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Multidimensional Child Rights Deprivation in Indonesia

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List of abbreviations

Bappenas	Badan Perencanaan Pembangunan Nasional	National Development Planning Agency
BPS	Badan Pusat Statistik	Statistics Indonesia
CRC	Konvensi Hak Anak	Convention on the Rights of the Child
DHS		Demographic and Health Survey
ECD		Early Childhood Development
ECE		Early Childhood Education
FGD		Focus Group Discussion
IDI		In-depth Interview
Jamkesda	Jaminan Kesehatan Daerah	Regional Health Insurance
JKN	Jaminan Kesehatan Nasional	National Health Insurance
kcal		kilo calories
Kemendik-budristek	Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi	Ministry of Education, Culture, Research, and Technology
MDD	*Keragaman pangan minimum*	Minimum Dietary Diversity
MICS		Multiple Indicator Cluster Survey
MODA	Deprivation Analysis	Multidimensional Overlapping
NTB	Nusa Tenggara Barat	West Nusa Tenggara
OPHI	Oxford Poverty and Human Development Initiative	Oxford Poverty and Human Development Initiative
PBI	*Penerima bantuan iuran*	Premium Assistance Beneficiaries
PDAM	Perusahaan Daerah Air Minum	Water Supply Company
RDA	*Angka kecukupan gizi*	Recommended Dietary Allowance
RPJMN	Rencana Pembangunan Jangka Menengah Nasional	Country's National Medium-Term Development Plan
SDGs	Tujuan Pembangunan Berkelanjutan	Sustainable Development Goals
Susenas	Survei Sosial Ekonomi Nasional	National Socioeconomic Survey
WHO	Organisasi Kesehatan Dunia	World Health Organization
WNPG	Widyakarya Nasional Pangan dan Gizi	National Workshop on Food and Nutrition

Executive summary

Introduction

This report assesses the current situation of child welfare in Indonesia and encourages dialogue among policymakers on appropriate policy orientations. Children experience poverty and deprivation differently from adults, as they have specific needs and vulnerabilities as well as lack agency when it comes to realizing their rights. Measuring child deprivation provides direct insights into children's effective access to goods and services, going beyond household decisions when it comes to allocation of shared resources to the benefit (or not) of their children.

The framework guiding the analysis presented in this report is based on an extensive collaborative process between the National Development Planning Agency (Bappenas), Statistics Indonesia (BPS), UNICEF Indonesia, and SMERU in 2022 to ensure the contextual relevance of indicator and dimension selection for Indonesia. However, this report features 2023 data updated from 2022.

As part of the Government of Indonesia's ongoing commitment to understanding children's welfare, especially those showing greater vulnerability profiles, development of this report's multidimensional deprivation analysis was updated using newly available 2023 National Socioeconomic Survey (Susenas) data. While monetary poverty analysis focuses on estimating the level of financial resources that households access to fulfill their children's and other members' needs, the multidimensional deprivation analysis directly measures whether children effectively access what they need to grow and thrive, corresponding to the satisfaction of rights as identified in the Convention on the Rights of the Child (CRC). These results aim to foster policy engagement and dialogue around reduction of child deprivations and guide the design of policies and programmes to improve children's welfare.

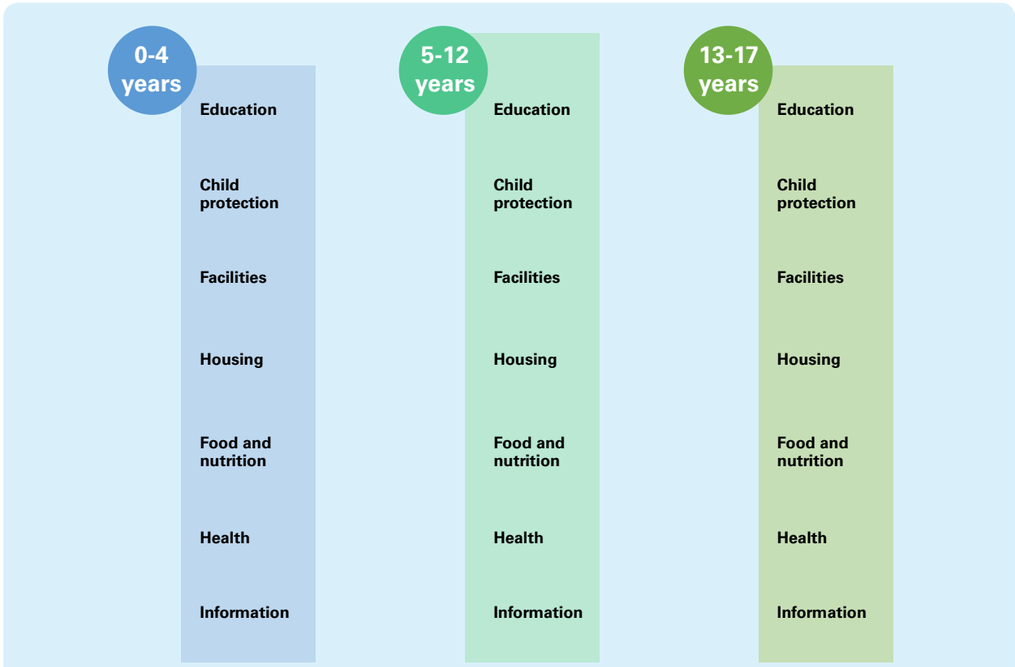
Methods

This analysis was conducted using the 2023 Susenas, representative of households and individuals at the national, provincial and kabupaten (district)/kota (city) levels. The sample was restricted to children aged 0–17 years, totalling 396,397 children.

The Multiple Overlapping Deprivation Analysis (MODA) methodology, developed by the UNICEF Office of Research in Florence, is used to measure and identify multidimensional deprivations among children aged 0–17 years old in Indonesia. The methodology builds on existing approaches to multidimensional poverty measurement, including the ones underlying UNICEF's Global Study on Child Poverty and Disparities and Oxford Poverty and Human Development Initiative (OPHI)'s Multidimensional Poverty Index.

The multidimensional deprivation analysis uses the following dimensions (see Figure ES.1) are agreed to measure deprivations among children. A complete list of dimensions, indicators and thresholds used to measure child multidimensional deprivations in Indonesia using Susenas 2023 is available in Annex 1 of this report.

Figure ES.1. Dimensions for multidimensional deprivation analysis



Key results

1. ***In Indonesia, more than three times as many children are multidimensionally deprived compared to children living in monetary poor households.***

   In 2023, at the national level, 11.78 per cent of children live in monetary poor households. However, almost four-in-10 children are multidimensionally deprived (37.38 per cent, 29.8 million), meaning that they do not have access to goods and/or services supporting their welfare in at least two domains (facing deprivation in at least two of dimensions).

2. ***Children living in monetary poor households are not always multidimensionally deprived and vice versa.***

   Some 3.58 per cent of children are monetary poor, but not multidimensionally deprived, whereas three-in-10 children are multidimensionally deprived, but not monetary poor (29.17 per cent). Additionally, 8.20 per cent of children are simultaneously monetary poor and multidimensionally deprived. Nearly six-in-10 children are not monetary poor nor multidimensionally deprived (59.05 per cent).

3. ***Multiple deprivations and how they overlap between different dimensions. Who are the multidimensionally deprived children?***

   It is observed that deprivations are often multidimensional and experienced simultaneously. Approximately 37.38 per cent of children in Indonesia are multidimensionally deprived, facing deprivations in at least two dimensions at the same time.

Large discrepancies are observed based on the area of residence, with a multidimensional deprivation rate of 30.8 per cent in urban areas and 46.1 per cent in rural areas. In addition, at the regional level, children living in Maluku and Papua present the highest multidimensional deprivation rates, with eight-in-10 children being multidimensionally deprived. Jawa has the lowest multidimensional deprivation rate (33.3 per cent). However, in terms of absolute numbers, 2.9 million and 1.3 million children living Jawa and Sumatra, respectively are multidimensionally deprived.

Higher multidimensional child deprivation is associated with lower education levels of the household head

The education level of the household head is associated with deprivation. Approximately 64.6 per cent of children living with household heads without schooling are multidimensionally deprived compared to 20.9 per cent of children with household heads who attained tertiary level education.

From a gender perspective, a slightly larger proportion of children living within female-headed households are multidimensionally deprived compared to those in male-headed ones.

Adopting a gendered disaggregation of results allows for gender equality-focused advocacy. However, based on 2023 Susenas data in Indonesia, no significant differences between girls and boys are observed regarding multidimensional deprivation levels. Gendered experiences of deprivation might not be sufficiently reflected in indicators available from the database. This observation highlights the need for further research on the dynamics at work in the differing experiences of deprivation by girls and boys in Indonesia. Furthermore, 38.7 per cent of children living in female-headed household are observed to be multidimensionally deprived compared to 37.3 per cent of those in male-headed ones.

Dimension of deprivation

a. Approximately four-in-10 children are deprived in the health dimension, with the youngest children aged 0–4 years experiencing the highest levels of deprivation.

In 2023, 39.6 per cent of children aged 0–17 years experienced deprivation in health. In particular, 61.7 per cent of children aged 0–4 years faced deprivations, as opposed to 35.1 and 25.7 per cent of those aged 5–12 and 13–17 years, respectively. In line with the life-cycle approach, different indicators are analyzed depending on their relevance to each age group. The health insurance indicator is available for all age groups, while the completed immunization indicator is included for children aged 12–35 months only. Deprivation rates in health insurance are higher among the youngest age group, 47.1 per cent for children aged 0-4 years compared to 25.7 per cent for those aged 13–17 years. Furthermore, one-in-three children aged 12–59 months (33.8 per cent) is not fully immunized.

b. Around 30.34 per cent of children are deprived in the facilities dimension.

Deprivation levels are similar across all age groups, ranging from 29.43 to 30.98 per cent for children aged 0–4 to 13–17 years respectively, mainly driven by the lack of access to improved sanitation and use of solid cooking fuels in households. Less than one-in-10 children do not have access to an improved drinking water source.

c. In 2023, 86.3 and 39.8 per cent of children aged 3–4 and 5–6 years, respectively did not attend early childhood education (ECE).

Educational stimulation of children at a young age is fundamental to their development. Moreover, access to quality education can help build human capacity, improving an individual's chances of escaping poverty. However, implementation of ECE in Indonesia is fragmented across the country and lacks universal and harmonized standards. ECE is left to the private sector and not subsidized by the government, leading to unequal access. Coordinated efforts are, therefore, needed at central and sub-national levels to harmonize the existing policy framework, and ensure regular its monitoring and evaluation.

Conclusion

This report discusses the situation of multidimensional deprivations among children in Indonesia, and its overlap with monetary poverty. In addition to specific policy recommendations arising from the analysis, Susenas 2023 data provides insights into broader child welfare issues resulting in the following conclusions and recommendations.

1. Adopt a holistic perspective to child welfare measurements and ensure that all children have access basic services and have their rights fulfilled.

Children's experiences of poverty and deprivations tend to be multidimensional. A large share of children not identified as monetary poor are nevertheless multidimensionally deprived. By proactively identifying the most vulnerable children, cost-effective approaches to addressing poverty and deprivation can be made more efficient and sustainable in the medium to long terms. Focusing only on child monetary poverty, on the other hand, would overshadow the multiple deprivations simultaneously experienced by children. As such, we strongly recommend the following approaches to support policy and programme design to realize reductions in child poverty and deprivations:

- Encourage inter-sectoral dialogue among policymakers for improved policy design.
- Integrate multidimensional deprivation monitoring in national and local governments' agenda.
- Promote coordinated efforts and investments across sector-specific stakeholders.

2. Support cross-sectoral approaches to tackle multidimensional child deprivations.

Deprivations in some dimensions are strongly associated and could potentially affect deprivations in others. For children under-five, coordination between educational and health services could be strengthened and additional efforts made to adequately disseminate information on good (hygiene) practices. Children whose survival is at risk cannot perform well in school. Schools could host information and sensitization sessions on family best practices (health and hygiene) and visits to health centres could also promote education.

3. Conduct further analyses of overlaps between different dimensions of child welfare at subnational levels. Adopt a decentralized approach to child poverty and deprivation reduction.

Facilitate the dissemination of geographically disaggregated results, through regional briefs, to inform locally-focused policies and strategies. Additional analytical work in this sense can support local government in seeking a better understanding of and instating more specific policies for regional specificities.

4. ***Rigorously expand access to essential facilities and services for all children in Indonesia.***

   Children living in rural areas and more remote places in general tend to have drastically lower access to essential facilities, such as safe drinking water, adequate sanitation and affordable and quality early childhood education. There is need for well targeted investments by the Government of Indonesia to ensure locally-available facilities. Aside from supply-side considerations, the population should be incentivized to use the improved services. Furthermore, the tracking, monitoring and reporting of local spending and its efficiency is essential to ensure central government policies are well implemented locally. A nationwide strategy is needed to address decentralized services in these areas.

5. ***Systematically and routinely report on child poverty and deprivation through a dedicated online platform.***

   In Indonesia, data on monetary child poverty is collected on a regular basis through the Susenas initiative. Moreover, the country has established itself as a champion in reporting on progress towards the Sustainable Development Goals (SDGs), including through integration of SDG targets in the medium-term development plan. It is desirable to achieve the same level of routine reporting for multidimensional deprivations. In addition to reporting on these figures through regularly published technical documents, providing access to a digest of key poverty and deprivation measures on a SDG Dashboard[1] would allow continued monitoring of the situation of children and key sectors like health, ECE and access to facilities. These initiatives can foster prompt political action and civil engagement around child welfare issues.

6. ***Ensure the availability of relevant data for older children (aged 5–17 years) to enrich analyses.***

   The Susenas dataset contains a variety of age-specific indicators for children under-five, in particular regarding nutrition and health. To ensure that older children's multidimensional deprivation rates are not underestimated, policy dialogue around the integration of additional variables would allow creation of relevant deprivation indicators for children aged 5–17 years.

7. ***Conduct additional research to better understand the drivers of multidimensional child deprivation.***

   This analysis focuses on identifying dimensions in which children experience deprivations simultaneously. Further studies may help explain the results obtained. Examples of potential research questions can include:

   - Why do children living in households with heads without any education or attained secondary education face higher levels of multidimensional deprivation? Under what conditions are these observations more common?
   - What characterizes female-headed households? How many working adults do they host on average? Are they single parented? Do they receive social assistance, given the additional economic burden faced when raising children in these circumstances?
   - Are children with a disability exposed to higher levels of poverty/deprivation? Are there any social protection and care services available to them? What are the additional costs of raising children with disabilities?

[1] SDG Dashboard : http:/sdgs.bappenas.go.id/dashboard/

1. Introduction

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1.1 Background of the study and country context

The 2030 Agenda for Sustainable Development Goals (SDGs) provides a historic opportunity for countries to realize an internally agreed vision by setting national targets to reduce child poverty or deprivations in all their dimensions to become a defining achievement of today's generation. Ensuring the fulfilment of children's rights has a direct and long-term impact on children's lives and wellbeing, affecting the success of a country's socio-economic development.

The Indonesian Government is committed to ensuring the realization of children's rights. As a signatory to the Convention on the Rights of the Child (CRC), the SDGs and other international frameworks for action on child rights have been incorporated into the country's Medium-Term Development Plan (RPJMN) 2020–2024. Moreover, Indonesia places a high priority on the provision of health, education, birth registration, and other services that constitute child rights. The government, amongst others, has focused on tackling stunting and safeguarding children and other vulnerable populations from abuse. In addition, Statistics Indonesia (BPS) continuously publishes poverty rate data for the population aged under 18 years, the reference age for children according to Law No.35 (2014) on child protection.

In the context of Indonesia, the first child poverty study with a Multidimensional Overlapping Deprivation Analysis (MODA) analysis was conducted by UNICEF and BPS (2017) using National Socioeconomic Survey (Susenas) 2016 data with deprivations measured over six dimensions (housing, facilities, food, education, protection, and health). The 2017 MODA revealed that two-in-three Indonesian children (64.95 per cent) experienced deprivations in two or more dimensions, compromising their growth and development.

In contrast to 2017's MODA study, this MODA iteraton involved stakeholders from line ministries mandated to realize child rights to participate in a series of national workshops during December 2022 to June 2023 held at national level. The Ministry of National Development Planning (Bappenas), BPS, SMERU and UNICEF worked collaboratively to organize the workshops, during which the MODA approach was introduced and presented. The inception phase engaged participants from line ministries to jointly determine the reference age group, deprivation dimensions, indicators, and thresholds to be used for MODA in Indonesia. The government's involvement plays a critical role in ensuring continuous support and delivering change for children. In the finalization of the final report, the Social Policy Research Institute was invited to improve the analysis to align with global standards, while also updating the analysis with the 2023 Susenas dataset, and analyzing trends from 2022 to 2023.

The method utilized in this study is particularly novel because it is the first attempt to integrate qualitative research findings to strengthen data driven from a quantitative MODA study. Designing and implementing successful policies requires an understanding of the levels of multidimensional child deprivation, which must be complemented by a thorough analysis of how children perceive and address deprivations to give children a voice.

This study folds into a research agenda as part of the 2021–2025 Programme Cooperation between UNICEF and the Government of Indonesia. Analysis of children's experiences of deprivations will serve as an important input for continuous monitoring of child welfare and generate useful information to support implementation of government social protection programmes. The calculation of deprivation contributions from each dimension will be key to mapping the configuration of deprivations at national level and setting policy targets.

1.2 Roadmap for MODA in Indonesia

Bappenas, BPS, UNICEF Indonesia, and SMERU worked together through an elaborative collaborative process to ensure the selection relevance of MODA dimensions and indicators in the context of Indonesia (see Figure 1). In 2017, a series of workshops was held with participants from line ministries and institutions mandated or active in realizing child rights.

In the inception phase, Innocenti – Global Office of Research and Foresight supported participants at the workshops to gain a clear understanding of the MODA concept and how to adapt it to country-specific definitions of deprivation. Once participants were cognizant of the approach, follow-up workshops were held to discuss the quantification of child deprivations and data to be used in the analysis.

Figure 1. Roadmap to MODA

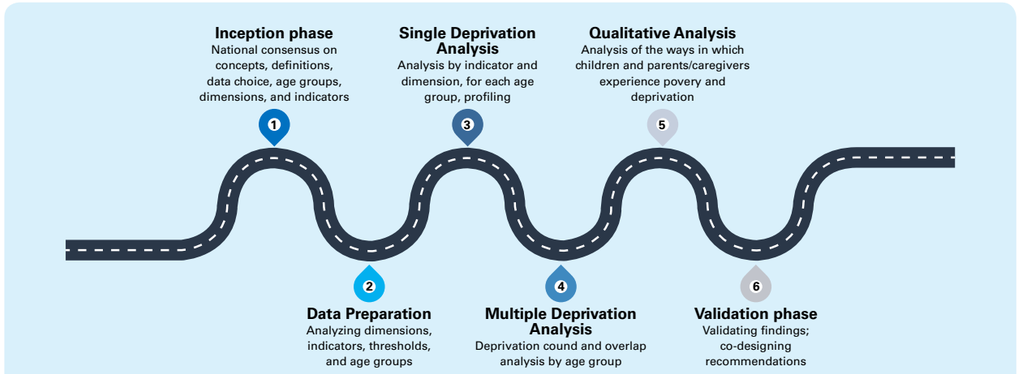

Table 1. Availability of Susenas Data According to CRC

No.	Dimensions	CRC	Availability in Susenas Data
1	Food, nutrition	Article 24	Yes
2	Water	Article 24	Yes
3	Healthcare	Article 24	Yes
4	Shelter, housing	Article 27	Yes
5	Environment/ pollution	Article 24	No
6	Education	Article 28	Yes
7	Leisure	Article 31	Yes
8	Cultural activities	Article 31	No
9	Information	Articles 13, 17	Yes
10	Exploitation; child labour	Article 32	Yes
11	Cruelty, violence	Articles 19, 37	No
12	Violence at school	Article 28	No
13	Social security	Articles 16, 26, 27	Yes
14	Birth registration; nationality	Articles 7, 8	Yes

Note: Columns 2 and 3 are based on de Neubourg et al. (2012: 15).

The application of MODA in each country can be adjusted to the available data and relevant needs. Bappenas, BPS and SMERU facilitated discussions on national data for adapting MODA to the context of Indonesia. BPS used Susenas results that cover a nationally representative sample of Indonesian households to produce the child deprivation analysis using the MODA approach. Susenas contains a core questionnaire which consists of information on household-level and individual/household member-level data. As Susenas data is collected and published annually, it allows for a continuation of multidimensional child deprivation analyses annually.

Furthermore, Susenas contains a core questionnaire which consists of extensive information on children at the individual and household levels, aligned with the CRC. Table 1 shows that Susenas data includes information on child nutrition, provision of health and

water access, in accordance with Article 24 of the CRC, and on children's education stated in Article 28 of the CRC.

Moreover, Susenas covers household expenditure data to allow for an overlapping analysis between multidimensional child deprivation and monetary child poverty. Data is collected and published annually, enabling continued multidimensional child deprivation analyses in the following years.

Once the use of Susenas was agreed upon, participants worked collaboratively to define age groups, dimensions and indicators to underpin the MODA approach. MODA takes children's life-cycle into consideration, which means that the approach acknowledges each stage of a child's life as needs are age-specific. The inception phase also resulted in consensus on three age groups of children for the deprivation analysis: (i) 0–4 years old, (ii) 5–12 years old, and (iii) 13–17 years old. The selection of age groups considered different deprivations experienced by each group. The cutoff between age groups also considered the availability of Susenas data, phases in the education system (such as completion rates of primary schooling for those 13 years old and above), and the child protection sector (children aged 13 years and above working less than 15 hours a week).

During the inception phase, workshop participants were reminded that the selection of dimensions and indicators used to measure child deprivation should reflect the national context as described in the following documents, all of which have significant implications for children:

1. Child-related data in Susenas
2. Sustainable Development Goals
3. Convention on the Rights of the Child
4. Law No.35 (2014) on Amendments to Law No.23 (2002) on Child Protection
5. Government plans and policies, such as RPJMN 2020–2024, sectoral and cross-sectoral plans.

1.3 Study objectives

Assessing children's wellbeing in Indonesia through using a combination of monetary and multidimensional perspectives provides an understanding of the national situation of vulnerable children, focusing on important aspects of their lives. As part of the Indonesian Government's commitment to children's welfare, especially those showing greater vulnerability, child monetary poverty and multidimensional deprivation analyses were updated in 2023 leading to creation of this report. Monetary poverty analysis focuses on estimating the level of financial resources that households access and could employ to meet their children's needs, while the multidimensional deprivation directly measures whether children can effectively access what they need to grow and thrive – having their rights satisfied. These results support policy engagement and dialogue around child deprivation reduction and can guide policies and programmes to improve children's overall welfare.

Furthermore, the reported results can be used to monitor the country's progress towards SDG 1.2.2. This target aims to reduce by half the proportion of women, men and children of all ages living in poverty in all its dimensions according to national definitions by 2025. This report provides an update of the situation of multidimensionally deprived children as a follow up to previous analyses carried out on previous rounds of Susenas data.

Key research questions guiding this study were:

- What is the level of deprivation across different dimensions, among children in Indonesia and by age group?
- What is the prevalence and severity of multidimensional child deprivation in Indonesia?
- What are the geographic and socio-economic characteristics of deprived children, including profiling by area of residence, island level, household size, gender, and educational attainment of the household?
- How do the concepts of monetary child poverty and multidimensional child deprivation overlap when used to identify vulnerable children in Indonesia?
- How has the situation of multidimensional child deprivation in Indonesia evolved since the last figures produced in 2022?
- Which dimensions contribute the most to multidimensional child deprivation?
- What are the policy implications of this study and recommendations to improve child poverty and deprivation levels in Indonesia?

Following this introduction, Chapter 2 details the MODA methodology used for the analysis, as well as the data and parameters employed. Chapter 3 discusses the main results of the single deprivation analysis by indicator and dimension for each age group (0–4 years, 5–12 years and 13–17 years), while Chapter 4 outlines multidimensional deprivation rates among children aged 0–17 years and by age group. Chapter 6 explores children's aspirations beyond MODA, while Chapter 7 concludes the report and provides policy recommendations.


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2. Methodology

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2.1 MODA methodology

The Multiple Overlapping Deprivation Analysis (MODA) methodology[2], developed by the Innocenti Global Office of Research and Foresight is used to measure and identify multidimensional deprivations among children aged 0–17 years in Indonesia. The methodology builds on existing multidimensional poverty measurements, including UNICEF's Global Study on Child Poverty and Disparities[3] and Oxford Poverty and Human Development Initiative's (OPHI) Multidimensional Poverty Index.[4]

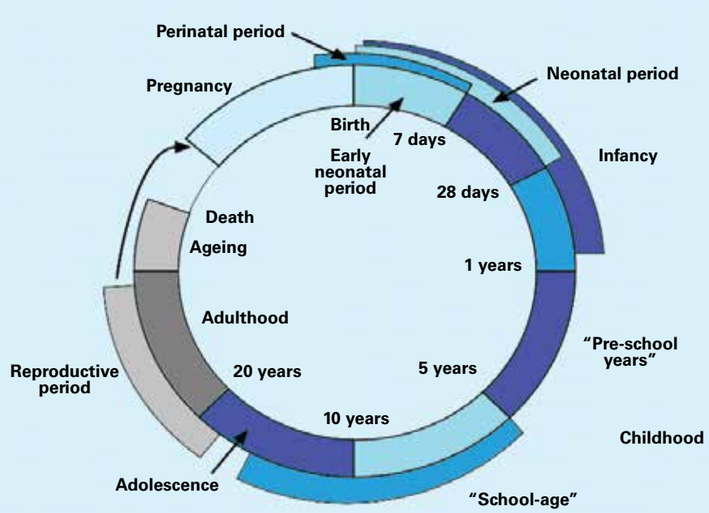
The MODA approach consists of the following four key elements:

1) It identifies the child as the unit of analysis, rather than the household.
2) It adopts a life-cycle approach, to reflect the different needs of children through their life-cycle, from early childhood to primary childhood and adolescence.
3) It enhances sectorial approaches (e.g., nutrition, health and education) by examining overlaps between deprivations in multiple dimensions. This analysis provides insights into multiple aspects of child poverty experienced simultaneously and provides information on the level of severity of multidimensional deprivation.
4) It supports an equity-oriented perspective, through identification of socio-economic and geographical characteristics of the most vulnerable children. In particular, this can inform and guide effective policy design.

2.2 Data

Susenas 2022 and 2023 are the main datasets used to conduct this multidimensional deprivation analysis. The dataset, conducted in March 2023, is representative at national, provincial and district/city levels, with a target sample of 340,000 households consisting of more than 1.2 million individuals, including 396,397 children aged 0–17 years. Susenas data is collected annually and provides a wide range of information on several key dimensions of children's welfare at household and individual levels, including nutrition, health, education, water, sanitation, housing and information. Furthermore, regularly collected Susenas data allows for trend analyses, comparing the most recent results with previous Susenas waves (in particular, comparing 2023 and 2022 data), as well as an overlapping analysis with monetary child poverty, also measured using this dataset.

Figure 2. Life-cycle approach



Source: Claeson and Waldman (2000)

[2] The MODA methodology is described technically in more detail in the step-by-step guidelines to MODA (de Neubourg et al., 2012).
[3] See Gordon et al. 2003; UNICEF, 2007.
[4] See Alkire and Santos, 2010; Alkire and Foster, 2011.

Table 2. List of dimensions and indicators for measuring multidimensional child poverty in Indonesia using Susenas 2023

Dimension	Indicator	Age group		
		0–4 years	5–12 years	13–17 years
Food and Nutrition	Calorie consumption	✓	✓	✓
	Exclusive breastfeeding	✓(0–5 months)		
	Minimum dietary diversity	✓(6–23 months)		
Health	Health insurance	✓	✓	✓
	Complete immunization	✓(12–59 months)		
Education	Preschool participation	✓(3–4 years)	✓(5–6 years)	
	School participation		✓(7–12 years)	
	Completion of primary education			✓(13–15 years)
	Completion of secondary education			✓(16–17 years)
Protection	Birth registration	✓	✓	✓
	Child marriage		✓(10–12 years)	✓
	Child labour		✓(10–12 years)[5]	✓
Housing	Overcrowding	✓	✓	✓
	Floor type	✓	✓	✓
Facilities	Drinking water	✓	✓	✓
	Sanitation	✓	✓	✓
	Cooking fuel	✓	➲	✓
Information	Internet access	✓	➲	✓
	Mobile phone	✓	➲	✓

2.3 Selection of dimensions, indicators and thresholds

The analysis uses the following selection of indicators and dimensions to measure (multidimensional) deprivation among children (see Table 2). In line with the MODA guidelines, the choice of parameters takes the following considerations into account: (i) relevance of indicators to deprivation measurement at the dimension level, (ii) data availability for all children of a given age group and (iii) data quality, in terms of missing values and balanced responses for a given variable, amongst others. The same indicators, dimensions, and thresholds used in the previous study based on Susenas 2022

[5] The MODA methodology is described technically in more detail in the step-by-step guidelines to MODA (de Neubourg et al., 2012).

data were employed for this analysis. The dimensions considered are:
1) food and nutrition, 2) health, 3) education, 4) protection, 5) housing, 6) facilities, and 7) information. A detailed list of dimensions, indicators and thresholds is available in Annex 1. The results are disaggregated by three age groups: 0–4 years, 5–12 years and 13–17 years.

2.3.1 Food, dimensions, indicators and thresholds

a) Calorie consumption

The main indicator to measure children's food and nutrition in the government's RPJMN and SDG targets are outcome indicators: wasting and stunting. Despite limitations on data availability in Susenas 2022, particularly on the height and weight of children, it captures information on household consumption in terms of expenditure and calorie consumption. Based on the National Workshop on Food and Nutrition (WNPG) series, the percentage of food insecurity in an area is calculated by measuring the population with calorie consumption of less than 1,400 kcal per capita (70 per cent of recommended dietary allowances/RDA) divided by the number of population in a certain expenditure group.

Food insecurity measures are used to proxy children's food intake. Children living in households with low calorie consumption, less than 1,400 kcal, means they do not consume enough caloric energy from the food they eat. Consuming a dietary intake below the minimum caloric recommendations may lead to undernourishment in a given population (UNICEF, 2017).

Workshop participants in the inception phase outlined an optimal way to calculate children's dietary allowances was to specifically use their individual consumption, protein consumption in particular, rather than household consumption per capita and consider their gender, age, height and weight. Susenas data is limited in those measurements.

b) Exclusive breastfeeding

Participants from line ministries agreed with the use of children's exclusive breastfeeding status to measure children's deprivation in terms of food and nutrition dimension. Exclusive breastfeeding is also a key strategy to reduce stunting as stipulated in Presidential Regulation No.72 (2021) on the Acceleration of Stunting Reduction. The government set a target of 80 per cent of children aged 0–5 months to receive exclusive breastfeeding by 2024. Children are considered deprived if they do not receive exclusive breastfeeding. This measure is applied only to children aged 0–5 months.

c) Minimum dietary diversity

Delivering an integrated nutrition intervention during the key first 1,000 days of life will help Indonesia reduce stunting at a faster rate. The intervention should aim to ensure children aged 6–23 months have a diet sufficiently diverse with essential nutrients (WHO, 2016).

Given the improved module in Susenas 2022 that includes the minimum dietary diversity (MDD) indicator, the variety of food groups consumed by children aged 6–23 months should also be measured. In Indonesia, MDD for children aged 6–23 months is defined as consumption of at least five out of eight food groups. Children are considered deprived if they consume less than five of the following food groups: (i) grains, roots, and tubers, (ii) legumes and nuts, (iii) dairy products (milk, yogurt, cheese, infant formula), (iv) meat/meat products and fish, (v) eggs, (vi) vitamin A-rich fruits and vegetables, (vii) other fruits and vegetables and (viii) breastmilk.

It is important to note that MDD only reflects a complementary feeding diet, not breastfeeding status. Therefore, participants of workshops advocated for inclusion of both measures, breastfeeding status and complementary feeding, when measuring deprivation in the food and nutrition dimension.

2.3.2 Health dimension

a) Health insurance

As a preventive measure, ensuring children have basic health insurance can lower the cost of medical expenses and increase the odds of accessing healthcare. The availability of health insurance is vital as it can prevent individuals from becoming vulnerable or falling into poverty. However, based on calculations from SUSENAS, the percentage of children aged 0–17 as recipients of the National Health Insurance (JKN) is still low and even lower for children under five years old .

Workshops' discussions on utilization of health insurance focused on whether it should cover only JKN or other health insurance schemes, such as regional health insurance (Jamkesda) and private insurance. Susenas 2022 data captures both. Participants agreed that any health insurance was likely to address inadequate access to healthcare services. Children are considered deprived if they do not have health insurance, be it JKN or other insurance schemes.

b) Complete immunization

Providing routine immunizations in a timely manner is key to reducing child deaths from preventable diseases (WHO, 2016). Aside from stunting reduction measures, routine immunization programmes can be viewed as a proxy for access to healthcare services. Based on Presidential Regulation No.72 (2021), Indonesia aims for 90 per cent of children aged 0–59 months to receive basic immunizations by 2024. Therefore, it is important to identify children under five years old yet to complete basic immunizations.

Susenas covers immunization status for children aged 0–59 months. During the inception phase, workshop participants from line ministries outlined that based on the immunization period, children's basic immunizations should be achieved by 12 months old, but delays in acceptance of vaccines was possible. Thus, this indicator focuses on the population of children aged 12–59 months who have received complete basic immunizations. Children are categorized as deprived if they have not completed basic immunizations within the age period 12–59 months.

2.3.3 Education dimension

The issues of preschool and school participation, completion, and transition between grades and levels were explored by workshop participants during the inception phase on child deprivations in education.

a) Preschool participation

A growing body of research from various fields has shown that early childhood development (ECD) is the most significant developmental stage of a person's life. ECD is a broad concept that covers a variety of services, including pre-primary education, parenting education, and other methods for enhancing young children's learning possibilities. Based on the strategic plan of the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek), Indonesia targets 40.2 per cent preschool participation in 2024 by children aged 3–6 years.

Susenas 2022 data generates information on children aged 3–6 years and a range of formal and informal ECD centres

that children attend. The indicator for preschool participation is relevant for two age groups defined in MODA for Indonesia, namely 0–4 and 5–12 years old. Children are considered deprived if, aged 3–6 years, they are not attending or have dropped out of organized learning for early childhood education (ECE) in the current school year.

b) School participation

Increasing equal distribution of access to education services at all levels and accelerating implementation of the 12-Year Compulsory Education programme remains a key Kemendikbudristek priority. Children aged 7–17 years are considered deprived if they are not attending school in the current school year.

c) Completion of primary education

SDG Target 4.1 focuses on completion of primary (elementary and junior high schools) and secondary (senior high school) education. The reference age group for children's primary school completion rate is 13–15 years. Children are considered deprived if they have not completed primary education aged 13–15 years.

d) Completion of secondary education

The reference age group for the completion rate of secondary education is the population of children aged 16–18 years. For Indonesia's MODA, since the age range only covers to 17 years old, the secondary education completion rate is measured for children aged 16–17 years. Hence, children are considered deprived if aged 16–17 years they have not completed secondary education.

2.3.4 Protection dimension

Under Indonesia's Law No.35 (2014), the definition of child protection is any activities to guarantee and protect children and their rights to live, grow, develop and participate optimally in accordance with dignity and humanity, and protect children from any forms of violence and discrimination.

a) Birth registration

Children are considered deprived when they have no birth certificate. The previous MODA by BPS in 2017 included birth registration as a key child rights indicator. It is a tool to access basic services, such as health and education.

b) Child marriage

The context and indicators related to child marriage and cohabitation can be approached through an examination of age groups. One strategy is to take into account the population of women in a given society. Another strategy is to focus on marital and relationship status of women aged 15-19 years. Susenas covers questions about marital status of all household members. In the MODA Indonesia approach, children are considered deprived if aged between 10–17 years when married or once married.

c) Child labour

SDG8 seeks to ensure protection of children from harmful child labour. The child labour criteria according to BPS (2022a) are: (i) 5–12 years of age: children who work, regardless of working hours, (ii) 13–14 years of age: children who work for more than 15 hours per week and (iii) 15–17 years of age: children who work for more than 40 hours per week.

In Susenas, the child labour indicator is applied across children aged 10–17 years. The module covers questions on a child's working status and hours. However, there is no information about the type of work or whether it is harmful. The qualitative aspect in this study looks for evidence of child labour in domestic and non-domestic chores.

2.3.5 Housing dimension

Children have the right to a home that is secure, suitable, and conducive to their growth and development. Housing is a crucial aspect of children's development where they spend a large amount of time studying, sleeping, playing, and interacting with family members.

a) Overcrowding

Overcrowding refers to excess amounts of people living in a limited space. The health, education, and safety of children can be negatively impacted by overcrowding. Children are considered deprived when they live in a house with less than 7.2m^2 floor area per capita. This measurement refers to the metadata for SDG indicators.

In the future, there is an opportunity to increase the floor area per capita to 9m^2 as per the newest regulation under Government Regulation No.12 (2021) on amendments to Government Regulation No.14 (2016) on Housing and Settlement Area Management. Workshop participants in the inception phase outlined the need to update the overcrowding indicators. However, since RPJMN remains focused on the overcrowding indicator being less than 7.2m^2 floor area per capita, Indonesia's MODA approach will follow the same indicator with the option of future adjustments.

Participants also raised concern about how overcrowding is measured, as it affects the privacy and psychological welfare of children. The qualitative aspect of this study aims to capture how the dynamics of overcrowding within families can affect children's welfare.

b) Floor type

This indicator follows the MODA approach in 2017. Children are considered deprived if they live in a house with the widest flooring made of bamboo, soil, or other materials.

2.3.6 Facilities dimension

Deprivation in facilities refers to the inability to access either an improved drinking water source, improved sanitation, or clean cooking fuel. During workshops in the inception phase, some participants proposed the 'safety' aspects of water and sanitation. However, this has yet to be considered for this study, as it requires specific infrastructure to measure such 'safety' aspects, which is limited in the Susenas module.

a) Drinking water

Children are categorized as deprived if they live in households without an improved drinking water source. Based on metadata for SDG indicators, improved drinking water sources includes pipes, drilled wells/pumps, protected wells, protected springs, rainwater, packaged or refilled packaged water. For households using packaged or refilled packaged water, this is categorized as having access to adequate drinking water if the water source is used for bathing/washing and comes from pipes, drilled wells/pumps, protected wells, protected springs, and rainwater.

b) Sanitation

Children are considered deprived if they live in households with no access to adequate sanitation. The adequate sanitation indicator, as defined by metadata for SDG indicators, includes private, shared or public-use sanitation facilities, flush or pour-flush to a piped sewer system, septic tank pit latrines, ventilated-improved pit latrines or pit latrines with a slab, if in rural areas.

c) Cooking fuel

This indicator is important in the MODA approach, as fuel used for cooking is critical to children's health and ability to study (Carraro et al., 2020). Around 2.4 billion people worldwide cook using open fires or inefficient stoves fuelled by coal

and other dangerous fuels which generate harmful household air pollution (WHO, 2022).

Workshop participants during the inception phase raised concern about the need to remove kerosene as an appropriate fuel for cooking. Based on a multinational study conducted by Arku et al. (2020), the use of kerosene as cooking fuel adversely affects health. Therefore, the measurement for this indicator was improved from the previous cooking fuel indicator used in MODA by BPS in 2017. In this study, children are considered deprived when they live in a household that does not use electricity or gas as a cooking fuel.

2.3.7 Information dimension

Based on Article 17 of the CRC, every child has the right to access information and materials from various sources. The COVID-19 pandemic highlighted the critical importance of access to accurate and timely information. It also brought attention to resources required for children to participate equitably in educational opportunities, especially when learning remotely. The information dimension is a proxy to capture children's and households' access to information and the ability to communicate.

Susenas covers information about children's individual access to the internet and mobile phones. During the inception phase, most workshop participants weighed up the suitability of children under five years old or primary school age having individual access to the internet or mobile phones. Although using individual-level children's data is preferable in MODA, in the information dimension, data was aggregated into household-level data. Children are considered deprived in this dimension if disadvantaged in one of these indicators:

a) **Internet access**
Children are deprived if they live in a household without internet access.

b) **Mobile phone**
Children are deprived if they live in a household where no household member owns a mobile phone.

2.4 Summary of available analytics

2.4.1 Quantitative analysis

For each age group (0–4 years, 5–12 years and 13–17 years), the following specific analyses are carried out and described:

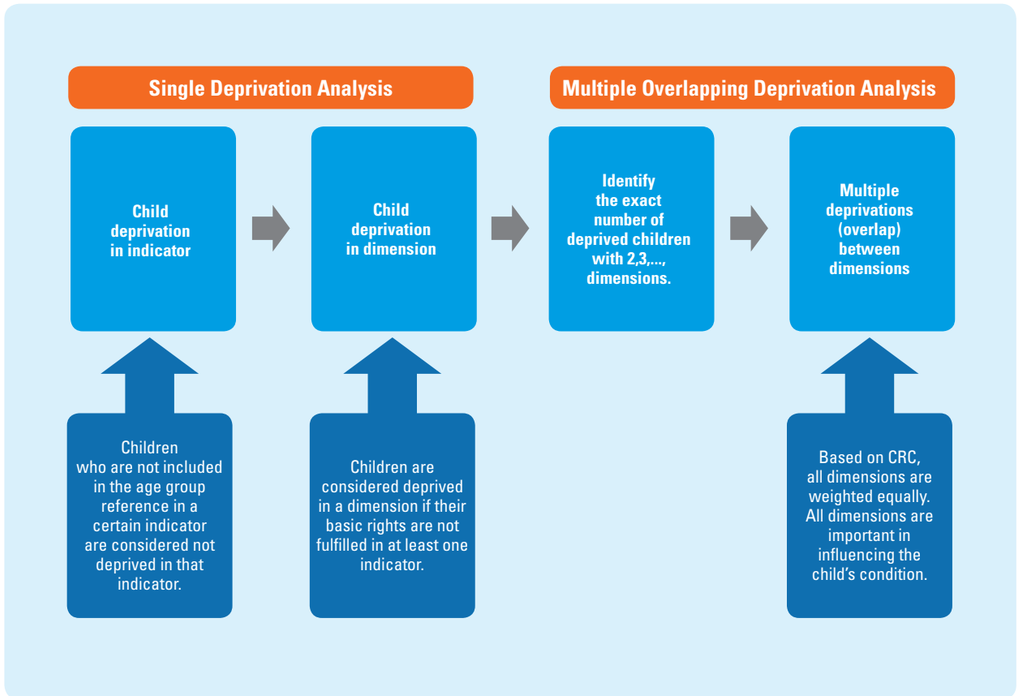
a) **Single deprivation analysis** demonstrates the proportion of children deprived in each dimension and each indicator.

b) **Multidimensional deprivation indices** summarize the multidimensional deprivation situation of children by age group at the national level and according to their characteristics. The three indices below are reported and analyzed for specific thresholds (k) and above which children are considered multidimensionally deprived:

i. The headcount ratio (H), informs the incidence of multidimensional child deprivation.[6]
ii. The average intensity (A), calculates the average number of deprivations among multidimensionally deprived children.
iii. The adjusted deprivation headcount (M0), captures both the incidence and intensity of multidimensional deprivation in an index ranging from 0 to 1. This index is particularly relevant for comparison purposes between regions or population sub-groups. The closer M0 is to 1, the higher the levels of (multidimensional) deprivation.

[6] The MODA methodology is described technically in more detail in the step-by-step guidelines to MODA (de Neubourg et al., 2012).

Figure 3. Framework analysis of MODA



c) **The three-way overlap** identifies the levels of overlap between deprivations in selected combinations of three dimensions. Focus is placed on combinations yielding the highest or complete lack of overlap signalling the need (or not) for integrated policy responses.

d) **The decomposition of M_0** presents the contribution of each dimension to the overall adjusted multidimensional poverty index.

Figure 3 describes the transition from a sectoral approach of reporting on child deprivation indicators to adopting a holistic view of child multidimensional deprivation. This allows for evaluating overlapping simultaneous deprivations, counting the number of deprivations per child and summarizing this information for particular child population sub-groups.
In line with the union approach, MODA considers a child as deprived in a given dimension if s/he experiences deprivation in at least one of the indicators used to measure deprivation for this dimension.[7] In addition, each dimension associated with a right of the child as enshrined in the CRC has been taken into account with equal importance to establish the multidimensional child poverty rate. At the multidimensional level, a cut-off approach is adopted, where a deprivation threshold k (with $0 < k \leq d$) determines if the child is multidimensionally deprived or not. In Indonesia, **a child with two or more deprivations is identified as multidimensionally deprived**, using a threshold of k=2.

[7] MODA uses the union approach when combining indicators into dimensions to identify children deprived in any of the selected indicators. This approach implies that every child deprived in at least one indicator of a given dimension will be considered deprived in said dimension. This approach is not sensitive, at this stage, to the severity of deprivation as it implies equal weight of indicators making deprivation in a dimension independent of the number of indicators a child is deprived in (de Neubourg et al., 2012). Conceptually, this is rooted in the understanding of indicators for a given dimension as measures of key and complementary aspects of child deprivation experienced for this dimension.

2.4.2 Qualitative analysis

Where relevant, elements from the qualitative analysis the SMERU Research Institute's study on multidimensional child deprivation in Indonesia, conducted in 2022, complements the quantitative analysis.

Specific research questions guided the qualitative data collection and analysis: (i) to explore children's perceptions and understanding of child welfare, which includes deprivations experienced by children, (ii) to explore children's aspirations for the future, both related to themselves and surrounding environment (parents, family, friends, teachers), and (iii) to identify children's challenges to improve their welfare and levels of support.

One kota (city) and one kabupaten (district) were chosen as the qualitative sample, with Kota Surabaya (city of) Surabaya and Kabupaten (district of) Lombok Tengah selected. The regions' poverty rates, regional characteristics, diversity of community livelihoods, and specific issues for children were considered. In detail, the selection of the two regions was based on the following:

1. Kota Surabaya has a variety of economic sectors (industry, agriculture, and trade and services) and as the second largest city in Indonesia, is densely populated. By examining these characteristics, the dynamics of children's lives in densely populated urban areas can be explored.

2. Kabupaten Lombok Tengah has a variety of economic sectors, not only in agricultural and coastal-related sectors, but also in tourism. Child marriage issues were a key factor when selecting Kabupaten Lombok Tengah. In 2020, it ranked second after Bima for the number of child marriages in the province of West Nusa Tenggara (NTB) (DP3AP2KB Provinsi NTB, 2020). Kabupaten Lombok Tengah (NTB) was the second province with the highest percentage of child marriages in Indonesia according to Susenas 2021 (Dewi et al., forthcoming). In terms of child labour, NTB also ranked as one of 10 provinces in Indonesia with a high prevalence of child labour (Dewi et al., forthcoming). Focusing on Kabupaten Lombok Tengah allows for the observation of child protection issues, the respective dimension and how it influences other dimensions in a child's life.

Data collection included the following methods:

a) Twelve focus group discussions (FGDs) with parents/caregivers of children aged 0–17 years, as well as with girls and boys aged 13–15 and 16–17 years. The sample included households with social assistance beneficiaries and children living in single-parent households. Each FGD consisted of eight to nine parents/caregivers and five to nine children aged 13–15 years and three to nine children aged 16–17 years.

b) Sixteen in-depth interviews with children and 21 in-depth interviews with parents/caregivers sought to understand the experiences of children, such as those with disabilities, who have been married, working or left behind.

c) Eighteen photo-voices with children aged 7–17 years to deepen the understanding of their experiences and what they consider important in their lives.

3. Single Deprivation Analysis

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3.1 Deprivation in Indicators and Dimensions

This section presents the percentage of children deprived in each indicator and dimension of their welfare. In line with the life-cycle approach, the results are disaggregated by the following age groups covering three stages of child development: 0–4 years, 5–12 years and 13–17 years. 3 provides an overview of deprivation levels of children by indicator and age group.

Therefore, a child is defined as deprived in a dimension, if she or he is deprived in at least one of its indicators. For example, a child is deprived in the housing dimension if she or he suffers from deprivation in at least one of the indicators "Overcrowding" or "Floor type". Figure 4 (a), (b), and (c) display the prevalence of children deprived in each dimension and age group.

Table 3. Percentage of children deprived in indicators

Dimensions	Indicators of Deprivation	0 –4 years	5 –12 years	13 –17 years	0 –17 years	Reference age
1. Food and Nutrition	1.1 Calorie consumption	15.34	11.63	10.33	12.26	
	1.2 Exclusive breastfeeding	26.03			26.03	0–5 m.o.
	1.3 Minimum dietary diversity	40.67			40.67	6–23 m.o.
2. Health	2.1 Health insurance	47.12	35.09	25.7	35.7	
	2.2 Complete immunization	33.82			33.82	12–59 m.o.
3. Education	3.1 Preschool participation	86.25	39.83		64.07	3–6 y.o.
	3.2 School participation		0.84	10.35	5.07	7–17 y.o.
	3.3 Completion of primary education			2.17	2.17	13–15 y.o.
	3.4 Completion of secondary education			9.88	9.88	16–17 y.o.
4. Protection	4.1 Birth registration	16.56	5.14	5.18	8.21	
	4.2 Child marriage		0	0.48	0.18	10–17 y.o.
	4.3 Child labour		0.83	1.94	0.94	10–17 y.o.
5. Housing	5.1 Overcrowding	12.67	11.75	11.1	11.81	
	5.2 Floor type	3.29	3.55	3.39	3.44	
6. Facilities	6.1 Drinking water	8.92	9.17	9.05	9.07	
	6.2 Sanitation	17.48	18.22	18.17	18.01	
	6.3 Cooking fuel	10.56	11.4	12.37	11.45	
7. Information	7.1 Internet access	4.59	5.08	3.09	4.39	
	7.2 Mobile phone	2.28	2.54	1.89	2.29	

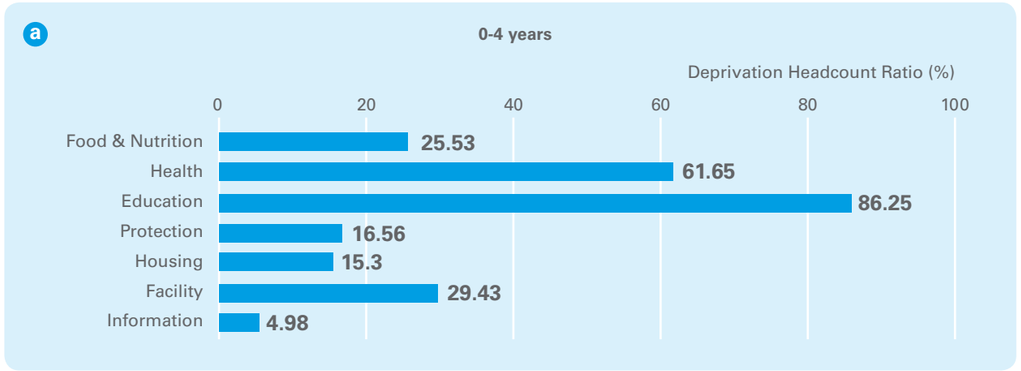
Source: Authors' calculation using Susenas, March 2023
Note: m.o. = months old, y.o. = years old

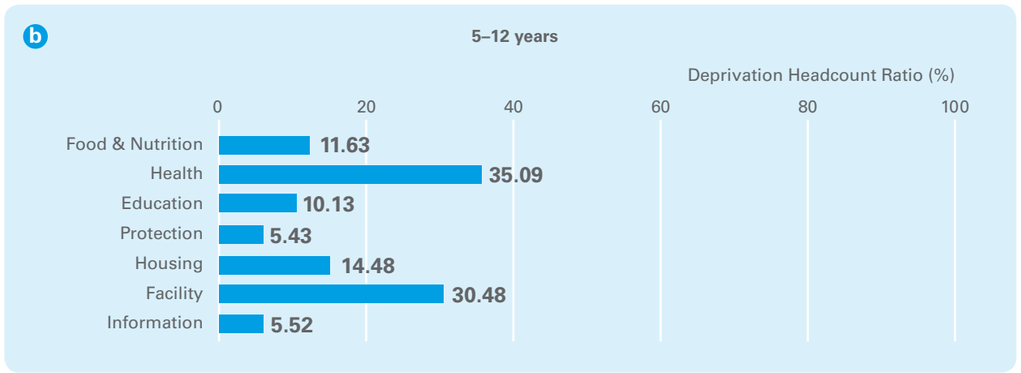
The MODA methodology uses the union approach to aggregate indicators into dimensions. Each indicator is considered equally important and provides information on the fulfilment of a need or right of the child.

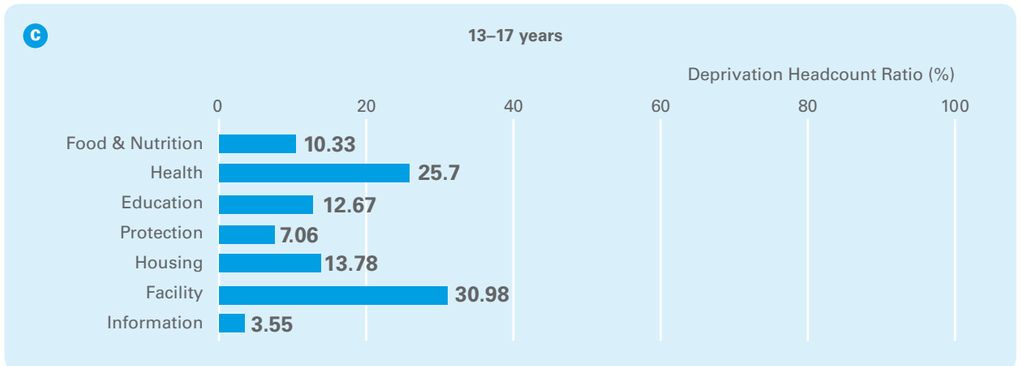
3.1.1 Food and nutrition dimension

In Indonesia, more than one-in-four children under six months of age are not exclusively breastfed (26.03 per cent). Furthermore, 40.67

Figure 4. Deprivation rates by dimension







Source: Authors' calculation using Susenas, March 2023

per cent of children aged 6–23 months do not meet the international WHO standards on minimal dietary diversity. Another 15.43 per cent of children aged 0–4 years are deprived in the "Calorie consumption" indicator. Subsequently, 25.53 per cent of children this age face deprivation in the food and nutrition dimension.

For older age groups, food and nutrition is measured by the "Calorie consumption". The deprivation rate stands at 11.63 per cent for children aged 5–12 years and at 10.33 per cent for children aged 13–17 years, respectively.

Box 1. Children's eating habits

Children's eating habits

Unhealthy eating habits of children aged under-five either stem from parental food habits or parental negligence. However, for older children – particularly school aged, their food habits are more preferential. Children were found to skip meals to purchase foods of their choice during school hours.

In terms of protein consumption, saltwater fish were found to be most unaffordable, even in coastal areas such as Kota Surabaya and Kabupaten LombokTengah. Children living in poor households in Kota Surabaya were more likely to consume chicken or processed fish as it is affordable and widely available in local food stalls, namely *warteg*. In Kabupaten LombokTengah, children living in poverty consumed plant-based protein and to some extent their parents fished to provide freshwater fish. Chicken was rarely consumed except during festive events.

3.1.2 Health dimension

More than half of children aged 0–4 years old were found to be deprived in the health dimension. In terms of health, 33.82 per cent of children aged 12–59 months old did not receive a full round of immunizations. Moreover, nearly half of children aged under-five are not covered by health insurance – JKN or other insurance schemes. The proportion of children not covered by health insurance decreases as children grow older, with deprivation levels of 35.09 and 25.7 per cent for children aged 5–12 and 13–17 years, respectively. Looking at the deprivation rates by dimension, approximately six-in-10 children aged 0–4 years suffer from deprivations in health, the second highest level of deprivation for this age group (61.65 per cent). Health also represents one of the highest levels of deprivation for older children.

Box 2. Health insurance coverage

Qualitative evidence shows that, despite parental awareness, young children living in poverty have low perceived knowledge of their deprivation and right to health insurance. Nevertheless, older children – particularly those in senior high school, are more likely to be aware of its importance.

Qualitative evidence shows that most children from poor families were covered by the National Health Insurance (JKN) programme by becoming its premium assistance beneficiaries (PBI). Some children were found to be deprived of health insurance due to the lack of registry documentation (birth certificate and family card) to be eligible for the JKN programme. Furthermore, in Kota Surabaya, children and parents can still access community health centres (*puskesmas*), but with incurring transportation costs. This is likely the case for respondents who only know about JKN and are not aware of the availability of Jamkesda at their location. In Kabupaten LombokTengah, shamans (*belian or dukun* and *mantri nurses*), become the main option for accessing health care.[8]

[8] Mantri nurses are mostly male and stationed in rural areas when there is lack of doctors (Juanastama et al., 2021).

3.1.3 Education dimension

Of children aged 3–4 years, a striking 86.25 per cent do not attend any preschool education. This is also the case for 39.83 per cent of children aged 5-6 years old. On the other hand, education deprivation rates among older children with regards to "School participation", "Completion of primary education", and "Completion of secondary education" are much lower. Indeed, 0.84 and 10.35 per cent of children aged 7–12 and 13–17 years, respectively, do not attend school. In addition, 2.17 per cent of children aged 13–15 years did not complete primary education, while 10.91 per cent of children aged 16–17 years did not complete secondary education.

3.1.4 Protection dimension

As already alluded to in this report, access to some nutrition, healthcare and education services is conditional on a child's birth registration. Deprivation in the protection dimension across children's age groups is mostly driven by the absence of birth certificates and appears higher in younger age groups. Deprivation rates are highest among the youngest age group (0–4 years), with 16.56 per cent of children this age deprived. On the other hand, 5.14 and 5.18 per cent of children aged 5–12 and 13–17 years, respectively, experience deprivation in this indicator.

Box 3. Challenges to access early childhood education

Attitudes towards early childhood education were found to be positive among the qualitative study respondents as most children in Kota Surabaya were enrolled in preschool education. However, the study found challenges with enrolment rates in the under-five age group. While preschools require admissions of children aged 5–6 years, parents preferred enrolling children in kindergarten before five years old. Another factor that contributed to the higher preschool deprivation rate, notably in rural areas such as Kabupaten LombokTengah, was the accessibility from homes or indirect expenses associated with enrolment, such as transportation. Deprivation in education was relatively low for older children compared to other dimensions (see Figures 4b and 4c). The deprivation rate for school participation of children aged 7–12 years (0.84 per cent) is much lower than for the 13–17 year age group (10.35 per cent) (Table 3). This is due to access to primary school education being almost universal with gender parity (BPS, 2022b).

Although school attendance among child respondents was high, the study also found out-of-school children in Kota Surabaya and Kabupaten LombokTengah. In Kota Surabaya, economic factors impacting families' ability to afford school fees had pushed children out of school. This was particularly the case for children living in poor households who attended private schools due to limited public schools near their homes. Whereas in Kabupaten LombokTengah, most cases of out-of-school children were those in marital unions or children with disabilities, as many were driven out of school due to hostile bullying environments.

For children aged 10–17 years, two additional indicators were included in the analysis: "Child marriage" and "Child labour". Less than 1 per cent of children are or have been married, while 0.83 and 1.94 per cent of children aged 10–12 and 13–17 years, respectively are engaged in child labour.

While child labour was not included in the MODA analysis due to lack of data, it remains a determinant of child deprivation in the context of child protection. According to ILOSTAT (2002), a child's age, type of work performed, and working environment all play a role in determining what constitutes child labour.

Box 4. Challenges in child protection

Challenges to attain rights in birth registration

Qualitative findings found the absence of birth certificates was a source of deprivation in other dimensions, particularly to register for health insurance. For children living in poverty, affordability and access to civil registration offices were key barriers to obtaining birth certificates.

Child marriage and child labour

Mirroring quantitative findings, child marriage was prevalent among children aged 13–17 years in Kota Surabaya and Kabupaten Lombok Tengah. Reasons for child marriage differed in the two study areas. In Kota Surabaya, it occurred due to pre-marital pregnancies, while in Kabupaten Lombok Tengah it was found to be part of a cultural tradition known as *culik* or the practice of "kidnapping a girl child to be married".

Both drivers of child marriage result in deprivation of school participation. However, it affects girls' and boys' participation in school differently. Girls can no longer attend school after marriage, in contrast to boys who are permitted to continue their education.

The qualitative study found child labour among children in older age groups, whereas those aged 5–12 years were more involved in domestic chores. In Kabupaten Lombok's rural areas, children were primarily found working in agricultural settings, supporting parents in rice fields. Additionally, children also worked in their parents' grocery stalls or motor workshops. Similarly, in Kota Surabaya's urban areas, most children worked in the service sector, including parents' grocery stores or street food stalls. Most working children came from low-income families to earn additional household income.

Other forms of deprivation in the protection dimension

Children deprived in the protection dimension, but not captured through Susenas data, are those exposed to bullying in school or children's neighbourhood environment. Exposure to bullying and violence was found to be common in the lives of child participants in Kota Surabaya and Kabupaten Lombok Tengah. Bullying commonly involves an imbalance of social or physical power. When bullying happens, children do not always speak up, notably when they are under threat.

Several bullying behaviours were experienced by children in the two locations, such as verbal bullying (mocking using parents' names, a child's lack of material possessions or physical appearance), physical bullying (pinching, hitting), and asking for money by using physical force. In Kota Surabaya, the study found a case of a child who was beaten for not handing over Rp5,000[9].

Children with disabilities are vulnerable to bullying due to unequal physical power. Field findings in Kabupaten Lombok Tengah show that bullying experienced by children with disabilities caused them to drop out of school. This was experienced by KH (female, 15 years old). She has a physical disability in her legs and suffers from a type of cerebral palsy that affects her movement. She must walk with a cane. She was often bullied at school where her cane was taken away by other students. The resulting feelings of sadness made KH stop attending school.

> *"Even though bullying does not happen every day, it has happened several times. I never told my father about the bullying. I once reported one of my schoolmates, who hid my cane, to my teacher. That schoolmate was then scolded by the teacher and I received my cane back. But it did not stop there, my other schoolmates, whether a boy or a girl, often mock me because of my leg condition. My schoolmates' attitudes were among the reasons for me not wanting to go to school again."*
> **(Interview, female, 15 years old, Kabupaten Lombok Tengah)**

Another case of bullying children with disabilities was experienced by SA (male, 11 years old) in Kabupaten Lombok Tengah. He is deaf and speech impaired. SA experienced physical bullying by a group of children. He was tied to a window grill, and his mouth was filled with chili and taped. His grandfather described the bullying.

> *"He was tied to the window grill. His mouth was filled with chili and covered with sellotape. This abuse was video recorded by the children. It went viral. Then later we found out."*
> **(HK, 70 years old, Kabupaten Lombok Tengah)**

3.1.5 Housing dimension

Similar deprivation rates are observed in the housing dimension across all age groups, ranging from 13.78 per cent for children aged 13–17 years to 15.3 per cent for children aged 0–4 years. The dimension is composed of the indicators "Overcrowding" and "Floor type". Approximately one-in-10 children live in overcrowded households, with less than 7.2m^2 floor area per capita, while less than 4 per cent live in households without a covered floor.

[9] 0.32US$. Exchange rate used : 1 USD = 15,799 IDR. Exchange rates are based on UN Operational Rates of Exhange on 11/15/2024.

Box 5. Overcrowding and leaky roofs

Many children in poverty reported living in overcrowded houses without their own rooms, sometimes sharing a bed with others, resulting in discordance with household members due to a lack of privacy. In terms of floor materials, most children in Kabupaten Lombok Tengah lived in houses with cement floors and walls made of concrete or bamboo. The study found cases of children living in houses with dirt floors. However, such floor materials were not considered a deprivation as they are culturally acceptable in Kabupaten Lombok Tengah. In contrast, in Kota Surabaya children typically live in houses with ceramic floors and concrete walls.

Children living in poverty reported feeling deprived in the housing dimension when living under leaky roofs and in overcrowded houses. These children also stated that the use of asbestos roofs in houses caused discomfort as they produced more heat during the day.

3.1.6 Facilities dimension

The facilities dimension indicates relatively high levels of deprivation, 29.43 per cent for children aged 0–4 years, 30.48 per cent for children aged 5–12 years and 30.98 per cent for children aged 13–17 years. In particular, 18 per cent of children do not have access to improved sanitation facilities. Moreover,11.45 per cent live in households using solid cooking fuels. Less than one-in-10 children do not have access to improved drinking water sources. In response, awareness campaigns need to be scaled-up to inform households on the importance of using improved water and sanitation facilities and adequate cooking fuels for children's welfare. Moreover, alternative financing should be explored, including public-private partnerships, to ensue equitable access to renewable energy and efficient energy use in remote areas.

Box 6. Drinking water and basic sanitation

Qualitative evidence revealed that drinking water sources for households in Kabupaten Lombok Tengah and Kota Surabaya included piped water from the water supply company (PDAM), protected drilled and dug wells, and refillable drinking water gallons. Nevertheless, water supplies were disrupted during droughts in Kabupaten Lombok Tengah and PDAM supply delays in the two study areas. Some children also complained of unhygienic drinking water when finding mosquito larvae in their drinks.

Sanitation facilities differed between the two study areas. Most child informants living in poverty in Kota Surabaya could access private bathrooms with septic tanks within their houses. In contrast, poor families in Kabupaten Lombok Tengah had simple-structured bathrooms outside of the main house. Moreover, open defecation was still commonly practiced as some did not have access to sanitation facilities and were forced to defecate in yards, rice fields, or beaches.

Deprivation in the facilities dimension based on sanitation indicators was significantly felt by children living in poverty and with a physical disability. As such, they could not access proper toilets nor were attempts made by their parents to modify sanitation facilities to their child's condition.

In terms of cooking fuel, most children in Kota Surabaya and Kabupaten Lombok Tengah live in households that use liquefied petroleum gas (LPG), in the form of a 3kg tank, to cook. Parents in Kabupaten Lombok Tengah reported challenges in using LPG and switched back to firewood when LPG prices increased, while scarcity occurred in local supply. Furthermore, apart from cooking fuel, families in Kota Surabaya noted concerns about cooking as it was not possible to install air ventilation devices in densely populated residences.

3.1.7 Information dimension

This dimension, measured by "Internet access" and "Mobile phone", presents the lowest levels of deprivation for all age groups. For example, 4.59 per cent of children under-five live in households without internet access. In addition, 2.28 per cent live in households where no household members own a mobile phone. Similar results are found for the other age groups. Across the three age groups, the information dimension deprivation rate is relatively low. This could be driven by the rapid growth in mobile phone usage and Indonesia's large population of internet users (BPS, 2022c).

Box 7. Limited internet access

In Susenas, there is limited data revealing the extent of internet and mobile phone usage to access child appropriate material. The qualitative method in this study was used to capture whether having internet and mobile phone access is associated with access to useful information. In Kota Surabaya and Kabupaten Lombok Tengah, parents of younger children aged 0–4 years admitted using their mobile devices to distract children from tantrums. Children in older age groups used mobile phones and internet access for gaming, social media, and watching videos. Digital access was rarely used for school purposes which varied from receiving/submitting assignments, school WhatsApp group communications, and research.

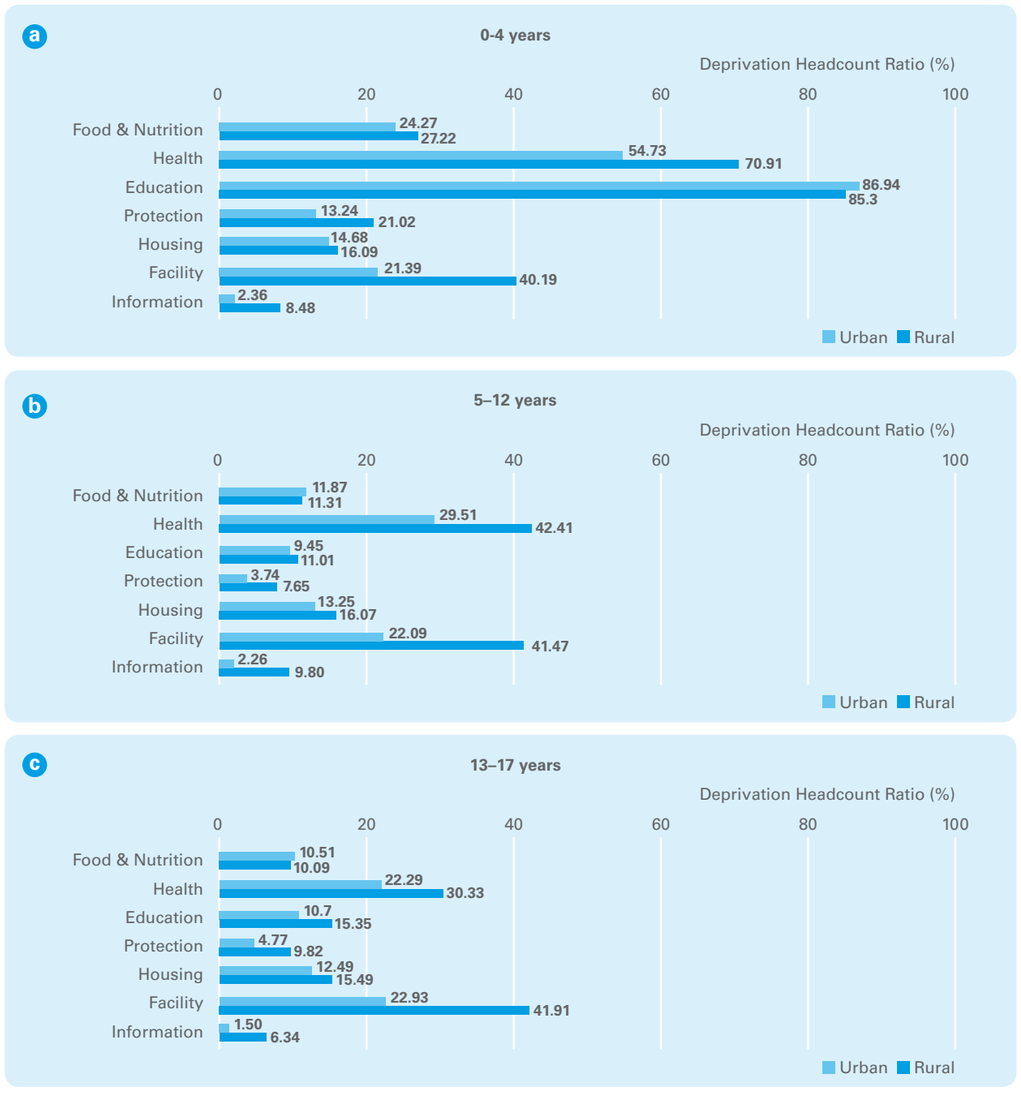
However, in urban or rural areas when households did not have personal access to the internet, children and parents from poor families accessed it through rented public wifi. Despite slow connections, families willingly spent Rp3,000-5,000[10] daily for 6–12 hours of public wifi.

[10] 0.19-0.32US$. Exchange rate used : 1 USD = 15,799 IDR. Exchange rates are based on UN Operational Rates of Exhange on 11/15/2024.

3.2 Dimension headcounts by household characteristics

The overall status of deprivations can mask disparities faced by groups of children based on their geographical, household and individual characteristics. The following section explores the results disaggregated by area of residence and gender of the household head. As shown in Figure 5, incidences of deprivations vary depending on areas of residence. In particular, children living in rural areas presented higher deprivation rates in almost all dimensions analyzed, across all age groups. The largest discrepancies were observed for the health and facility dimensions. For example, 29.51 per cent of children aged 5–12 years living in urban areas face deprivation in health compared to 42.41 per cent of rural children.

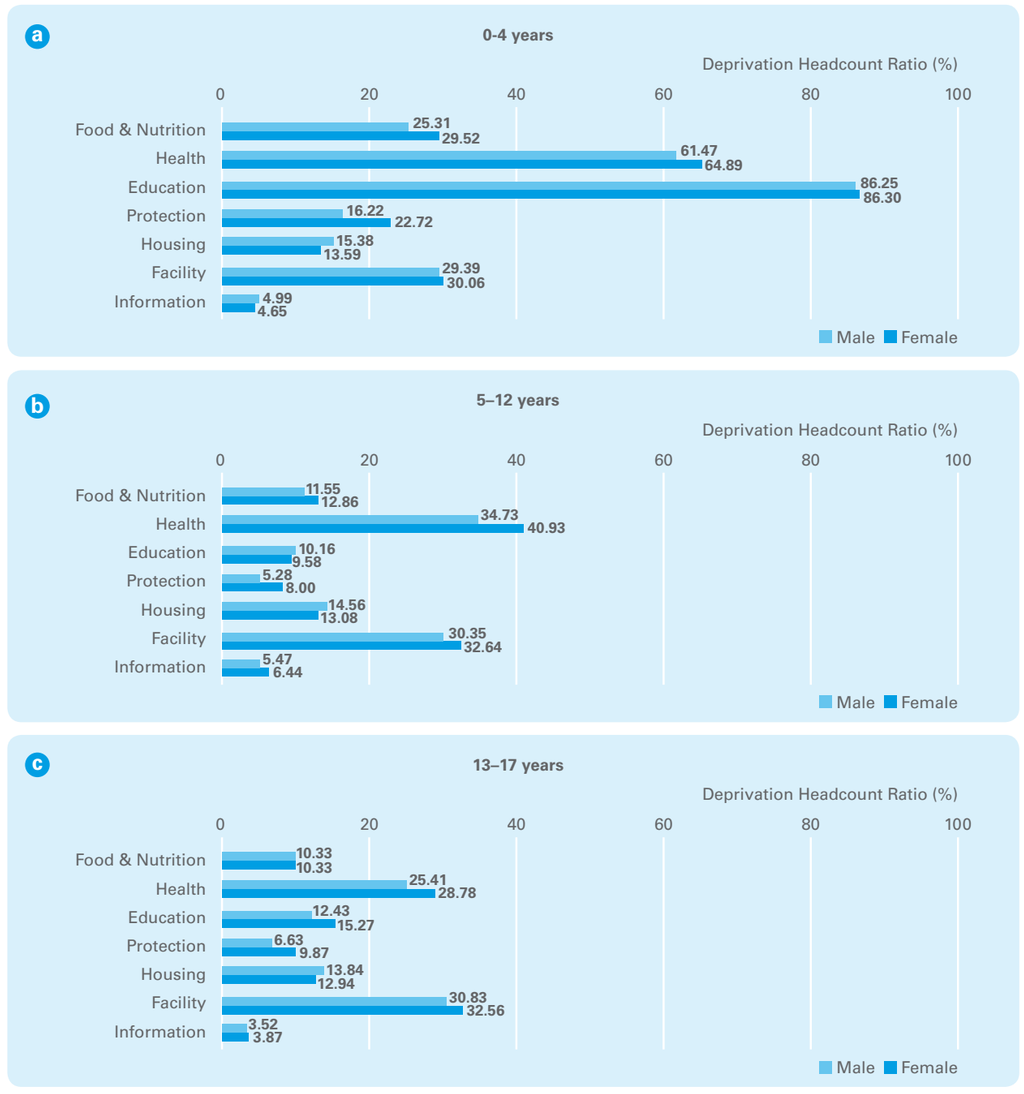
Figure 5. Deprivation rates by dimension and area of residence



Source: Authors' calculation using Susenas, March 2023

Birth registration remains the key contributor to protection dimension deprivation across all age groups. Based on studies in developing countries, children in rural areas (Adi et al., 2015) and those living in female-headed households are less likely to have birth certificates (Candia, 2019). However, the protection dimension deprivation rate becomes relatively lower when children reach school age (5–17 years old) as birth certificates have usually been processed to enrol in formal school programmes. In Indonesia, birth registration is also necessary for access to health insurance, particularly JKN. Furthermore, slightly higher deprivation rates are found among children living in female-headed households than those in male-headed households, in all dimensions except housing (see Figure 6).

Figure 6. Deprivation rates by dimension and gender of the household head



Source: Authors' calculation using Susenas, March 2023

4. Multidimensional Deprivation Analysis

This section presents results for the multidimensional deprivation analysis, revealing the proportion of children who are simultaneously deprived in multiple dimensions. In addition, the severity of deprivations that children experience is assessed.

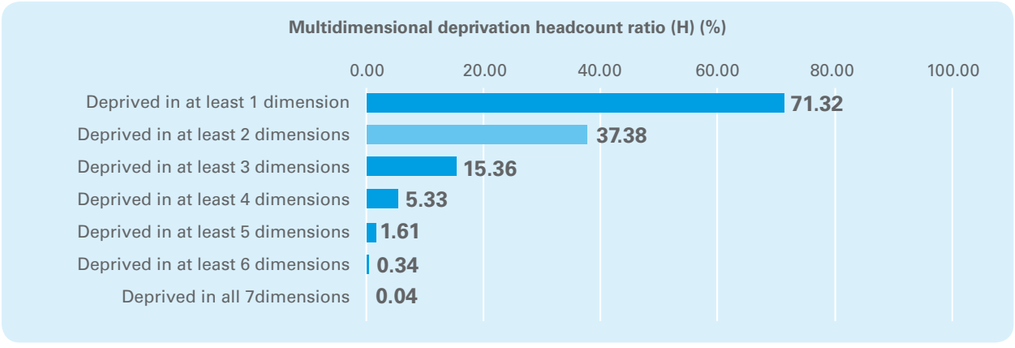
4.1 Multidimensional poverty headcount distribution (0–17 years)

It is observed that deprivations are often multiple and experienced simultaneously. More than seven-in-10 children aged 0–17 years in Indonesia suffer from one deprivation (71.32 per cent). Moreover, 37.38 per cent are deprived in at least two dimensions at the same time. In this report, children deprived in at least two dimensions of their welfare are considered multidimensionally deprived. Few children experience simultaneous deprivations in five, six or seven dimensions.

per cent in rural areas. In addition, striking differences between regions were observed, hence the focus of this analysis.

At the regional level, children living in Maluku and Papua present the highest multidimensional deprivation rates. However, large numbers of multidimensionally deprived children live in Jawa. Eight-in-10 children living in Maluku and Papua islands are multidimensionally deprived, followed by children living in Balinustra Island where a multidimensional deprivation rate of 48.77 per cent is observed. The latter percentage is mainly driven by the high rate of multidimensional deprivation in the Nusa Tenggara Timur province (78.02 per cent). In Sulawesi, Sumatera and Kalimantan, 35.73, 38.02 and 38.21 per cent of children, respectively, are multidimensionally deprived. Moreover, Jawa presents the lowest multidimensional deprivation rate of 33.28 per cent. However, in terms of absolute numbers, Jawa and Sumatra present the highest number

Figure 7. Multidimensional deprivation headcount ratio at the national level, 0–17 years



Source: Authors' calculation using Susenas, March 2023

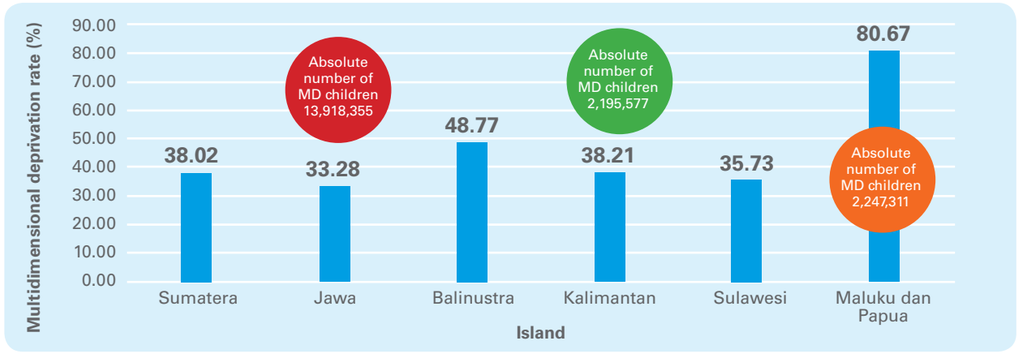
4.1.1 Profile of multidimensionally deprived children

The share of children who suffer from multidimensional deprivation varies by geographic location and is higher in rural areas than urban ones. Large discrepancies are observed based on the area of residence, with a multidimensional deprivation incidence rate of 30.81 per cent in urban areas and 46.10

of multidimensionally deprived children, 13.9 million and 7.14 million, respectively. In Maluku dan Papua, approximately 2,247,311 children are identified as multidimensionally deprived. Kalimantan indicates the lowest absolute number of multidimensionally deprived children (1,980,670)

Children living in households belonging to the poorest wealth quintile show significantly

Figure 8. Multidimensional deprivation rates (%) by region and number of multidimensionally deprived (MD) children for selected regions, 0-17 years



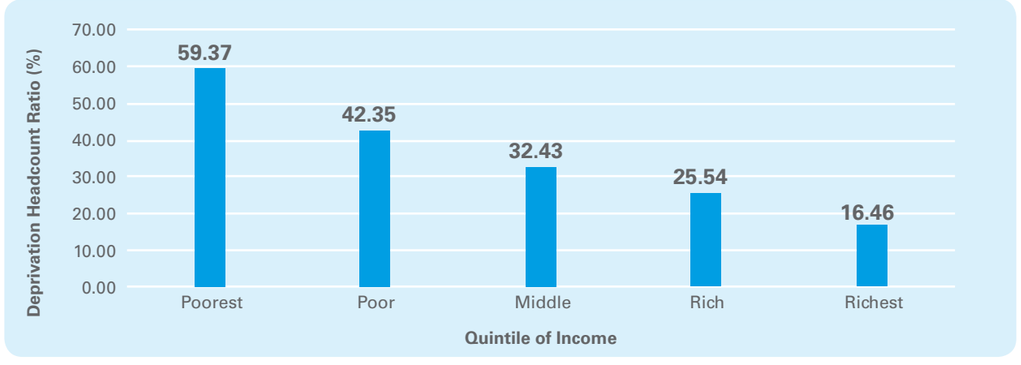
Source: Authors' calculation using Susenas, March 2023

higher multidimensional deprivation rates than children living in wealthier households. Nearly six-in-10 children (59.37 per cent) from the poorest wealth quintile are multidimensionally deprived compared to 25.54 and 16.46 per cent of children in the second richest and richest wealth quintiles, respectively (see Figure 9).

Higher multidimensional child deprivation is associated with lower education levels of household heads. The education level of the household head is associated with deprivation. Approximately 64.56 per cent of children living in households headed by someone who did not attend school are multidimensionally deprived compared to 20.94 per cent of children with household heads who attained tertiary education.

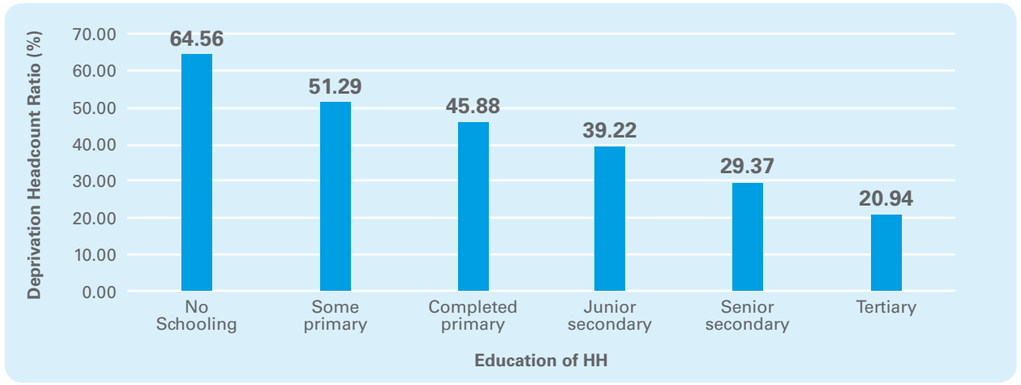
From a gender perspective, a slightly larger proportion of children living in female-headed households are multidimensionally deprived compared to those living in male-headed households. Adopting a gendered disaggregation of results allows for gender equality-focused advocacy . However, based on 2023 Susenas data, no significant differences between girls and boys are observed when it comes to multidimensional poverty levels. Gendered experiences of deprivation might not be sufficiently reflected in indicators available from the database. This

Figure 9. Multidimensional deprivation rates (%) by household's wealth quintile, 0–17 years



Source: Authors' calculation using Susenas, March 2023

Figure 10. Multidimensional deprivation rates (%) by education level of the household head, 0–17 years



Source: Authors' calculation using Susenas, March 2023

observation highlights the need for further research on the dynamics at work in the experiences of deprivation by girls and boys in Indonesia.

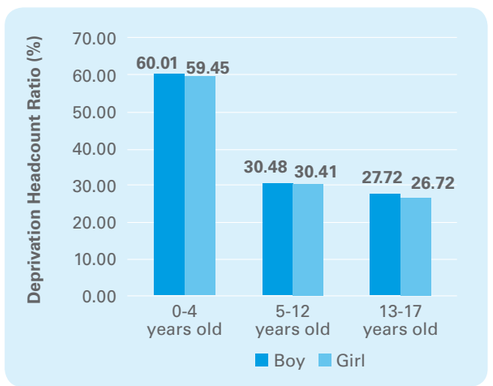
However, 38.68 per cent of children living in female-headed households are multidimensionally deprived compared to 37.28 per cent of children with male household heads. To make meaningful deductions from these figures, it is important to control for the share of male versus female-headed households that are mono-parental (or constituted by one working aged adult only) or not.

4.1.2 Overlaps between multidimensional and monetary poverty

In Indonesia, more than three times as many children are multidimensionally deprived than those living in monetary poor households. In 2023, at the national level, 11.78 per cent of children lived in monetary poor households. Among them, 69.61 per cent were monetary poor and multidimensionally deprived at the same time. On the other hand, almost four-in-10 children were multidimensionally deprived (37.38 per cent, 29.8 million). This means they do not have access to goods and/or services in at least two domains of their wellbeing (facing deprivations in at least two of the dimensions of welfare). The differences are particularly striking for the youngest age group (0–4 years), where 59.7 per cent of children suffered from multidimensional deprivation compared to a monetary poverty rate of 13.2 per cent. Multidimensional deprivation highlights a wider range of unfulfilled needs for children when compared to monetary poverty.

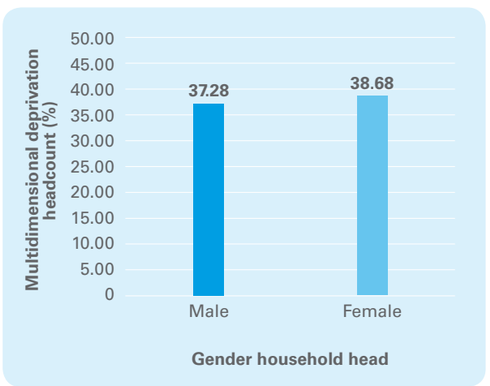
This illustrates that children living in non-monetary poor households do not always have access to the basic services and goods they need to grow (and often for fulfilling their rights), due to the unavailability of services or infrastructure, lack of information, socio-cultural factors or other reasons.[11] In addition to the country's reporting requirements, under the SDGs, poverty analyses are often used to inform targeting criteria for administering broader social sector initiatives. Focusing only on insights generated by monetary poverty analyses risks overshadowing the similarly dire situation faced by children suffering from deprivations in several dimensions of their welfare.

Figure 11. Multidimensional deprivation rates (%) by sex of the child and age groups



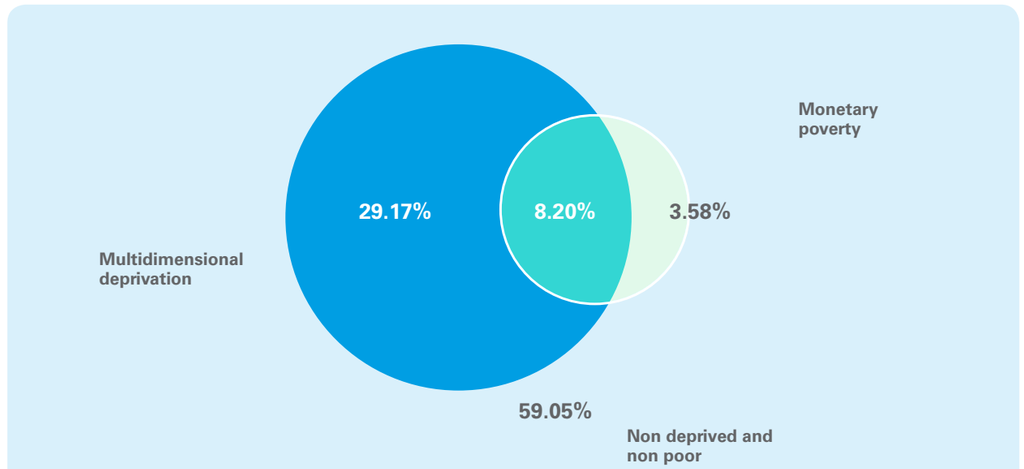
Source: Authors' calculation using Susenas, March 2023

Figure 12. Multidimensional deprivation rates (%) by sex of the household head, 0–17 years



Source: Authors' calculation using Susenas, March 2023

Figure 13. Overlaps between monetary poverty and multidimensional deprivation, 0–17 years



Approximately 8.20 per cent of Indonesian children (6.5 million) are both monetary poor and multidimensionally deprived. Children living in monetary poor households are not always deprived and vice versa: 3.58 per cent of children are monetary poor, but not multidimensionally deprived. Three-in-10 children are multidimensionally deprived, but not monetary poor (29.17 per cent). Nearly six-in-10 children are not monetary poor nor multidimensionally deprived (59.05 per cent).

Geographical disparities

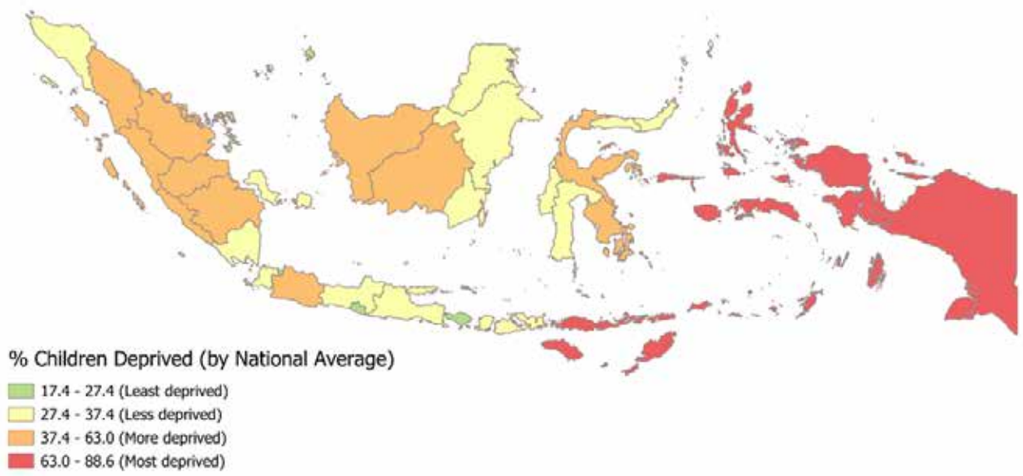
The following maps show multidimensional deprivation and monetary poverty rates for children aged 0–17 years by province (see Figure 14 and Figure 15). **The islands of Papua and Nusa Tenggara host the largest share of multidimensionally deprived and monetarily poor children.** The situation is more nuanced for the Maluku Islands, where

[11] de Neubourg, de Miliano, and Plavgo, 2014.

high multidimensional deprivation levels are observed across the islands. On the other hand, the northern part of Maluku Islands fairs among the best when it comes to monetary poverty. In Central and East Java, incidences of monetary poverty are on the medium-high side, while the proportion of multidimensional deprived children tends to be low-medium. Opposite findings are observed in West Java.

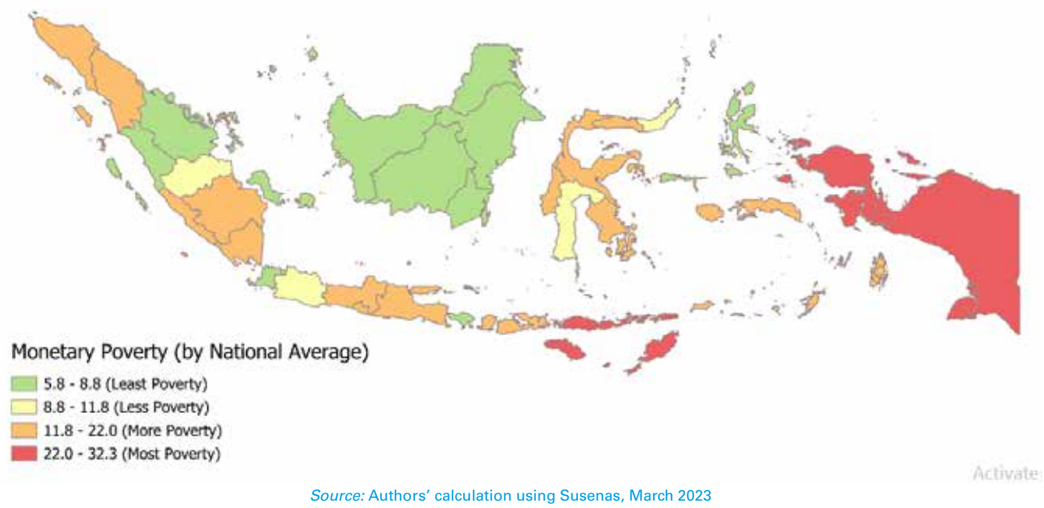
Further diverging observations are made for Sumatera Island. These results show that multidimensional deprivation is not always associated with monetary poverty, with regions among the best in terms of deprivation, but among the worst performing when it comes to monetary poverty and vice versa.

Figure 14. Child multidimensional deprivation rate (%) by province, 0–17 years



Source: Authors' calculation using Susenas, March 2023

Figure 15. Monetary child poverty rate (%) by province, 0–17 years



Source: Authors' calculation using Susenas, March 2023

4.2 Multidimensional poverty headcount, intensity and severity index

The deprivation indices can provide information on the severity of deprivations experienced by children. First, the multidimensional deprivation headcount (H) (%) represents the proportion of multidimensionally deprived children. Then, the intensity of deprivation is measured by the average number of deprivations among the deprived (A). Finally, the adjusted multidimensional deprivation headcount (M0) takes into account both the prevalence and intensity of deprivation, creating an index ranging from 0 to 1. This index cannot by interpreted on its own and is often used to compare population groups and geographical regions. The closer the index is to one, the higher the levels of multidimensional deprivation.

In Indonesia, 37.38 per cent of children are multidimensionally deprived. On average, they experience deprivations in 37.24 per cent of the seven dimensions analyzed. Incidences of multidimensional deprivations are significantly higher in rural areas than urban ones (46.10 versus 30.81 per cent). However, the severity of deprivation among multidimensionally deprived children is similar in both areas (38.90 per cent in rural areas and 35.38 per cent in urban areas). At the island level, eight-in-10 children living in Maluku dan Papua suffer from multidimensional deprivations, with an average deprivation intensity of 48.60 per cent. Jawa, on the other hand, presents the lowest multidimensional deprivation levels.

Table 5 disaggregates the results by age group. The multidimensional deprivation rate (H) is the highest for children under the age of five years. Indeed, 59.73 per cent experiences

Table 4. Multidimensional deprivation indices, 0–17 years, using a threshold k=2

Sample	Multidimensional deprivation headcount (H)*, %	Average no. of deprivations among the deprived (A), %	Adjusted multidimensional deprivation headcount (M^0)
National	37.38	37.24	0.139
Rural	46.10	38.90	0.179
Urban	30.81	35.38	0.109
Sumatera	38.02	36.39	0.138
Jawa	33.28	35.43	0.118
Balinustra	48.77	41.86	0.204
Kalimantan	38.21	36.22	0.138
Sulawesi	35.73	37.09	0.133
Maluku dan Papua	80.67	48.60	0.392

Source: Authors' calculation using Susenas, March 2023

Table 5. Multidimensional deprivation indices by each age group, using a threshold k=2

Sample	Multidimensional deprivation headcount (H)*, %	Average no. of deprivations among the deprived (A), %	Adjusted multidimensional deprivation headcount (M^0)
0–4 years	59.73	38.81	0.232
5–12 years	30.45	36.13	0.110
13–17 years	27.23	35.96	0.098

Source: Authors' calculation using Susenas, March 2023

deprivations in at least two dimensions of their welfare. The prevalence of multidimensional deprivation decreases among older age groups: 30.45 per cent of children aged 5–12 years and 27.23per cent of those aged 13–17 years are multidimensionally deprived. However, the intensity of deprivation is similar across age groups, with multidimensionally deprived children, on average, facing deprivation in 36.13–38.81 per cent of the seven dimensions analyzed.

4.3 Overlap analyses

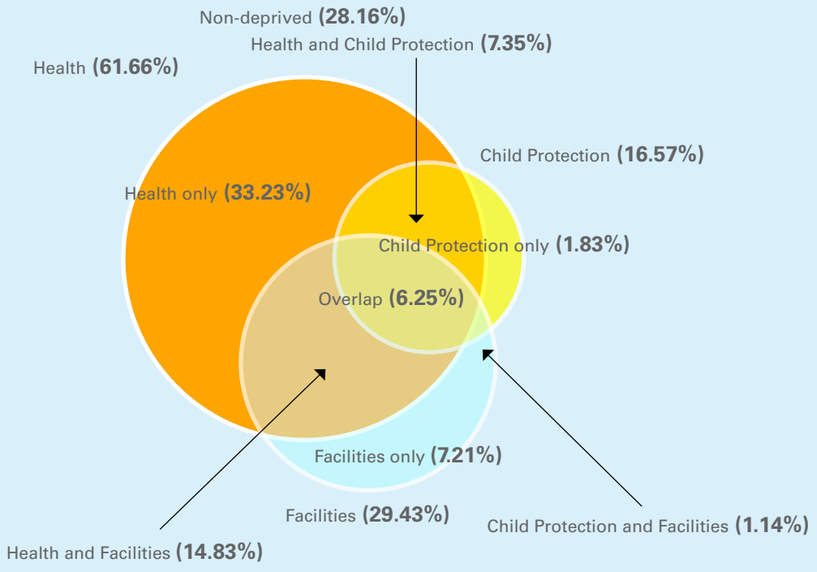
4.3.1 Three-way overlap

The three-way overlap analysis presents the overlap of combinations of three dimensions. This report spotlights one example per age group, using a venn diagram, which displays the proportion of children deprived in three, two and one dimensions only and the percentage of children not deprived in any of the three dimensions analyzed. The selection of combinations is based on the relevance of dimensions for each age group and level of deprivation. The results for all combinations are shown in Annex 2.

For all age groups, the overlap between dimensions observed was relatively low. Additional research needs to be conducted on reasons why this is the case.

Figure 16 displays overlaps between the health, protection and facilities dimensions for children under-five. Approximately 6.25 per cent suffer from simultaneous deprivations in all three dimensions. Furthermore, 14.83 per cent of children at this age are deprived in health and facilities at the same time, but not in the protection dimension. In general, health deprivations affect a larger share of children. Nearly three-in-10 children do not face in any deprivations of these dimensions (28.16 per cent). Nutrition was not included here because of its limited overlaps with other dimensions.

Figure 16. Three-way overlaps between the health, protection and facilities dimensions, 0–4 years

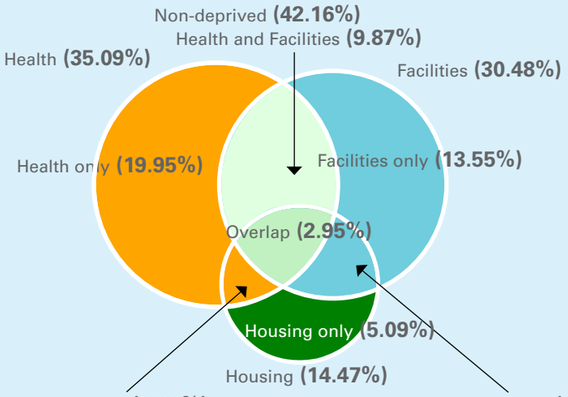


Source: Authors' calculation using Susenas, March 2023

Around 2.95 per cent of children aged 5–12 years are deprived in the health, facilities and housing dimensions at the same time (see Figure 17). In addition, 9.87 per cent of children of this age suffer from deprivations in health and facilities, but not in the housing dimension. One-in-five children is deprived in the health dimension only. In this age group, 42.16 per cent do not face any deprivations in the three dimensions analyzed.

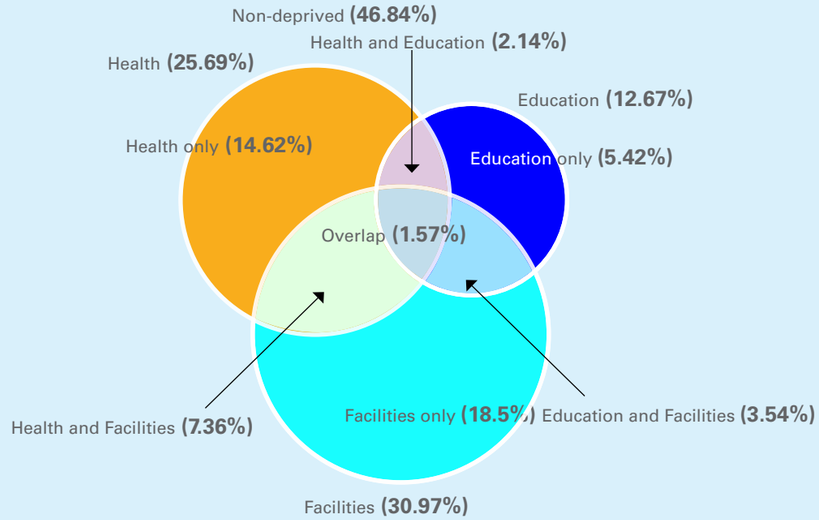
For children aged 13–17 years, the combination between the health, facilities and housing dimensions is studied (Figure 18). Less than 2 per cent of children experienced simultaneous deprivations in all three dimensions (1.57 per cent). A larger proportion of children of this age were deprived in health or facilities only (14.62 and 18.50 per cent, respectively). Almost one-in-two children is not deprived in any of the dimensions (46.84 per cent).

Figure 17. Three-way overlap between the health, facilities and housing dimensions, 5–12 years



Source: Authors' calculation using Susenas, March 2023

Figure 18. Three-way overlap between the health, education and facilities dimensions, 13–17 years

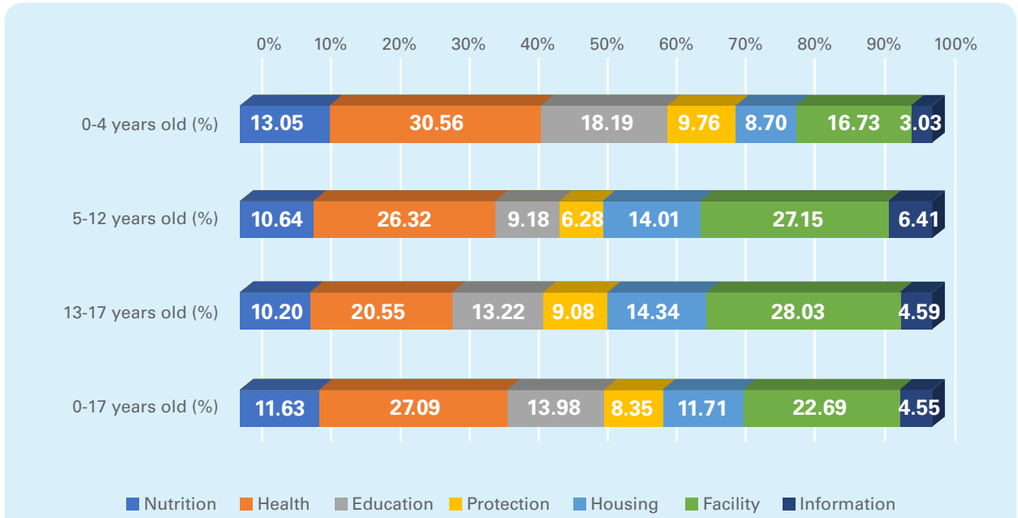


Source: Authors' calculation using Susenas, March 2023

4.4 Contribution of dimensions to child multidimensional deprivation

Figure 19illustrates the contribution of each dimension to the adjusted multidimensional deprivation headcount (M0) at the national level, using a deprivation cutoff of 2. For all age groups, the health dimension contributes most to the multidimensional deprivation levels among children, while the facility dimension is the second largest contributor for older children (27.15 and 28.03 per cent, respectively).

Figure 19. Contribution to M (in %) by age group with deprivation cutoff (k=2)



Source: Authors' calculation using Susenas, March 2023

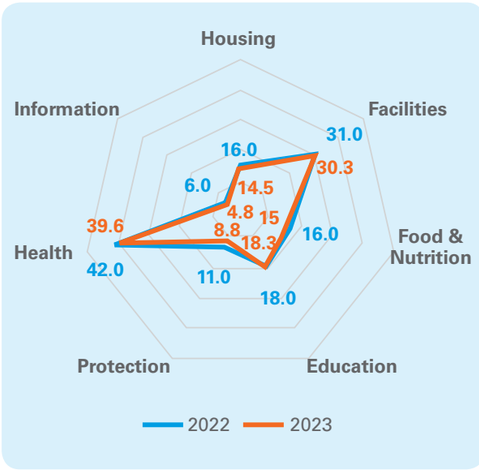
5. Trend Analysis

5.1 Trend analysis at the dimension level

Indonesia has made strides in alleviating poverty in its many forms. In order to quantify the progress, this report analyses dimensional trends from 2022 and 2023. From 2022 to 2023, the deprivation rates decreased for all dimensions analyzed, except for education. In particular, the health deprivation fell by 2.4 percentage points, while the share of children deprived in protection in 2022 was 11.0 per cent compared to 8.8 per cent in 2023. Deprivations in the education dimension slightly increased with 0.3 percentage points (18.0 per cent in 2022 versus 18.3 per cent in 2023).

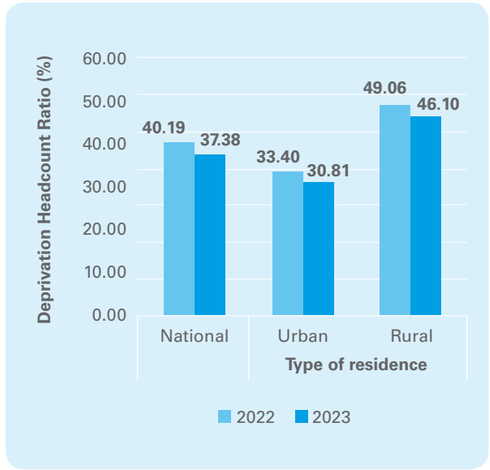
multidimensional deprivation headcount ratio at the national level and by area of residence for both years. From 2022 to 2023, multidimensional deprivations in Indonesia fell by 2.82 percentage points, from 40.19 to 37.38 per cent, respectively. In rural areas, a difference of 2.96 percentage points is recorded, while multidimensional deprivation shifted from 33.40 per cent in 2022 to 30.81 per cent in 2023 in urban areas, a decline of approximately 2.59 percentage points. However, the comparable downward trend by area of residence should be nuanced. The incidences of multidimensional deprivation in urban areas is significantly lower, indicating a more pronounced change in multidimensional deprivation rates from 2022 to 2023.

Figure 20. Deprivation headcount ratio (%) by each dimension in 2022 and 2023, 0–17 years



Source: Authors' calculation using Susenas, March 2023

Figure 21. Multidimensional deprivation headcount ratio (H) (%) in 2022 and 2023, using a threshold of k=2, 0–17 years



Source: Authors' calculation using Susenas, March 2023

5.2 Trend analysis of multidimensional child deprivation

The results of this analysis, based on Susenas 2023, show a decrease in the share of multidimensionally deprived children compared to 2022. Figure 21 shows the

6. Beyond Moda: Children's Aspirations

The MODA framework narrows down the focus to fulfillment of child rights rather than children's aspirations. However, this section examines poverty and living conditions from children's perspective and aspirations. The relationship between aspirations and living conditions is complex and multifaceted. Some argue that low aspiration leads to poverty, while others believe that low aspiration is the result of poverty (Ibrahim, 2011; Dalton, Ghosal, and Mani, 2016).

Figure 22. A tree of hope

Child participants from Kabupaten Lombok Tengah voiced their aspirations during focus group discussions. Many expressed desires for improved housing conditions, such as having their own rooms with better interior designs and enhanced flooring. They also harboured hopes for a brighter future and making their parents proud.

Child participants from Kabupaten Lombok Tengah voiced their aspirations during focus group discussions. Many expressed desires for improved housing conditions, such as having their own rooms with better interior designs and enhanced flooring. They also harboured hopes for a brighter future and making their parents proud.

It is important to acknowledge children's aspirations as they play a crucial role in shaping their futures. Aspirations shape important future-oriented behaviours (Carter-Wall and Whitfield, 2012). Remedial action based on external assessments alone is insufficient. Those who are trapped in poverty also require encouragement to pursue greater goals. Thus, the most effective policy interventions for children living in poverty or deprivation should consider both children's aspirations or their internal views and external assessments (Dalton, Ghosal, and Mani, 2016).

Through discussions and elaborations of children's feelings towards the seven dimensions of deprivation, the following principal themes were identified in relation to what older children living in poverty or deprivation most aspire to: education, leisure time, and housing.

6.1 Education

In general, although children commonly drop out of school due to economic challenges, early marriage and bullying trauma, many still aspire to return to school. For those bullied, the lingering trauma builds hesitancy to return. A few child study participants expressed a desire to return to school if they could be assured of a bullying-free environment.

> *"It's a bit sad because I haven't been going to school since 2021. I usually envy the others. I cried a lot since 2021, like, 'Oh God, I want to go to school,' even if I don't have the money. In February, my brother said 'Come on, go back to school. I'll pay for it.' But I didn't want to because I was afraid of being bullied. I haven't attended school again. So, I don't want to. I want to switch school. [My brother said,] 'It's okay. I'll pay for the books in installments.' [But] I just don't want to be bullied by my friends."*
> **(IDI, female, out-of-school child, 15 years old, Kota Surabaya)**

> *"I don't want to go back to school [...] unless it offers a more private setting, like one-on-one learning. I can't face being bullied and mocked again."*
> **(IDI, female, child with disability, 15 years old, Kabupaten Lombok Tengah)**

Meanwhile, children in-school aspire to higher education, such as senior high school or university. These aspirations align with their parents' hopes for their children's future. As many informants come from financially disadvantaged backgrounds, affording education is a significant challenge. This concern casts a shadow over their prospects for future education. While older children hope to continue to higher education levels, they often feel hesitant due to economic constraints.

> *"The main reason [I am hesitant to pursue higher education] is financial constraints. Who wouldn't want to study at a higher level if it was possible? Even up to university level, right?"*
> **(Photovoice, female, 16 years old, Kabupaten Lombok Tengah)**

The challenge of financing education becomes more acute for children living far from school, as additional transportation expenses add to existing financial burdens. This situation leads them to seek better transportation access to school, such as free public transportation for students or using a bicycle to reach school. Children also emphasized the pivotal role that teachers play not just in their academic achievements, but also in their overall welfare at school. In Kabupaten Lombok Tengah, some children shared stories about how their entire school experience was influenced by the temperament and behaviour of their teachers. In contrast, during an FGD with parents in Kota Surabaya, concerns were also raised about verbal abuse by teachers. Children expressed a desire for a safe environment regarding communication and disciplinary action by their teachers. They voiced the need to be heard, valued, and protected from use of physical punishment.

Reports of verbal abuse and physical punishment point to physical disciplinary issues in some educational settings. This emphasizes a pressing need for reform, such as enforcing national child protection laws prohibiting the use of verbal, psychological, and physical abuse against children as written in Law no 35 2014. It also underscores the profound influence that teachers have on students – emotional as well as academic. Students' voices and aspirations indicate a broader call for mutual respect in schools.

Box 8. Beyond the classroom: children's experiences of physical disciplinary actions at school

Nearly all child participants in a FGD reported inappropriate behaviour by teachers. Sometimes, it was triggered by not answering questions correctly, arriving late to school, or engaging in playful behaviour during lessons. In response, teachers resorted to physical punishment, hitting the children with hands, feet, books or wooden objects, pinching them or making them stand under the sun in a field. Sinta (a pseudonym) recalled a kindergarten incident where a teacher pinched her, which traumatized her to the extent she no longer wanted to attend school. Meanwhile, Wawan (also a pseudonym) lost his motivation to study due to a teacher who always punished him physically for making mistakes, which also affected his academic performance. These children never told their parents about these incidents, and chose to remain silent. "[We] keep silent."

While this issue is not measured in the MODA dimensions, it highlights children's concerns regarding the broader scope of child protection as they spend a significant portion of their day at school. Attention to bullying should not only encompass peer-to-peer incidents, but also actions perpetrated by teaching staff. Thus, fostering a school environment that ensures safety and prioritizes child protection is essential for all stakeholders, given its pivotal influence on children's welfare.

6.2 Leisure time with family and friends

Children aspire to have more time for recreation and playing with family and friends. This underscores the significance that children place on quality time with family. However, barriers such as financial constraints or the need to work often hinder these opportunities. This underlines the importance of parents being actively involved in their children's lives and attentive to their emotional and social needs.

As such, children may be aware of the economic pressures that families face, as they sometimes associated quality family time with financial resources through linking vacations with the need for more money. This perspective should not lead to children believing that meaningful family time requires money. Therefore, parents need to pay more attention to children and understand that family bonding is not solely tied to monetary experiences.

Additionally, children aspired to spend more face-to-face time with friends, as many have become increasingly attached to digital devices, leading to reduced physical interactions. They also expressed aspirations for increased dedicated spaces for children—areas where they can play and bond with family and friends.

> *"I'd prefer to play without using a cellphone. You know, playing with friends like we used to, like playing hide and seek. Because nowadays, everyone is on their phones."*
> **(IDI, female, out-of-school child, 15 years old, Kota Surabaya)**

> *"[During the holiday] I wish I can play soccer with my friends, but there is no soccer field nearby."*
> **(IDI, male, working child, 15 years old, Kabupaten Lombok Tengah)**

Having access to safe and leisure-focused spaces, such as public parks, was seen as important to children's welfare as it provided an alternative to home and school, which can both be stressful, and gave children somewhere to unwind. Limited play areas or public spaces that support children's activities in the two study areas were apparent.

Children, through photovoice activities, also highlighted household chores that ate into their leisure time (see Figure 23). Children in Kabupaten Lombok Tengah particularly disliked work-related activities. The majority of 'the disliked activities' photos taken were of daily labour activities, such as herding cattle, drying grain, delivering water gallons, and household chores. Nearly all child participants, especially girls, were required to do household chores. It was apparent these children wished to avoid such labour-intensive routines in favour of more free time for leisure activities to improve their daily lives and overall welfare.

> *"How is it possible for [some of] my friends to enjoy their free time without having to worry about things like money or family problems?"*
> **(FGD, female, 16–17 years old group, Kota Surabaya)**

> *"It is so tiring. So tiring working in the rice fields […] I don't like it."*
> **(FGD, female, 16–17 years old group, Kabupaten Lombok Tengah)**

Figure 23. Household chores that children dislike

6.3 Housing

Children aspire to have their own private rooms. Qualitative findings revealed that participants' homes commonly consisted of one or two separate rooms occupied by at least four family members. This limited number of rooms means children must share space with other family members which deprives them of the space needed to be alone and express emotions in privacy.

> *"So, I really wish I had my own room, so I could sleep alone [and] have my own privacy."*
> **(FGD, female, 16–17 years old group, Kota Surabaya)**

> *"I want to have my own room because every night my mother usually uses her mobile phone with a loud volume [so I get disturbed and can't sleep]."*
> **(Group interview, female, 9 years old, Kota Surabaya)**

Aside from the need for a private room, children also expected to have a tiled floor and a sturdy roof, instead of cemented floors and leaking roofs. Older children experiencing overcrowding highlighted the need for public spaces, such as public parks, to counterbalance discomfort experienced at home.

Based on FGDs with parents, there was recognition that children hoped for improved housing conditions to increase their levels

of comfort. However, financial constraints hinder necessary repairs. Given these financial challenges, parents often prioritize more immediate necessities, such as food and education. This situation reflects the tough choices that families must make when allocating limited resources and the broader socioeconomic challenges that influence family decisions and children's living conditions.

"As long as [the house] is still fit to live in."
(FGD with parents, male, Kabupaten Lombok Tengah)

7. Conclusion and Policy Recommendations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Conclusions

This report discusses the situation of multidimensional deprivation among children in Indonesia, and its overlaps with monetary poverty. Deprivation is measured across seven dimensions of child welfare: food and nutrition, health, education, protection, housing, facilities, and information. In line with the life-cycle approach, results are disaggregated for the following age groups: 0–4 years, 5–12 years and 13–17 years.

Nearly four-in-10 children (aged 0–17 years) in Indonesia are multidimensionally deprived, facing deprivation in at least two dimensions of their welfare simultaneously. Yet, few children experience simultaneous deprivations in five, six or seven dimensions – an encouraging result. From 2022 to 2023, the multidimensional deprivation rate fell by 2.82 percentage points, from 40.19 to 37.38 per cent, respectively.

The proportion of children who suffer from multidimensional deprivation varies by geographic location. In fact, 46.10 per cent of children living in rural areas are multidimensionally deprived compared to 30.81 per cent in urban areas. In addition, striking differences are observed between islands. Eight-in-10 children living on Maluku and Papua islands experience multidimensional deprivations, while a multidimensional deprivation rate of 48.8 per cent is recorded for children living on Balinustra Island. However, in terms of absolute numbers, Jawa and Sumatra present the highest number of multidimensionally deprived children, 2.9 million and 1.3 million respectively.

Children living in monetary poor households are not always deprived and vice versa: 3.58 per cent of children are monetary poor, but not multidimensionally deprived. In contrast, three-in-10 children are multidimensionally deprived, but not monetary poor (29.17 per cent). Additionally, 8.20 per cent of children are simultaneously monetary poor and multidimensionally deprived. Nearly six-in-10 children are not monetary poor nor multidimensionally deprived (59.05 per cent).

At the sectoral level, the health dimension shows the highest levels of deprivation for all age groups, ranging from 25.70 per cent for children aged 13–17 years to 61.65 per cent for those aged 0–4 years. This dimension is measured by "Health insurance (0–17 years)" and "Complete immunization". In particular, 33.82 per cent of children 12–59 months old did not receive full immunization, while almost half of children under-five are not covered by health insurance – JKN or other insurance schemes.

Moreover, with regards to education, 86.25 and 39.83 per cent of children aged 3–4 and 5–6 years, respectively, do not attend any preschool education. Deprivation rates among older children related to "School participation", "Completion of primary education", and "Completion of secondary education" are much lower.

Policy recommendations

Data and research

Susenas 2023 data provides unique insights into broader child welfare issues which underpin the following conclusions and recommendations.

Adopt a holistic perspective to child welfare measurements and ensure that ALL children can access basic services and have their rights fulfilled. Children's experiences of poverty and deprivation tend to be multidimensional. A large share of children not identified as monetary poor are nevertheless multidimensionally deprived. By proactively identifying the most vulnerable children, cost-effective approaches to addressing poverty and deprivation can be made more efficient and sustainable in the medium to long terms. Focusing only on child monetary poverty, on the other hand, would overshadow the multiple deprivations simultaneously experienced by children. As such, the following approaches to support policy and programme design are recommended to tackle child poverty and deprivations:

- Encourage inter-sectoral dialogue among policymakers for improved policy design.
- Integrate multidimensional deprivation monitoring in national and local governments' agenda.
- Promote coordinated efforts and investments across sector-specific involved stakeholders.

Ensure the availability of relevant data for older children (aged 5–17 years) to enrich analyses. The Susenas dataset contains a variety of age-specific indicators for children under-five, in particular with regards to nutrition and health. To ensure that older children's multidimensional deprivation rates are not underestimated, policy dialogue around the integration of additional variables are encouraged to allow for the creation of relevant deprivation indicators for children aged 5–17 years.

Carry out additional research to better understand the drivers of multidimensional child deprivation. This analysis focused on identifying the indicators and dimensions in which children experience deprivations simultaneously. Further regression analysis studies may help explain the most significant inhibitors and enablers of risk factors. Examples of potential research questions could include:

- What is the relationship between birth registration and health insurance coverage?
- Why do children living with household heads who did not attain any education or secondary education face higher levels of multidimensional deprivation? Under what conditions are these observations more common?
- What characterizes female-headed households? How many working adults do they host on average? Are they single parented? Do they receive social assistance, given the additional economic burdens faced when raising children in these circumstances?
- Are children with a disability exposed to higher levels of poverty/deprivation? Are there any social protection and care services available to them? What are the additional costs of raising children with disabilities?

Ensure continuity of data collection and analysis on multidimensional child deprivations using Susenas.

The annual national dataset offers great opportunities to further policy-relevant research due to its: i) representativity at sub-national levels, and ii) regular data collection protocol supporting the publication of regularly updated data. This paves the way to further engage policy dialogue to support better measurement of child welfare in Indonesia.

Cross-sectoral approaches

Support cross-sectoral approaches to tackle multidimensional child deprivations. Deprivations in some dimensions are strongly associated, and could potentially affect, deprivations in others. For children under-five, coordination between educational and health services can be strengthened and additional efforts made to adequately disseminate information on good (hygiene) practices. Children whose survival is at risk cannot perform well in school. In response, schools

could host information and sensitization sessions on family best practices (health and hygiene), while visits to health centres could also be an occasion to promote early onset of education.

Promote equitable access to essential services such as healthcare, especially for the most vulnerable children in Indonesia. Affordability of social services by poor households needs to be supported through social protection programmes, including health insurance and social assistance. On the supply side, it is important to increase access to quality social services, taking into consideration challenges for remote locations and potential biases associated with children's sex. Not having a birth certificate or residential registration can lead to exclusion from health insurance coverage. This administrative requirement risks sanctioning already vulnerable populations. While most countries in the region do not meet the benchmark of 15 per cent of government budget spent on health, Indonesia's allocation to the health sector at around 5.6 per cent of total national government spending (2024) fares less well than most countries in the region. Therefore to maximise provision of essential services, below are the recommendations;

- Encourage streamlining and simplifying the health insurance registration process as well as expanding coverage of subsidies through social assistance to increase child coverage.

- Adapt health services to take into account the varying needs of children to promote equity among regions and socioeconomic groups.

- Improve local governmental capacity and accountability to deliver appropriate quality social services especially health and sanitation services to children.

Promote immunization coverage among children by improving primary health care services and outreach programmes, with a focus on deprived groups.

Adopt a decentralized approach to child poverty and deprivation reduction programmes. Facilitate dissemination of geographically disaggregated results to inform locally-focused policies and strategies. Regional policies and programmes should be developed through contextualized disaggregated data to enhance local government support and increase regional ownership.

Leverage profiling analysis for identifying subcategories of children requiring prompt social assistance. While social assistance programmes need to be expanded to cover those vulnerable and living under poverty, sustainably securing resources remains a priority in Indonesia. Therefore, identifying poor and vulnerable children will not only enable a clear mapping of policy gaps, it will also target the intended beneficiaries to improve the efficiency and equity of programmes. Focused interventions as a first step within a clear medium- to long-term plan is a relevant policy option. The results of this analysis helps identify those children who would benefit from prompt policy action and could, therefore, be the first targeted beneficiaries of child-sensitive social protection interventions and/or equity-focused investments in several social sectors. Key recommendations include:

- Addressing regional discrepancies in terms of multidimensional deprivation and ensuring equitable access to basic services.

- Strengthening the capacity and coordination of local governments, institutions and organizations.

Implement poverty reduction strategies tailored to local circumstances and poverty profiles. A series of sub-national policy documents could inform these further.

Rigorously expand access to essential facilities and services for all children in Indonesia. Children living in rural areas and more remote places in general have drastically less access to essential facilities such as safe drinking water, adequate sanitation and affordable quality early childhood education. There is need for well targeted investments by the Government of Indonesia to ensure locally available facilities. Apart from supply-side considerations, the population should be incentivized to use the improved services. Furthermore, the tracking, monitoring and reporting of local spending and its efficiency is essential to ensure central government policies are well implemented locally. A nationwide strategy is needed to address decentralized services in these areas.

Systematically and routinely report on child poverty and deprivation through a dedicated online platform. In Indonesia, data on monetary child poverty is collected on a regular basis through the Susenas initiative. Moreover, the country has established itself as a champion in reporting on progress towards the SDGs, including through integration of SDG targets in the medium-term development plan. It is desirable to achieve the same level of routine reporting for multidimensional deprivations. In addition to reporting on these figures through regularly published technical documents, providing access to a digest of the key poverty and deprivation measures on a SDG Dashboard [12]would allow for continued monitoring of children and in key sectors like health, ECE and access to facilities. These initiatives can foster prompt political action and civil engagement around child welfare issues.

- ***Implement behavioural change campaigns on the use of adequate sanitation facilities and appropriate cooking fuels.*** The government is also encouraged to make further efforts to increase access to improved and clean sanitation facilities in schools and health centres.

- ***Promote the use of clean fuel to reduce internal pollution and health risks*** associated with solid cooking fuel. Exploring innovative technologies, private-public partnerships to expand the supply market, as well as introduction of subsidies for alternative environmentally-friendly cooking options are also encouraged.
- ***The government is encouraged to strengthen the implementation of ECE policies as well as a monitoring and evaluation system.*** It is also important to improve coordination between early childhood institutions, increase teachers' salaries, invest in universal teacher training as well as ECE infrastructure.

Finally, although Indonesia has secured stable government spending to benefit the social sector over the past five years with approximately 15, 6 and 15 per cent of total government spending allocated to education, health and social protection budgets, respectively, **compared to other countries in the ASEAN region, Indonesia's health expenditure is lower**.[13] Moreover, the efficiency of social sector spending including health and education is behind many other ASEAN countries leading to more children being left behind in access to services. It is recommended that the Government of Indonesia increases social sector investments and improves efficiency of spending to reduce monetary poverty and multidimensional child deprivations. In addition, priority should be given to financing poor regions at sub-national levels to reduce disparities and inequality across regions.

[12] SDG Dashboard : http:/sdgs.bappenas.go.id/dashboard/

[13] The Ministry of National Development Planning (BAPPENAS) and UNICEF (2023) "Progress of Child-focused SDGs in Considering the Impact of the Covid-19 Pandemic during 2015–2021".

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9. Annexes

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9.1 Annex 1. List of dimensions, indicators and thresholds measuring multidimensional child poverty in Indonesia

	Indicator	Threshold	0-4 years	5-12 years	13-17 years
Nutrition	*Calorie consumption*	0-17 years: Child lives in a household with low calorie consumption (less than 1,400 kcal).	X	X	X
	Exclusive breastfeeding	0-5 months: Child is not exclusively breastfed.	X (0-5 months)		
	Minimum dietary diversity	6-23 months: Child does not meet meal diversity standards and consumes less than five of the following food groups: (i) grains, roots, and tubers, (ii) legumes and nuts, (iii) dairy products (milk, yogurt, cheese, infant formula), (iv) meat/meat products and fish, (v) eggs, (vi) vitamin A-rich fruits and vegetables, (vii) other fruits and vegetables and (viii) breastmilk.	X (6-23 months)		
Health	*Health insurance*	0-17 years: Child does not have health insurance.	X	X	X
	Complete immunization	12-59 months: Child did not receive complete basic vaccinations.	X (12-59 months)		
Education	*Preschool participation*	3-6 years: Child did not attend or has dropped out of organized learning for early childhood education (ECE) in the current school year.	X (3-4 years)	X (5-6 years)	
	School participation	6-15 years: Child is not attending school in the current school year.		X (7-12 years)	X
	Completion of primary education	13-15 years: Child did not complete primary education.			X (13-15 years)
	Completion of secondary education	16-17 years: Child did not complete secondary education.			X (16-17 years)
Protection	*Birth certificate*	0-17 years: Child does not have a birth certificate.	X	X	X
	Child marriage	10-17 years: Child is or has been married.		X (10-12 years)	X
	Child labour	10-17 years: Child is involved in child labour.		X (10-12 years)	X
Housing	*Overcrowding*	0-17 years: Child lives in a household with less than 7.2m² floor area per capita	X	X	X
	Floor type	0-17 years: Child lives in a household with the widest flooring made of bamboo, soil, or other materials	X	X	X
Facilities	*Drinking water*	0-17 years: Child lives in a household where the main source of drinking water is unimproved (WHO) .	X	X	X
	Sanitation	0-17 years: Child lives in a household with an unimproved toilet facility .	X	X	X
	Cooking fuel	0-17 years: Child lives in a household that does not use electricity or gas as cooking fuel.	X	X	X
Facilities	*Internet access*	0-17 years: Child lives in a household without internet access.		X	X
	Mobile phone	0-17 years: Child lives in a household where none of the household members own a mobile phone.		X	X

[14] Improved water sources include pipes, drilled wells/pumps, protected wells, protected springs, rainwater, packaged or refilled packaged water. For households using packaged or refilled packaged water, it is categorized as having access to adequate drinking water if the water source is used for bathing/washing and comes from pipes, drilled wells/pumps, protected wells, protected springs, and rainwater.

[15] The adequate sanitation indicator, as defined by metadata for SDG indicators, includes private, shared or public-use sanitation facilities, flush or pour-flush to piped sewer system, septic tank pit latrines, ventilated-improved pit latrines or pit latrines with slab, if in rural areas.

9.2 Annex 2. Three-way deprivation overlap analysis at the national level, by age group

Table 6. Three-way overlap analyses for children aged 0-4 years (Susenas 2023)

Combination of three dimensions	Overlap between all dimensions	Overlap between first two dimensions	Overlap between first and third dimensions	Overlap between second and third dimensions	Deprivation in only first dimension	Deprivation in only second dimension	Deprivation in only third dimension	Deprived in none of the three dimensions
Facilities, Housing, Information	1.5%	5.5%	1.9%	0.3%	20.5%	8.0%	1.3%	61.0%
Education, Housing, Information	0.8%	5.2%	1.3%	1.0%	30.8%	8.3%	1.8%	50.7%
Education, Facilities, Information	1.5%	9.9%	0.7%	1.9%	26.2%	16.2%	0.9%	42.8%
Education, Facilities, Housing	2.8%	8.5%	3.2%	4.2%	23.7%	13.9%	5.1%	38.6%
Protection, Housing, Information	0.9%	3.0%	1.0%	0.9%	11.7%	10.5%	2.2%	69.9%
Protection, Facilities, Information	1.6%	5.8%	0.3%	1.8%	8.8%	20.2%	1.2%	60.2%
Protection, Facilities, Housing	2.4%	5.0%	1.4%	4.6%	7.7%	17.5%	6.8%	54.6%
Protection, Education, Information	0.7%	3.3%	1.2%	1.4%	11.4%	32.8%	1.6%	47.6%
Protection, Education, Housing	1.1%	2.9%	2.8%	4.9%	9.8%	29.3%	6.5%	42.7%
Protection, Education, Facilities	2.0%	1.9%	5.4%	9.3%	7.2%	24.9%	12.7%	36.5%
Health, Housing, Information	1.4%	8.9%	2.5%	0.4%	48.8%	4.6%	0.7%	32.7%
Health, Facilities, Information	2.7%	18.4%	1.2%	0.7%	39.4%	7.6%	0.4%	29.6%
Health, Facilities, Housing	5.3%	15.8%	5.1%	1.8%	35.5%	6.6%	3.2%	26.8%
Health, Education, Information	1.6%	21.9%	2.3%	0.5%	35.8%	14.1%	0.6%	23.1%
Health, Education, Housing	4.1%	19.5%	6.3%	1.9%	31.8%	12.7%	3.0%	20.7%
Health, Education, Facilities	8.0%	15.5%	13.1%	3.3%	25.0%	11.3%	5.0%	18.7%
Health, Protection, Information	1.6%	12.0%	2.3%	0.4%	45.7%	2.6%	0.7%	34.7%
Health, Protection, Housing	3.2%	10.4%	7.1%	0.6%	40.9%	2.3%	4.3%	31.1%
Health, Protection, Facilities	6.2%	7.3%	14.8%	1.1%	33.2%	1.8%	7.2%	28.2%

Combination of three dimensions	Overlap between all dimensions	Overlap between first two dimensions	Overlap between first and third dimensions	Overlap between second and third dimensions	Deprivation in only first dimension	Deprivation in only second dimension	Deprivation in only third dimension	Deprived in none of the three dimensions
Health, Protection, Education	3.3%	10.3%	20.2%	0.7%	27.8%	2.3%	14.0%	21.4%
Food and Nutrition, Housing, Information	0.7%	4.3%	1.0%	1.1%	19.5%	9.2%	2.2%	62.1%
Food and Nutrition, Facilities, Information	1.3%	7.5%	0.4%	2.1%	16.4%	18.6%	1.2%	52.6%
Food and Nutrition, Facilities, Housing	2.6%	6.1%	2.4%	4.4%	14.3%	16.3%	5.8%	48.0%
Food and Nutrition, Education, Information	0.5%	4.6%	1.3%	1.7%	19.2%	31.4%	1.6%	39.8%
Food and Nutrition, Education, Housing	1.2%	3.8%	3.8%	4.8%	16.6%	28.3%	5.4%	35.9%
Food and Nutrition, Education, Facilities	1.9%	3.2%	6.8%	9.4%	13.6%	23.7%	11.2%	30.1%
Food and Nutrition, Protection, Information	0.8%	5.5%	0.9%	1.1%	18.3%	9.1%	2.1%	62.1%
Food and Nutrition, Protection, Housing	1.7%	4.7%	3.4%	2.2%	15.8%	8.0%	8.0%	56.2%
Food and Nutrition, Protection, Facilities	3.0%	3.3%	5.7%	4.4%	13.5%	5.9%	16.3%	47.9%
Food and Nutrition, Protection, Education	0.8%	5.6%	4.3%	3.2%	14.9%	7.0%	29.9%	34.3%
Food and Nutrition, Health, Information	1.3%	15.0%	0.4%	2.6%	8.9%	42.8%	0.7%	28.4%
Food and Nutrition, Health, Housing	3.5%	12.7%	1.5%	6.8%	7.7%	38.6%	3.4%	25.7%
Food and Nutrition, Health, Facilities	6.5%	9.8%	2.3%	14.6%	6.9%	30.7%	6.0%	23.1%
Food and Nutrition, Health, Education	3.3%	13.0%	1.8%	20.3%	7.4%	25.1%	12.8%	16.3%
Food and Nutrition, Health, Protection	5.2%	11.1%	1.2%	8.4%	8.1%	36.9%	1.8%	27.3%

Table 7. Three-way overlap analyses for children aged 5-12 years (Susenas 2023)

Combination of three dimensions	Overlap between all dimensions	Overlap between first two dimensions	Overlap between first and third dimensions	Overlap between second and third dimensions	Deprivation in only first dimension	Deprivation in only second dimension	Deprivation in only third dimension	Deprived in none of the three dimensions
Facilities, Housing, Information	1.7%	5.4%	2.1%	0.3%	21.3%	7.1%	1.5%	60.6%
Education, Housing, Information	0.4%	1.4%	0.5%	1.5%	7.7%	11.1%	3.1%	74.2%
Education, Facilities, Information	0.7%	2.9%	0.2%	3.1%	6.3%	23.8%	1.5%	61.5%
Education, Facilities, Housing	1.0%	2.6%	0.8%	6.0%	5.7%	20.8%	6.6%	56.4%
Protection, Housing, Information	0.8%	1.0%	0.6%	1.1%	3.1%	11.6%	3.0%	78.9%
Protection, Facilities, Information	1.2%	2.0%	0.2%	2.6%	2.0%	24.7%	1.6%	65.8%
Protection, Facilities, Housing	1.4%	1.8%	0.4%	5.7%	1.8%	21.6%	7.0%	60.3%
Protection, Education, Information	0.4%	0.7%	1.0%	0.6%	3.3%	8.5%	3.6%	82.0%
Protection, Education, Housing	0.5%	0.6%	1.3%	1.4%	3.1%	7.6%	11.3%	74.2%
Protection, Education, Facilities	0.7%	0.4%	2.5%	2.9%	1.8%	6.1%	24.3%	61.2%
Health, Housing, Information	0.7%	4.5%	1.7%	1.2%	28.1%	8.0%	1.9%	53.8%
Health, Facilities, Information	1.6%	11.2%	0.8%	2.1%	21.5%	15.5%	0.9%	46.3%
Health, Facilities, Housing	2.9%	9.9%	2.3%	4.1%	20.0%	13.6%	5.1%	42.2%
Health, Education, Information	0.4%	3.7%	2.0%	0.5%	28.9%	5.5%	2.5%	56.4%
Health, Education, Housing	0.8%	3.3%	4.5%	1.1%	26.5%	4.9%	8.1%	50.8%
Health, Education, Facilities	1.7%	2.4%	11.1%	1.9%	19.9%	4.1%	15.8%	43.2%
Health, Protection, Information	0.6%	2.3%	1.8%	0.8%	30.3%	1.7%	2.3%	60.1%
Health, Protection, Housing	0.8%	2.1%	4.4%	0.9%	27.7%	1.6%	8.3%	54.1%
Health, Protection, Facilities	1.7%	1.3%	11.1%	1.6%	21.0%	0.9%	16.1%	46.3%
Health, Protection, Education	0.6%	2.3%	3.5%	0.5%	28.6%	2.0%	5.5%	56.9%
Food and Nutrition, Housing, Information	0.5%	2.3%	0.6%	1.4%	8.3%	10.3%	3.0%	73.6%

Combination of three dimensions	Overlap between all dimensions	Overlap between first two dimensions	Overlap between first and third dimensions	Overlap between second and third dimensions	Deprivation in only first dimension	Deprivation in only second dimension	Deprivation in only third dimension	Deprived in none of the three dimensions
Food and Nutrition, Facilities, Information	0.8%	3.6%	0.2%	2.9%	7.0%	23.1%	1.5%	60.8%
Food and Nutrition, Facilities, Housing	1.6%	2.9%	1.2%	5.5%	6.0%	20.5%	6.2%	56.1%
Food and Nutrition, Education, Information	0.2%	1.2%	0.8%	0.7%	9.4%	7.9%	3.7%	76.0%
Food and Nutrition, Education, Housing	0.4%	1.0%	2.3%	1.5%	7.8%	7.2%	10.3%	69.4%
Food and Nutrition, Education, Facilities	0.7%	0.7%	3.7%	2.9%	6.4%	5.8%	23.1%	56.6%
Food and Nutrition, Protection, Information	0.3%	0.6%	0.7%	1.1%	10.0%	3.4%	3.4%	80.5%
Food and Nutrition, Protection, Housing	0.4%	0.5%	2.3%	1.3%	8.4%	3.2%	10.4%	73.5%
Food and Nutrition, Protection, Facilities	0.7%	0.3%	3.8%	2.6%	6.9%	1.9%	23.5%	60.4%
Food and Nutrition, Protection, Education	0.3%	0.7%	1.2%	0.8%	9.5%	3.7%	7.8%	76.0%
Food and Nutrition, Health, Information	0.5%	3.9%	0.6%	2.0%	6.6%	28.7%	2.5%	55.2%
Food and Nutrition, Health, Housing	1.1%	3.3%	1.7%	4.2%	5.6%	26.5%	7.5%	50.2%
Food and Nutrition, Health, Facilities	2.0%	2.4%	2.5%	10.8%	4.7%	19.8%	15.2%	42.5%
Food and Nutrition, Health, Education	0.6%	3.8%	0.8%	3.5%	6.4%	27.2%	5.2%	52.5%
Food and Nutrition, Health, Protection	0.5%	3.9%	0.4%	2.4%	6.8%	28.2%	2.1%	55.6%

Table 8. Three-way overlap analyses for children aged 13-17 years (Susenas 2023)

Combination of three dimensions	Overlap between all dimensions	Overlap between first two dimensions	Overlap between first and third dimensions	Overlap between second and third dimensions	Deprivation in only first dimension	Deprivation in only second dimension	Deprivation in only third dimension	Deprived in none of the three dimensions
Facilities, Housing, Information	1.2%	5.7%	1.4%	0.1%	22.8%	6.8%	0.9%	61.3%
Education, Housing, Information	0.4%	2.0%	0.5%	0.9%	9.7%	10.4%	1.7%	74.3%
Education, Facilities, Information	0.7%	4.4%	0.2%	1.8%	7.4%	24.0%	0.8%	60.7%
Education, Facilities, Housing	1.5%	3.6%	0.9%	5.3%	6.6%	20.5%	6.0%	55.5%
Protection, Housing, Information	0.7%	1.4%	0.5%	0.6%	4.3%	11.0%	1.7%	79.7%
Protection, Facilities, Information	1.0%	2.9%	0.1%	1.5%	2.8%	25.5%	0.8%	65.2%
Protection, Facilities, Housing	1.6%	2.4%	0.5%	5.3%	2.5%	21.8%	6.4%	59.6%
Protection, Education, Information	0.5%	2.3%	0.7%	0.4%	3.4%	9.4%	1.9%	81.3%
Protection, Education, Housing	0.8%	2.0%	1.3%	1.7%	2.9%	8.2%	10.0%	73.2%
Protection, Education, Facilities	1.5%	1.2%	2.4%	3.6%	1.7%	6.3%	23.5%	59.7%
Health, Housing, Information	0.3%	2.9%	0.7%	1.0%	21.8%	9.6%	1.5%	62.2%
Health, Facilities, Information	0.7%	8.2%	0.3%	1.9%	16.4%	20.2%	0.7%	51.6%
Health, Facilities, Housing	1.8%	7.2%	1.4%	5.1%	15.3%	16.9%	5.5%	46.8%
Health, Education, Information	0.3%	3.4%	0.7%	0.7%	21.2%	8.3%	1.9%	63.5%
Health, Education, Housing	0.7%	3.1%	2.5%	1.8%	19.5%	7.2%	8.8%	56.6%
Health, Education, Facilities	1.6%	2.1%	7.4%	3.5%	14.6%	5.4%	18.5%	46.8%
Health, Protection, Information	0.3%	2.1%	0.7%	0.8%	22.6%	3.6%	1.7%	68.1%
Health, Protection, Housing	0.6%	1.8%	2.6%	1.5%	20.7%	3.0%	9.1%	60.7%
Health, Protection, Facilities	1.4%	1.0%	7.5%	2.5%	15.7%	1.9%	19.5%	50.3%
Health, Protection, Education	1.0%	1.4%	2.7%	1.8%	20.5%	2.7%	7.2%	62.7%
Food and Nutrition, Housing, Information	0.3%	2.1%	0.3%	1.0%	7.6%	10.4%	1.9%	76.4%

Combination of three dimensions	Overlap between all dimensions	Overlap between first two dimensions	Overlap between first and third dimensions	Overlap between second and third dimensions	Deprivation in only first dimension	Deprivation in only second dimension	Deprivation in only third dimension	Deprived in none of the three dimensions
Food and Nutrition, Facilities, Information	0.5%	3.5%	0.1%	2.0%	6.2%	24.9%	0.9%	61.8%
Food and Nutrition, Facilities, Housing	1.4%	2.6%	1.0%	5.4%	5.3%	21.5%	6.0%	56.8%
Food and Nutrition, Education, Information	0.2%	1.4%	0.5%	0.7%	8.3%	10.3%	2.2%	76.4%
Food and Nutrition, Education, Housing	0.5%	1.1%	1.9%	1.9%	6.8%	9.1%	9.4%	69.2%
Food and Nutrition, Education, Facilities	0.8%	0.9%	3.3%	4.4%	5.4%	6.7%	22.6%	56.0%
Food and Nutrition, Protection, Information	0.2%	0.7%	0.4%	0.9%	9.0%	5.0%	2.0%	81.8%
Food and Nutrition, Protection, Housing	0.4%	0.6%	2.0%	1.6%	7.4%	4.3%	9.7%	74.0%
Food and Nutrition, Protection, Facilities	0.7%	0.3%	3.4%	3.3%	6.0%	2.7%	23.7%	60.1%
Food and Nutrition, Protection, Education	0.4%	0.6%	1.2%	2.4%	8.1%	3.5%	8.7%	75.1%
Food and Nutrition, Health, Information	0.2%	2.6%	0.4%	0.8%	7.1%	22.1%	2.1%	64.7%
Food and Nutrition, Health, Housing	0.6%	2.2%	1.8%	2.6%	5.8%	20.4%	8.8%	57.9%
Food and Nutrition, Health, Facilities	1.1%	1.6%	2.9%	7.8%	4.7%	15.1%	19.2%	47.6%
Food and Nutrition, Health, Education	0.5%	2.3%	1.2%	3.2%	6.4%	19.7%	7.8%	59.0%
Food and Nutrition, Health, Protection	0.3%	2.5%	0.7%	2.1%	6.9%	20.8%	3.8%	62.9%

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