars will increase in the country if the number of poor people increases."* Another discussant states, *"People may commit suicide. Depression and divorce are some of the effects of poverty, and there will be family disintegration."*

SHOWED Exercise Narrative

Dimensions: nutrition and shelter and protection and health

Would you please describe this photo? What do you see here?

- The picture shows a family living in a canvas shelter. They were forcefully displaced from somewhere. Here there are two babies, and the parents are sick.
- The other terrible thing about the shelter is that boys from the locality gather to smoke cigarettes together here. The family on this street lives in inhumane conditions without access to food, protection, and so on.
- It is very difficult to live in this canvas house. This clearly presents what experiencing poverty means.
- A family needs to have a house to live in. Providing a home will be the best solution for the family. Another solution may be to avoid forced displacement.



Caption: A canvas shelter for a family in a street situation

Photo credit: A female participant, Addis Ababa

The boys-only photovoice FGD in Dire Dawa described poverty as something that reduces capacity to work and survive. Elements include exposure to poor sanitation, improper waste disposal, lack of protection, and lack of health services. A discussant says: *"I view poverty as a disease vector. I believe there is a difference between boys and girls because girls bear a heavy workload of housework and have fewer work opportunities outside the home than boys."* For this group, the picture below best describes poverty.

The causes of poverty are family separation, health problems, illness, illiteracy, and loss of family. Here, one discussant said: *"I believe that poverty has negative side effects on human beings. Children without families or from poor families may not be able to continue their education."* Another discussant reveals: *"I believe that health problems, illness and illiteracy contribute to poverty. Loss of family due to chronic illness can also lead to poverty."*

The consequences of poverty, according to the FGD, can include illness, migration, famine, illiteracy, and hunger. One discussant reported that: *"Poverty can result in illness, migration, and famine."* Another said: *"Poverty leads to illiteracy, famine, hunger, and illness."*

SHOWED Exercise Narrative

Dimensions: protection and sanitation and health

Would you please describe this photo? What do you see here?

- The picture indicates solid waste disposal around an affluent building and car parking.
- It shows poor sanitation and waste disposal. It is an unsafe place for children to play around since it might cause diseases.
- The person is living here in a good, fenced house but fails to maintain a healthy environment and does not care about the fate of children or people in the street.
- It shows that when waste is disposed of improperly, it becomes a source of disease for both rich and poor communities. It is one of the signs of poverty.
- It would be good to have a well-designed waste disposal system.



Caption: Waste blocking the gate of a house

Photo credit: A male participant, Dire Dawa

The girls-only photovoice FGD in Dire Dawa described poverty as not being able to meet basic needs and realize one's potential. It shows the lack of multiple components needed to meet basic needs, including housing, food, sanitation facilities, and others. One discussant said: *"Poverty acts as a barrier, stifling human development. It immobilizes individuals, preventing them from achieving their potential and dragging them backward. Poverty has a more significant impact on boys than girls."* Another participant said: *"Poverty is a factor that drags individuals behind in fulfilling their basic*

needs. It prevents someone from having food, clothes, and various types of essentials that one desires to achieve." The picture below best describes poverty for them.

The focus group discussion concluded that health problems, illness, illiteracy, and loss of family contribute significantly to poverty. In this instance, a participant explained: *"I believe that health problems, illness, and illiteracy contribute significantly to poverty. Loss of family due to chronic illness can lead to financial hardship."*

The effects or consequences of poverty are widening inequality, lack of access to education and health services, hunger, and psychological harm. One of the participants said: *"Poverty widens inequality in communities. For example, the poor cannot afford good clothes and lack access to education."* Another participant explained, *"Poverty denies many children access to education due to a lack of educational materials. Additionally, they cannot afford health services, leading to fatal consequences. Hunger is another consequence of poverty. Moreover, poverty causes psychological harm. For example, the community tends to neglect individuals in poverty, causing them psychological distress."*

SHOWED Exercise Narrative

Dimensions: housing and food and sanitation

Would you please describe this photo? What do you see here?

- The picture indicates the level of inequality. It shows a woman raising her two children while begging around luxury buildings.
- The individual is carrying one child and holding the other child's hand while begging. The woman could not access basic necessities, and children in this condition might be hopeless.
- It shows the struggle of the poor to raise children. It is typical of poverty, unable to meet basic needs including housing, food, sanitation facilities, and so on.
- The solution is that the government and the private sector should give attention to aiding poor and street children to sustain their lives.



Caption: A woman begging door-to-door with two children

Photo credit: A female participant, Dire Dawa

In sum, there are some differences in children's perceptions or understandings regarding poverty as a result of varied observations about their environment. The photovoice results reveal that children define poverty as a limit on the ability to achieve goals and to meet basic needs, as well as reduced capacity to work and survive, and not being able to realize one's potential. They understand it precisely as a multidimensional problem where people experience limited access to nutrition, health, education, housing, water, sanitation, information and participation, protection, and leisure. It is also clearly shown that the way children perceive and comprehend poverty in the two cities is very similar.

Children in the two cities have a comparable understanding of the causes and consequences of poverty. The main causes identified by children are lack of hard work, limited commitment to work, youth unemployment, substance addictions, joblessness, illiteracy, conflict, war or instability, child marriage, population growth, corruption, family separation, health problems, illness, and loss of family. Furthermore, the results demonstrate that, from the perspectives of children, poverty can lead to psychological impacts, mental illness, vulnerability to rape and sexual abuse, lost potential, theft and begging, migration, instability, suicide, depression, divorce, family disintegration, illiteracy, inequality, denying access to education and health services, famine, and hunger. In this case, we can understand that some factors are both the causes and consequences of poverty at the same time.

9.2. Experiences of children in street situations

In this section, we present the factors leading to children to be in street situations, the lives and experiences of poverty of children in street situations, and the aspirations of children in street situations in Addis Ababa and Dire Dawa cities. The children who participated in FGDs have spent one to nine years of their lives on the street. The educational status of the discussants ranges between Grades 3 and 8. Most of them came to the street from places outside Addis Ababa and Dire Dawa cities. Three came from Shashemene, Adami Tulu, and Ziway areas to Addis Ababa, while the other children living in the street in both Addis Ababa and Dire Dawa cities did not want to reveal their places of origin. The FGD revealed that children in street situations live alone or with family, relatives, friends or colleagues.

Factors behind children ending up in street situations

A multitude of factors cause children to live on the street. According to Abate et al. (2022), extreme poverty, unemployment, family breakdown (divorce), child abuse and neglect, behavioural disorders, sensation seeking, and civil war are the main factors contributing to street life. These causes are mainly classified as push factors (those that push or coerce kids to go on the streets), and pull factors (those that can help children find the streets appealing or attractive). Exceptionally, both factors may contribute to a child ending up on the street simultaneously. In this study, the Addis Ababa FGD results revealed that children ended up in street situations because of push factors (family breakdown or divorce and death of family members, economic conflict, and misconduct) and the pull factors (attraction to city life, seeking freedom, and peer pressure). One of the male discussants in Addis Ababa explained that the main driving forces for him to end up on the streets were economic necessity and peer pressure: *"My father died many years ago. I was living with my mother, and our lives were not good. In between, I met my friend, who had earned more money in Addis Ababa*

earlier. Influenced by my friend, I came to Addis to work and support my mother, but ended up living on the streets since I couldn't get a job. To your surprise, when I came to Addis Ababa, I didn't tell my mother."

Similar push and pull to those in Addis Ababa have exposed children to life on the streets in Dire Dawa. In this case, for instance, a girl group discussion participant from the Dire Dawa FGD with street children explained that the cause of her ending up living on the streets was family loss, saying: *"I found myself on the street due to the deaths of my mother and father. I have an older sister who works as a housekeeper, attends school herself, and supports me to attend school as well. However, our living situation is difficult, and we often shift between sleeping in volunteer houses and neighbouring homes, as finding a stable place to live is a constant struggle."*

The discussants also reveal that life on the streets is different from their expectations. Children move to the streets with the hope of having better living conditions. However, it is harsher to live on the streets than one can imagine. For instance, a boy in Addis Ababa said: *"Street life is completely different from my expectations. We suffered a lot with the cold weather at night, and from police mistreatment and a lack of a proper place to stay, sleep, or work on the street. My expectation was to work outside, earn more income, and manage my life. But in reality, I couldn't get a steady job and couldn't manage my life accordingly."* A girl in Dire Dawa added: *"The reality of street life appears more challenging and complex than one might imagine. Experiencing homelessness, especially for a girl, involves difficulties such as begging for survival, involuntary encounters, and abuse. The actual hardships go beyond general perceptions. From a distance, it might seem simple, but the daily hardships and risks make it an immensely difficult and complex experience."*

The lives and experiences of poverty of children in street situations

This section describes the lives and livelihood conditions of children in street situations, using poverty indicators such as: access to shelter; uncertainties and challenges; access to food, drinking water, and sanitation; substance abuse; access to health-care services; access to education opportunities; and experience of psychological aggression and physical or sexual abuse.

Access to shelter

One of the major problems for children in street situations is lack of access to safe shelter. The FGDs revealed that children in street situations usually sleep in places such as on the street, in car parks, in abandoned buildings, or at workplaces. Sometimes, they sleep in a low-priced rental room, charging ETB 50 to 100 per day, together with others in the same room with a separate bed. A girl in Addis Ababa explained: *"We sleep here, anywhere convenient for us on the street. But when we have money, we sleep in Washington, D.C., a place in Addis Ababa where many individuals sleep in bunk beds within a small room. The area is the cheapest bed in Addis Ababa, costing close to 50–100 birr per day. The bed is not clean, but the price is very reasonable for us."* A boy in Dire Dawa stated: *"I sleep outside in Bajaji parking because I don't have options."*

The group discussants revealed that children in street situations may live alone, live with relatives, live with friends, or live with colleagues. They usually reside in groups with their peers so that they can share their financial struggles and resist together when any external pressure arises at night. For example, a boy in Addis Ababa explained: *"I live with my colleagues, who know each other here on the street. It has been more than five years since I lived with my friend."* A girl in Dire Dawa explained: *"I currently live with my sister, and we are taking care of our little brother, who is 3 years old. Our mother passed away when he was just 5 months old."*

Perceptions of life on the street among children

The FGDs revealed that life on the streets looks uncertain and challenging. Children in street situations are often exposed to health risks, vulnerable to criminal gangs, and deprived of their human rights. A boy in Addis Ababa said: *"Life on the street is the worst experience and uncertain. Most of the street children are really suffering. Even if life is challenging, I personally send money to my mother when I get extra income. My mother expects something good from me since she doesn't know my real life is on the street."* A girl in Dire Dawa added: *"Life on the streets is extremely challenging. I have a sister who is only 5 months old. We struggle to find food, money for health care, and a place to sleep. People often give us various names and treat us poorly. They don't want to share leftover food with us; instead, they prefer to give it to dogs. Water and health-care services are also scarce."*

Access to food, drinking water, and sanitation

Access to food, drinking water, and sanitation are daily challenges and major indicators of poverty among children in street situations. Often, children in street situations access food from hotel and restaurant leftovers. They also access drinking water from households and businesses. A boy in Addis Ababa said: *"We get leftover food from the hotels and cafeteria. Mainly, it is free, but some hotels and cafeterias sell it. Last time, one hotel asked me to pay 20 birrs for the leftover food. Sometimes, if we do not get such food for some reason, we order food from cafeterias or hotels. We get water from generous households and business organizations."* A girl in Dire Dawa explained: *"We obtain food from restaurants. After we wash equipment or materials, restaurants provide us with food and water."*

The FGD shows that children in street situations face challenges getting access to toilet facilities. They usually attempt pay to use public toilets or use toilets in hotels and cafeterias. However, they can be forced to use inappropriate places as they can't afford public and private toilet facilities. A boy in Addis Ababa said: *"We use public toilets with a payment of five birr every time. In addition, we also try to use hotel and cafeteria toilets, but a few of them don't allow us. Sometimes, we also use open fields, buildings under construction, bridges, water or river lines, and roadsides with limited traffic movement."* A girl in Dire Dawa explained: *"When we attempt to use others' toilets, we face insults. As a result, we resort to using open fields."*

Substance use among children in street situations

The FGD revealed that children in street situations usually consume substances like cigarettes, sniffing glue, alcohol, khat (*Catha edulis*), or a combination of substances. Substance use, besides its health risks, puts children in street situations at risk of committing crimes or engaging in robbery, theft, or prostitution. The main reasons that children in street situations use drugs are peer pressure, to cope with cold weather, to relieve stress and depression, to gain group recognition, to prevent hunger, and to prevent fear. A boy in Addis Ababa explained: *"I consume alcohol, cigarettes, khat, sniffing glue, and hashish. I use substances to resist challenges such as cold weather and police beatings."* A boy in a street situation in Dire Dawa added: *"I use alcohol, cigarettes, and sniffing glue."* However, some do not consume such substances. For instance, a girl in Dire Dawa stated: *"I don't consume any addictive substances."*

Access to health-care services for children in street situations

Children in street situations are vulnerable to various diseases and health problems. They are often susceptible to infectious diseases because of their lack of proper housing, nutrition, clothing, sanitation, and substance abuse. However, access to health services for children living on the streets remains low in the country. According to the FGD, in Addis Ababa, in some cases children in street situations can access health-care services free of charge or at affordable prices if they fall ill. They can access medical services from some selected hospitals and clinics free of charge. For instance, a boy in Addis Ababa stated: *"A clinic called Sister Clinic located near Sidist Kilo provides free medical service to street children. It does not need an ID or any document to get medication. In addition to the free medical service, it also provides better-quality food until children get better. Moreover, children can access medical services from Zewditu Hospital for free."* However, the FGD showed that children in street situations in Dire Dawa city have no access to free medical services. A girl in Dire Dawa explained: *"We don't receive any treatment. For example, recently I felt pain in my leg, and I went to the health station to receive medical treatment. However, after a medical examination, a doctor referred me to a private clinic or laboratory for a blood test. Unfortunately, the blood test service at the private clinic or laboratory was expensive, so the only choice was to terminate the treatment."*

Access to education opportunities for children in street situations

Lack of or limited access to education opportunities is one of the indicators of multidimensional child poverty. The FGD found that children in street situations very rarely have access to education opportunities due to lack of capacity to meet basic needs and registration requirements at schools. A girl in Addis Ababa explained: *"It is very difficult to get educational opportunities here as a street child. Schools need clearance from our community back home, and schools need a guarantor to get registered. Besides, education needs a proper place to study and income to manage the rest of life, including housing, food and clothing. Thus, we cannot manage and think about education in general in this situation."* A boy in Dire Dawa said: *"There is no education opportunity due to lack of basic needs."*

Daily routines of children in street situation

The FGD findings indicate that children in street situations do various activities during the day for a living. These daily activities include car washing, street vending using mobile shops, shoe shining, renting small bicycles, bicycle training, working in garages, begging, gambling, daily labour, loading and unloading cargo from a taxi or working as a taxi assistant,

collecting plastic and cans from waste sites and selling them, and washing materials at restaurants. This means they are more likely to face exploitation, as they perform high-risk activities at a younger age due to poverty. A girl in Addis Ababa described her experience: *"I beg, wash a car, collect waste plastic and cans and sell them, and shine shoes."* A boy in Dire Dawa stated: *"I earn money begging and as a daily labourer."*

Experience of psychological aggression, and physical or sexual abuse

Children in street situations often experience psychological aggression, physical abuse, or sexual abuse. Psychological aggression is an abusive relationship including bullying, gaslighting, and abuse in the workplace. Physical abuse includes all types of physical punishment, including spanking, slapping, pinching, pulling, twisting, and hitting with an object, while sexual abuse includes anything that forces a person to participate in unwanted sexual activities. The findings indicate that psychological aggression, such as insulting and being labelled as a thief and crazy, physical aggression, such as police beatings, and sexual abuse or violence are common. A girl in Addis Ababa explained: *"Living in the street for a female is very challenging. Physical as well as sexual violence is very common and is very frequent unless we have our own sexual partner. This happens mainly after we drink together. By the way, our close friends experience it."* A boy in Dire Dawa explained that: *"insults and physical violence are very common."*

The biggest challenges faced by children in street situations:

Children in street situations usually confront a multitude of challenges due to the hazardous environment and risky living conditions on the streets. According to one of the FGDs, the biggest challenges that street children face include frequent checks, being beaten and labelled as thieves by the police, a shortage of finances to do business, limited job opportunities, sexual and physical violence, labour abuse, being forced into very dangerous work, lack of food and shelter, deportation to place of origin, and health issues such as sexually transmitted diseases and hygiene-related diseases. A girl in Addis Ababa revealed: *"The main challenge we encounter is restrictions from the police; they do not allow us to sit or to sleep as we want. We always run when we see them. They sometimes deport street children to their places of origin. Last time, while I was already sleeping, a police officer came at night and beat my leg and broke it."* A boy in Dire Dawa said: *"Violence is a big concern."*

Aspirations of children in street situations

Hopes for the future

Children in street situations think that their lives and livelihoods will get better in the future. They hope to continue their education and be able to become doctors, work in beauty salons, start businesses, buy and drive cars, establish charity organizations, become religious people, or become hotel managers, to mention a few. For example, a boy in Addis Ababa said: *"We hope that this situation will change, but still, we need certain kinds of support to kick us out of the current context."* A girl in Dire Dawa described: *"Despite facing challenges today, I have a hopeful outlook and aspire to reach a high position in the future. Personally, I want to be a doctor."*

Children in street situations plan to become football players, car drivers, business owners, continue their education, and go back to their families to change their future. A girl in Addis Ababa explained: *"I am planning to continue my education."* A boy in Dire Dawa states: *"I plan to work with other businessmen."*

The support children in street situation seek to improve their wellbeing

Children in street situations think that various actors can help them improve their futures or accomplish their goals. The stakeholders that would help them, according to the discussants, are the government, families and relatives, the private sector and individuals, financial institutions, NGOs, community members, and parents. For instance, a girl in Addis Ababa stated: *"I need the support of the community members and the government."* Another girl in Dire Dawa explained: *"I want support from financial institutions to engage in petty trade to improve my life."*

Children in street situations need different kinds of support, including financial and material support, education and skills training to start their own business activities, job opportunities, food, and sanitation materials to make their lives better. A boy in Addis Ababa said: *"We need institutional and coordinated support like training, financial support, and material support to start our own business activities."* A girl in Dire Dawa explained: *"I need sanitation material support and financial support to engage in business."*

10. Conclusion

Our survey on MCP in Addis Ababa and Dire Dawa shows that there were about 800,000 multidimensionally poor children in the two cities in 2023, or about 41 per cent of the child population in the two cities. This means two-fifths of children in the two cities lack access to the means to meet their basic needs and lack access to services across nine non-monetary dimensions: health, nutrition, education, child protection, water, sanitation, housing, information and participation, and leisure.

As MCP is a composite index, we need to identify the dimensions and indicators that significantly contribute to the probability of a child being multidimensionally poor. Accordingly, 89 per cent are deprived in water (with prevalence of indicator-level deprivation of 85.8 per cent in water availability), 77.7 per cent deprived in leisure (indicator-level deprivations of 58 per cent in safe space to play outside, 48.7 per cent in possession of recreation materials, and 28.8 per cent in engaging in leisure activities), 64.1 per cent are deprived in housing (indicator-level deprivations of 46.9 per cent in housing material, 41.4 per cent in housing problems, and 14.3 in overcrowding), and 54.9 deprived in nutrition (indicator-level deprivations of 52.2 per cent in food shortage, 48.1 per cent in MMD, 31.3 per cent deworming, and 24.1 per cent in stunting). Deprivations in the remaining dimensions are: 41.1 per cent deprived in child protection (indicator-level deprivations of 59.6 per cent in birth registration, 27.6 per cent in physical or psychological aggression, and 5.6 per cent in left home alone), 26.8 per cent deprived in health (indicator-level deprivations of 20.4 per cent in distance to health facility, 8.5 per cent in immunization, and 6.9 per cent knowledge about ORS), 24.1 per cent deprived in sanitation (indicator-level deprivations of 46.6 per cent in materials for menstrual hygiene and 14.1 per cent in improved toilet facility), 23 per cent deprived in education (indicator-level deprivations of 18.8 per cent in ECD activities, 13.8 per cent in distance to school, and 11.3 per cent in delay in grade level), and 20.5 per cent deprived in information and participation (indicator-level deprivations of 57.2 per cent in receiving family planning messages, 46.9 per cent in information device in the household, 17.2 per cent in participation in celebrating special occasions and 11.1 per cent in hanging out with friends).

Deprivations often overlap, rarely occurring in isolation, with children experiencing a combination of deprivations. A staggering 97 per cent of children experience deprivations in two to nine dimensions simultaneously, creating a complex web of deprivations, with a large overlap observed between water and housing. As such, around 40 per cent of children who are deprived in the water dimension are also deprived in the housing dimension. Deprivations in water and housing dimensions are identified not only by their strong overlap but also by their huge contribution to the MCP incidence. As such, 39 per cent and 36 per cent of children who are deprived in water and housing dimensions, respectively, end up being multidimensionally poor. This translates into the probability of

a child being multidimensionally poor being around 39 per cent if a child is deprived in the water dimension and 36 per cent if the child is deprived in the housing dimension. By the same token, the probability of a child being multidimensionally poor is around 39 per cent if the child is deprived in the leisure dimension and 34.4 per cent if the child is deprived in the nutrition dimension.

Multidimensional child deprivation is associated with various factors specific to the child, parent, and household. Girls, children with disabilities, and orphaned children are more likely to experience deprivation than others. Conversely, when the head of the household achieves higher education and engages in skilled employment, the likelihood of multidimensional child deprivation decreases. Larger household size, specifically with more children under the age of five, significantly increases the probability of a child experiencing multidimensional poverty. Additionally, there is a significant correlation between wealth and the level of child deprivation. The results show an overlap between household asset poverty and the status of multidimensional poverty among children.

Incidence of multidimensional child poverty has increased between 2016 and 2023, though this is affected by the new set of indicators and dimensions used in the later year.

11. Policy implications

Based on the main findings of the study, key policy implications include:

- **Combining interventions to result in complementarities:** multiple deprivations should be addressed simultaneously by combining effective interventions that focus on resolving deprivations in any of the dimensions (and indicators therein) that contribute significantly to incidence of MCP. For instance, based on existing strong overlap between housing, water and sanitation and their huge contribution to incidence of MCP, there is a strong rationale for combining housing and water, sanitation, and hygiene (WASH) interventions to tackle MCP and improve public health. One combined intervention could be upgrading existing informal settlements in Addis Ababa and Dire Dawa, focusing on constructing houses with improved sanitation facilities and access to clean water. The other could be integrating WASH principles into the design of social housing projects to ensure residents have access to safe water, sanitation, and good hygiene. Moreover, providing access to clean water, sanitation facilities, and hygiene education alongside temporary housing during emergencies and humanitarian contexts helps prevent disease outbreaks in particular and the incidence of MCP in Ethiopia.
- **Investing in social protection programmes that address various deprivations:** As there is a strong link between wealth and multidimensional child deprivation, income poverty and inequality should be addressed to empower families and break the cycle of poverty in its all form. Household and child-level characteristics that predict incidence of MCP could be used as targeting criteria to reach children that are highly likely to be multidimensionally poor.
- **Strengthening child protection and family support services:** Families at risk should be supported to help prevent children from resorting to life on the streets. Moreover, cases of neglect, abuse, or abandonment should be identified and action taken to prevent children from running away or being forced onto the streets. Safe and supported reintegration should occur with families whenever possible, or street children should be assisted to find permanent housing and integrate into society.
- **Data-driven monitoring and evaluation:** As this survey highlights, data should be collected and utilized to track progress in the fight against MCP over time. There should be continuous efforts to generate and utilize timely and accurate data, to facilitate monitoring and evaluation interventions and ensure their effectiveness in halting single or overlapping deprivations, and to facilitate adaptation of strategies as needed.
- **Mainstreaming multidimensional measures of poverty:** Besides policies that promote economic growth and reduce income inequality, multidimensional child poverty indicators should be mainstreamed into national development plans, targeting multiple deprivations simultaneously, taking into account geographic disparities and the needs of the most vulnerable.

12. References

- Abate, D., Eyeberu, A., Adare, D., Negash, B., Alemu, A., Beshir, T., ... and Dessie, Y. (2022). Health status of street children and reasons for being forced to live on the streets in Harar, Eastern Ethiopia. Using mixed methods. *Plos one*, 17(3), e0265601.
- Agyire-Tettey, F., Asuman, D., Ackah, C. G., and Tsiboe-Darko, A. (2021). Multidimensional child poverty in Ghana: Measurements, determinants, and inequalities. *Child Indicators Research*, 14, 957-979.
- Alderman, H., Behrman, J. R., Glewwe, P., Fernald, L., and Walker, S. (2017). Evidence of impact of interventions on growth and development during early and middle childhood. In de Silva, N. et al., eds.
- Alkire, S., Roche, J.M., Ballon, P., Foster, J., Santos, M.E. and Seth, S. (2015). *Multidimensional poverty measurement and analysis*. Oxford, UK and New York, USA: Oxford University Press.
- Chzhen, Y., and Ferrone, L. (2017). Multidimensional child deprivation and poverty measurement: Case study of Bosnia and Herzegovina. *Social Indicators Research*, 131(3), 999-1014.
- Central Statistical Agency (CSA) and ICF. (2016). Ethiopia Demographic and Health Survey 2016. Addis Ababa, Ethiopia, and Rockville, Maryland, USA: CSA and ICF.
- CSA and UNICEF Ethiopia (2018). Multidimensional Child Deprivation in Ethiopia. Addis Ababa: CSA.
- de Neubourg, C., Chai, J., de Milliano, M. and Wei, I.P.Z. (2012). Step-by-Step Guidelines to the Multiple Overlapping Deprivation Analysis (MODA). Office of Research Working Paper. Florence, Italy: UNICEF Office of Research..
- Dercon, S. (2012). Understanding child poverty in developing countries: Measurement and analysis. *Childhood poverty: Multidisciplinary approaches*, 52-69.
- Gordon, D., Nandy, S., Pantazis, C., Townsend, P. and Pemberton, S.A. (2003). *Child poverty in the developing world*. Bristol, UK: Policy Press.

Hjelm, L., Ferrone, L., Handa, S., and Chzhen, Y. (2016). Comparing approaches to the measurement of multidimensional child poverty. Office of Research - Innocenti Working Paper. Florence, Italy: UNICEF Office of Research.

Hoddinott, J., Maluccio, J. A., Behrman, J. R., Flores, R., and Martorell, R. (2008). Effect of a nutrition intervention during early childhood on economic productivity in Guatemalan adults. *Lancet*, 371:411–416.

de Silva, N. et al., eds. (2017). Disease Control Priorities, Third Edition: Volume 8. Child and Adolescent Health and Development. Washington DC, USA: World Bank.

Thorbecke, E. (2013). Multidimensional poverty: conceptual and measurement issues. In Kakwani, N. and Silber, J., eds. (2013) *The Many Dimensions of Poverty*. London, UK: Palgrave Macmillan, pp.3-19.

United Nations Children's Fund (2023). International Classification of Violence against Children. New York, USA: UNICEF.

United Nations Children's Fund (2013). Every Child's Birth Right: Inequities and trends in birth registration. New York USA: UNICEF.

United Nations Children's Fund (2023). Monitoring the Situation of Children and Women. UNICEF Data. Accessed June 2023 from <https://data.unicef.org/topic/child-poverty/>.

Wang, C. and Burris, M.A. (1997). Photovoice: Concept, Methodology and Use for Participatory Needs Assessment. *Health Education & Behaviour*, 24: 369-387.

World Health Organization (2008). Eliminating Female genital mutilation An interagency statement. OHCHR, UNAIDS, UNDP, UNECA, UNESCO, UNFPA, UNHCR, UNICEF, UNIFEM, WHO. Geneva, Switzerland: WHO.

13. Annexes

13.1. Appendix A: Appendix Tables

Appendix Table 1: Summary of policies and legislation on child rights in Ethiopia

Dimensions	CRC	Policy/strategy and year enacted/signed/ratified	Key Pillars
Education	Article 28 recognizes the right of the child to education, and with a view to achieving this right progressively and on the basis of equal opportunity, make strategy available and accessible to every child	Policies and strategies in Education: • National Education and Training Policy, 1994 • Early Childhood Care and Education (ECCE) Policy Framework, 2010 • ECCE Standard Operating Procedures (SOP) and Guidelines, 2010 • Education Development Road Map (2018-2030) • Gender Strategy for the Education and Training Sector, 2014	• Reference to the Sustainable Development Goals, especially SDG 4; the CRC; Education for All; the International Covenant on Economic Social and Cultural Rights • The centralized Education Management Information System (EMIS) is used to monitor educational outcomes • Adaptability of support during disasters • Recognizes the need for a multisectoral approach • Prioritization of children's needs • Policies highlight provisions and plans for coordination with other government agencies and stakeholder groups.

Health and Nutrition	Article 24 recognizes the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health-care services. To combat disease and malnutrition through the provision of adequate nutritious foods and clean drinking water, taking into consideration the dangers and risks of environmental pollution	Policies and strategies in Health and Nutrition: • The National Health Policy – NHP (2011) • The National School Health and Nutrition Strategy – SHN (2012) • The National Nutrition Programme – NNP II (2016) • The National Newborn and Child Survival Strategy (2015)	• Highly focused on community participation and consultation • Recognizes the need to be more robust on monitoring and evaluation • Reference to existing international conventions, laws, policies, guidelines and regulations • Adaptability of support during disasters and multisectoral approach • Policies should prioritize children's needs
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Child protection	Article 32 recognizes the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development.	Policies, strategies, and programmes for Child Protection: • National Children's Policy (2018) • Ethiopia Code of Conduct on SRGBV Policy Enactment (2014) • Alternative Childcare Guidelines on Community-Based Childcare, Reunification and Reintegration Programme, Foster Care, Adoption and Institutional Care Service (2009) • National Case Management Framework System for Child Protection (2019) • National Costed Road Map to End Child Marriage and FGM/C (2020–2024) • National Action Plan to Eliminate the Worst Forms of Child Labour (2016–2020)	• Integrate the efforts of all stakeholders, including family, community, government, NGOs, regional and international organizations. • Recognizes the importance of children's participation in matters affecting them.
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Water and sanitation	Article 23 recognizes that children have the right to the best health care possible, clean water to drink, healthy food and a clean and safe environment to live in. All adults and children should have information about how to stay safe and healthy.	Policies, strategies, and programmes for water and sanitation: • The National Hygiene Sanitation Strategy	• The strategy recognizes the urgency of protecting children’s rights while also recognizing how gender impacts outcomes. • The strategy recognizes that intersectoral collaboration with the health, water, education and rural development sectors is required to achieve sanitation outcomes. • The Strategy outlines the steps envisaged in the public financing strategy for improved sanitation
Information	Article 17 recognizes that children have the right to get information from the Internet, radio, television, newspapers, books and other sources. Adults should make sure the information they are getting is not harmful. Governments should encourage the media to share information from lots of different sources, in languages that all children can understand.	Policies, strategies, and programmes for Information and communication: • Consultation on the Recommendations and Working Text of the National Open Data Policy of The Government of Ethiopia (2018)	• Achieving sustained economic growth and improved public service delivery in a transparent and accountable manner. • Building an innovation-data-enabling industry to harness rapid social economic development.

Housing	Article 27 recognizes that children have the right to food, clothing and a safe place to live so they can develop in the best possible way. The government should help families and children who cannot afford this.	Policies, strategies, and programmes on housing • Urban Housing Strategy of Ethiopia (2013)	• Recognizes government intervention and participation of stakeholders in the sector. • Aims to integrate and coordinate efforts to enable access to housing by the poor and mid income level households. • Targets integration of the sector with employment creation. • Encourages saving and arranges financial schemes
Leisure	Article 31 recognizes every child has the right to rest, relax, play and to take part in cultural and creative activities.		
Federal Democratic Republic of Ethiopia, 1995 Constitution Article 90	• To safeguard the rights of every child in the country. It recognizes that children are entitled to special care, protection, and assistance to ensure their physical, mental, and social well-being. To ensure the protection of children from economic exploitation, hazardous labour, child trafficking, and any form of physical or mental abuse that may harm the welfare or development of children.		
National Child Policy, 2017	• It aims to provide a comprehensive framework for addressing child rights and well-being in the country. • It aims to promote child development, protect children from harm, and ensure their participation in decision-making processes.		

Appendix Table 2: List of profiling variables and their descriptions

Profiling variable	Description
sex of the child	Binary; 1 if the child is a boy and 0 if girl
age of the child	Age of the child in years
disability status of the child	Binary; 1 if the child has difficulty in any of the following functioning: seeing, hearing, walking, remembering or concentrating, self-care, communicating, and 0 otherwise.
mother lives in the household	Binary; 1 if the mother lives in the household, and 0 otherwise
father lives in the household	Binary; 1 if the father lives in the household, and 0 otherwise
mother is alive	Binary; 1 if the mother is alive (regardless of whether she resides in the household or not), and 0 otherwise
father is alive	Binary; 1 if the father is alive (regardless of whether he resides in the household or not), and 0 otherwise
child's mother OR father not alive	Binary; 1 if one of the parents of the child passed away, 0 otherwise
male household head	Binary; 1 if the household head is male, and 0 if female
age of the household head	Age of the household head in years
education of the household head (four categories)	Categorical variable; 1-illiterate, 2-primary education, 3-secondary education, 4- beyond secondary education
household head is married	Binary; 1 if the household head is married, and 0 otherwise.
household head is engaged in skilled work	Binary; 1 if the household head is engaged in a skilled work, and 0 otherwise.
family size	Number of household members
number of children under 18	Number of household members that are below the age of 18 years
number of children under 5	Number of household members that are below the age of 5 years
social assistance	Binary; 1 if the household receives social assistance (cash transfers, food assistance, cash or food for work, or other assistance), and 0 otherwise.
own household business/ enterprise	Binary; 1 if the household owns a business, and 0 otherwise
asset holding	Asset index constructed using 29 household asset items
region	Binary; 1 if the child is in Addis Ababa, and 0 if in Dire Dawa

Appendix Table 3: Two-sample t-tests on mean difference in number of deprivations and MCP incidence

Variables		Number of deprivations	MCP headcount/ incidence (%)
Under 5	Observations	1,364	
	Mean	4.18	40
5-17 years	Observations	3,058	
	Mean	4.19	42.7
Mean difference		-0.02	-2.7*
Female	Observations	2,189	
	Mean	4.30	44.2
Male	Observations	2,233	
	Mean	4.09	39.7
Mean difference		0.21***	4.5***
Addis Ababa	Observations	2745	
	Mean	4.17	41.9
Dire Dawa	Observations	1677	
	Mean	4.22	42
Mean Difference		-0.05	-0.1

Note: The means are without sample weights

Appendix Table 4: Mean differences of individual and household characteristics based on MCD incidence, under 18

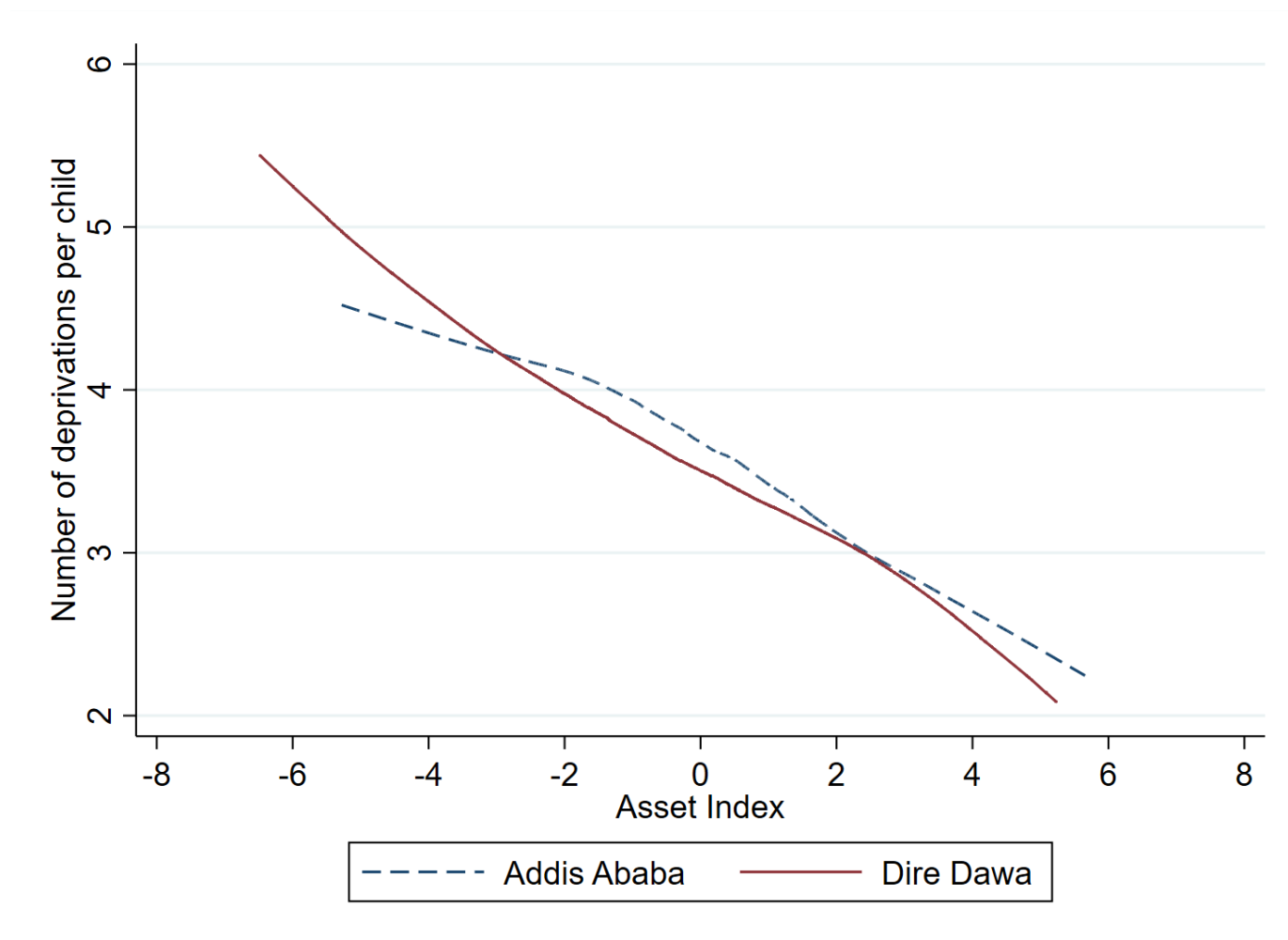
Individual/household characteristics	Mean for non-deprived children	Mean for deprived children	Mean difference
sex of the child	0.524	0.478	0.046***
age of the child	7.204	8.279	-1.075***
disability status of the child	0.0320	0.0400	-0.008
mother lives in the household	0.908	0.861	0.048***
father lives in the household	0.785	0.686	0.099***
mother is alive	0.985	0.973	0.012***
father is alive	0.962	0.913	0.049***
child's mother OR father not alive	0.049	0.104	-0.055***
male household head	0.675	0.581	0.094***
age of the household head	41.66	41.45	0.201
Educational attainment of the household head (four categories; illiterate, primary education, secondary education, beyond secondary education)	1.932	1.420	0.513***
household head is married	0.850	0.806	0.044***
household head is engaged in skilled work	0.697	0.488	0.209***
family size	5.168	5.083	0.085
number of children under 18 years	2.505	2.489	0.016
number of children under 5	0.717	0.703	0.014
social assistance	0.0920	0.209	-0.117***
own household business/enterprise	0.140	0.171	-0.031***
asset index	0.868	-0.938	1.806***
region; 1 Addis Ababa and 0 Dire Dawa	0.621	0.620	0.001

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

Appendix Table 5: Factors associated with a change in probability in multidimensional child deprivation

variables	(1)	(2)		(3)	(4)
	Probit			Poisson	
	(Incidence of MCD)			(Number of deprivations)	
	Coefficient	AME		Coefficient	AME
sex of the child (1=Male, 0=Female)	-0.2693*** (0.0506)	-0.0863*** (0.0161)		-0.0803*** (0.0123)	-0.3368*** (0.0516)
age of the child	0.0544*** (0.0070)	0.0174*** (0.0022)		0.0169*** (0.0016)	0.0708*** (0.0067)
disability status of the child	0.2860* (0.1488)	0.0917* (0.0476)		0.1053** (0.0409)	0.4416** (0.1716)
mother lives in the household	-0.0243 (0.0896)	-0.0078 (0.0287)		-0.0272 (0.0212)	-0.1141 (0.0891)
father lives in the household	-0.1205 (0.0913)	-0.0386 (0.0293)		-0.0280 (0.0226)	-0.1174 (0.0947)
child's mother OR father not alive	0.1927* (0.1100)	0.0618* (0.0352)		0.0434* (0.0236)	0.1822* (0.0989)
male household head	0.0359 (0.0840)	0.0115 (0.0269)		0.0172 (0.0201)	0.0723 (0.0843)
age of the household head	0.0043 (0.0033)	0.0014 (0.0010)		0.0001 (0.0008)	0.0003 (0.0033)
education of the household head	-0.0511 (0.0417)	-0.0164 (0.0133)		-0.0267** (0.0105)	-0.1121** (0.0441)
household head is married	0.2502** (0.1097)	0.0802** (0.0350)		0.0680*** (0.0263)	0.2853*** (0.1101)
household head is engaged in skilled work	-0.2279*** (0.0748)	-0.0731*** (0.0239)		-0.0558*** (0.0181)	-0.2343*** (0.0758)
family size	0.0084 (0.0294)	0.0027 (0.0094)		0.0113 (0.0074)	0.0472 (0.0312)
number of children under 18 years	-0.0338 (0.0478)	-0.0109 (0.0153)		-0.0136 (0.0111)	-0.0572 (0.0463)
number of children under 5	0.1583** (0.0651)	0.0508** (0.0208)		0.0414*** (0.0156)	0.1735*** (0.0653)
social assistance	0.3152*** (0.0889)	0.1011*** (0.0282)		0.0851*** (0.0188)	0.3570*** (0.0785)
own business/enterprise	0.0758 (0.0844)	0.0243 (0.0270)		0.0227 (0.0192)	0.0953 (0.0806)
asset index	-0.2297*** (0.0179)	-0.0736*** (0.0050)		-0.0730*** (0.0042)	-0.3064*** (0.0173)
region; Addis Ababa	0.2595*** (0.0713)	0.0832*** (0.0226)		0.0780*** (0.0180)	0.3271*** (0.0754)
constant	-0.9644*** (0.2246)			1.2265*** (0.0522)	
Observations	3,058	3,058		3,058	3,058

Appendix Figure 1: Association between deprivation count of children and household asset index



Appendix B: Sampling Design

This study followed a similar sampling design to the 2016 EDHS. We present the sampling design of the 2016 EDHS as reported in CSA and ICF (2016) as follows.

The 2016 EDHS sample is determined using a two-stage stratified sampling technique. Considering our study focuses only on urban areas, particularly Addis Ababa and Dire Dawa city administrations, the first stage involved selecting 56 enumeration areas (EAs)¹¹ from Addis Ababa and 32 EAs from Dire Dawa with probability proportional to the EA size. The EA size is the number of residential households in the EA as determined in the PHC. A household listing operation was implemented in the selected EAs, and the resulting lists of households served as the sampling frame for the selection of households in the second stage. Some of the selected EAs were large. The selected large EAs with more than 200 households were segmented to minimize the task of household listing. Only one segment was selected for the survey with probability proportional to the segment size. Household listing was conducted only in the selected segment. Thus, a 2016 EDHS cluster is either an EA or a segment of an EA.

In the second stage of selection, a fixed number of 28 households per cluster were selected with an equal probability systematic selection (i.e., systematic random sampling) from the newly created household listing (see Table 3.2 for the final sample size from the two cities). The survey interviewer interviewed only the pre-selected households.

¹¹ An EA is a geographic area that covers an average of 181 households. A complete list of all EAs and the estimated number of residential households are provided by the Population and Housing Census (PHC) sampling frame, which is the same sampling frame used for the 2016 EDHS.