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Child Poverty in the Arab States:
Analytical Report of Eleven Countries

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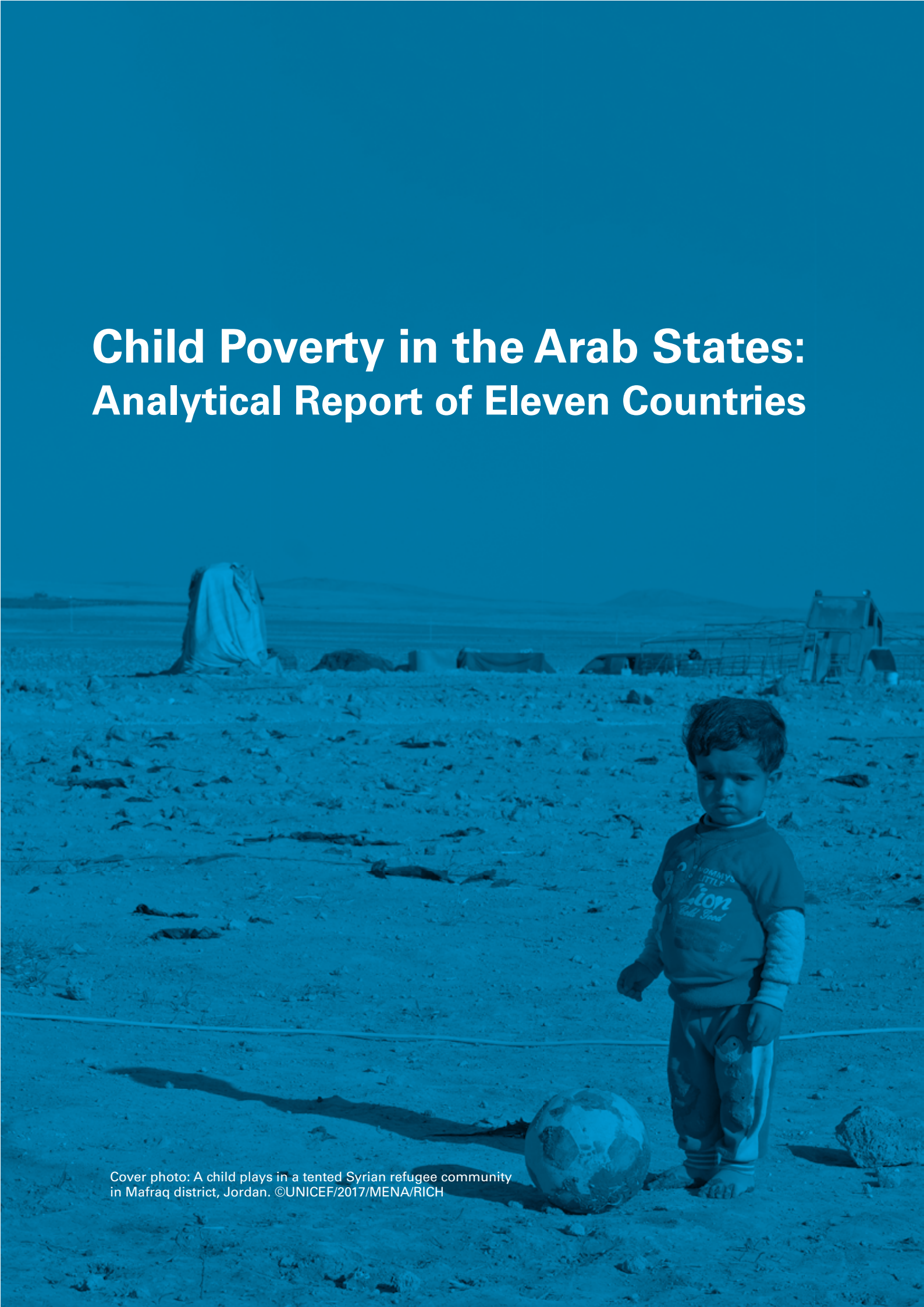

Cover photo: A child plays in a tented Syrian refugee community in Mafraq district, Jordan. ©UNICEF/2017/MENA/RICH

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List of Acronyms

CC-MODA	Cross-country Multiple Overlapping Deprivation Analysis
CRC	Convention on the Rights of the Child
DHS	Demographic and Health Survey
ESCWA	United Nations Economic and Social Commission for Western Asia
GNI	Gross National Income
HDI	Human Development Index
IDP	Internally Displaced Person(s)
IHDI	Inequality-adjusted Human Development Index
LDCs	Least Developed Countries
MDG	Millennium Development Goals
MENA	Middle East and North Africa
MENARO	Middle East and North Africa Regional Office (UNICEF)
MICS	Multiple Indicator Cluster Survey
MPI	Multidimensional Poverty Index
NGO	Non-governmental organization
NCHS	National Centre for Health Statistics
OoR	Innocenti Office of Research
OPHI	Oxford Poverty and Human Development Initiative
PAPFAM	Pan Arab Project for Family Health
PPP	Purchasing power parity
SDG	Sustainable Development Goals
TFR	Total Fertility Rate
U5MR	Under-five mortality rate
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
WB	World Bank
WBDI	World Bank Development Indicators
WEO	World Economic Outlook database, published by the World Bank
WHO	World Health Organization

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Executive Summary

Objective and Structure of the Report

The analysis in this report offers vital information on child poverty in the Arab States. It contributed to the first ever Arab Poverty Report – a project under the auspices of the League of Arab States, produced in close collaboration with ESCWA, OPHI and UNICEF. The Arab Poverty Report demonstrates that multidimensional poverty is a reality in the region, as it is worldwide. Both at the level of the household and at the level of the individual child, multidimensional poverty is widespread, particularly when using measures that are tailored to the reality of the region. The Arab Poverty Report argues that policy makers in the region need to urgently take steps to address multidimensional poverty, to break the intergenerational transmission of poverty and to contribute to future peace and prosperity.

The Child Poverty Analytical Report aims to provide a tool for policymakers, practitioners and all stakeholders striving to eliminate child poverty in the 11 LAS member states examined. The analysis offers an overview of child poverty in these various countries and looks at differences and gaps within and between countries. Trends in child poverty over the past decade and a half are examined for selected countries.

A fundamental objective of this report is to demonstrate that the right tools can help highlight the reality of multidimensional child poverty in the Arab region and to underline the urgent need for a policy response. The report is intended to provide an evidence-base for dialogue with and amongst government partners at all levels. It seeks to advocate for the importance of routine monitoring of child deprivation, moving from ad hoc studies to routine evidence generation. The report provides a methodological approach for ways in which multidimensional child poverty can be measured robustly, regularly and routinely in the Arab States.

Chapter 1 provides the socio-economic context of the countries examined and describes the methodology used for the child poverty analysis. The following chapters analyse child poverty in 11 LAS member states by initially considering the general situation of multidimensionally poor children and subsequently, examining possible drivers of poverty more closely. Chapter 2 looks at the incidence and profile of child poverty today (in the most recent year post-2010). The 11 LAS member states are considered overall, comparing them and identifying country clusters. The chapter also examines the depth of child poverty. Chapter 3 looks at determinants of child poverty and inequality. The chapter includes a discussion of child protection, a crucial element of child well-being in the Arab States. Chapter 4 provides an analysis of trends in selected countries between 2000 (or the closest data set) and the most recently available and comparable data. Finally, Chapter 5 outlines overall findings and recommendations.

Although the report is not representative of the Arab States as a whole, it seeks to illustrate different child poverty manifestations in the area. The analysis considers 78 per cent of the under-18 population in the Arab States (that is, a headcount of 118,869,000) and shows the significant heterogeneity of poor children's situations in the countries examined.

Methodology

This Child Poverty Analytical Report applies a cross-country MODA (CC-MODA) methodology, adapted to the Arab region, informed by the National-MODA analyses previously rolled out in the region, to analyse and compare the 11 selected countries. The report is based on a quantitative analysis of household survey data sets from the eleven countries, carried out by OoR.

The analysis is based on two household survey data sets for each of the eleven countries: the most recent available household survey data set and a comparable data set closest to 2000. The MODA analysis used in this report looks at five dimensions of child well-being, selected in line with the rights set out in the Convention on the Rights of the Child, for two age categories (0-4 and 5-17). For children 0-4, the dimensions examined are water, sanitation, housing, health, and nutrition. For children 5-17, the dimensions considered are water, sanitation, housing, information and education. The dimensions of water, sanitation and housing are defined in the same way for both age groups, as they reflect the environment in which children live. They are applied equally to all children of the same household, while the dimensions of health, nutrition, education and information, are specific to the different age groups.

This application of the MODA methodology defines two measures of poverty. The first measure, 'acute poverty,' defined in the original CC-MODA methodology (see De Neubourg et al, 2012), has been applied mostly to low-income countries. The second measure, 'moderate poverty,' was established taking into consideration specific characteristics and experiences of Arab countries. For purposes of the analysis, a child is considered poor if he or she suffers from two or more deprivations (for example, if a child of school-going age travels for more than 30 minutes round trip to fetch water and is not enrolled in primary school, then he or she will be deemed acutely poor). Children affected by acute poverty are a subset of those affected by moderate poverty.

To facilitate a more in-depth analysis, the 11 countries examined were divided into clusters as follows:

- Cluster 1: Countries with low acute poverty and low moderate poverty (Egypt, Algeria, Jordan, Palestine and Tunisia)
- Cluster 2: Countries with low to medium acute poverty and medium to high moderate poverty (Iraq and Morocco)
- Cluster 3: Countries with high acute poverty and high moderate poverty (Comoros, Mauritania, Sudan and Yemen)

In addition to providing a deep examination of the seven dimensions mentioned above, the report looks at relative gaps between disadvantaged and advantaged groups of children in terms of:

- Area (Rural/Urban)
- Sex (Female/Male)
- Education of the household head (No education/Primary or higher)
- Wealth (Poorest quintile or Q1 /Richest quintile or Q5)

It also provides a study of trends in child poverty for those countries with available and comparable data for 2000 and 2015, at the national and cross-country level. It is important to emphasise that since the most recent data used for the analysis is from circa 2015, the likely increase in poverty as a result of conflict and displacement in certain LAS member states over the last few years is not fully accounted for in this analysis.

Results and Key Findings

Overall Incidence

The incidence of acute and moderate child poverty varies greatly across the 11 LAS member states analysed. In general, the incidence of both acute and moderate poverty is considerable. The under-18 population in the countries examined stands at approximately 118 million, representing about 6 per cent of the world's total child population. Of these children, 52.5 million suffer from moderate poverty, representing 44.1 per cent, or close to half of all children in the 11 countries considered, while 29.3 million, or 1 out of 4, experience acute poverty. Such levels of child poverty must be prioritised through tailored policies that take into account the different historical and development trajectories of each country, as well as current national and regional situations. Families and children are negatively affected by overlapping deprivations.

By Dimensions

The following are high-level findings of the acute and moderate child poverty analysis looking at individual dimensions:

Housing: This dimension shows the highest levels of deprivation amongst children. In looking at the 11-country average, nearly half of all children in the region suffer from moderate housing deprivation, living in houses or shelters with primitive flooring and dealing with overcrowding of more than 3 people to a room. One in every three children suffer from acute deprivation, living in houses with primitive flooring and dealing with overcrowding of more than 4 people to a room.

Water: The 11-country average indicates a significant incidence of acute and moderate water deprivation. In particular, almost half of all children in Cluster 3 countries (45 per cent) experience acute water deprivation, while 73 per cent experience moderate water deprivation.

Sanitation: Acute and moderate sanitation deprivation incidence varies significantly among the clusters and as each cluster compares with the 11-country average. Acute deprivation (using an unimproved toilet facility) ranges from less than one percent in Jordan, Egypt and Palestine to well over 50 per cent in Comoros, Mauritania and Sudan. Moderate deprivation (sharing a toilet facility with other households) is more widespread and affects over one in five children in the countries studied.

Nutrition: Incidence is similar for both moderate and acute nutrition deprivation in Clusters 1 and 2. In both clusters, 1 in 4 children experience acute nutrition deprivation (i.e. not meeting norms on breastfeeding practice or experiencing wasting). Cluster 3 shows an acute nutrition deprivation share of 31.7 per cent of its child population, only 5 percentage points above the 11-country average. Moderate nutrition deprivation (stunting or obesity) affects over half of all children in Cluster 3 countries (54.1 per cent). With limited differences between clusters and countries, the analysis suggests that malnutrition is a very widespread and almost universal aspect of child poverty in the countries studied. Undernutrition is slightly more pronounced among otherwise disadvantaged children and in Cluster 3 countries, while obesity affects more advantaged children at a higher rate.

Health: Health deprivation varies considerably among clusters. The average incidence of moderate health deprivation (i.e. unskilled birth attendance, incomplete immunization or lack of antenatal care) is significantly high across all 3 clusters as 44.1 per cent of children on average experience some form of health deprivation.

Education: Incidence is relatively high across Clusters 2 and 3, particularly in terms of moderate education deprivation (being out of school or falling two or more grades behind), experienced by 1 out of every 3 children in these clusters.

Information: The information dimension has the lowest incidence of all the dimensions examined in Clusters 1 (second lowest for moderate deprivation), 2 and 3 (second lowest for moderate deprivation). Still, in Comoros nearly 1 in 5 children face acute information deprivation (no access to any information or communication device[1]) and in Sudan nearly half of all children face moderate information deprivation (no access to one information and one communication device). Palestine also stands out with a high level of moderate information deprivation.

Correlation with Inequality

Area: Children in rural areas are much more likely to be deprived in the housing, water, sanitation and information dimensions than children in urban settings. For instance, in rural areas children are 5 times more likely to be acutely deprived in sanitation than in urban areas.

Sex: In the case of the indicators used in this analysis, the sex of the child is not associated with differences in the level of deprivation in any dimension. However, this should not be interpreted to mean that there is no gender dimension to childhood deprivation in the countries studied. Rather, the dimensions and indicators used in this study and the limitations of available data make it impossible to capture gendered differences.

Education of the household head: Children who live in a household where the head has no education are more likely to be acutely deprived in various dimensions. Overall, children whose household head did not receive any education are 2.3 times as likely to suffer from acute poverty than children in families where the household head received a primary education or higher.

Wealth: Household wealth is strongly correlated with deprivation in various dimensions, at both the moderate and acute deprivation thresholds. The only exception is nutrition, which shows next to no correlation with household wealth. This indicates that nutritional challenges in the region are not necessarily income-related. Unpacking the nutrition dimension, it becomes clear that obesity affects advantaged children more, while undernutrition is more prominent amongst disadvantaged children and in Cluster 3 countries.

Overall, levels of deprivation incidence seem to be influenced mostly by the area in which children live, the education of the household head and wealth. A cluster analysis by habitat dimensions (which includes housing, water and sanitation) also shows that geographic area is an important factor in determining the likelihood of child deprivation.

1 Information devices include radio, TV, computer. Communication devices include telephone or mobile phone.

Trends

Countries for which comparable trend data are available exhibit significant reductions in the proportion of children with two or more deprivations, by both acute and moderate measures, between the two data points included between 2000 and 2015. The exception is Sudan, where very little progress has been made. Except for Sudan, the reduction of acute poverty in all countries was greater than the reduction of moderate deprivation, indicating important improvements in the most basic level of child wellbeing, but ongoing challenges remain in attaining the levels to which the region aspires.

The report's concluding chapter outlines challenges, opportunities and nine recommendations for action-oriented policy, based on the findings of this child poverty analysis in 11 LAS member states.

Chapter 1.
Introduction

Chapter 1. Introduction

1.1 Country contexts

The Child Poverty in the Arab Region Report examines 11 LAS member states, listed in table 1.1 below, along with key socio-economic indicators.[2]

Table 1.1: Socio-economic Indicators for 11 Arab States[3]

Country	Population		GNI per Capita PPP (current international $)	Human Development Index		U5MR (per thousand live births)
	Total	< 18 (%)		Index Value	World Rank	
	2015	2015	2015	2014	2014	2015
Algeria	39,666,519	32.9	14,310	0.736	83	25.5
Comoros	788,474	46.7	1,490	0.503	159	73.5
Egypt	91,508,084	38.4	10,710	0.69	108	24.0
Iraq	36,423,395	47.4	15,340	0.654	121	32.0
Jordan	7,594,547	41.6	10,760	0.748	80	17.9
Mauritania	4,067,564	46.5	3,710*	0.506	156	84.7
Morocco	34,377,511	32.4	7,690	0.628	126	27.6
Palestine**	4,668,466	47.1	5,080*	0.678	113	21.1
Sudan	40,234,882	47.1	3,990	0.479	167	70.1
Tunisia	11,253,554	27.7	11,100	0.721	96	14.0
Yemen	26,832,215	47	2,720	0.498	160	41.9

* For 2014.
** Referred to as State of Palestine in the UNICEF database and West Bank and Gaza in the World Bank database.

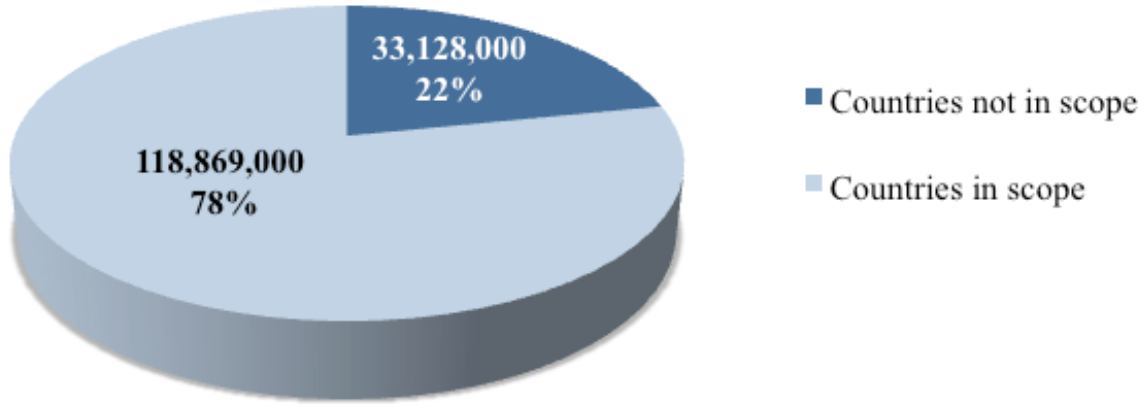
Table 1.1 illustrates the heterogeneity of the countries examined, particularly with regards to GNI per capita and the mortality rate for children under 5 (U5MR). For example, countries such as Algeria, Egypt and Jordan have a relatively high GNI per Capita and a relatively low under-5 child mortality rate, while others like Comoros, Mauritania, Sudan and Yemen have a relatively low GNI per capita and high under-5 child mortality rate.

Figure 1.1 considers the under-18 population in the Arab States examined in this report. Over three quarters of the under-18 population in the member states of LAS fall within the scope of this analysis. Although this report does not cover the Arab States as a whole, it is important to stress that it does consider a significant share of the area's child population and examines various Arab States with quite different situations. However, averages for the eleven countries studied cannot be read as 'regional averages'.

2 The 11 countries examined in the report are members of the League of Arab States (LAS). The remaining member states of the LAS not considered in this report are: Bahrain, Djibouti, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Somalia, Syria and the United Arab Emirates.

3 The data sources include: Population – UNICEF State of the World's Children Report, 2016; GNI per Capita PPP ($) - World Bank World Development Indicators; Human Development Index from United Nations Development Programme Human Development Reports; U5MR – World Bank World Development Indicators.

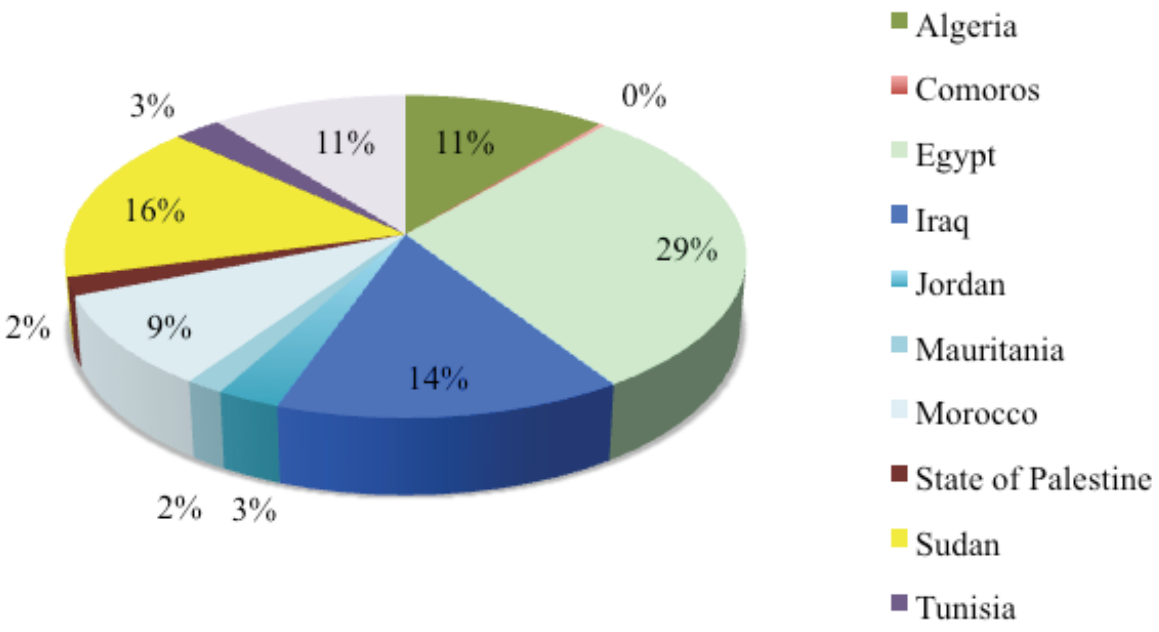
Figure 1.1: Total Arab States Population Under 18 by Countries in Scope and Not in Scope of the Child Poverty Analytical Report



Source: UNICEF State of the World's Children Report, 2016

Figure 1.2 illustrates the heterogeneity in size of the under-18 population across the 11 countries examined. For example, Egypt accounts for more than a quarter of the total population considered in this report while the Comoros' share is less than 1 per cent.

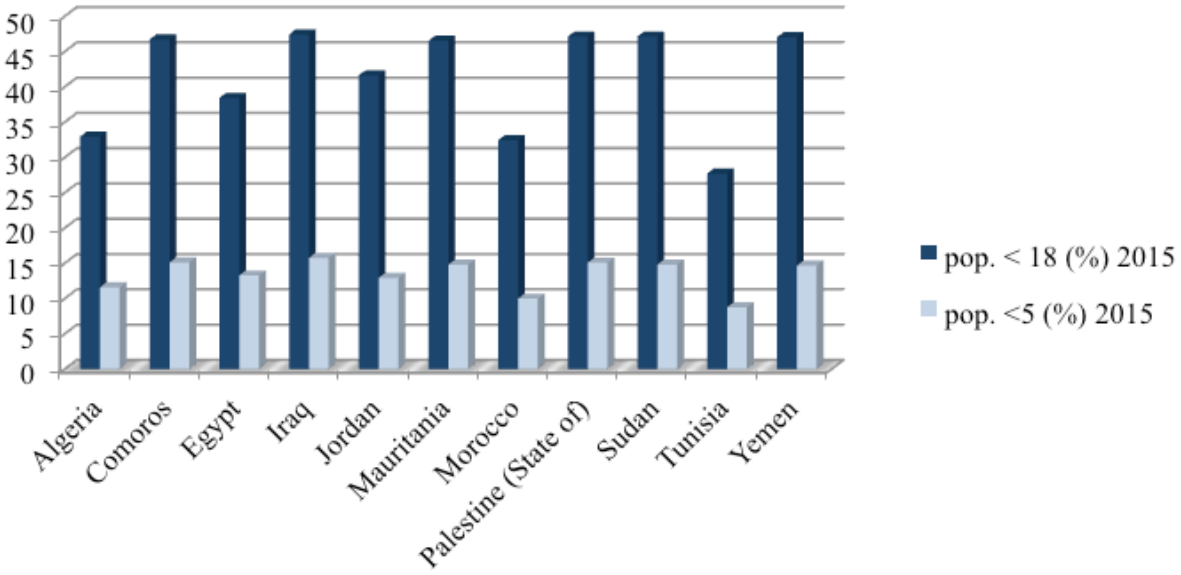
Figure 1.2: Share of Population under 18 Across the 11 Arab States Examined



Source: UNICEF State of the World's Children Report 2016

As shown in Figure 1.3, the under-18 population represents a large share of the total country population, at least over 25 per cent, in all of the 11 countries examined. In six countries that share is over 45 per cent. In looking at the under-5 population, it can be noted that some of the countries are at a more advanced stage in the demographic transition (i.e. Algeria, Morocco and Tunisia). An increase in the child and youth population, the 'youth bulge', provides a unique opportunity for affected countries to achieve social and economic growth in coming years with a declining dependency ratio as the young population begins to age.

Figure 1.3: Percentage of population under 18 and under 5 in 11 Arab States



Source: UNICEF State of the World's Children Report 2016

Children are a significant part of society in the 11 Arab States analysed. This report will demonstrate that an investment in children is particularly relevant and needed today. Without this, the region is unlikely to realise a demographic dividend and future peace and prosperity will remain at risk.

1.2 Conceptual framework

Conventional wisdom of development relies primarily on quantifiable macroeconomic growth indicators to measure a nation's advancement. However, economists have increasingly challenged the connection between economic growth and welfare with empirical evidence showing that growth does not always reduce poverty, and that greater wealth does not necessarily entail improved living standards[4]. Sen's Capability Approach defines poverty as the inability to enjoy basic rights and substantive freedoms[5]. Development is realised not only through increased incomes and asset shares, but also through people's increased capabilities to lead lives they have reason to value. He contends that capability deprivation is a more complete measure of poverty than income as it captures the internal aspects of poverty which may become lost or hidden in aggregate statistics. Sen advocates for a more holistic view of poverty, inequality, and development in order for the appropriate policies to help maximise individual freedom and choice[6].

4 See for example, Ravi Kanbur, "Income distribution and Development," in Handbook of Income Distribution I, ed. Anthony B. Atkinson and François Bourguignon, (Amsterdam: Elsevier Science, 2000): 791-841; Giovanni Andrea Cornia and Sampsa Kiiski, "Trends in Income Distribution in the Post World War II Period: Evidence and Interpretation," WIDER Discussion Paper 89, (UNU/WIDER: Helsinki, 2001); and World Bank, "The growth experience. What have we learned from the 1990s? A background note," Poverty Reduction & Economic Management Network, World Bank, Washington DC, 143-146.

5 Amartya Sen, Commodities and Capabilities, (Amsterdam New York New York, N.Y., U.S.A: North-Holland Sole distributors for the U.S.A. and Canada, 1985), Elsevier Science Pub. Co. ISBN 9780444877307.

6 Ibid., and Development as Freedom (2001, New York: OUP).

Poverty has become increasingly recognised as a multidimensional concept extending beyond income and consumption. In recent years, significant progress has been made in measuring multidimensional poverty. See for example the work of Tsui (2002), Bourguignon and Chakravarty (2003), Alkire and Santos (2010), Alkire et al. (2015), among others[7]. Complementing money metrics of development, multidimensional poverty measures non-monetary deprivations across various dimensions of health, education and living standards, providing a more accurate depiction of the experience of the poor. The goods and services children need to thrive are to a large extent public or nonmarket, rendering income and consumption approaches inherently inadequate in assessing the experience of child poverty. The poverty experienced by children is more profoundly affected by poor infrastructure (shelter, water, sanitation) and household relationships (domestic violence) than a lack of material resources[8].
Recent evidence even suggests that in the specific case of sub-Saharan Africa, three quarter of malnourished women and children do not live in the poorest households by money metric measures[9].
In particular, although over half of the world's people – including more than one billion children – now live in cities and towns, cities are often more unequal than the countries in which they are located. Many children growing up in cities lack access to basic services and are unable to enjoy the 'urban advantage'[10].
Therefore, conceptualisations of child poverty require a multidimensional approach considering both monetary and nonmonetary indicators.

Conceptual analyses based primarily on monetary poverty have resulted in policies and programming predominantly centred on adults and households as a whole. As children constitute a considerable portion of the population of the Arab States – nearly half the total population in six of the eleven countries studied (see Table 1.1) – their needs must be considered in the discussion of poverty reduction. By identifying the main characteristics of child poverty and the main drivers of deprivation in the region, multidimensional poverty analyses provide policymakers with the necessary evidence to design targeted poverty reduction strategies[11].

In 2003, UNICEF, through the University of Bristol, first measured multidimensional child poverty by examining moderate and acute deprivation in areas critical for child development[12].
These findings were presented in the 2005 UNICEF State of the World's Children Report and in the 2007 Global Study of Children's Poverty and Disparities. Expanding on this study, UNICEF developed the Multiple Overlapping Deprivation Analysis (MODA), a methodology to analyse the extent and nature of multidimensional poverty of children. By applying the Convention on the Rights of the Child (CRC) to construct dimensions of child welfare involving survival, development, protection, and social participation, MODA addresses aspects of child poverty beyond just material wealth[13]. Contrary to Bristol and other multidimensional poverty indexes, MODA emphasises the life-cycle of children, defining different dimensions according to different ages whenever possible. MODA also integrates elements of the Alkire-Foster method (Alkire & Foster, 2011), measuring the intensity of poverty, that is, the average number of deprivations suffered by deprived children, and producing an adjusted headcount ratio, which is the product of the headcount by the average intensity of deprivation: this provides an instrument to assess both the breadth and the depth of poverty at the same time, and a tool for comparison between groups[14].
Using the adjusted headcount, MODA can also analyse sub-group decomposition, dimensional breakdown, and changes over time[15].

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7 Lucia Ferrone, "A Multiple Overlapping Deprivation Analysis for the Arab Region," UNICEF Innocenti Office Technical Note, 2017; Tsui, K.-y. "Multidimensional poverty indices." Social Choice and Welfare, 19(1), 68-93. 2002. doi:10.1007/s355-002-8326-3; Bourguignon, F., & Chakravarty, S. "The Measurement of Multidimensional Poverty." The Journal of Economic Inequality, 1(1), 25-49. 2003. doi: 10.1023/A:1023913831342; Alkire, S., & Santos, M. "Acute multidimensional poverty: a new index for developing countries." Human Development Research Paper 2010/11. 2010; Alkire, S., Foster, J., Seth, S., Santos, M., Roche, J., & Ballon, P. Multidimensional poverty measurement and analysis. (Oxford: Oxford University Press, 2015).

8 Ferrone, "A Multiple Overlapping Deprivation Analysis for the Arab Region," 2017.

9 Brown, C., Ravallion, M., van de Walle, D., "Are Poor Individuals Mainly Found in Poor Households? Evidence using Nutrition Data for Africa," Policy Research Working Paper 8001, World Bank Group: Washington, 2017.

10 Equity for Children, "Addressing Urban Inequities and Childhood: Advancing the agenda for children and cities," 2016, http://equityforchildren.org/2016/11/launch-of-the-urban-inequities-and-children-conference-report/.

11 ESCWA, "Multidimensional Poverty in Sudan," Country Background Paper, 2017, 1.

12 See D. Gordon, Shaileen Nandy, C. Pantazis, S. Pemberton, and P. Townsend, "The distribution of child poverty in the developing world," Bristol: Centre for International Poverty Research, 2003; and Minujin, Enrique Delamonica, Alejandra Dvidziuk and Edward D. Gonzalez, "The Definition of Child Poverty: a discussion of concepts and measurements," Environment & Urbanization 18, no. 2 (2006) International Institute for Environment and Development (IIED): 481–500.

13 Ferrone, "A Multiple Overlapping Deprivation Analysis for the Arab Region," Forthcoming 20

14 Ibid. The average deprivation intensity is the number of deprivations from which a multiply deprived child suffers, divided by the maximum number of dimensions studied, and averaged out across all the deprived children in the relevant age group.

15 Ibid.

Despite the adoption of international agreements such as the Convention on the Rights of the Child (CRC) and human rights charters, not enough has been done to address growing inequalities which affect children in education, health, and access to social services. Most of the post-Millennium Development Goal (MDGs) conversations in the context of children were driven by the fundamental lesson from the MDGs and the World Summit for Children goals: that the focus on global and national averages failed to account for growing inequalities that disproportionately affect children. In particular, the post-2015 debate seems to have left a broad consensus among stakeholders about using the equity approach to address multidimensional extreme poverty[16].
In light of the recent adoption of the Sustainable Development Goals (SDGs), and specifically SDG 1, Target 1.2 ('By 2030, halve the proportion of men, women and children living in poverty in all its dimensions, according to national definitions') an in-depth examination of the various dimensions of child poverty could provide governments with the opportunity to design policies and programs that help end the cycle of poverty for children and their families[17].

1.3 Report background

The present child poverty analysis forms part of a broader initiative – the Arab Poverty Report. The Arab Poverty Report was drafted at the request of the League of Arab States (LAS), as a collaborative effort of the United Nations Economic and Social Commission for Western Asia (ESCWA), UNICEF Middle East and North Africa Regional Office (MENARO) and the Oxford Poverty and Human Development Initiative (OPHI). The report describes the current incidence and profile of multidimensional poverty at the level of the household (ESCWA, using the Multidimensional Poverty Index (MPI)) and at the level of the individual child (UNICEF, using CC-MODA). In addition, more detailed reports on multidimensional poverty and its evolution over time in the Arab region at household and child level are being issued by ESCWA and UNICEF respectively. This Child Poverty in the Arab States Report contributes to the Arab Poverty Report by providing an in-depth analysis of child deprivation data and possible root causes in 11 countries of the region.
The analysis for this report was pursued through a collaboration between MENARO and the UNICEF Office of Research - Innocenti (OoR) in developing a regional cross-country Multiple Overlapping Deprivation Analysis (CC-MODA). The regional CC-MODA uses comparable datasets from 11 countries at two points in time over the last fifteen years. The OoR provided technical expertise to support the adaptation of the CC-MODA and to develop an analysis plan to undertake cross-country comparisons as well as trend analyses of child poverty in the Arab region.

This Child Poverty Analytical Report is highly innovative for the region. Although many UNICEF country offices in MENA have conducted national MODA studies and strive to gain recognition of child poverty as a significant and urgent issue in the Arab States, a more systematic regional assessment of child poverty and inequalities had yet to be performed prior to this report[18]. These national studies helped inform the analysis conducted in the following chapters. In the aftermath of the adoption of Sustainable Development Goal (SDG) 1 ('End poverty in all its forms everywhere'), and in light of SDG Target 1.2 ('By 2030, halve the proportion of men, women and children living in poverty in all its dimensions, according to national definitions'), ending extreme child poverty is a key opportunity for the 11 countries examined here to help build social cohesion, sustainable development, peace and prosperity in the region.

The Arab States include countries and territories from Mauritania and Morocco in the Northwest of Africa to Yemen and Oman, including Djibouti and Sudan in sub-Saharan Africa. The region is home to nearly 418 million people, including 157 million, or 38 percent, who are under the age of 18. The region is marked by significant disparities – Saudi Arabia, one of the Arab region's richest countries, shares borders with Yemen, one of its poorest and most conflict-ridden. Inequalities are also evident within countries: income, gender and geographical inequalities in the Arab States keep many children in a state of poverty and vulnerability[19].

Starting late 2010, the Arab States witnessed a wave of protests and revolts, ignited by a multitude of root causes, including wide-ranging social inequities and perceptions of inadequate governance. This was aggravated by corruption and constrained political representation, and by record levels of unemployment, soaring food and fuel prices, acute water scarcity and a volatile political and security context. The socio-political changes that ensued consisted of a mixture of genuine reform, growing authoritarianism and

16 Alberto Minujin and Mildred Ferrer, "Assessing Sustainable Development Goals from the standpoint of equity for Children," Journal of International and Comparative Social Policy, 2016, 6.
17 Ibid., 1-2.
18 Countries that have already conducted or are in the process of completing a National MODA study include: Algeria (2016/17), Djibouti (2015), Egypt (2016/17), Iraq (2015), Libya (2017), Morocco (2016/17) the State of Palestine (2016), Sudan (2016), Somalia (2013), and Tunisia (2015).
19 "UNICEF Middle East and North Africa website, accessed February 2017, https://www.unicef.org/mena/about.html.

outright conflict. Children have been affected in many ways[20].
The analysis of this report sheds some light on the root causes of social tension in the countries studied. In addition, it points to actions that must be taken to overcome some of the inequities that led to the turbulence of recent years.

1.4 Report goals and objectives

The Child Poverty in the Arab States Report aims to provide a tool for policymakers, practitioners and all stakeholders striving to eliminate child deprivation in the 11 LAS member states examined. The analysis offers an overview of child poverty in the various countries in scope and looks at differences and gaps within and between countries. Trends in child poverty over the past decade and a half are examined for selected countries.

A fundamental objective of this report is to demonstrate that the right tools can help highlight the reality of multidimensional child poverty in the Arab region and to underline the urgent need for a policy response. The report is intended to serve as an evidence-base for dialogue with and amongst government partners at all levels. It seeks to advocate for the importance of routine monitoring of child poverty, moving from ad hoc studies to institutionalised evidence generation. The report provides a methodological approach for ways in which multidimensional poverty can be measured robustly, regularly and routinely in the Arab States.

1.5 Overview of the methodology

This Child Poverty Analytical Report uses a cross-country MODA (CC-MODA) methodology, adapted to the Arab States, informed by the National-MODA analyses previously rolled out in the region, to analyse and compare the 11 selected countries.

The report is based on household survey data sets from the 11 countries studied, on which a standard analytical protocol was applied by OoR. Two survey data sets were used for each country, the most recent compatible survey and one with comparable data for the year closest to 2000. Both data sets originate from three main sources of data: Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS), and Pan Arab Project for Family Health (PAPFAM) household surveys, (see Annex I for the specific list of countries and corresponding data sources). The MODA analysis underlying this report is based on the original Cross-Country MODA (CC-MODA, see De Neubourg et al., 2012), and looked at seven dimensions of child well-being, selected in line with the rights-based approach of the Convention on the Rights of the Child for two age categories (0-4 and 5-17). For children 0-4, the dimensions examined were water, sanitation, housing, health, and nutrition. For children 5-17, the dimensions considered were water, sanitation, housing, information, and education (see Box 1). The dimensions of water, sanitation, and housing are defined in the same way for both age categories, as they reflect the environment in which children live and are applied equally to all children of the same household, while the dimensions of health, nutrition, education and information are specific to the different age groups. This reflects a life-cycle approach to the measurement of multidimensional child poverty that recognises that children have different needs and abilities at different ages. The attention to the life-cycle of children, to the extent allowed by data, is one of the core features of MODA.

MODA uses a 'triple' cut-off method to define multidimensionally poor children: first, indicators and their respective thresholds are defined, according to national or international definitions; indicators are then aggregated into dimensions using the union approach: a child is deprived if he or she is deprived in any of the indicators of that dimension. Finally, dimensions are counted applying equal weighting. MODA does not define, on principle, the final cut-off, instead reporting results for each possible cut-off point. In conducting the child deprivation analysis in later chapters of this report, a child will be considered poor if he or she suffers from two or more deprivations (for example, if a child of school-going age travels for more than 30 minutes round trip to fetch water and is not enrolled in school then he or she will be deemed acutely poor).

Headcount and depth of poverty were generated and a multivariate regression was run for each data set. The data was disaggregated in the same way for a number of background variables. Statistics were produced, also for each data set, for single indicators and for each dimension, and for multiple deprivations.

This application of the MODA methodology defines two measures of poverty. The first measure, 'acute

20 UNICEF, "Humanitarian Action for Children 2012: Middle East and North Africa," 2012, accessed February 2017, https://www.unicef.org/hac2012/hac_mena.html.

poverty', defined in the original CC-MODA methodology (see De Neubourg et al, 2012), has been applied mostly to low-income countries. The second measure, 'moderate poverty', was established taking into consideration specific characteristics and experiences of Arab countries: leveraging the indicators, definitions and dimensions used in the national MODA studies conducted in the region, additional indicators and threshold changes were applied to the 'acute poverty' definition, in order to construct a measure of poverty that better reflects the reality of countries in the region. Increasing thresholds was preferred when there was no indicator deemed suitable to capture progressive realisation for a given dimension. The number of dimensions however, were never increased (see Ferrone, 2017 and Box 1)[21].

The two measures of poverty do not identify mutually exclusive populations: indeed, a child who is acutely poor is also, by definition, moderately poor. The underlying idea is to define both a lower and a higher threshold of poverty that will better capture the situation of children in the present context. The concept is similar to the one pertaining to poverty lines of food and basic needs in monetary terms: the food poverty line (sometimes called 'extreme' poverty line) is lower than the basic needs one, and households who are defined as 'food poor' are also defined as poor in terms of their basic needs (which is usually the official poverty line). Similarly, the threshold defining acute child poverty is lower than the one defining moderate child poverty. Therefore, moderate child poverty 'contains' acute child poverty.

The choice of indicators, thresholds and dimensions for both acute and moderate poverty in the analysis presented in this report is not only based on conceptual considerations, but is also the outcome of data availability: to construct a regional measure, comparability across countries needed to be taken into account, as well as other considerations. This is the main reason for excluding, for example, a measure of deprivation related to violence from the multidimensional analysis[22]. Other considerations include the availability of suitable indicators in domains such as health and nutrition for older children, which are not available in the used dataset, or education for younger children, which would be available only for a sub-set of countries. This stems from the fact that the surveys used are not specifically targeted to children, or child-related deprivation, with the notable exception of the MICS, which, however, has been traditionally more concerned with young children's and maternal well-being. With a more comprehensive data collection, it would be possible to address poverty of all children in a more holistic way.

Using these data, the report includes a cross-country comparison and overall examination of 11 Arab States (see Table 1.1 for the list of countries). To facilitate a more in-depth analysis, countries were divided into clusters (see Chapter 2). The report also provides a study of the trends in child poverty for those countries with available and comparable data, between 2000 and 2015, at the national and cross-country level.

21 For more information on the CC MODA regional analysis for Arab States, see Lucia Ferrone, "A Multiple Overlapping Deprivation Analysis for the Arab Region," UNICEF Innocenti Office Technical Note, 2017.

22 Countries that provide information on deprivation related to violence are discussed in section 3.3 of this report

Box 1: A Multidimensional Deprivation Approach to Child Poverty

i) The Multiple Overlapping Deprivation Analysis (MODA) Approach: MODA is a methodology that UNICEF developed building on the work started with Bristol University (Gordon et al. 2003), to identify the extent and nature of multidimensional poverty experienced by children (de Neubourg et al., 2012). It draws on the international framework of child rights to construct dimensions of child well-being in the domains of survival, development, protection and social participation.*

ii) The Seven Dimensions of Child Poverty**

Water	Sanitation	Housing	Health	Nutrition	Education	Information

(iii) The Continuum of Deprivation along Each Dimension

No Deprivation -> Moderate Deprivation -> Acute Deprivation

(iv) Acute and Moderate Deprivations in Each Dimension

Dimensions	Acute Deprivation	Moderate Deprivation	Age
Water	Unimproved source of water	Household does not have piped water into dwelling or yard	All children 0-17
	Distance of more than 30 minutes roundtrip		
Sanitation	Unimproved toilet facility	Unimproved toilet facility	All children 0-17
		Shared toilet	
Housing	Primitive floor/type of household	Primitive floor/type of household	All children 0-17
	Overcrowding (more than 4 people per room)	Overcrowding (more than 3 people per room)	
Health	Un-skilled birth assistance (0-23 months)	Un-skilled birth assistance (0-23 months)	Children 0-4
	Not immunised: DPT3	Not fully immunised	
		No ante-natal care (0-23 months)	
Nutrition	Infant and young child feeding (IYCF) (0-23 months)	Infant and young child feeding (IYCF) (0-23 months)	Children 0-4
	Wasting	Wasting	
		Stunting (>24 months)	
		Obesity (>24 months)	
Education	Not enrolled in primary school (children of primary age)	Not enrolled in school (all ages)	Children 5-17
	Did not finish primary (from age of end of primary to 17)	Two or more grades behind school or did not complete primary (from age of end of primary to 17)	
Information	No access to any information or communication device	No access to any information device	Children 5-17
		No access to any communication device	

(v) Incidence of Child Deprivation (2+)
In conducting the child deprivation analysis in the later chapters of this report, we consider a child to be deprived if he or she suffers from two or more deprivations.

* Lucia Ferrone, "A Multiple Overlapping Deprivation Analysis for the Arab Region," UNICEF Innocenti Office Technical Note, 2017.
**Adapted from Gordon's (2000) theory of relative deprivation.

Chapter 3 examines the relative gaps or inequalities between disadvantaged and advantaged groups of children. For each variable, a ratio between best and worst outcomes is calculated to show the relative gap, or disparity, between disadvantaged and advantaged children. Disadvantage and advantage are assumed as follows:

More frequently disadvantaged	More frequently advantaged
Rural	Urban
Female	Male
Household head has no or incomplete primary education	Household head has at least completed primary education
Poorest quintile (Q1)	Richest quintile (Q5)

The value 1 of the ratio indicates there is no inequality between the two groups. If the value is greater than 1, the advantaged group shows a better situation than the disadvantaged group: the higher the value, the greater the inequality. For example, if child mortality in rural areas is 30 per thousand live births and in urban areas only 5 per thousand live births, the relative gap will be 6 (30‰/5‰=6), that is, child mortality in rural areas is 6 times greater than in urban areas. A value lower than 1 indicates that, in this particular case, the situation of the disadvantaged group is better than that of the advantaged group.

The following chapters analyse child poverty in 11 LAS member states by initially considering the general situation of poor children and subsequently examining possible drivers of deprivations more closely. Chapter 2 analyses the incidence and profile of child poverty today (in the most recent year post 2010). The report considers the 11 Arab States overall, comparing them and identifying country clusters. In this chapter, the depth of child poverty is also examined. Chapter 3 looks at determinants of child poverty and disparities. This chapter also includes a discussion of child protection, a crucial element of child well-being in the Arab region. Chapter 4 shows the evolution of child poverty since 2000. This chapter provides an analysis of trends in selected countries between 2000 (or the closest data set) and the most recently available and comparable data. Finally, Chapter 5 outlines overall findings and recommendations.

Chapter 2.

Incidence of Child Poverty: The present situation

Chapter 2. Incidence of Child Poverty: The present situation

This chapter presents an analysis of regional patterns in child poverty. It delves into the percentages of acute and moderate child poverty in 11 LAS member states and examines how deeply children are affected.

Section 2.1 analyses the child poverty incidence in each of the 11 countries examined and across all countries. It also compares each country's incidence to the 11-country weighted average.[23]

In section 2.2, the 11 countries are separated into clusters to facilitate a more comprehensive analysis. The section also explores differences in child poverty incidence between countries.

Finally, section 2.3 further breaks down the information included in section 2.2, providing an analysis of the depth of child poverty across the 11 LAS member states and the country clusters.

2.1 Incidence of child multidimensional poverty

In general, the incidence of both acute and moderate child poverty in the Arab region is considerable.

The incidence of acute and moderate child poverty varies greatly across the 11 LAS member states analysed. In Sudan and Mauritania for example, over 70 per cent of children experience acute poverty. While moderate poverty in Mauritania reaches 86.7 per cent, in Iraq it is 46.5 per cent, while Egypt presents a relatively low incidence of moderate poverty at 16.6 per cent. It is important to note, however, that the number of children affected is much higher in Egypt (5.6 million children) than in Mauritania (1.6 million). A disaggregated analysis is therefore critical to fully understand the situation across the region and in each individual country, as well as to identify each country's impact on regional trends.

The under-18 population in the countries examined is approximately 118 million (see Figure 1.1), about 6 per cent of the world's total child population. Of these children, 52.5 million suffer from moderate poverty, representing 44.5 per cent, or close to half of all children in the 11 countries considered, while 29.3 million, or close to 1 out of 4, experience acute poverty. Figure 2.1 shows that the difference between acute and moderate poverty is more pronounced in some countries than in others. In Sudan and Mauritania, for example, incidence of poverty is above 70 per cent for both acute and moderate measures. Except for Sudan, Mauritania, Yemen, Comoros and Morocco each country's moderate poverty incidence is at least twice as high as its acute poverty.

This indicates inequality both within and between countries. In some countries, the majority of children still struggle to meet some of their most basic requirements, while in others, the most extreme forms of multidimensional poverty have been eradicated for the vast majority of children. But within countries, the large differences between acute and moderate poverty indicate that there are significant pockets of children that are at risk of being left behind, as others are approaching or surpassing more aspirational levels of well-being

Sudan has the second largest share of the child population of the 11 countries examined at 19 million (16 per cent), and the highest incidence of both moderate and acute poverty, where very few children are not deprived by one or both measures[24]. Sudan's incidence of acute poverty impacts over 14 million children, while close to 9 out of 10 children suffer from moderate poverty. Thus, Sudan accounts for nearly half of the children living in acute poverty and nearly a third of those living in moderate poverty in the countries studied for this report. In neighbouring Egypt, where the share of population under-18 is the largest of the 11 countries examined at 30 per cent, the number of children affected by acute poverty is approximately 1.2 million (3.2 per cent) while 5.8 million (16.6 per cent) suffer from moderate poverty.

Morocco and Yemen[25] are the countries with deprivation rates closest to the 11-country weighted average. However, both countries are very different. Some 4.6 million children (41.8 per cent) in Morocco experience moderate poverty. That figure is approximately 9.6 million children or 76.4 per cent of the total under-18 population in Yemen. In Morocco, nearly 2.6 million, (23.8 per cent) of all children experience acute poverty.

23 The population under 18 years old in 2015 of each country is used to estimate the weighted average. The source for the under-18 population, unless otherwise stated, is the UNICEF State of the World's Children Report 2016.

24 Data for Sudan in 2000 - before South Sudan's independence - only looked at the north part of the country, and the circa 2015 data was only for Sudan, making the two data sets comparable.

25 Note that the data for Yemen used in this report date from before the current conflict. The levels of multidimensional poverty amongst children in Yemen are assumed to be much higher at the time of publication of this report.

In Yemen, 48.8 per cent or over 6 million children suffer from acute poverty. These two examples emphasise the importance of looking at all countries individually, examining absolute numbers as well as population share, to better understand the situation in each instance (see Table 2.1).

Figure 2.1: Incidence of Moderate and Acute Poverty (%)

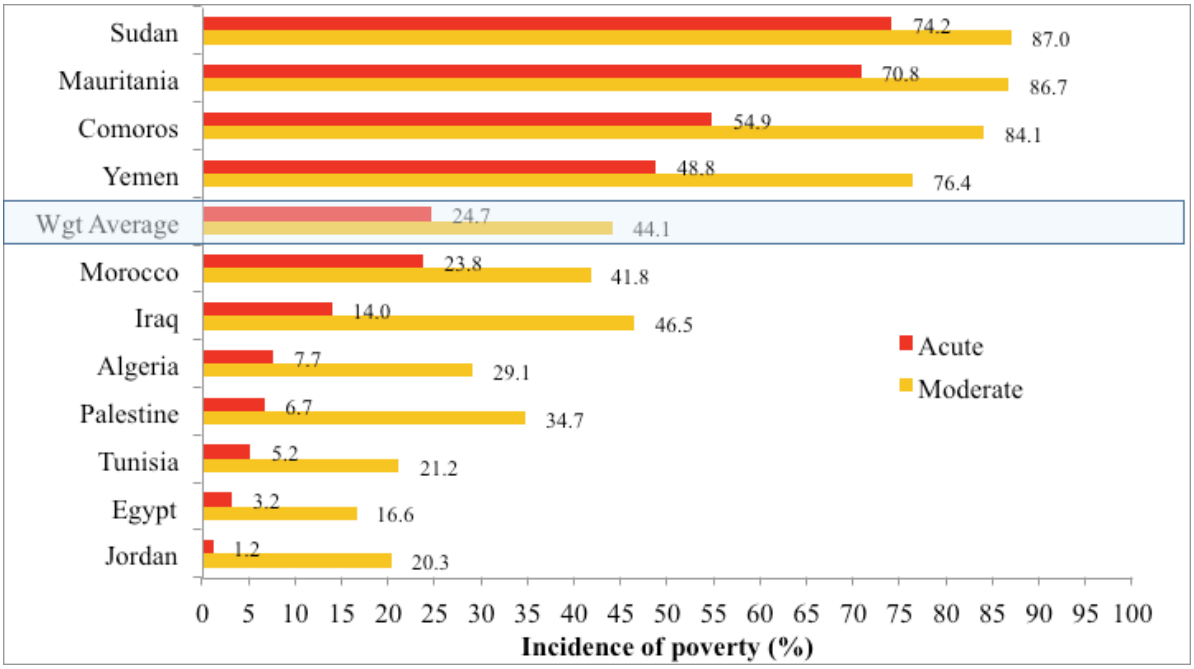


Table 2.1: Incidence of Moderate and Acute Poverty (Absolute Numbers)

	Population Under 18 (Millions)	Moderate Poverty (Millions)	Acute Poverty (Millions)
Sudan	18.95	16.49	14.06
Mauritania	1.89	1.64	1.34
Comoros	0.37	0.31	0.20
Yemen	12.63	9.65	6.12
Total	118.87	52.45	29.31
Morocco	11.12	4.65	2.64
Iraq	17.27	8.03	2.42
Tunisia	3.11	0.66	0.16
Algeria	13.07	3.80	1.01
Palestine	2.20	0.76	0.15
Egypt	35.09	5.83	1.12
Jordan	3.16	0.64	0.04

Mauritania's child poverty incidence depicts a situation similar to Sudan's for the 1.89 million children in the country. At 70 per cent, nearly three-fourths of children experience acute poverty, while moderate poverty affects some 4 out of 5 children. While the incidence of both acute and moderate poverty is very similar in these two countries, Mauritania's under-18 population represents only 10 per cent of Sudan's. Therefore, although the share of children affected is almost the same in both countries, the actual number of children suffering poverty varies greatly.

Tunisia, Jordan and Palestine have similar under-18 populations and the acute poverty level for all three countries is below the weighted average. In all three countries combined less than a million children are

affected by acute poverty. Approximately 160,000 children suffer from acute poverty in Tunisia, 38,000 in Jordan and 147,000 in Palestine. However, in terms of moderate poverty, in Tunisia and Jordan the average is less than half the 11-country weighted average (in Tunisia the under-18 population affected is 660,312 (21.2 per cent) and in Jordan 641,420 (20.3 per cent)).

Yemen and Comoros have relatively similar incidences of acute poverty at 48.8 per cent and 54.9 per cent, respectively. Comoros is the only archipelago that is part of the 11 countries examined, and unlike Yemen, which has 12.6 million children, it has one of the smallest under-18 populations (368,000). However, it also has one of the highest rates of moderate poverty at 84.1 per cent, that is, close to every single child experiences some form of deprivation. More than 9.6 million, or over three quarters of Yemeni children, are affected by moderate poverty. This means, for instance, that more children experience moderate deprivation in Yemen than in Egypt, despite the fact that the former has a significantly smaller under-18 population.

Although Algeria, Morocco and Yemen have similar under-18 population sizes, Algeria's incidence of acute and moderate poverty are more comparable to Palestine's (which has a much smaller child population). With an under-18 population of 13 million, approximately 1 out of every 3 children experiences moderate poverty, while acute poverty affects nearly 1 million children (7.7 per cent).

These findings indicate that there is no one-size-fits-all approach to addressing child poverty in the Arab region. Understanding the complexity of each country's context is essential to designing tailored national policies that address the specificities of child poverty, while taking into account the heterogeneity of the region.

2.2 Cluster analysis of 11 Arab States

As highlighted in section 2.1, the 11 countries examined are characterized by heterogeneous moderate and acute child poverty levels. To better understand each specific situation, a closer examination of national historical, economic and socio-demographic contexts is needed. Since such a detailed analysis is beyond the scope of this report, creating country clusters will allow for a clearer interpretation of the child poverty situation across the 11 selected countries.

Cluster analysis allows us to group together countries with similar characteristics. To facilitate the child poverty analysis across the 11 countries, country clusters were created by considering the distance between each country's child poverty level and the 11-country average, weighted by population size. This process yielded the following three groups:

- Cluster 1: Countries with low acute poverty and low moderate poverty
- Cluster 2: Countries with low to medium acute poverty and medium to high moderate poverty
- Cluster 3: Countries with high acute poverty and high moderate poverty

Table 2.2: Country Clusters by Levels of Child Poverty

Country	Survey	Year	Acute HC 2+ (%)	Moderate HC 2+ (%)	Acute Adj HC 2+ (%)	Moderate Adj HC 2+ (%)
Algeria	MICS	2012	7.7	29.1	3.4	13.9
Egypt	DHS	2014	3.2	16.6	1.3	7.4
Jordan	DHS	2012	1.2	20.3	0.5	8.7
Palestine	MICS	2014	6.7	34.7	2.7	16.2
Tunisia	MICS	2011	5.2	21.2	2.4	10.3
Cluster 1			4.4	20.6	1.9	10.0
Iraq	MICS	2011	14.0	46.5	6.43	22.6
Morocco	PAPFAM	2011	23.8	41.8	12.2	23.2
Cluster 2			17.8	44.7	8.7	22.8
Comoros	DHS	2012	54.9	84.1	27.2	52.8
Mauritania	MICS	2011	70.8	86.7	41.9	60.0
Sudan	MICS	2014	74.2	87.0	43.6	61.5
Yemen	DHS	2013	48.8	76.4	27.2	47.8
Cluster 3			64.3	83.0	37.2	56.2
Weighted Average			24.7	44.1	13.6	26.2

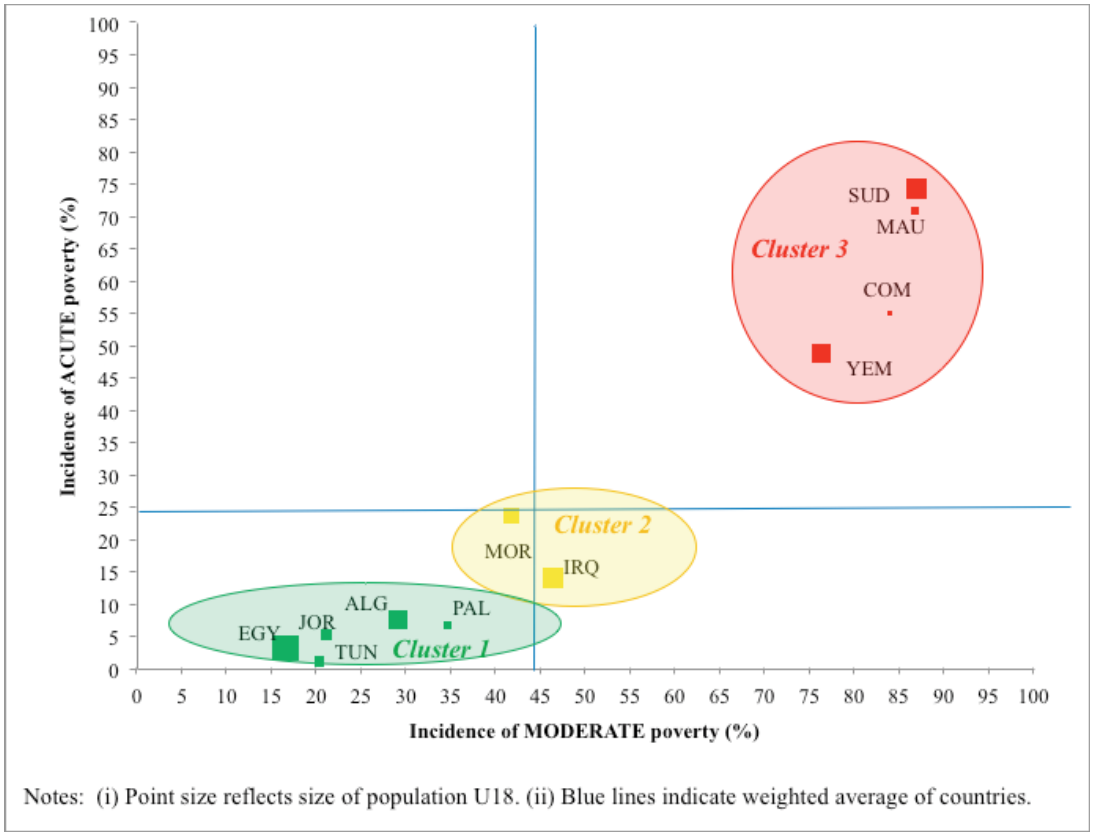
In Table 2.2, acute and moderate poverty headcount (HC 2+) scores are shown for each country, as well as acute and moderate poverty adjusted headcount (Adj HC 2+). The adjusted headcount measure accounts for depth of poverty, which is examined further in the following section. As illustrated in this table, the 11 countries examined clearly fit into the three clusters and remain within the same country cluster regardless of the measure applied.

The country cluster composition is as follows:

- Cluster 1: Algeria, Egypt, Jordan, Palestine and Tunisia
- Cluster 2: Iraq and Morocco
- Cluster 3: Comoros, Mauritania, Sudan and Yemen

Figure 2.2 helps to visualize the information provided in Table 2.1 in further detail. In looking at Cluster 1, we see that while Egypt has the lowest incidence of moderate poverty, it also has the largest population share both within its cluster and the selected 11 countries. The figure also shows that each cluster includes one of the three countries with the largest share of children in the region (Egypt, Iraq and Sudan). Cluster 1, where the lowest moderate and acute levels of poverty are observed, accounts for approximately 56.6 million children, while Cluster 2 and Cluster 3 account for 28.4 and 33.8 million children, respectively. As illustrated by Figure 2.1, the total weighted average of moderate poverty, 44.1 per cent, is below the weighted average for Cluster 2 (44.7 per cent) and Cluster 3 (83.0 per cent) and above Cluster 1 (20.6 per cent). In the case of acute poverty, the weighted average (24.7 per cent) is above Cluster 1 (4.4 per cent) and Cluster 2 (17.8 per cent) and much lower than Cluster 3 (64.3 per cent).

Figure 2.2: Country Clusters by Levels of Child Poverty



Notes: (i) Point size reflects size of population U18. (ii) Blue lines indicate weighted average of countries.

Given the situation in Yemen and Sudan, Cluster 3's incidence spans from 76.4 per cent to 87 per cent of children who experience moderate poverty, while acute poverty spans from 48.8 per cent to 74.2 per cent. Cluster 1 has a moderate incidence spanning from 16.6 per cent to 34.7 per cent and an acute poverty ranging from 1.2 per cent to 7.7 per cent. Cluster 2 is the only group with two countries and has moderate poverty ranging from 41.8 per cent to 46.5 per cent and acute poverty from 14 per cent to 23.8 per cent. It is interesting to note that Clusters 1 and 2 are close and contiguous while Cluster 3 is much more distant both in terms of moderate and acute poverty.

In regards to acute poverty, it is clear that children in Cluster 3 countries fare worse than those in Clusters 1 and 2. In Yemen, children experience acute poverty by approximately 25 percentage points more than children in Morocco (48.8 per cent in the former and 23.8 per cent in the latter). Between Jordan and Sudan, the countries with the least and most acute poverty incidence respectively, children suffering from acute poverty range from 1.2 per cent in Jordan to 74.2 per cent in Sudan. Figure 2.2 also shows that Morocco's acute poverty incidence and moderate poverty incidence are closest to the weighted average. Cluster 1 countries present similar acute poverty incidence levels, as none of the four countries exceed 10 per cent.

The figures in this section corroborate the importance of presenting data in different formats. This helps to provide a better understanding of each country's reality without assuming regional similarities. The further the information depicted is examined, the easier it is to see that each of the 11 countries considered follows a different political, social and economic trajectory, leading to a specific context within which child poverty must be understood and addressed.

2.3 Depth of child poverty in 11 Arab States

This section analyses the depth of poverty by looking at multiple deprivations and their distribution among children. The objective of this deprivation overlap analysis is to provide information on children's experience of simultaneous deprivations in several dimensions. It can also help inform policy design and identify entry points for targeted policies.

As illustrated by Figures 2.3 and 2.4, a large number of children in the region suffer from at least one deprivation by both moderate and acute measures. While Sudan presents the direst scenario in both measures, it is important to emphasise the reality of Cluster 1 countries. More than half of the children in all five countries in Cluster 1 experience at least one moderate deprivation, which is particularly noteworthy considering the proportion of children included in the cluster.

Sudan presents the most alarming scenario, where close to 50 per cent of the population under 18 suffers from four or more (4+) moderate deprivations. This number falls in terms of acute deprivations, where about 20 per cent of all children suffer from 4+ deprivations, however, it is still high. Figure 2.3 clearly shows that in Sudan, nearly every child suffers from at least one moderate deprivation. Likewise, Figure 2.4 highlights that more than 93 per cent of children in the country experience at least one acute deprivation.

Egypt and Jordan are the two countries with the lowest incidence of children suffering from more than two (2+) deprivations under both moderate and acute measures, followed by Tunisia, Palestine and Algeria. However, as stated earlier, since Egypt has the highest share of children in the region, even at just above 15 per cent of moderately deprived children, the absolute number of the under 18 population affected is very high. While countries in Cluster 1 are better off than countries in Clusters 2 and 3, the incidence of moderate deprivation is still significant (Figure 2.5). In Cluster 1, about 20.6 per cent of all children experience 2+ deprivations.

Countries in all 3 clusters show that fewer children are affected as the number of dimensions considered increases.

Figures 2.3 and 2.4 illustrate the high incidence of overlapping deprivations in the region, and while this is particularly true for moderate deprivations, some countries also experience high levels of 1+ acute deprivation. In Comoros, Mauritania, Sudan and Yemen, for example, over three out of four children experience at least one acute deprivation.

Families and children are negatively affected by overlapping deprivations, and more severely impacted than other groups. Results show that the moderate deprivation measure more adequately describes the intrinsic qualities of child poverty than the acute deprivation measure in the 11 countries examined, particularly in clusters where there is no substantial difference between the two measures.

Figure 2.3: Depth of Moderate Child Poverty

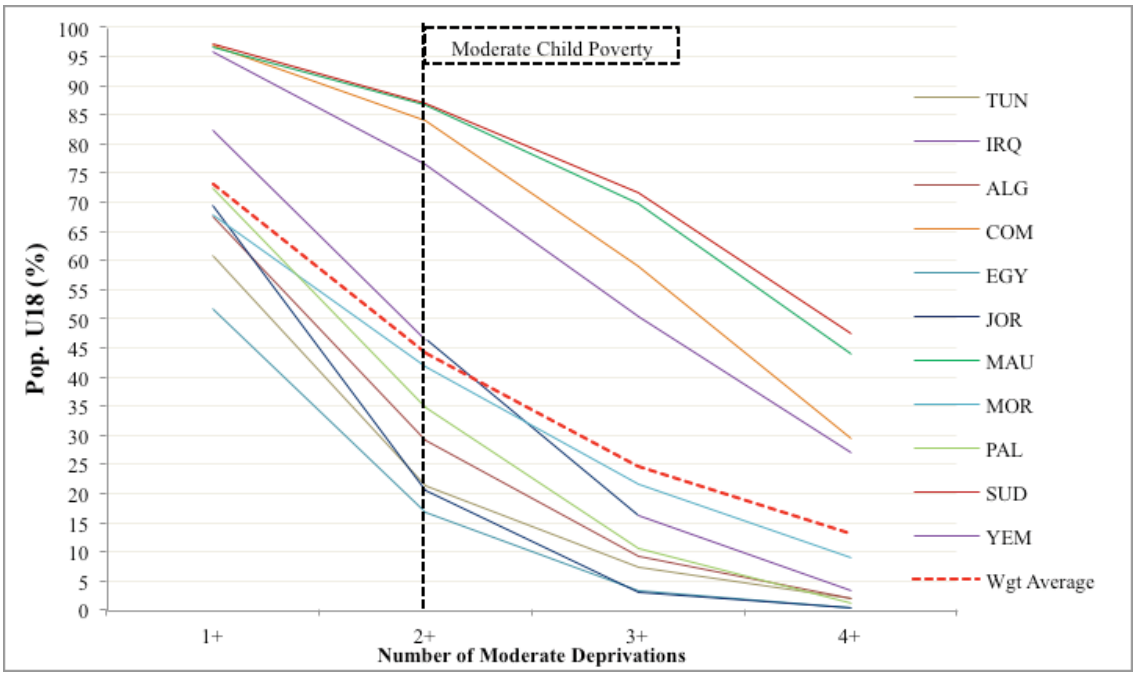


Figure 2.4: Depth of Acute Child Poverty

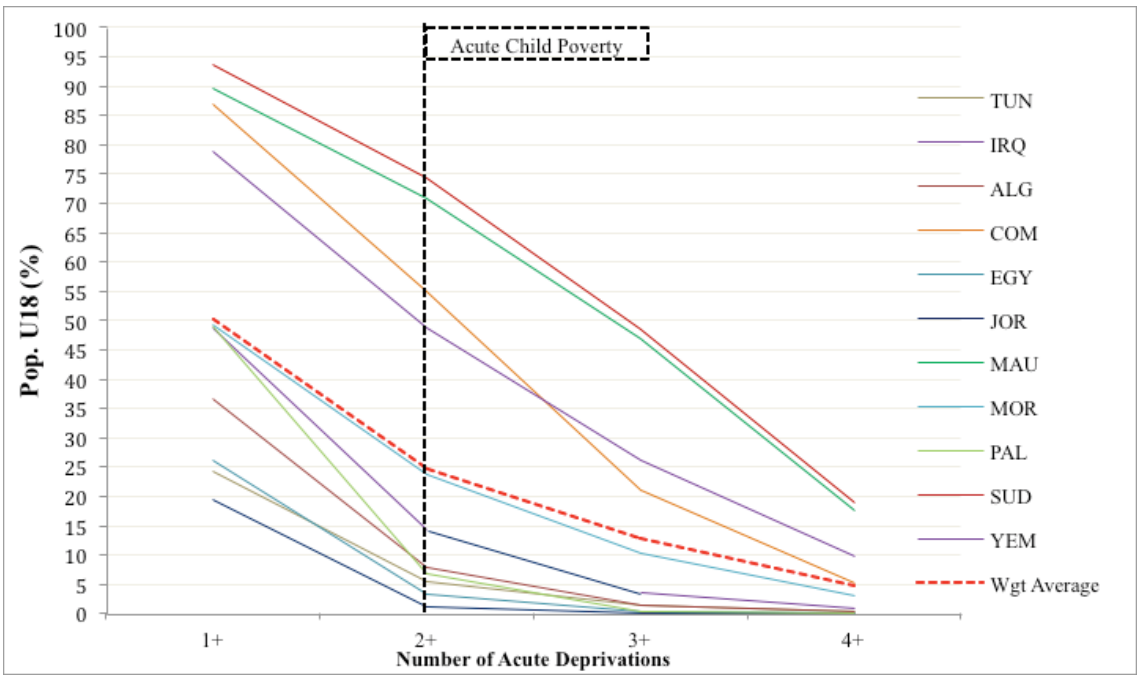
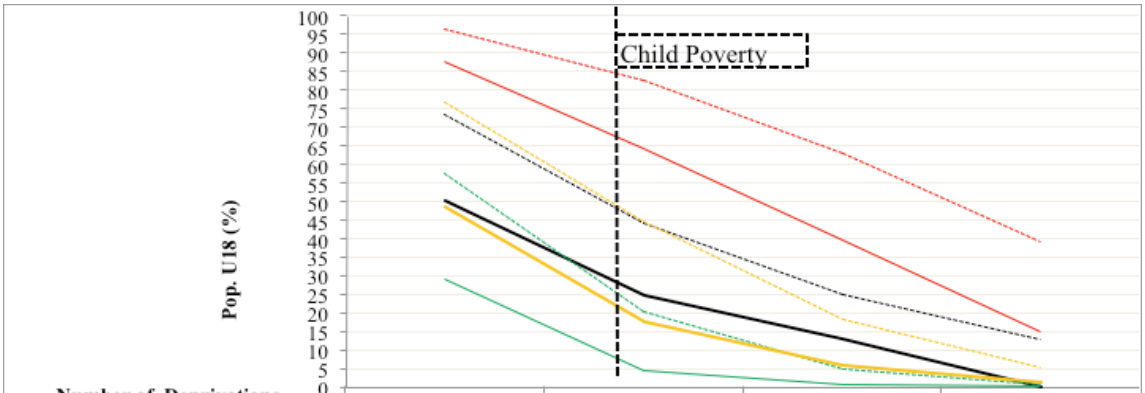


Figure 2.5 shows 1+ to 4+ deprivations by both acute and moderate measures for all three clusters as well as the 11-country averages. Cluster 3 countries show a higher incidence in both measures for 1+ to 4+ deprivations. Whereas in Cluster 1, for example, about one third of children suffer from at least 1 acute deprivation and only 0.5 per cent experience 3+ acute deprivations, almost none suffer from 4+ acute deprivations.

This figure also highlights that for both acute and moderate measures more children than average experience at least 1 deprivation, but less than average experience more than 2, 3 or 4 deprivations. Cluster 3 countries account for some 33 million children, which means that at 15.1 per cent, nearly 5.1 million children suffer from acute deprivation in 4+ dimensions. This percentage is significantly lower for Cluster 2, where at 1.5 per cent some 426,000 children are affected by acute deprivation in more than four dimensions.

Figure 2.5: Depth of Acute and Moderate Child Poverty – All Clusters



Number of Deprivations	1+	2+	3+	4+
All countries-Moderate	73.1	44.1	24.8	12.9
All Countries Acute	50.3	24.7	13.0	0.0
Cluster 1 -Moderate	57.5	20.6	5.0	0.8
Cluster1 -Acute	28.8	4.4	0.5	0.1
Cluster 2-Moderate	76.6	44.6	18.4	5.5
Cluster 2-Acute	48.7	17.9	6.1	1.5
Cluster 3 -Moderate	96.4	83.0	63.3	39.4
Cluster 3-Acute	87.6	64.3	39.7	15.1

Besides the incidence of poverty (that is, the share of children deprived in two or more deprivations), MODA also calculates the intensity of poverty, which can be regarded as the depth of poverty: it measures by how much poor children are deprived. And finally, MODA calculates the adjusted headcount, which is the product of incidence and intensity, providing synthetic information about the breadth and depth of poverty.

Figures 2.6, 2.7 and 2.8 incorporate the poverty depth measure and the adjusted headcount for each country (Figures 2.6 and 2.7) and for each cluster (Figure 2.8). In terms of moderate poverty, approximately 44.1 per cent of children in the 11 countries examined suffer from two or more deprivations. This percentage is significantly lower in regards to the acute poverty measure, where the share of children affected is 24.7 per cent. Likewise, when looking at depth of poverty, the 11-country average is 53.1 per cent for the moderate measure, and 48 per cent for the acute measure.

Figure 2.6: Depth by Country – Moderate Child Poverty

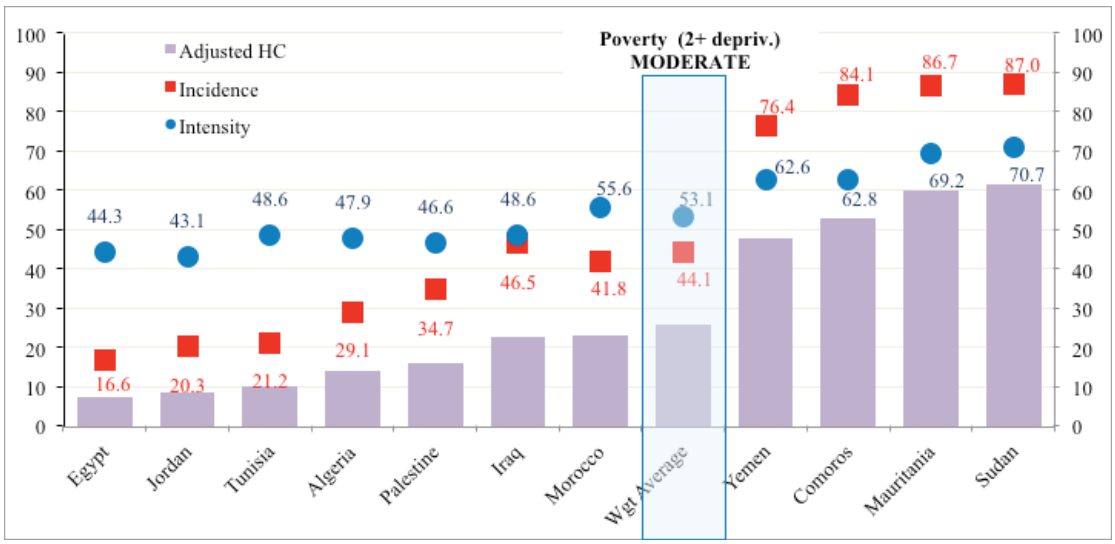


Figure 2.7: Depth by Country – Acute Child Poverty

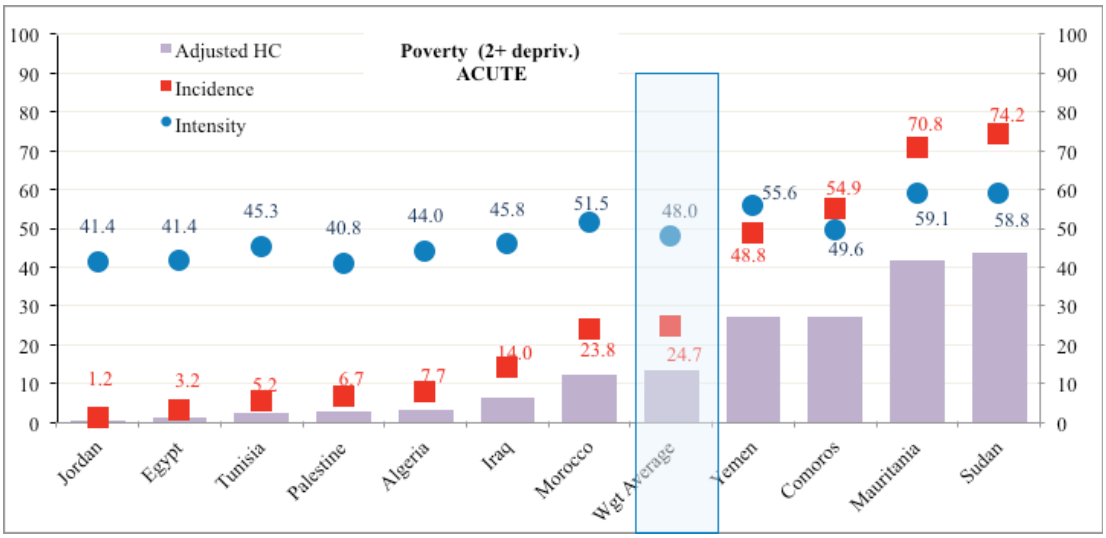
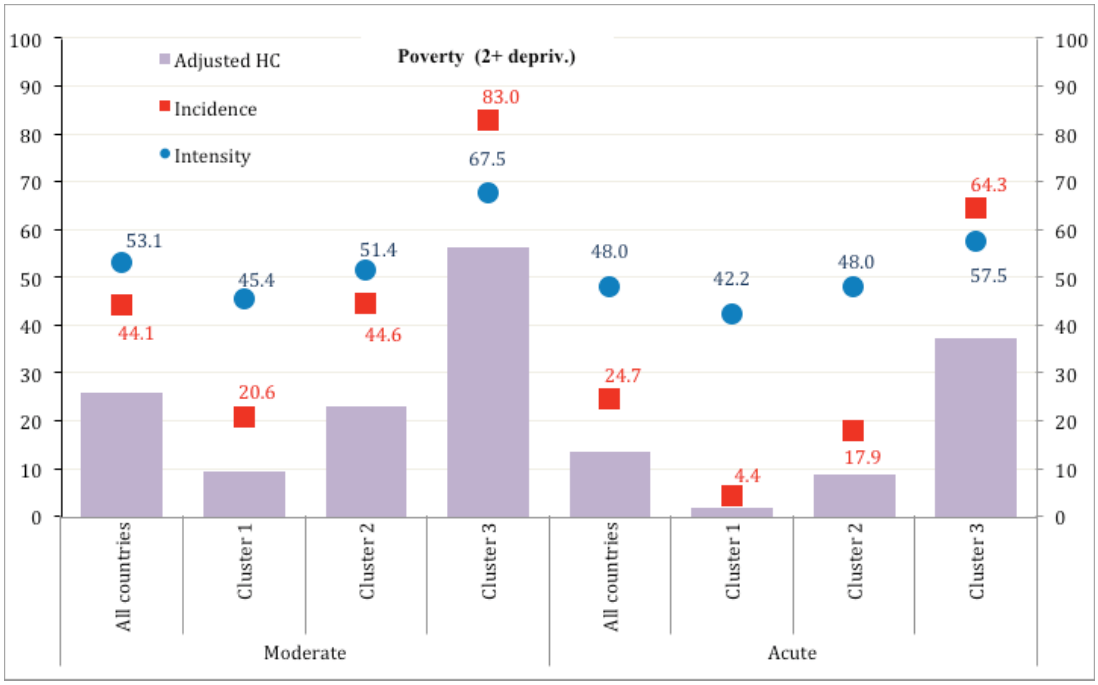


Figure 2.8: Depth by Cluster – Moderate and Acute Child Poverty



As shown in Figure 2.8, for both acute and moderate poverty, Cluster 3 countries fare worse than Clusters 1 and 2. Cluster 1 countries show low incidence in both moderate and acute poverty but a depth similar to the regional average. Moderate poverty incidence in Cluster 3 is higher than acute or moderate incidence for any other cluster.

Cluster 3 countries show an incidence higher than depth by both acute and moderate measures, whereas it is the opposite in Clusters 1 and 2 countries and in terms of the regional average. Cluster 3 shows consistently more similarities in terms of incidence and depth levels across moderate and acute deprivations than do Clusters 1 and 2. These two clusters have more significant differences in depth and incidence levels although the incidence and depth of moderate poverty in Cluster 2 are nearly the same.

It is important to note that as shown in Figure 2.8, both incidence and depth follow the same trend or pattern as does the adjusted headcount for both moderate and acute measures.

Chapter 3.

Determinants of Child Poverty and Inequality

Chapter 3. Determinants of Child Poverty and Inequality

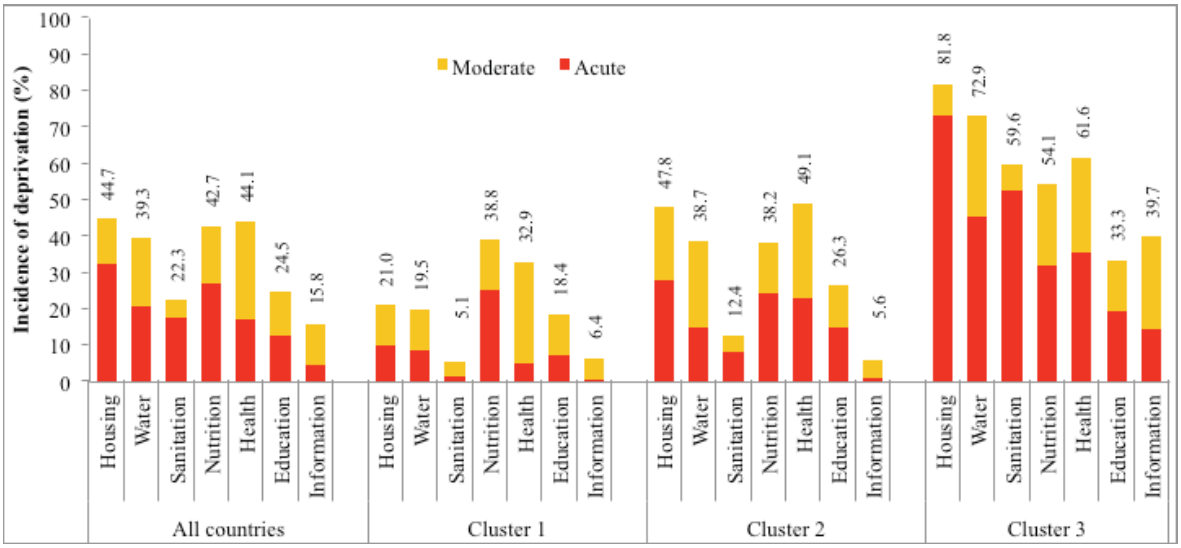
This chapter delves deeper into the information examined in Chapter 2 by conducting an analysis of acute and moderate child poverty dimensions and by further disaggregating data based on geography, sex, education of the head of household and wealth. It compares the three clusters and further analyses each country by dimension, examining the more serious deprivation cases in housing, health, and education. It also analyses when specific countries have lower deprivation incidence in certain dimensions compared with others in their cluster and with the cluster average. The chapter seeks to clarify the reasons behind each cluster average, considering in particular each country's weight on these aggregate measures. Section 3.2 studies disparities or relative gaps within dimensions when disaggregating data by rural/urban area, sex, education of the household head and wealth. Finally, section 3.3 addresses deprivation determinants according to two age groups: 0 to 4 years old and 5 to 17 years old. It concludes by analysing the impact of violent discipline towards children according to the various disaggregation categories and country clusters.

3.1 Dimensions and their Contributions to Poverty

This section examines moderate and acute deprivation levels in each dimension of the multidimensional poverty analysis, providing a more detailed account of how clusters compare against each other. It also looks at how much each cluster weighs on the 11-country average by dimension.

Figure 3.1 illustrates moderate and acute deprivation incidence for the seven dimensions that make up the child deprivation analysis. The incidence by dimension varies significantly across and within the three clusters. Below is a detailed analysis by dimension.

Figure 3.1 Acute and Moderate Deprivation by Dimension and Cluster (in %)



Housing

The housing dimension analysis examines housing materials, particularly flooring, and overcrowding indicators.[26] Overall, in the 11 countries examined, the housing dimension affects children most frequently, for both moderate and acute deprivation. In looking at the 11-country average, approximately 32.2 per cent of all children suffer from acute housing deprivation and 44.7 per cent suffer from moderate deprivation. In other words, nearly half of all children in the region suffer from moderate housing deprivation, living in houses or shelters with primitive flooring and dealing with overcrowding of more than 3 people to a room. One in every 3 children suffer from acute deprivation in this dimension, living in houses with primitive flooring and dealing with overcrowding of more than 4 people to a room.

26 For complete definitions of dimension indicators according to acute and moderate deprivation see Annex II.

Figure 3.1 shows that the incidence of child deprivation in each dimension varies according to the cluster. In Cluster 1 countries, for example, 9.9 per cent of children experience acute deprivation in housing, while twice as many (21 per cent) suffer from moderate housing deprivation. Acute housing deprivation in Cluster 1 represents only a third of the 11-country average, while moderate housing deprivation is about half.

Both acute and moderate housing deprivation in Cluster 2, which includes Iraq and Morocco, look somewhat similar to the 11-country average. In Cluster 2 countries, more than 1 out of every 4 children, or 27.7 per cent of the under-18 population experiences acute housing deprivation. Nearly half (47.8 per cent) suffers from moderate housing deprivation, 3 percentage points higher than the 11-country average. It is important to note that since this section only considers incidence it does not account for the actual number of children affected. Clusters 2 and 3 have relatively similar population sizes (at 28.3 million and 33.8 million people under 18 for Clusters 2 and 3, respectively, see section 2), while the population of Cluster 1 is larger by approximately 25 million children (at 56.6 million young people under 18).

In Cluster 3, which is made up of nearly 34 million children, the incidence of acute housing deprivation is 73.3 per cent, that is, approximately three in four or 24.7 million children, experience acute housing deprivation. At 81.8 per cent, close to 27.6 million children experience moderate housing deprivation, nearly twice the incidence of moderate housing deprivation suffered by children in Cluster 2.

Water

The water dimension analysis examines children's use of unimproved water sources, the distance from a child's home to water sources and access to piped water.[27] The 11-country average shows a high incidence of acute and moderate water deprivation. Approximately 20.5 per cent of all children experience acute deprivation in this dimension, while some 39.3 per cent are affected by moderate water deprivation. As shown in Figure 3.1, the acute and moderate incidence are quite different in each cluster. Almost half of all children in Cluster 3 countries (45.4 per cent) experience acute water deprivation, while 72.9 per cent experience moderate water deprivation.

Cluster 2, where moderate and acute water deprivation respectively affect 38.7 per cent and 14.7 per cent of all children, shows an incidence in terms of moderate deprivation that is closer to that of the 11-country average than the other two clusters. At least 1 in every 3 children in Cluster 2 countries experience moderate water deprivation, in other words, live in a household without piped water inside the dwelling or in the yard. Nearly 1 in 6 children in this cluster experience acute water deprivation, that is, they must walk more than 30 minutes roundtrip to fetch water or can only access an unimproved water source.[28]

In Cluster 1, acute water deprivation, at 8.5 per cent, is less than half that of the 11-country average (20.5 per cent). While Cluster 1's acute water deprivation incidence is close to two thirds of Cluster 2's, at 14.7 per cent, the proportion of children affected is almost the same for both clusters. In Cluster 1, 4.8 million children experience acute water deprivation while 4.2 million are affected in Cluster 2. In Cluster 3, this incidence is tripled as 15.3 million children are affected by acute water deprivation.

Sanitation

The sanitation dimension analysis examines unimproved toilet facility and shared toilet indicators.[29] Acute and moderate sanitation deprivation incidence varies significantly among the clusters and as each cluster compares with the 11-country average. Cluster 3, where more than 52.4 per cent of children experience acute deprivation and 59.6 per cent experience moderate deprivation, shows the highest incidences. Cluster 1 has the lowest incidence for both acute and moderate sanitation deprivation, however, this still affects a relatively high proportion of children given the larger child population in this cluster. In Cluster 1, 1.3 per cent of children suffer from acute deprivation while 5.1 per cent suffer from moderate deprivation, which represents approximately 736,000 and 2.9 million children, respectively.

Cluster 2 shows incidences approximately 10 percentage points below the 11-country average for both acute and moderate sanitation deprivation. The share of Cluster 2 children acutely and moderately affected by this deprivation represent respectively, 8.2 per cent and 12.4 per cent. In terms of moderate deprivation, approximately 3.5 million children are affected in Cluster 2, which in comparison with Cluster 1, represents only about three quarters of a million more. It is important to note that while incidences can be significantly different from cluster to cluster (i.e. 12.4 per cent moderate deprivation in Cluster 2 against 5.1 per cent

27 Ibid.

28 An improved drinking-water source is defined as one that, by nature of its construction or through active intervention, is protected from outside contamination, in particular from contamination with fecal matter (Source: WHO / UNICEF Joint Monitoring Programme for Water Supply and Sanitation, accessed March 2017, https://www.wssinfo.org/definitions-methods/).

29 For complete definitions of dimension indicators according to acute and moderate deprivation see Annex II.

in Cluster 1), this can translate into surprising similarities when looking at the actual number of children affected.

Nutrition

The nutrition dimension analysis looks at indicators for stunting and obesity.[30] This dimension shows significant differences with previous dimensions examined. Clusters 1 and 2 have similar incidences for both moderate and acute nutrition deprivation.

Alarmingly, in both clusters, which represent 7 countries, close to 1 in 4 children experience acute nutrition deprivation. Cluster 1 shows an incidence of acute nutrition deprivation of 25.2 per cent, while that figure is slightly lower at 24.3 per cent for Cluster 2. The incidence level of acute nutrition deprivation for these two clusters is only slightly lower than the regional average, painting a dire picture in both groups. Combined, the acute nutrition deprivation incidence in Clusters 1 and 2 represents approximately 6.2 million children.

Cluster 3 shows an acute nutrition deprivation share of 31.7 per cent of its child population, only 5 percentage points above the 11-country average. Moderate nutrition deprivation affects over half of all children in Cluster 3 countries (54.1 per cent), while 38.8 per cent and 38.2 per cent are affected in Clusters 1 and 2, respectively.

The 11-country average more closely resembles the situation of countries in Clusters 1 and 2. This average represents approximately 9 million children experiencing acute nutrition deprivation across the 11 countries, while 14.4 million suffer from moderate nutrition deprivation.

Health

The health dimension analysis examines antenatal care and immunization indicators.[31] As shown in Figure 3.1 health deprivation varies significantly among clusters. Acute deprivation incidence is highest in Cluster 3 (35.2 per cent) while Cluster 2's incidence level, at 23 per cent, is relatively close to the 11-country average. In Cluster 3 countries, more than 1 out of every 3 children suffers from acute health deprivation. That represents approximately 2.9 million children who experience acute health deprivation in Cluster 3 alone, the largest share of acute deprivation for the health dimension. In looking at the 11-country average, approximately 5.7 million children suffer from acute health deprivation across the 11 countries examined. Cluster 1 has the lowest incidence of acute health deprivation at 5 per cent, which represents almost 840,000 children.

Cluster 3 has a moderate health deprivation incidence of 61.6 per cent, representing 5.2 million children. About half of all children in Cluster 2 countries experience moderate health deprivation, while at least 1 out of every 3 children in Cluster 1 countries suffer from moderate health deprivations.

The average incidence of moderate health deprivation is significantly high across all 3 clusters as 44.1 per cent of children on average experience some form of health deprivation.

Education

For the education dimension, the analysis examines school enrolment, children who are two or more grades behind in school, and primary school completion for children ages 5 through 17.[32] In the education dimension, incidence is relatively high across Clusters 2 and 3, particularly in terms of moderate deprivation. When a child is moderately deprived in education, he or she is not enrolled in school or is at least two grades behind while a child is considered acutely deprived if he or she is not enrolled in or did not finish primary school.

In Clusters 2 and 3, 1 out of every 3 children experience moderate education deprivation. The total number of children experiencing moderate education deprivation in these two clusters combined is approximately 12.9 million. Cluster 1 countries fare somewhat better with a moderate education deprivation incidence of 18.4 per cent and acute deprivation incidence of 7.1 per cent. The actual number of children experiencing moderate education deprivation in Cluster 1 represents 7.2 million children, more than half the amount of Clusters 2 and 3 combined.

30 Ibid.
31 Ibid.
32 For complete definitions of dimension indicators according to acute and moderate deprivation see Annex II.

Information

The information dimension analysis examines indicators for access to information and communication devices.[33] The information dimension has the lowest incidence of all the dimensions examined in Clusters 1 (second lowest for moderate deprivation), 2 and 3 (second lowest for moderate deprivation). The 11-country average is 4.4 per cent for acute deprivation and 15.8 per cent for moderate deprivation. In other words, of the 83.3 million children included within the scope of this indicator, 3.6 million suffer from acute information deprivation, and 13.2 million experience moderate information deprivation.

Cluster 1 countries experience practically no acute information deprivation, and a low 7 per cent moderate deprivation. In Cluster 2, a low 0.8 per cent of all children suffer from acute information deprivation and 5.6 per cent experience moderate information deprivation. In Cluster 3, moderate information deprivation incidence reaches 39.7 per cent, which means that nearly 9.5 million children experience it. At a high 14.2 per cent incidence, 3.4 million children suffer from acute information deprivation Cluster 3 countries.

As illustrated by Figure 3.1, in examining the 11-country moderate deprivation averages, housing, nutrition and health have particularly high incidence levels. The deprivation incidence in housing and water is significant in all clusters; however, it is particularly elevated in Clusters 2 and 3. Moderate health deprivation is high in all clusters as well, but it is 1.9 times higher in Cluster 3 than it is in Cluster 1. Cluster 3 has an acute housing deprivation that is 3.9 times higher than that of Cluster 1, and 2.3 times higher than Cluster 2. Cluster 1's performance is relatively better in all dimensions; however, it is important to note that the cluster's moderate health and nutrition deprivation incidences are worryingly high, in addition to the high housing and water incidence levels.

The information presented in Table 3.1 is disaggregated by country, cluster, dimension as well as acute and moderate deprivations, allowing for a more thorough analysis of the data. Although deprivation levels overall are in line with the findings discussed above, this more granular table can help underscore areas where more urgent attention is needed.

Table 3.1: Acute and Moderate Deprivation by Dimension (in %)

Country	Housing		Water		Sanitation		Nutrition		Health		Education		Information	
	Acute	Moderate	Acute	Moderate	Acute	Moderate	Acute	Moderate	Acute	Moderate	Acute	Moderate	Acute	Moderate
All countries	**32.2**	**44.7**	**20.5**	**39.3**	**17.5**	**22.3**	**26.7**	**42.7**	**17.0**	**44.1**	**12.4**	**24.5**	**4.4**	**15.8**
Cluster 1	9.9	21.0	8.5	19.5	1.3	5.1	25.2	38.8	5.0	32.9	7.1	18.4	0.3	6.4
Jordan	7.5	26.8	7.0	44.9	0.1	0.2	22.0	27.5	1.8	33.8	1.8	10.1	0.0	0.6
Egypt	9.3	17.2	3.2	9.5	0.2	2.5	26.2	42.3	5.4	39.3	10.3	19.2	0.2	6.2
Tunisia	9.0	18.3	7.0	36.8	4.9	8.1	23.5	33.0	4.0	16.9	3.2	16.5	0.4	3.9
Palestine	7.2	26.0	40.6	44.4	0.3	1.4	15.5	23.3	1.0	24.1	2.7	6.0	1.8	42.8
Algeria	12.9	29.6	17.9	31.9	4.0	13.3	24.6	34.3	5.2	18.8	2.1	21.1	0.1	3.2
Cluster 2	27.7	47.8	14.7	38.7	8.2	12.4	24.3	38.2	23.0	49.1	14.7	26.3	0.8	5.6
Iraq	28.5	54.4	10.1	38.9	3.6	6.7	25.1	39.6	25.4	46.8	13.6	29.6	0.3	2.4
Morocco	26.4	37.1	21.8	38.4	15.3	21.2	22.9	35.7	18.5	53.2	16.2	21.4	1.6	10.3
Cluster 3	73.3	81.8	45.4	72.9	52.4	59.6	31.7	54.1	35.2	61.6	19.4	33.3	14.2	39.7
Yemen	49.2	66.6	48.7	81.8	35.1	40.6	30.6	58.5	43.9	81.6	12.8	20.5	8.9	25.9
Comoros	42.4	53.8	28.1	69.0	63.4	77.4	33.9	51.5	25.1	60.1	10.0	47.8	19.1	48.5
Mauritania	70.4	79.2	56.1	71.9	59.7	71.0	36.7	54.4	44.9	68.3	26.5	37.7	10.2	38.7
Sudan	90.2	92.8	42.5	67.1	63.0	70.7	31.7	51.5	28.2	46.7	23.8	42.2	18.2	49.1

More than 25% below the weighted average of all countries. | Within 25% of the weighted average of all countries. | More than 25% above the weighted average of all countries.

33 For complete definitions of dimension indicators according to acute and moderate deprivation see Annex II.

In the water dimension, Palestine has a high incidence of acute water deprivation not only in comparison with Cluster 1 countries, but with Cluster 2 countries as well, and at least one country in Cluster 3. In terms of moderate water deprivation, all countries in Cluster 1, except for Egypt have a higher incidence than the cluster average; the incidence of moderate water deprivation is higher in Jordan and Palestine than in all the countries in Cluster 2. At almost 45 per cent, the incidence of moderate water deprivation in Jordan is higher than Cluster 2's average for the same dimension, which is 38.7 per cent.
In the Sanitation dimension, Cluster 1 moderate and acute deprivation levels are relatively low. Algeria, however, presents a higher incidence of moderate deprivation than the other countries that make up the cluster and a higher incidence of moderate deprivation than Iraq, which is part of Cluster 2. At 13.3 per cent, the incidence of moderate sanitation deprivation is almost twice as high as that of Iraq.

Cluster 3 countries have the highest incidence in both moderate and acute nutrition deprivation. Yemen especially shows an alarming rate of 58.5 per cent moderate deprivation, which means that more than half of the population's children are affected. At 30.6 per cent, Yemen's acute nutrition deprivation is slightly lower than the cluster average and closer to Cluster 2 countries' moderate incidence levels. In this dimension, most Cluster 1 countries have situations similar to those in Cluster 2 countries, with the exception of Palestine. Cluster 1 and Cluster 2 averages are very similar, although average incidence levels are higher in Cluster 1 than Cluster 2 by one or half a percentage point. This difference is likely influenced by Egypt's higher incidence of acute and moderate nutrition deprivation.

In the nutrition deprivation dimension, Sudan fares better than Yemen and Mauritania in terms of moderate deprivation. This is unusual since Sudan has some of the highest incidence rates in both acute and moderate deprivation for several dimensions.

The results for the health dimension show that while the incidence level in most Cluster 1 countries is at expected levels, moderate health deprivation is higher for Egypt at 39.3 per cent than the cluster average. Similarly, Iraq's level of acute health deprivation is 25.4 per cent, meaning that 1 in every 4 children in the country are affected. Once again, Sudan's moderate health deprivation incidence is lower than the cluster average by nearly 20 percentage points, and it is almost the same as Iraq's in Cluster 2.

The moderate and acute education deprivation incidence for Cluster 1 countries is relatively low compared to the 11-country averages. However, Egypt, for example, shows a higher than average incidence in acute and moderate education deprivation at 10.3 per cent and 19.2 per cent, respectively. Algeria shows the highest incidence of moderate education deprivation for the cluster at 21.1 per cent. In Cluster 3, Yemen fares better than both Cluster 2 countries, Iraq and Morocco in acute and moderate education deprivation.

In the information dimension, Palestine shows an alarmingly high incidence of moderate information deprivation at 42.8 per cent. That level of incidence is similar to that of Sudan and Comoros at 49.1 per cent and 48.5 per cent, respectively. Palestine's moderate information deprivation is also 6.7 times higher than the cluster average. Iraq, part of Cluster 2, fares much better than Morocco, and more similarly to Cluster 1 countries, particularly in terms of moderate deprivation.

Table 3.1 highlights a few notable trends in terms of deprivation incidence by dimension. Palestine, for example, a Cluster 1 country has acute water deprivation and moderate information deprivation levels that are more similar to those of Cluster 3 countries. In Cluster 2, Morocco fares particularly worse than Iraq, in terms of acute water deprivation, acute and moderate sanitation, and moderate information deprivation while Iraq fares worse particularly with moderate housing deprivation. Sudan, in Cluster 3, shows much lower incidence of moderate health deprivation at 46.7 per cent than the cluster average which is 61.6 per cent.

Inequality by dimensions

The following three figures show the differences in rural-urban deprivation for three selected countries, one in each cluster. A quick glimpse shows that moderate deprivation in rural areas is higher than in urban areas. The same trend persists in looking at acute deprivation, however, with some exceptions. In the case of Egypt, for example, the incidence of urban moderate nutrition deprivation, at 43.6 per cent is higher than the incidence in rural areas, which is 41.7 per cent. Moderate deprivation in education in rural and urban settings is nearly equal at 14.6 per cent and 13 per cent, respectively. The same is true for acute nutrition deprivation; the incidence is the same for rural and urban children at 26 per cent. Moderate water deprivation is 2.9 times higher for rural children than it is for urban children.

Iraq has a similar incidence of both acute and moderate nutrition deprivation in both urban and rural settings. However, acute nutrition deprivation is slightly higher in urban settings at 15.9 per cent, than it is

in rural areas at 14.1 per cent. Water deprivation is higher in Iraq's urban settings than its rural areas. Acute urban water deprivation reaches 43.9 per cent while in rural areas it is at 30.5 per cent. In urban settings, moderate water deprivation affects close to half of the child population (47.1 per cent), and although not as high in rural settings (36.3 per cent), it is still significant. Moderate health deprivation, is also higher for urban children, where it affects 24.7 per cent of the under-18 population; however, the moderate deprivation figure for rural children is also high at 22.4 per cent.

Sudan's moderate deprivation levels for the housing, sanitation and water dimensions are particularly high in rural settings. Both moderate and acute rural housing deprivation affects the majority of children in the country. Approximately 82.2 per cent of rural children experience acute housing deprivation, while 87.6 per cent of them experience moderate housing deprivation. The urban moderate and acute housing deprivation incidences although lower, are still significant at 65.2 per cent and 50.9 per cent, respectively. In the sanitation dimension, rural acute deprivation is 2.7 times higher than urban acute deprivation, while moderate information deprivation is 2.7 times higher for rural children than it is for their urban peers.

Figure 3.2: Rural-urban inequities by dimensions in Egypt

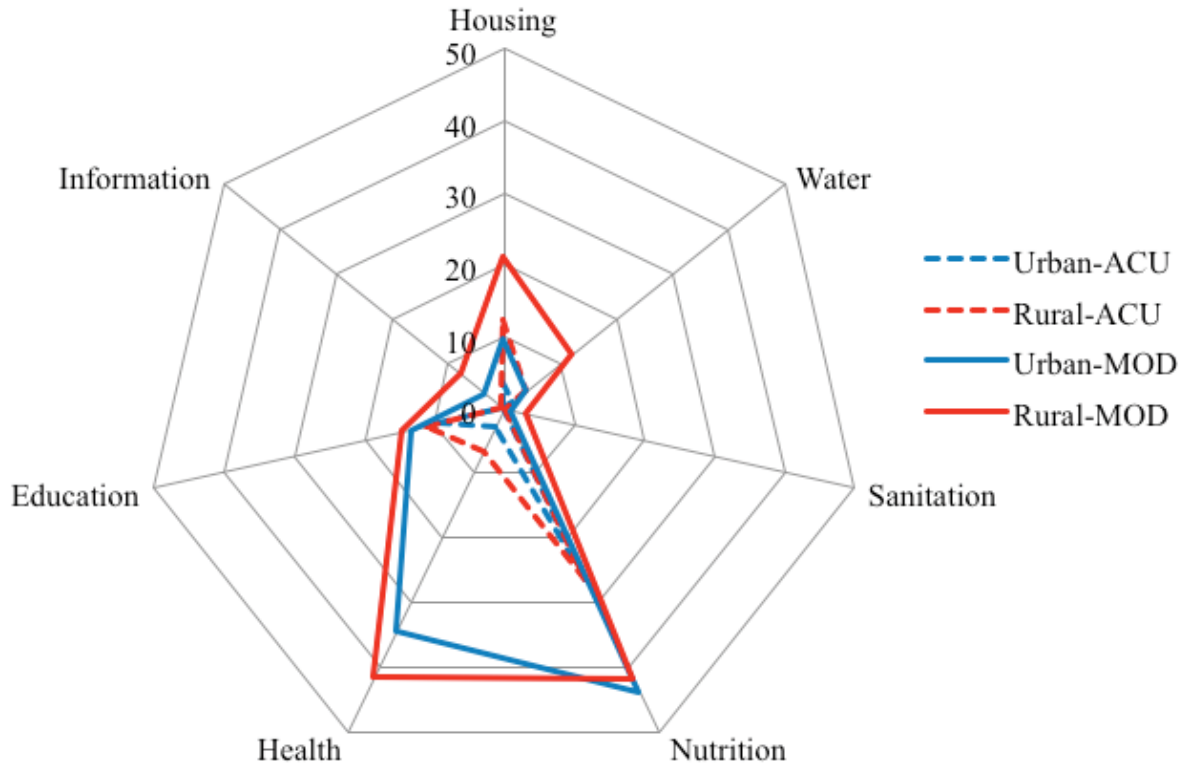


Figure 3.3: Rural-urban inequities by dimensions in Iraq

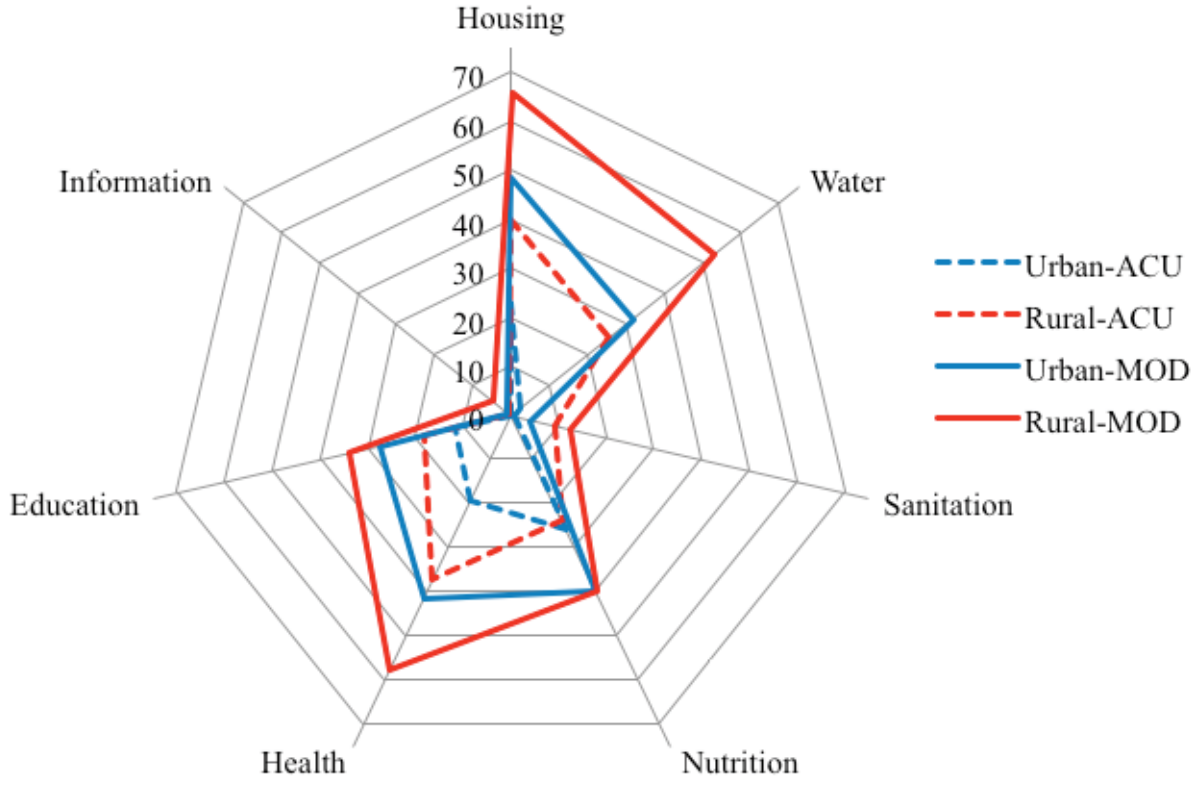
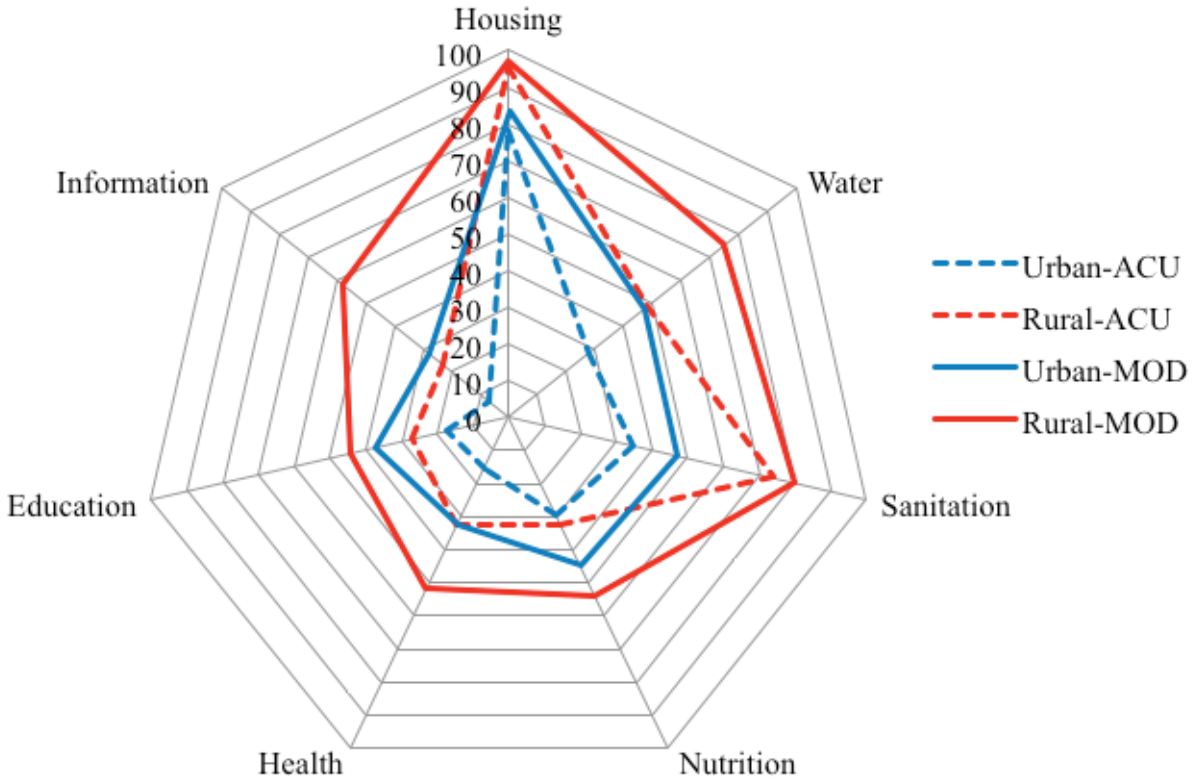


Figure 3.4: Rural-urban inequities by dimensions in Sudan



3.2 The correlation of inequality with deprivation

This section analyses the correlation of inequality with both acute and moderate deprivation in each dimension. An examination of child deprivation data highlights the importance of looking at geographical and social disparities to guide policy development. The level of deprivation can vary greatly depending on whether a child lives in a rural or urban area, and on his or her economic and social conditions. This section analyses relative deprivation gaps according to the following disparity indicators:[34]

- Area (Rural/Urban)
- Sex (Female/Male)
- Education of household head (No education/Primary or higher)
- Wealth (Poorest quintile or Q1/Richest quintile or Q5)

The section firstly examines the correlation of inequality with deprivation by comparing relative gaps of child well-being between rural and urban children; females and males; children living in households in which the head has no education versus those living in households where the head has at least a primary education; and, children living in households in the poorest wealth quintile (Q1) versus those in households in the richest quintile (Q5)[35]. Secondly, the analysis presents incidence levels for each disparity indicator and relative gaps outlining the degree to which disadvantaged groups are more likely to experience moderate or acute deprivations than advantaged groups. Thirdly, the section considers the correlation between inequality and each dimension of child deprivation and looks at how the three country clusters outlined in Chapter 2 compare.

When analysing inequalities it is important to determine whether or not differences are statistically significant, or if they are merely statistical variations. A statistical test of significance was carried out for this study. The results confirm that the differences presented in the points below are statistically significant ($p < 0.01$ in most of the cases and $p < 0.05$ in some cases). See Annex IV for details[36].

Figure 3.5 contrasts levels of moderate and acute child poverty by area, sex, education of household head and wealth. This figure highlights the fact that poverty incidence is higher for children in disadvantaged situations. It also reveals that disparities are especially high for three indicators: area, education of the head of household and wealth[37].

In regards to area, the moderate threshold incidence for rural children is 55.3 per cent, 1.8 times that of urban children. The incidence level experienced by females and males is almost the same, signifying that in each of the 11 countries examined, being female does not increase the likelihood of experiencing a higher deprivation incidence. The education of a child's household head plays an important role in determining the probability that he or she will experience moderate poverty. The incidence level of moderate poverty for children living in households where the head received no education is 57.8 per cent, while for children with household heads having received primary education or more this level falls to 36.7 per cent.

34 See Chapter 1 section 1.5 for an explanation of relative gap estimation.

35 The wealth quintiles are nationally defined and provided with each country's data. Their construction is described in survey documentation. Since some of the elements that typically constitute wealth quintiles are also part of the deprivation analysis, questions about the overlap of the two may arise: while there is an appreciable correlation between deprivation and wealth quintiles, the report team does not find it to be such that it creates a bias in the analysis (for more information, please see Annex III).

36 This analysis was developed by Lucia Ferrone, UNICEF, Office of Research – Innocenti

37 For each disparity indicator, the disaggregated incidence of deprivation was calculated using the estimated under 18 population corresponding to the specific population groups examined: rural, urban, female, male, children living in households where the head has no education, households where the head has at least a primary education, and children in Q1 and those in Q5. For this purpose, a coefficient of relative population derived from the sample examined was applied to the total country population under 18 for each country. This information was also used to estimate the cluster weighted averages for figures 3.8. 3.9 and 3.10.

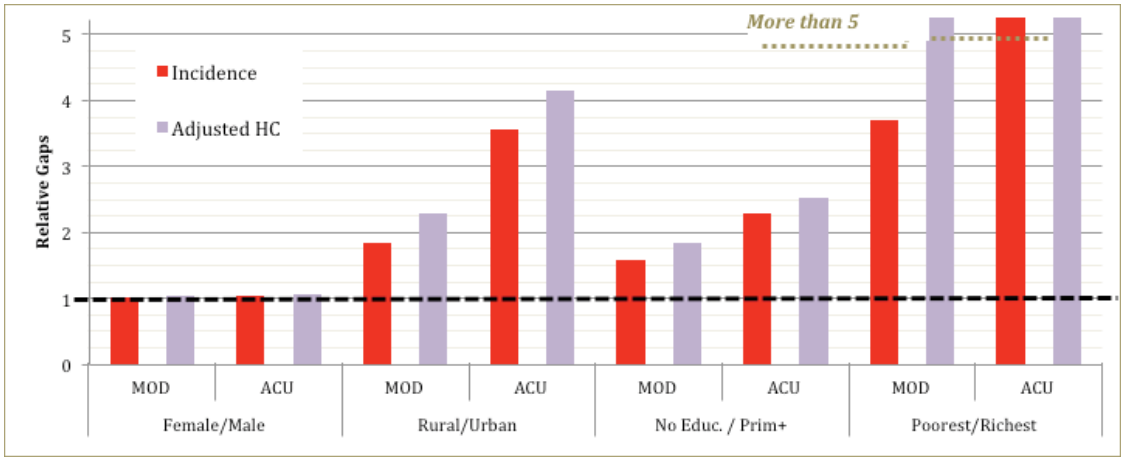
Figure 3.5: Moderate and Acute Child Poverty by Area, Sex, Education of Household Head and Wealth (in %)

According to Figure 3.5, the likelihood of disadvantaged children experiencing moderate poverty increases by 1.6 times when the head of household has no education. Disparities based on wealth quintiles are even greater. The incidence for children in Q1 is 67.3 per cent, while that of children in Q5 is 18.2 per cent; this means that the poorest children are close to 3.7 times more likely to experience moderate poverty than children in more advantaged groups.

Figure 3.5 shows a similar incidence trend for moderate and acute deprivation thresholds as, for both, disadvantaged groups are more likely to experience deprivations than advantaged groups. The levels of disparity, however, vary. The area indicator shows that acute poverty incidence is approximately 26 percentage points higher for rural compared to urban children. This means that at an incidence level of 36.3 per cent, children in rural areas are close to 3.6 times more likely to experience acute poverty than urban children. Again, the sex indicator shows no significant difference between female and male children. Both have nearly the same probability of suffering from acute poverty. In terms of the education of the household head, with an incidence level of 38.7 per cent, disadvantaged groups are 2.3 times more likely to experience acute poverty than children in advantaged groups. Finally, once again in looking at acute thresholds, the wealth indicator shows the greatest disparity as 46.9 per cent of the least wealthy children experience acute poverty versus only 3.9 per cent of the wealthiest children. In other words, Q1 children are 12 times more likely to experience acute multidimensional poverty than Q5 children.

Figure 3.6 shows relative gaps, or disparities, for incidence and adjusted headcount between advantaged and disadvantaged children. This graph corroborates and clarifies the information presented in Figure 3.5, comparing disadvantaged and advantaged groups in terms of sex, geographic area, education of the household head and wealth. In regards to the sex indicator, there is no difference between male and female children. Both have nearly the same likelihood of experiencing deprivation.

Figure 3.6: Relative Gaps for Moderate and Acute Child Poverty by Area, Sex, Education of Household Head and Wealth



The geographic area indicator shows that children in rural areas are nearly 3.6 times more likely to experience acute poverty than their counterparts in urban areas.

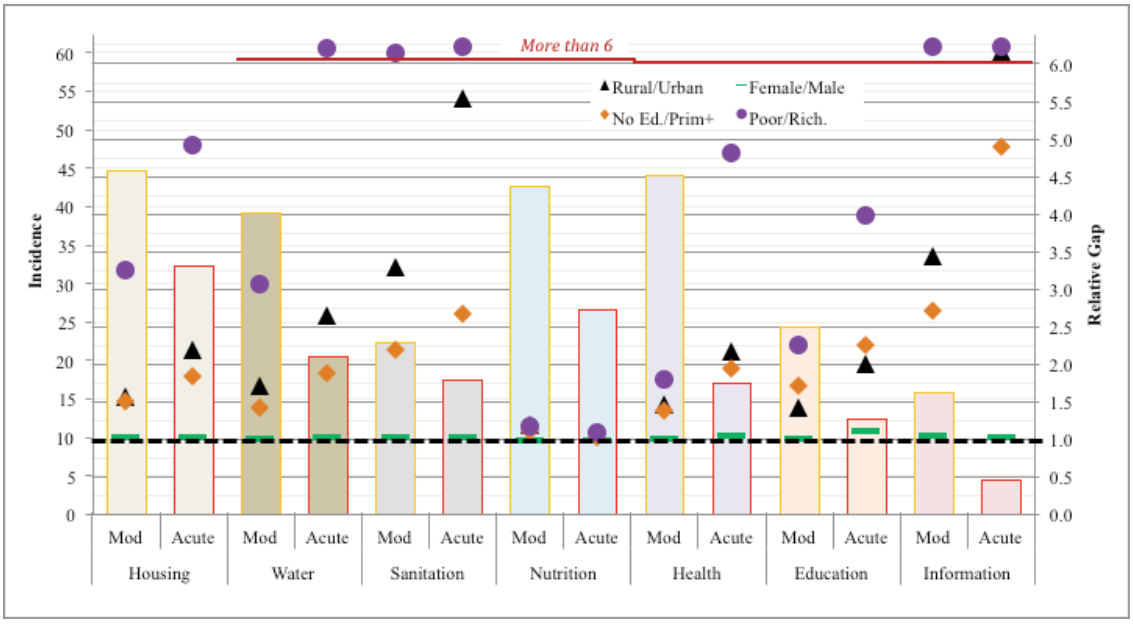
Children whose household head did not receive any education are 2.3 times as likely to suffer from acute poverty than children in families where the household head received a primary education or higher. In terms of moderate poverty, the former are 1.58 times as likely to suffer from poverty than the latter.

As in Figure 3.5, Figure 3.6 shows that wealth is the clearest determinant of inequality among the four indicators. Children in the bottom quintile are 3.7 times more likely than children in the top quintile to experience moderate poverty, while the most disadvantaged are 12.1 times more likely to experience acute poverty than the most advantaged.

Inequality by dimensions

The first two figures in this section focus on the effect of disparity indicators, that is inequality, on different groups of children. Figure 3.7 looks at moderate and acute deprivation for each disparity indicator, according to the dimensions of the child poverty analysis. This provides a better picture of how children are impacted by their geographic area, sex, the education of their household head and their wealth quintile, in each of the dimensions.

Figure 3.7: Incidence and Relative Gaps for Moderate and Acute Deprivation by Dimension and Area, Sex, Education of Household Head and Wealth[38]



38 The dotted line represents perfect equality. See the Methodology section in Chapter I for an explanation of relative gaps.

Looking at the rural/urban indicator, Figure 3.7 shows that children in rural areas suffer from higher inequality in the following dimensions when considering the acute threshold: information (in which rural children are 6.2 times more likely to experience deprivation than urban children), sanitation and water. Acute sanitation deprivation shows one of the most alarming levels of inequality, with children in rural areas being 5.5 times more likely to experience acute sanitation deprivation than children in urban settings. This should not be surprising given the lower level of infrastructure likely to exist in rural areas; it is, however, a very significant disparity.

Again, sex is not an important determinant of inequality for children of the 11 Arab region countries examined, according to Figure 3.7. Except for acute education deprivation, where males are slightly more likely to experience deprivation than females, there is no noticeable inequality between these two groups by the measures used here.

Aside from the nutrition dimension, the education of household head indicator shows that children in the acutely deprived category are the most affected by disparity in this background variable, particularly in terms of information. While in this dimension incidence is at a low 4.4 per cent, children living in families whose household head has not received any education are 4.9 times more likely to suffer from acute information deprivation than children living in families whose household head received a primary education or higher. Of all children in the selected 11 LAS member states, 12.4 per cent experience acute education deprivation, and approximately twice as many children, or 24.5 per cent, experience moderate education deprivation. However, acute education deprivation is 2.26 times more likely to affect children in families where the head of household did not receive any education. The level of education of the household head also affects inequality in sanitation. Children from a household where the head has not completed primary education are about 2.67 times more likely to experience acute sanitation deprivation.

In regards to the wealth indicator, nutrition shows the lowest inequality levels for both acutely and moderately deprived children. The incidence of moderate nutrition deprivation is high, as almost half of all children experience it; however, a relative gap of 1.2 indicates that wealth inequality does not significantly influence this.

The remaining dimensions show considerably higher wealth-related inequality. Information, sanitation, water and housing are the dimensions where wealth most clearly perpetuates high levels of inequality. The information dimension shows the highest disparities, with Q1 children more than 6.24 times more likely to suffer from acute and moderate information deprivation than their Q5 counterparts.

Acute water deprivation is experienced by 20.5 per cent of all children in the countries examined; however, children in the bottom quintile are 6.2 times more likely to live in a household where fetching water involves a trip longer than 30 minutes from an unimproved water source. Wealth inequality also has an important impact on sanitation deprivation. With moderate and acute deprivation incidences of 22.3 per cent and 17.5 per cent, respectively, the poorest children are over 6 times more likely than their richest counterparts to experience both levels of sanitation deprivation. The high inequality suffered by poor children in rural areas puts them at a particular disadvantage in terms of sanitation.

Children are also greatly affected by the wealth quintile they belong to in terms of acute education and health deprivation. While the incidence of acute health deprivation is relatively low at around 17 per cent, a relative gap of nearly 4.81 means that children in the bottom wealth quintile are significantly more likely to experience deprivation in this dimension. Acute education deprivation, which has a relatively low incidence of 12.4 per cent in the countries examined, is also linked to high inequality for those in the poorest households. Children in the lowest quintile are almost 4 times more likely to experience acute education deprivation than those in the richest households.

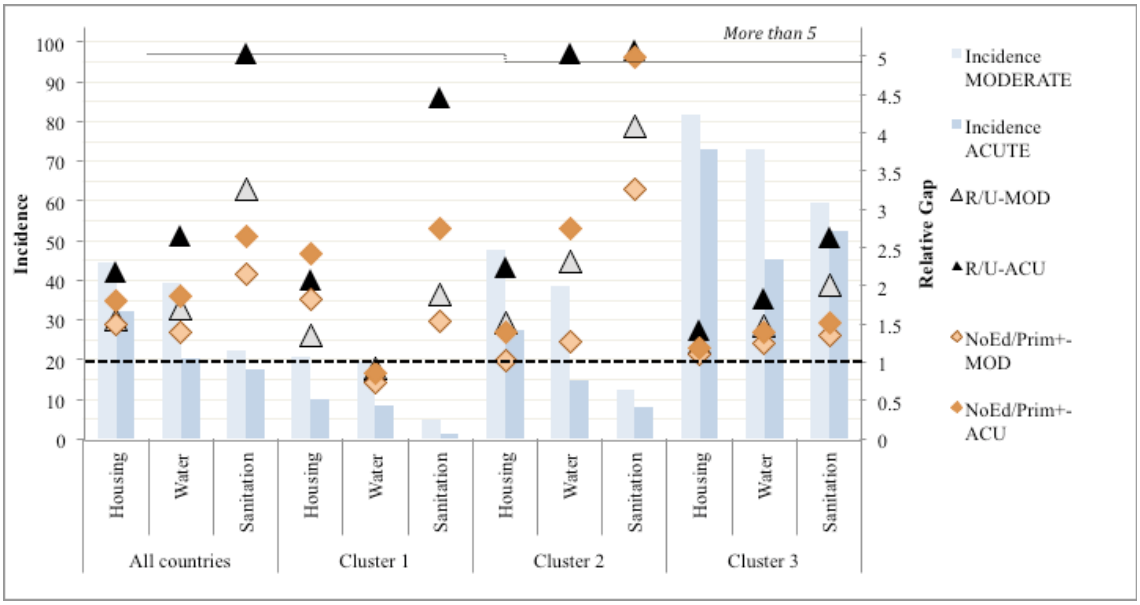
Inequalities by dimension categories and country clusters

The following three figures provide an analysis by cluster of countries. Dimensions were grouped into three categories: habitat, health, and education. The habitat category includes the housing, water, and sanitation dimensions; the health category includes health and nutrition; and, the education category includes the education and information dimensions.

Figure 3.8, which looks at the habitat category, depicts a higher incidence of housing, water, and sanitation deprivation in Cluster 3 countries. However, Cluster 1 and 2 countries most often display higher levels of inequality. Specifically, acute sanitation deprivation is 4.5 times higher for rural than for urban children in Cluster 1 and 5.1 times higher in Cluster 2. Similarly, in Cluster 2, acute water deprivation is 5 times more likely to be experienced by rural children than by their urban peers.

The 11-country weighted average for each dimension also shows high inequality, particularly in regards to acute sanitation, housing and water deprivation for rural children, as well as acute sanitation deprivation for children with a household head who did not receive any education. In Cluster 1, water deprivation disparity is relatively low for all indicators. The most frequently advantaged groups (males, urban with educated household head), seem to be disadvantaged in this dimension compared with the most frequently disadvantaged groups[39].
The gap is slight and not statistically significant while the incidence is below 20 per cent; however, it is still an important difference in comparison with the same dimension in the other two clusters.

Figure 3.8: Habitat Inequality by Cluster



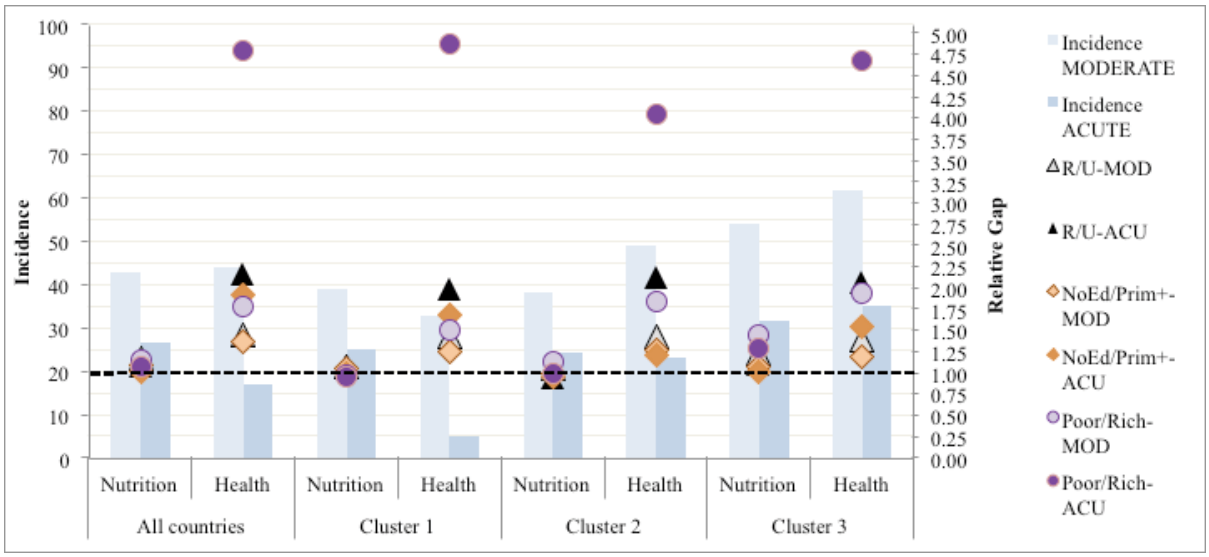
In Figure 3.9, which looks at the health category, nutrition shows very low levels of inequality, if any, across the three clusters. Apart from the slightly higher impact of wealth inequality in Cluster 3, children in advantaged and disadvantaged groups seem equally as likely to experience nutrition deprivation. This is corroborated by the 11-country weighted average, where all indicators in the nutrition dimension hover right above a relative gap value of 1, indicating an absence of inequality among the groups.

Conversely, acute health deprivation is twice as likely to be experienced by rural children. The wealth indicator also affects moderate health deprivation in Clusters 2 and 3, where Q1 children are almost twice as likely than Q5 children to experience moderate health deprivations. In looking at the 11-country weighted averages, children living in households where the head has no education are twice as likely to suffer from acute health deprivation than children in households where the head has at least a primary education.

Although the clustering of nutrition and health is not indicative of a correlation between the two, it does highlight that health is much more related to the situation of the household (i.e. area, education and wealth) than nutrition[40].
This result and the nature of the indicators examined for the health dimension, i.e. ante-natal care and child immunization, underscore the need to improve access to services for households in order to address health deprivation.

39 The wealth relative gap was not included in this case as it was correlated with the indicators in the dimensions covered here.
40 See Section 3.3 for a more in-depth health dimension analysis and Annex II for a detailed description of indicators by dimension according to moderate and acute deprivation.

Figure 3.9: Health Inequality by Cluster



In Figure 3.10, the 11-country weighted average indicates that 12.4 per cent of children suffer from acute education deprivation, and 4.4 per cent experience acute information deprivation. However, inequality in acute information deprivation is high, particularly in terms of the rural/urban indicator (with a relative gap of 7.1) and, to a lesser extent, of the education of household head indicator (with a relative gap of 4.9).

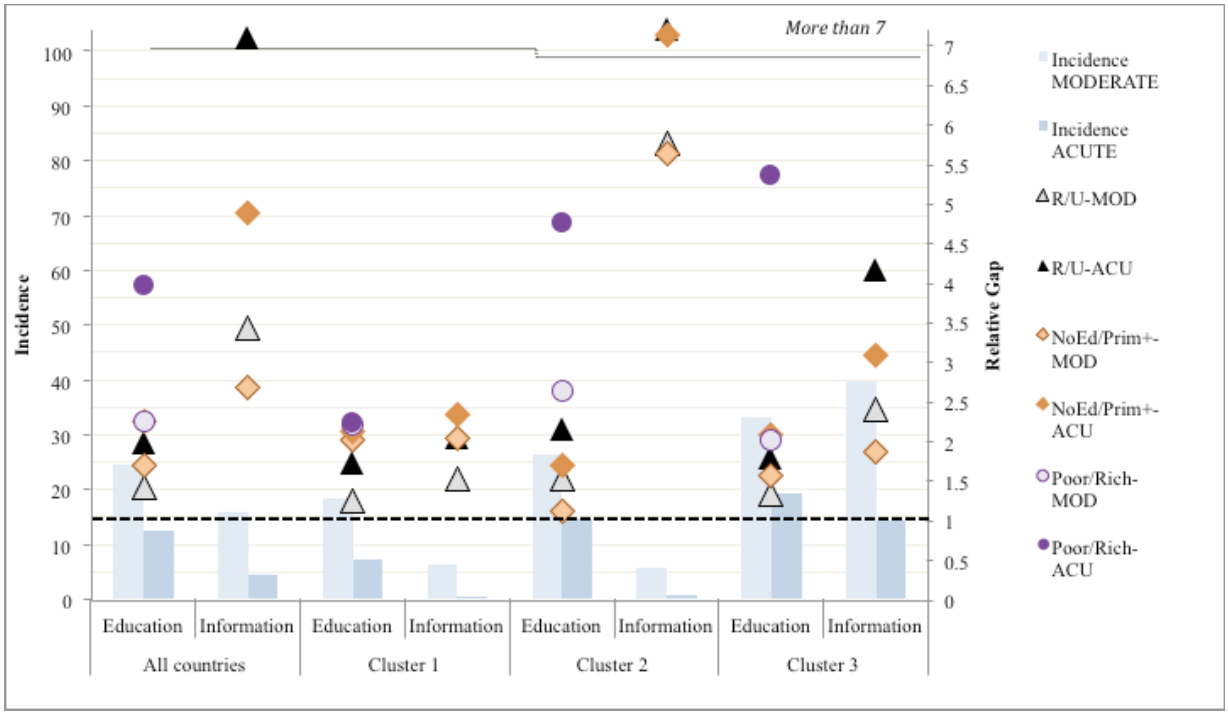
According to Figure 3.10, in Cluster 2 countries, a household head with no education is an important determinant of children's likelihood to experience acute information deprivation. However, this figure also indicates that the incidence of acute information deprivation is significantly low, particularly if compared to Cluster 3.

In looking at the wealth indicator, Figure 3.10 shows that Cluster 2 children in the bottom quintile are 4.8 times more likely than those in the top quintile to experience acute education deprivation. Similarly, in Cluster 3, children from the poorest households are 5.4 times more likely to experience acute education deprivation than those in the richest households. Unlike the habitat and health categories, the education category shows inequality in both the education and information dimensions in all clusters. In other words, inequality is present, although at times at a low level, for all dimensions across the three clusters[41].

The 11-country weighted average shows that in terms of acute education deprivation according to wealth, there is a significant gap between Q1 and Q5 children, an average driven by the high inequality between these two groups in Clusters 2 and 3.

41 Gender inequalities often do not show statistically significant differences, mainly due to the availability of deprivation indicators that can be used. Some exceptions exist, see Annex IV for details.

Figure 3.10: Education Inequality by Cluster



Box 2: The Correlation of Inequality with Deprivation at a Glance

1. Child poverty by disparity indicator follows a similar trend for acute and moderate poverty; higher levels of poverty incidence seem to be influenced mostly by the area in which children live (urban/rural), the education of the household head and wealth. It is important to note that sex of the child does not seem to be associated with differences in the level of poverty. This indicates that the indicators and thresholds used in this study are not particularly sensitive to gender differences. The finding should not be interpreted to mean that there are no gender disparities in childhood poverty in the countries studied. (Figure 3.5).

2. An analysis of inequality by dimension shows that wealth and rural/urban disparities are the most important determinants of child deprivation. Geographic area's effect on the information dimension leads to the highest relative gap between the most frequently advantaged and most frequently disadvantaged groups (the gap is higher than 7 for acute deprivation). There is low inequality in the nutrition dimension across all indicators. The education indicator follows area and wealth as key determinants of deprivation, with important impacts on sanitation, education and information deprivations (Figure 3.7).

3. A cluster analysis by habitat dimensions shows that geographic area is an important factor in determining the likelihood of child deprivation. The disparity level is slightly higher for acute deprivation in all cases. There is no clear trend across clusters, however, in looking at Cluster 3, incidence is the highest in housing, despite low inequality, since at an incidence of nearly 82% most children are affected by deprivations in this dimension (Figure 3.8).

4. For the health dimensions, nutrition remains largely unaffected by the disparity indicators. Health, on the other hand, shows a trend across clusters, where wealth and geographic area highly impact the likelihood of children experiencing acute health deprivation, followed by education of the household head. Nutrition is only slightly affected by indicators of wealth and area in Cluster 3 (Figure 3.9).

5. The education category, which includes the education and information dimensions, has the lowest incidence on average for both moderate and acute deprivation. Wealth strongly impacts inequality in terms of acute education deprivation in Clusters 2 and 3. In Cluster 1 countries, a child's wealth quintile affects whether or not he or she will be moderately deprived in education. A child's geographic area more clearly affects information deprivation in Cluster 2 and 3 countries (Figure 3.10).

3.3 Determinants of child deprivation

This section delves deeper into the correlation between inequality and deprivation based on children's age. Indicators have been selected specifically for each age group to follow the life cycle approach. The analysis examines, firstly, nutrition and health, and, secondly, education, across both acute and moderate cut-offs in these dimensions. The section also addresses the issue of child protection by country and looks at the correlation between habitat indicators and child deprivation.

Nutrition and health for children under 5 years old

The nutrition and health analysis includes stunting and obesity, antenatal care and immunization indicators. Figure 3.11 shows the incidence of stunting and obesity as well as relative gaps between advantaged and disadvantaged groups, for 0 to 4 year olds, by cluster. A child is considered stunted, a result of long-term nutritional deprivation, if he or she has a height or length-for-age of more than two standard deviations below the median of the NCHS/WHO international reference.[42] Research indicates that stunting is one of the major threats affecting child development and has implications for cognitive development that some consider irreversible beyond early childhood. In a recent study, Georgiadis et al. confirm this and suggest that child growth after age 5 can be responsive to changes in the household and community environments.[43] The study, which uses longitudinal data from Ethiopia, India, Peru and Vietnam, indicates that growth promotion after early childhood may be associated with improvements in child development. It also highlights that stunting is not only one of the key risk factors for child survival, health and development, but it is also the most common form of child malnutrition.

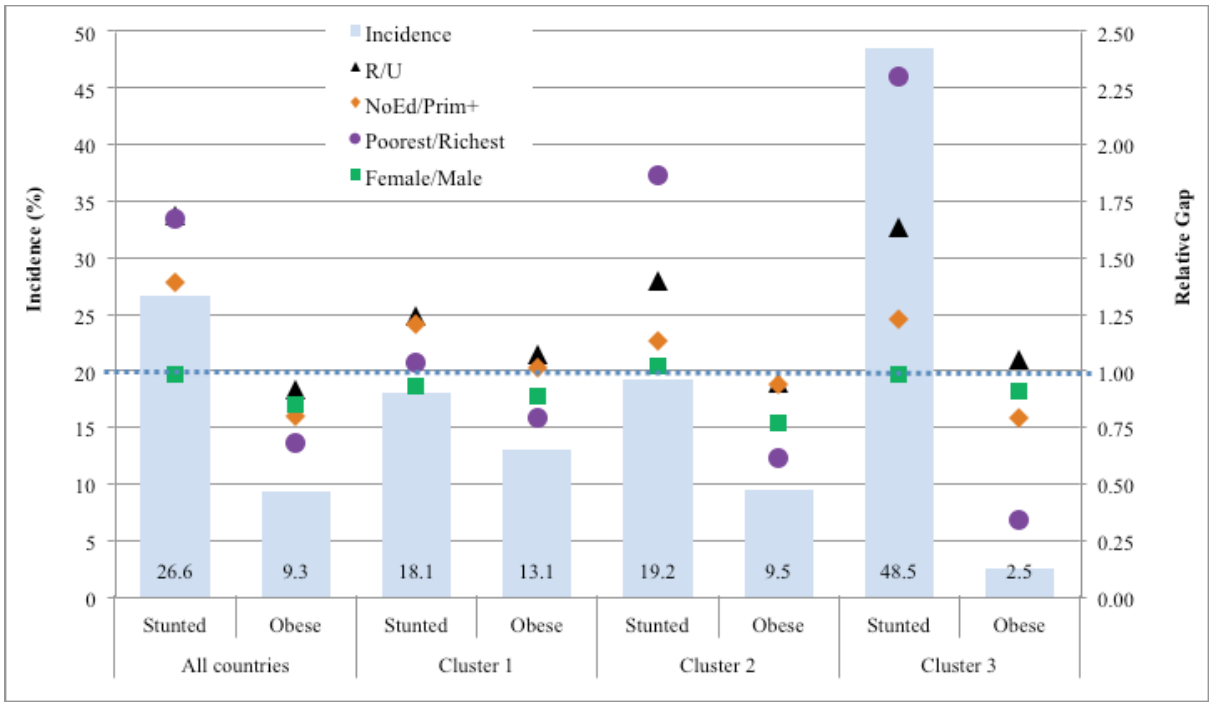
As shown in Figure 3.11, stunting is a key issue across the countries examined, as it is experienced by more than 1 out of every 4 children. In Cluster 3 alone, almost half of all children are affected by it. While not as severe, incidence in Clusters 1 and 2 reaches nearly 20 per cent, that is, almost 1 out of every 5 children is affected. Although sex does not have a significant correlation with stunting, wealth and area are both drivers of inequality. In terms of wealth, poor children from Cluster 2 and 3 countries are approximately twice as likely to experience this deprivation than those in the top quintile. Area has a slighter impact on Cluster 2 and 3 countries, where for children living in rural areas, the likelihood of experiencing this deprivation is, respectively, 1.4 and 1.6 times higher than for children in urban areas. Education of the household head is not as significant a driver of stunting.

Obesity – defined as a child having a BMI in the 95th percentile or higher where he or she lives – shows a different story than most of the previous indicators examined. On the one hand, there is a lower obesity incidence compared to stunting in all clusters; although the regional average suggests that 9.3 per cent of all children ages 0-4 experience it. On the other hand, the lowest incidence occurs in Cluster 3 where only 2.5 per cent of children are obese. This figure is at 13.1 per cent in Cluster 1 and at 9.5 per cent in Cluster 2. Unlike stunting, with obesity inequality appears to be insignificant according to all disparity indicators. In terms of wealth inequality, the disadvantaged group might be slightly better off than the advantaged group. All the other relative gap indicators are below or near 1, showing practically no difference between clusters.

42 For complete definition see Annex II.

43 Andreas Georgiadis, Liza Benny, Le Thuc Duc, Sheikh Galab, Prudhvikar Reddy, Tassew Woldehanna, "Growth recov ery and faltering through early adolescence in low-and middle-income countries: Determinants and implications for cognitive development," Social Science & Medicine 179 (2017): 81-90.

Figure 3.11: Stunting & Obesity Inequality by Cluster (Ages 0-4)



In terms of health, as illustrated in Figures 3.12 and 3.13, indicators studied include antenatal care, unskilled birth attendance and immunization. Antenatal care, which promotes the use of skilled birth attendants to help expectant mothers identify and manage obstetric complications or infections, is analysed for the 0 to 23 month-old age group. The indicator depicts whether a child's mother received less than 4 antenatal care visits. The immunization indicator is analysed for the 0 to 4 year-old age group and refers to children who have not been fully immunized.

According to Figure 3.12, antenatal care is the most pressing of the two indicators studied, given its high incidence in each cluster, but particularly in Clusters 2 and 3. At least half of all mothers of 0 to 23 month-old children in Clusters 2 and 3, and 1 out of every 5 children in Cluster 1, did not receive adequate antenatal care. Similar to stunting, access to antenatal care is largely correlated with wealth, although in Cluster 1, children in the poorest households are 3.5 times more likely to not receive any antenatal care, while in Clusters 2 and 3, Q1 households are close to 2.4 times and 2.9 times, respectively, more likely to not receive this care than Q5 households. Area inequality does not show significant correlation with deprivation in regards to access to antenatal care. This could be related with difficulties in getting access to antenatal care services in urban deprived areas.

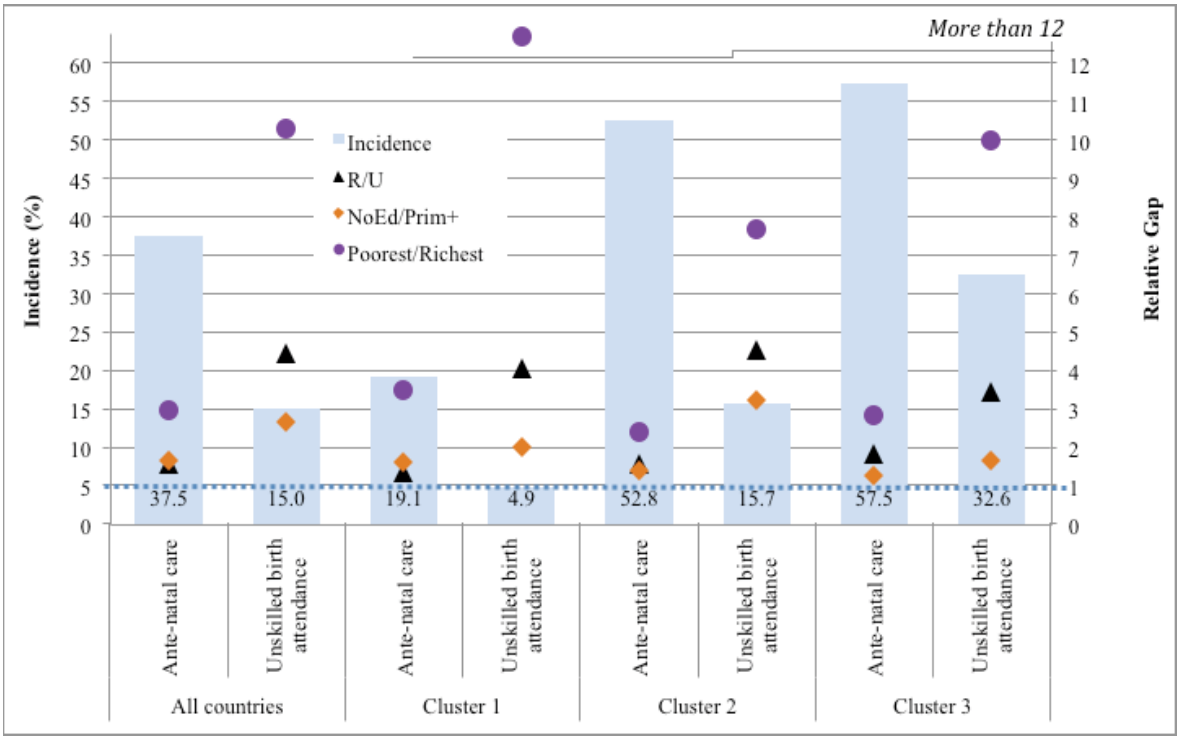
Unskilled birth attendance refers to births assisted by traditional birth attendants or community health workers.[44] As highlighted by Figure 3.12, the incidence of unskilled birth attendance is lower across the three clusters than insufficient antenatal care. It is especially low in Cluster 1 at 4.9 per cent, but it is relatively significant in Cluster 3, where close to 1 out of 3 births take place under unskilled attendance. Once again, wealth inequality appears to be an important driver of this deprivation. In Cluster 2, although the incidence is 15.7 per cent, children from the poorest quintile are 7.7 times more likely to have been born without the assistance of a skilled attendant. Cluster 3 countries experience the highest level of inequality, with the poorest children being 10 times more likely than the richest children to have been born without a skilled birth attendant.

Figure 3.12 also shows that area is a driver of inequality. Similar to the all-country weighted average, rural children from Clusters 1 and 2 have 4 times or higher probability than children in urban areas to be born with unskilled attendants. In Cluster 3, rural children are over 3 times more likely than urban children to be born without a skilled birth attendant.

44 See Annex II for complete definitions of antenatal care and unskilled birth attendance.

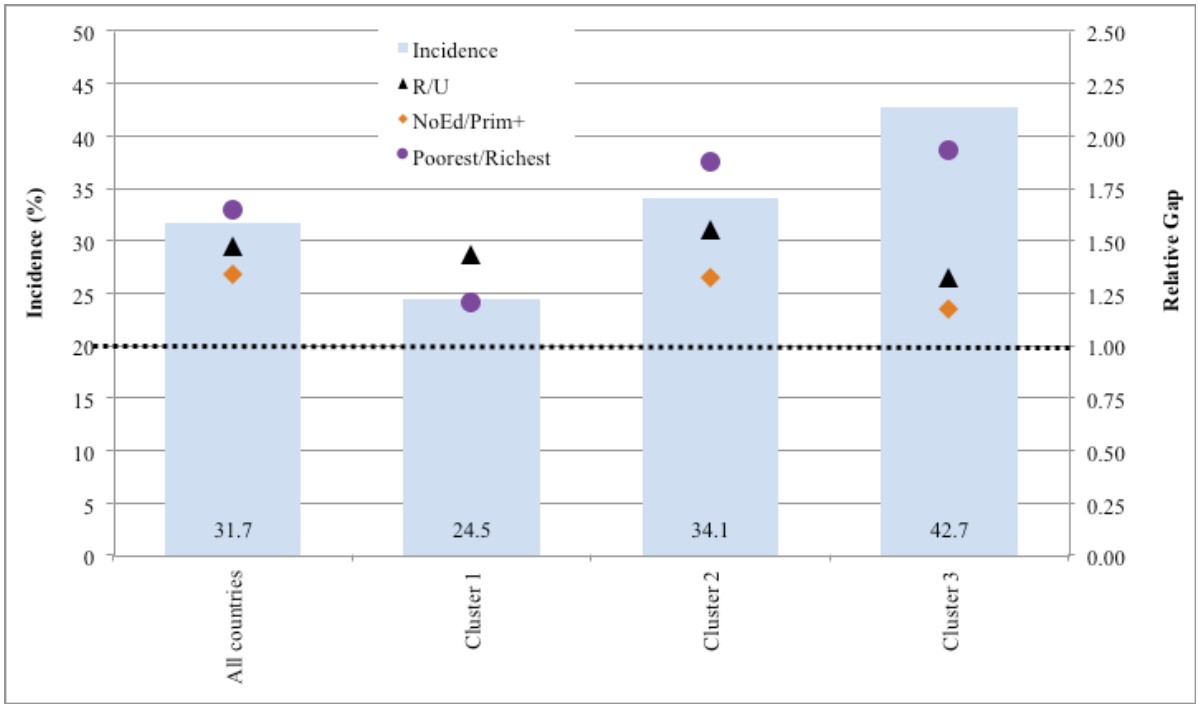
In terms of education of the household head, although the incidence of unskilled birth attendance is relatively low at 15.7 per cent in Cluster 2, this cluster also shows the highest inequality as children in the disadvantaged group are nearly 3.2 times more likely than children in the advantaged group to suffer from unskilled birth attendance.

Figure 3.12: Antenatal Care and Birth Attendance Inequality by Cluster (Ages 0-23 mo)



Regarding immunization, the incidence of children who have not been fully immunized is significantly high across the 11 countries examined, affecting nearly 1 in every 3 children. The breakdown of these incidence levels is highlighted in Figure 3.13, which shows that in Cluster 1 close to a quarter of all children are not fully immunized, while Clusters 2 and 3 have incidence levels of 34.1 per cent and 42.7 per cent, respectively. In terms of inequality by indicator, education of the household head and area do not play a significant role in whether or not a child is fully immunized by age 4; however, wealth has some impact in Clusters 2 and 3. The richest children in these clusters are approximately twice as likely to be fully immunized than the poorest children.

Figure 3.13: Immunization Inequality by Cluster (Ages 0-4)



Education for children aged 5-17

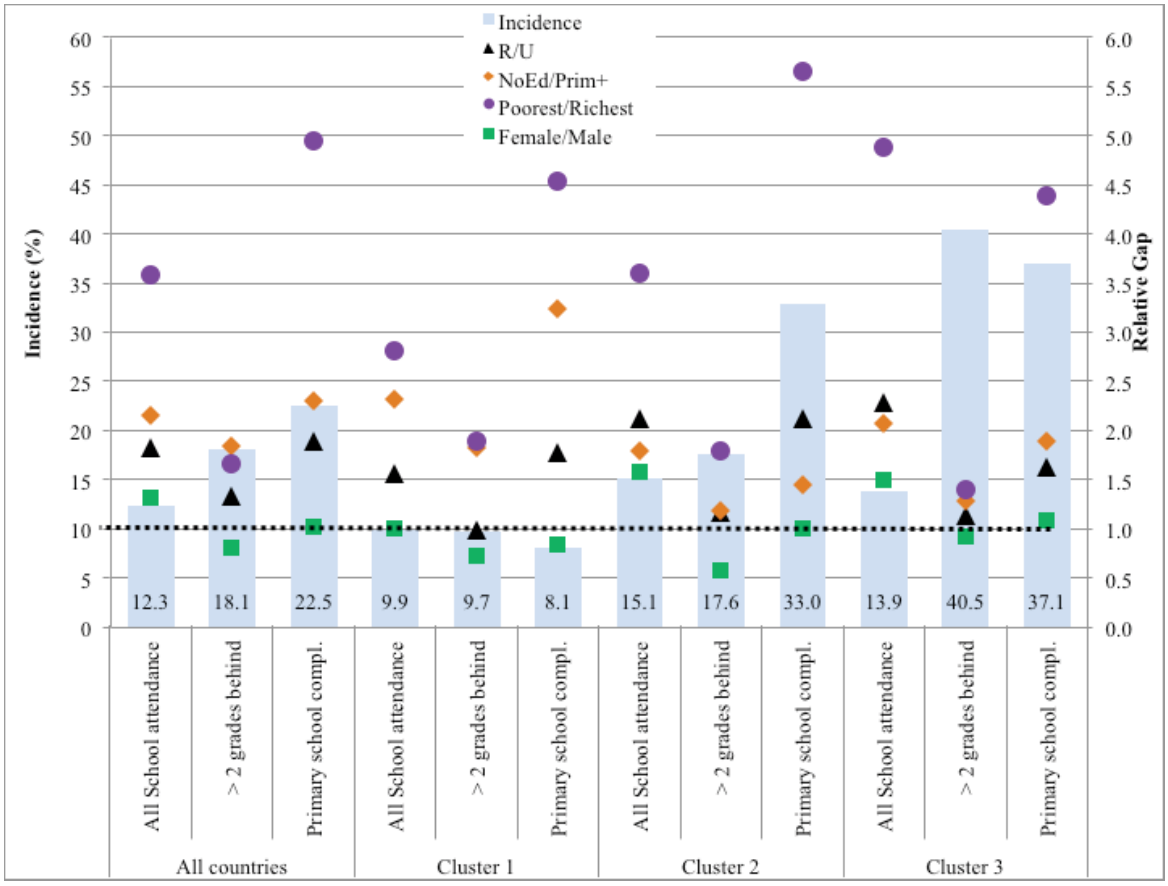
In the education dimension, the analysis examines school attendance, children who are 2 or more grades behind in school, and primary school completion for children ages 5 through 17.[45] According to Figure 3.14, sex is not a significant driver of inequality, which is consistent with the aggregate analysis presented in previous sections. The all-country averages show that 12.3 per cent of all children are not attending school, while nearly 20 per cent are more than 2 grades behind and almost 1 out of every 4 children do not complete primary school. In terms of incidence, children in Cluster 1 fare much better than children in Clusters 2 and 3. Incidence in Cluster 1 is less than 10 per cent in all three indicators, while wealth and the education of the household head are drivers of inequality. The wealth indicator suggests that the poorest children are at least 4 times more likely to not complete primary school than the richest children. School attendance and primary school completion are also affected by the education of the household head, with children in the disadvantaged group being 3.2 times more likely to not complete primary school than children in the advantaged group.

Cluster 2 shows higher incidence for all indicators; 15.1 per cent of children are not attending school, 17.6 per cent are two or more grades behind in school, and at least one third of all children do not complete primary school. Wealth is especially important as a determinant of primary school completion; in Cluster 2, children in the bottom quintile are 5.7 times more likely to not complete primary school, and are also 3.6 times more likely to not attend school than children in the top quintile. Area does not show a significant impact for these indicators except in Cluster 2 for school attendance and primary school completion, where children in rural areas are twice as likely to experience deprivations in these two indicators. The same is true in Cluster 3 for school attendance.

According to Figure 3.14, Cluster 3 has the highest incidence of children that are 2 or more grades behind and/or do not complete primary school. In this cluster, 40.5 per cent of children are 2 or more grades behind, highlighting an important issue in terms of the quality of education. Similarly, 37.1 per cent of all children do not complete primary school, an indicator which is highly correlated with wealth. With regards to primary school completion, children in Q1 are 4.4 times more likely to not complete primary school than children in Q5. In Cluster 3, 13.9 per cent of children are not attending school and this is correlated with inequality in wealth, education of the household head and area. Disadvantaged children in terms of education of the household head and area are twice as likely to not be attending school, while those in the bottom wealth quintile are 4.9 times more likely to not be attending school than children in the top quintile.

45 For complete definition see Annex II.

Figure 3.14: Education Inequality by Cluster (Ages 5-17)



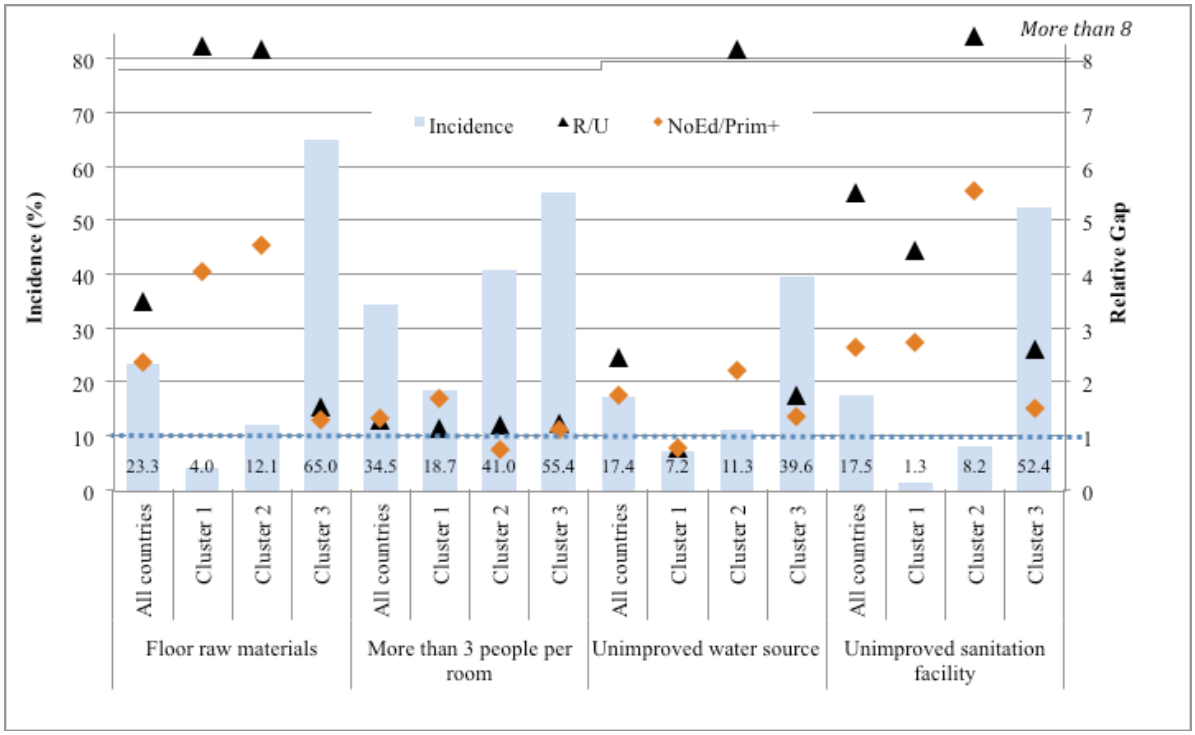
Habitat for children ages 0-17

Figure 3.15 groups together indicators related to habitat. This group is made up of three categories: a) house materials b) the situation of the people in the household as it relates to overcrowding; and, c) basic household services, such as water sources and sanitation.[46]

Figure 3.15 clearly shows that for all four deprivations highlighted, incidence is the highest in Cluster 3. In regards to the floor raw materials deprivation, which refers to flooring made of unfinished materials, dirt, sand, wood planks or bamboos, the incidence in Cluster 3 is 65 per cent; however, area and education of the household head do not have a significant correlation with this deprivation. Although incidence is relatively low in Clusters 1 and 2 at 4 per cent and 12.1 per cent, respectively, inequality in those countries in terms of area and education of the household head is correlated with deprivation. Children in Clusters 1 and 2 living in rural areas are more than 8 times more likely to live in a household with primitive flooring. They are close to 4 times or over more likely to experience this deprivation if their household head has no education. Incidence of overcrowding (more than 3 people per room) is high across all countries examined, where, on average, 1 out of every 3 children experience this deprivation. Cluster 3 countries fare worst with an incidence level of 55.4 per cent. Inequality in regards to area and education of the household head is not, however, strongly correlated with this deprivation.

46 The analysis does not include the wealth indicator, since wealth and habitat are auto-correlated as habitat indicators are included in the definition of the wealth index.

Figure 3.15: Habitat Inequality by Cluster (Ages 0-17)



The unimproved water source and unimproved sanitation facility variables show a similar trend in terms of incidence level across clusters. In Custer 1, the level of incidence for unimproved water source is 7.2 per cent, while unimproved sanitation facility shows practically no incidence (1.3 per cent). Cluster 2 shows slightly higher levels of incidence at 11.3 per cent for unimproved water source, and 8.2 per cent for unimproved sanitation facility. Deprivation in terms of water source is significantly correlated with area in Cluster 2, where disadvantaged groups are 8.2 times more likely to experience this deprivation than advantaged groups. Deprivation in access to improved sanitation facilities is highly correlated with area and the education of the household head in Cluster 2 and with area in Cluster 1 as the disadvantaged groups are respectively, 8.45, 5.56 and 4.47 times more likely to suffer from unimproved sanitation facilities than the advantaged groups.

In Cluster 3, 39.6 per cent of children live in households with unimproved water sources, however this deprivation is not significantly correlated with area or education of the household head. Moreover, 52.4 per cent of children live in households with unimproved sanitation facilities, with rural children being 2.64 times more likely than urban children to live under these conditions.

Protection

Protection is crucially important for child well-being.[47] While not a material deprivation, violence and exploitation are a violation of children's rights. This dimension encompasses many types of violations including physical and psychological violence, exploitation in the form of child labour, etc. In this report, violent discipline was used not as a deprivation dimension but as a key variable to characterise the situation in the countries with available information.[48] For the purposes of this analysis, violence is defined as violent discipline towards children (see Table 3.2 for a more detailed definition). It is a household level indicator that applies to all children, on the assumption that violent behaviour affects all members of the household and that being exposed to physical violence is itself detrimental.

47 This section on protection is based on Ferrone, "A Multiple Overlapping Deprivation Analysis for the Arab Region,2017.
48 Out of the 11 countries examined, only 9 countries have available information (Sudan, Iraq, Jordan, Algeria, Pal Tunisia, Mauritania, Egypt and Yemen).

Table 3.2: Protection Definition[49]

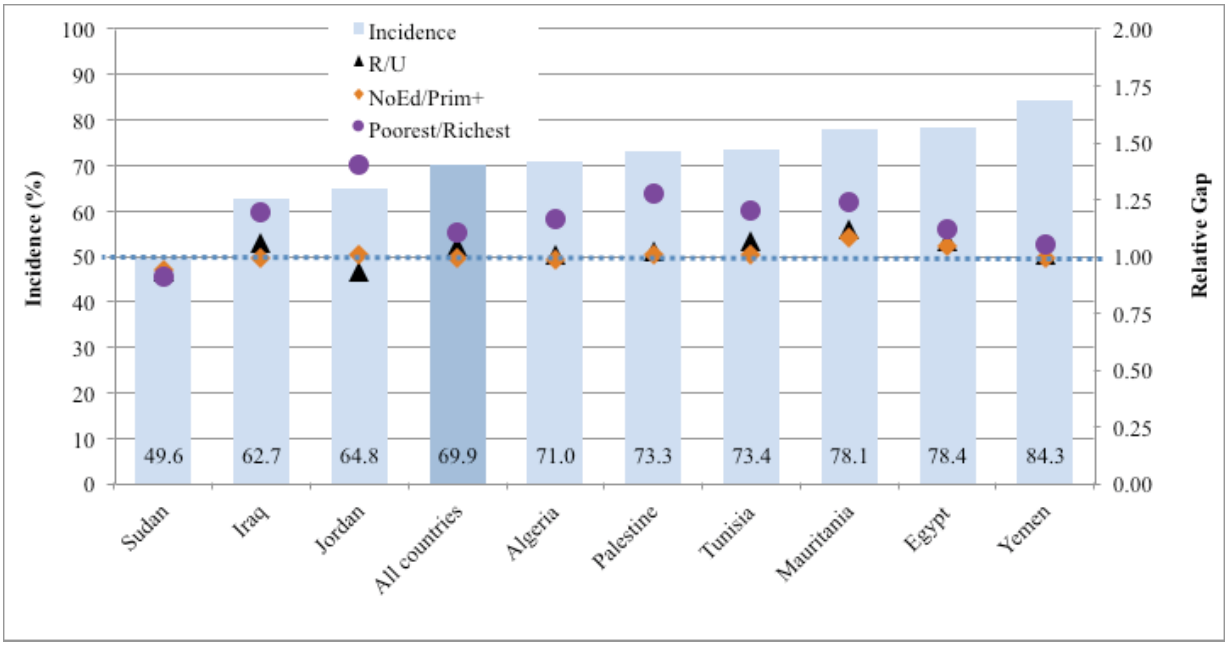
Violent discipline towards children	One or more of the following types of physical violence has been used to discipline a child aged 2-14 years old, living in the household: shaken; spanked, hit, slapped on bottom with bare hand; hit on bottom or elsewhere with belt or hard object; hit or slapped on the face, head or ears; hit or slapped on the hand, arm or leg; beaten over and over as hard as one could.

One important drawback of this indicator is that children who are not in the selected age range will report a missing value. This occurrence is limited in the data; still it needs to be taken into account.[50]

As shown in Figure 3.16, the incidence of violent discipline towards children is alarmingly high in the 9 countries examined, where the lowest incidence is 49.6 per cent.[51] Unlike most dimension analyses presented in previous sections, Sudan is the country with the lowest incidence of violent discipline towards children in this group. In Yemen, 84.3 per cent of children experience some form of violent discipline. Inequality levels for all indicators are almost insignificant, which is likely due to the high incidence of violent discipline across all countries, especially Mauritania, Egypt and Yemen, where nearly all children experience it in some form. Area is not a significant driver of inequality in terms of violent discipline towards children, and as previously stated, there is no significant difference between advantaged and disadvantaged groups in regards to the likelihood of experiencing violent discipline towards children.

The issue of violence against children is not directly linked to material deprivation but it significantly affects children's lives. It is a critical and difficult issue that families and communities must address in order to build a more inclusive society and achieve peace in the countries examined.[52]

Figure 3.16: Incidence and Inequality in Violent Discipline Towards Children



49 Ferrone, "A Multiple Overlapping Deprivation Analysis for the Arab Region," 2017. The first definition is drawn from MICS, which collects information on discipline applied to a randomly selected child in the household, aged two to fourteen. The second definition is derived from DHS data, and refers to any female member of the household aged fifteen to forty-nine. PAPFAM surveys may include one or the other type (adapted from DHS and MICS).

50 All countries included in this report use the "violent discipline towards children" definition in Table 3.2, as this has been added to the DHS survey in Egypt, Jordan, and Yemen. Overall, children who live in a household without any other child aged 2-14 represent 2 %, while missing values are around 9%. Missing values can be due to the refusal to respond to the specific questions on this topic.

51 The analysis only includes those countries with information on this variable.

52 See UNICEF Office of Research – Innocenti, "Understanding Children's Experiences of Violence in Andhra Pradesh and Telangana, India: Evidence from Young Lives," 2016, and UNICEF Office of Research – Innocenti, "Experiences of Peer Bullying among Adolescents and Associated Effects on Young Adult Outcomes: Longitudinal Evidence from Ethiopia, India, Peru and Viet Nam," 2016.

Chapter 4.

The Evolution of Child Poverty: Trend analysis in selected countries

Chapter 4. The Evolution of Child Poverty: Trend analysis in selected countries

This chapter provides an analysis and comparison of child poverty trends in selected Arab States. The trends were established from survey data for the year closest to 2000 and for the most recent available survey dataset. Countries were selected based on availability of comparable information between the earlier set of data (circa 2000, which will be referred to as 'baseline data'), and the circa 2015 datasets, (referred to going forward as T+1).[53] The analysis examines both moderate and acute poverty for the two periods, underscoring noteworthy improvements across all countries, except for Sudan, where there has been no significant change. The chapter then moves to an analysis of poverty trends by age groups 0-5 and 5-17. Finally, changes related to the number of overlapping deprivations will be presented.

4.1 Comparison of acute and moderate poverty incidence in children between circa 2000 and circa 2015 in selected countries

The selected countries, that is, those for which trend data is available, exhibit significant reductions in the proportion of children with two or more deprivations, by both acute and moderate measures.[54] The exception is Sudan, where very little progress has been made. As shown in Table 4.1, the total reduction of the percentage of children suffering from acute poverty was 75 per cent in Jordan, 80.5 per cent in Egypt, 60.9 per cent in Palestine, 33.5 per cent in Morocco, and 41.6 per cent in Yemen while only 1.8 per cent in Sudan.[55]

Table 4.1: Acute and Moderate Poverty Trends in Selected Countries[56]

Country	Acute Poverty			Moderate Poverty		
Year	Baseline	T+1	Change* (%)	Baseline	T+1	Change* (%)
Jordan	6.0	1.5	-75.0	34.5	20.8	-39.6
Egypt	16.5	3.2	-80.5	48.9	15.8	-67.7
Palestine	17.1	6.7	-60.9	52.9	34.7	-34.3
Morocco	31.7	21.1	-33.5	55.4	45.0	-18.8
Yemen	82.7	48.3	-41.6	90.3	76.4	-15.4
Sudan	75.4	74.0	-1.8	85.5	82.6	-3.4

Figure 4.1 shows the previously mentioned relative reduction of children with two or more deprivations (2+) in the countries with fully comparable data. Except for Sudan, the reduction of acute poverty in all countries was greater than the reduction of moderate poverty, indicating important improvements for the most vulnerable. In the case of Egypt and Jordan, the percentage of children experiencing acute poverty fell by over 75 per cent.

In terms of moderate poverty reductions, Figure 4.1 shows that the most significant improvement, once again, took place in Egypt, which reduced moderate child poverty by nearly 70 per cent. As mentioned previously (see Chapters 1 and 2), of the 11 countries examined in this report, Egypt has the largest share of children, however, it also has one of the lowest incidences of child poverty, especially by the acute measure. Sudan, the country with the highest acute and moderate poverty incidence, shows very little progress towards reducing child poverty and deprivation by either measure.

53 A few changes were introduced in some of the databases provided by OoR in order to make the data used in this chapter comparable across time. Please see Annex III for details.

54 Please note that the trends for Yemen should be treated with caution, as the data on which the analysis is based pre-date the current conflict and the human suffering it has caused.

55 Changes in Sudan were not statistically significant.

56 Change is calculated as follows: (circa 2015 estimate minus circa 2000 estimate) divided by circa 2000 estimate, and then multiplied by 100 to get a percentage.
Survey Years: Jordan (2002, 2012); Egypt (2000, 2014); Palestine (2006, 2014); Morocco (2004, 2011); Palestine (2006, 2014); Yemen (2003, 2013); Sudan (2000, 2014).

Given the lack of progress in Sudan in reducing the proportion of children living in poverty and bearing in mind the considerable population growth in the country, it is safe to assume that the actual number of children living in multidimensional poverty has increased in Sudan over the past decade and a half.

Figure 4.1: Relative Change in Incidence of Child Poverty (2+ dimensions) circa 2000-circa 2015 (%)

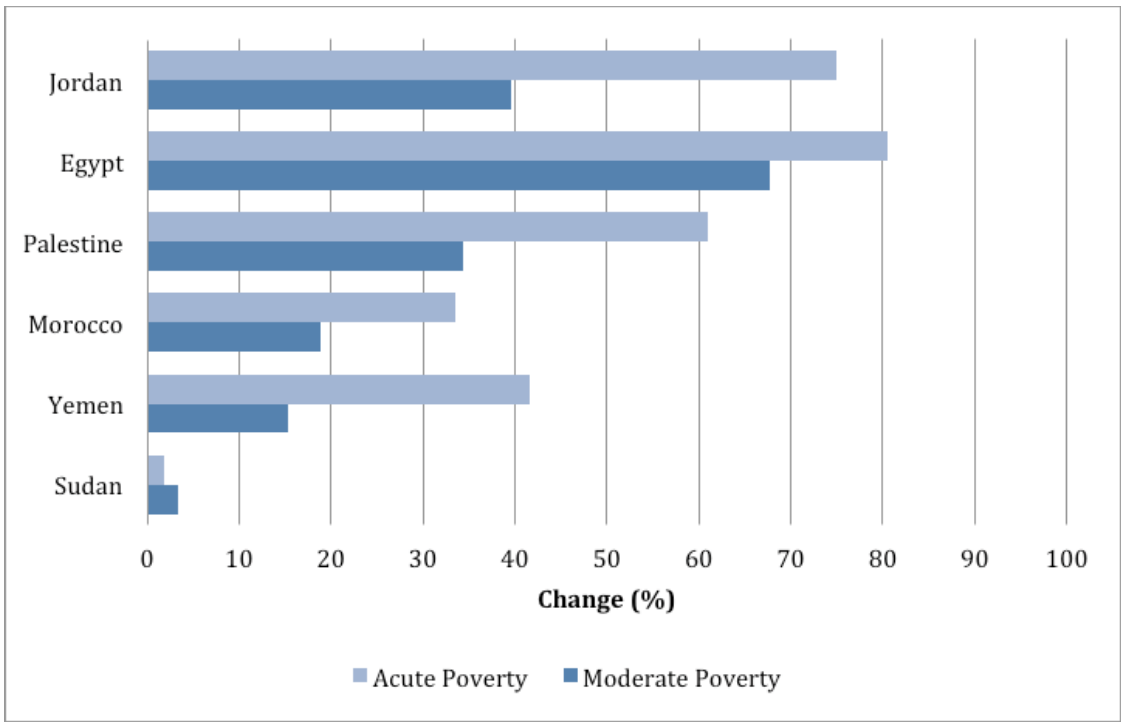
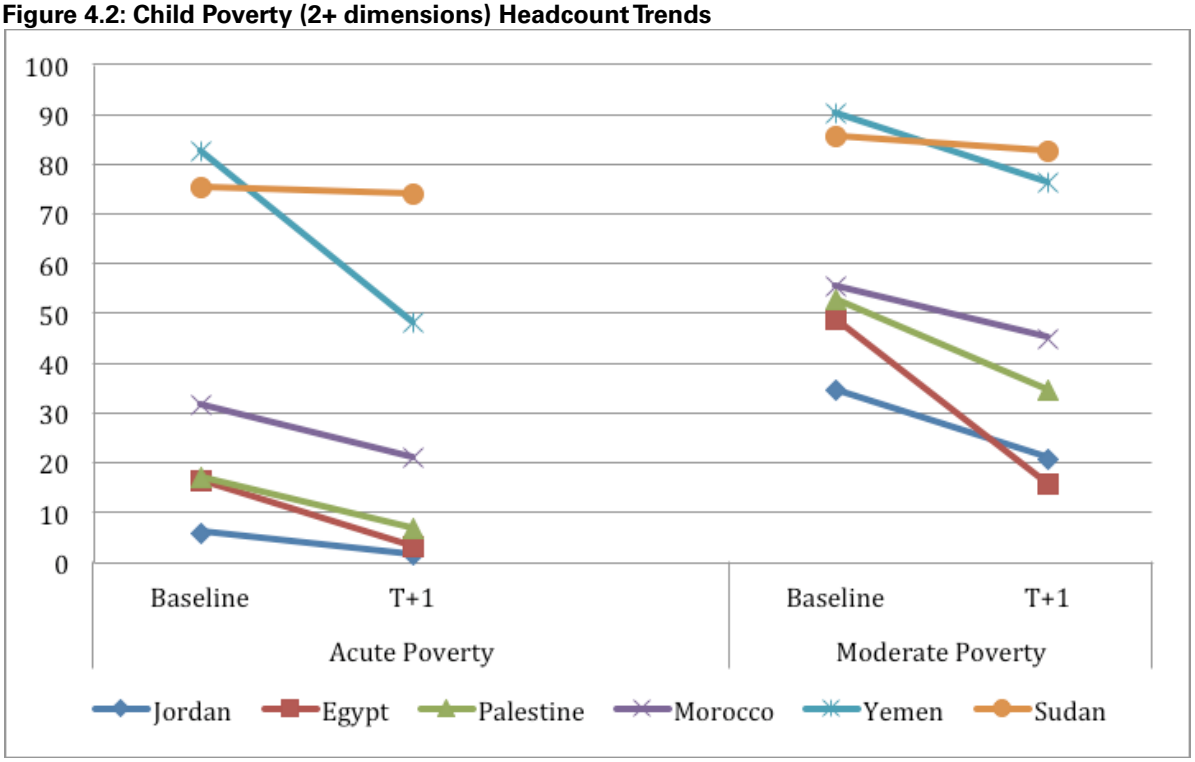


Figure 4.2 shows poverty trends in terms of headcount, measured using a cut-off of two or more deprivations. Once again, all countries show a decline in acute poverty, but at very different rates. While the sharpest decline can be seen in Yemen and Egypt, Sudan shows stagnant acute poverty, exhibiting insignificant change between the two points in time observed. Meanwhile, Palestine and Morocco have similar rates of decline in acute poverty of around 10.5 per cent.

In terms of moderate poverty trends, Egypt is the country with the sharpest decline at 33 per cent, followed by Palestine at 18.2 per cent; while for both Yemen and Jordan moderate child poverty fell by slightly more than 13.5 per cent. For Sudan, which only shows a 2.9 per cent decline in moderate child poverty, the protracted crisis the country has been experiencing has likely hindered opportunities for improvements in child poverty[57].

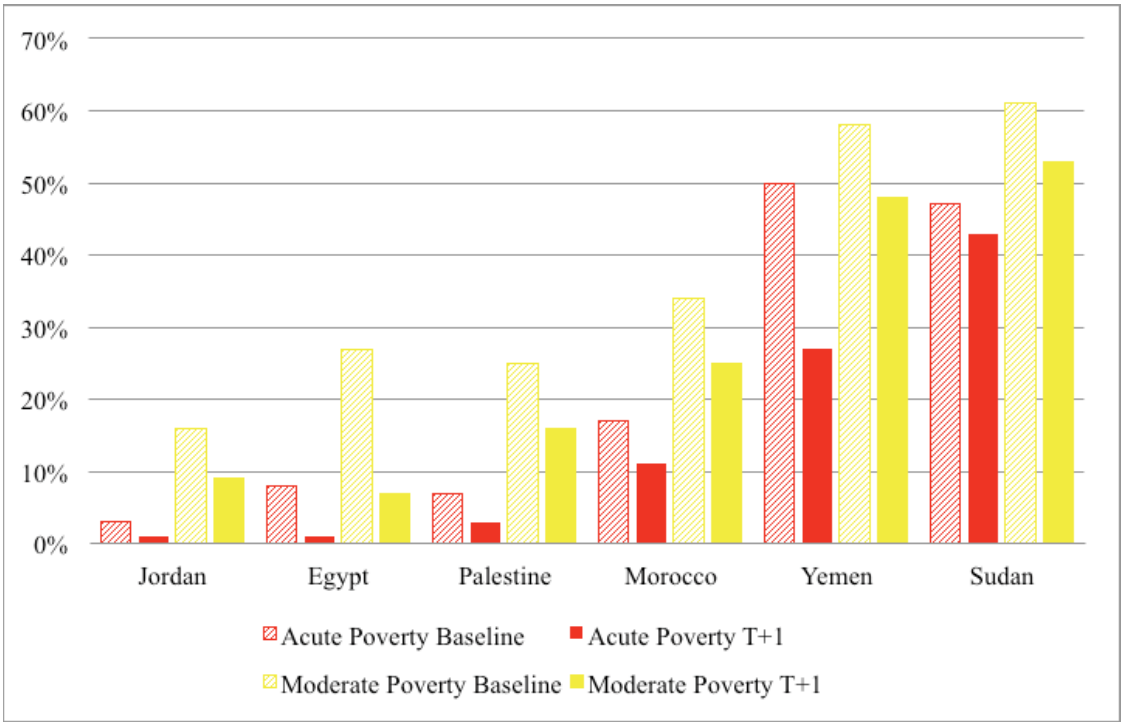
57 "Sudan Overview," World Bank, accessed February 2017, http://www.worldbank.org/en/country/sudan/overview.

Figure 4.2: Child Poverty (2+ dimensions) Headcount Trends



While examining trends in child poverty headcount can provide a general idea of patterns and potential correlations in children's lives between the two points in time observed, looking at the depth of poverty and how it has changed over time is also crucial in order to formulate policies better tailored to children's experiences. Figure 4.3 shows adjusted headcount trends, highlighting the change in poverty intensity, that is, in the average number of deprivations suffered by deprived children. Yemen shows the clearest decrease in acute poverty, while Egypt's moderate poverty adjusted headcount declined the most. The changes illustrated by Figure 4.3 are sharper than in previous figures in this chapter, for all countries, including Sudan. For all countries considered, the depth of poverty over time has decreased for both acute and moderate measures, which means that children experience on average fewer deprivations.

Figure 4.3: Child Poverty (2+ dimensions) Adjusted Headcount Trends



4.2 Key trends by age group across the selected countries

Figures 4.4 and 4.5 illustrate trends in child poverty headcount by age group. These figures indicate whether or not one age group saw a greater decline in poverty over time than the other.

In Sudan, the slight improvement in acute poverty seems to have been driven by the 5-17 age group (2.4 per cent decline in this age group vs. a 1.1 per cent increase in children under 5), while the country's decline in moderate poverty was driven by progress in the children under 5 group (8.7 per cent decline vs. 0.4 per cent decline in the 5-17 age group). In terms of acute poverty, Jordan, Palestine and Morocco show similar trends for the under 5 age group with slight declines (respectively at 3.7 per cent, 6 per cent, and 7.5 per cent), while Egypt's downward trend is sharper at 13.9 per cent. Yemen shows the steepest decline for both age groups in acute poverty at 23.9 per cent for children under 5 and 38.4 per cent for children aged 5-17.

In terms of moderate poverty, older children in Egypt have experienced the sharpest decline (42.7 per cent), followed by Palestine (21.3 per cent) and Yemen (18.8 per cent). Morocco and Jordan trail behind with lower but still significant decreases of 14.6 per cent and 12.5 per cent, respectively. Jordan, Egypt and Palestine hover around a 10 per cent decline in moderate poverty for children under 5 over the period examined (respectively 10.6 per cent, 10.4 per cent and 9.3 per cent). Yemen experienced a more modest decrease with a rate of 1.2 per cent. While in Morocco, there is a slight increase in the moderate poverty for children under 5 (0.7 per cent).

Figure 4.4: Headcount (2+) Trends - Children Under 5

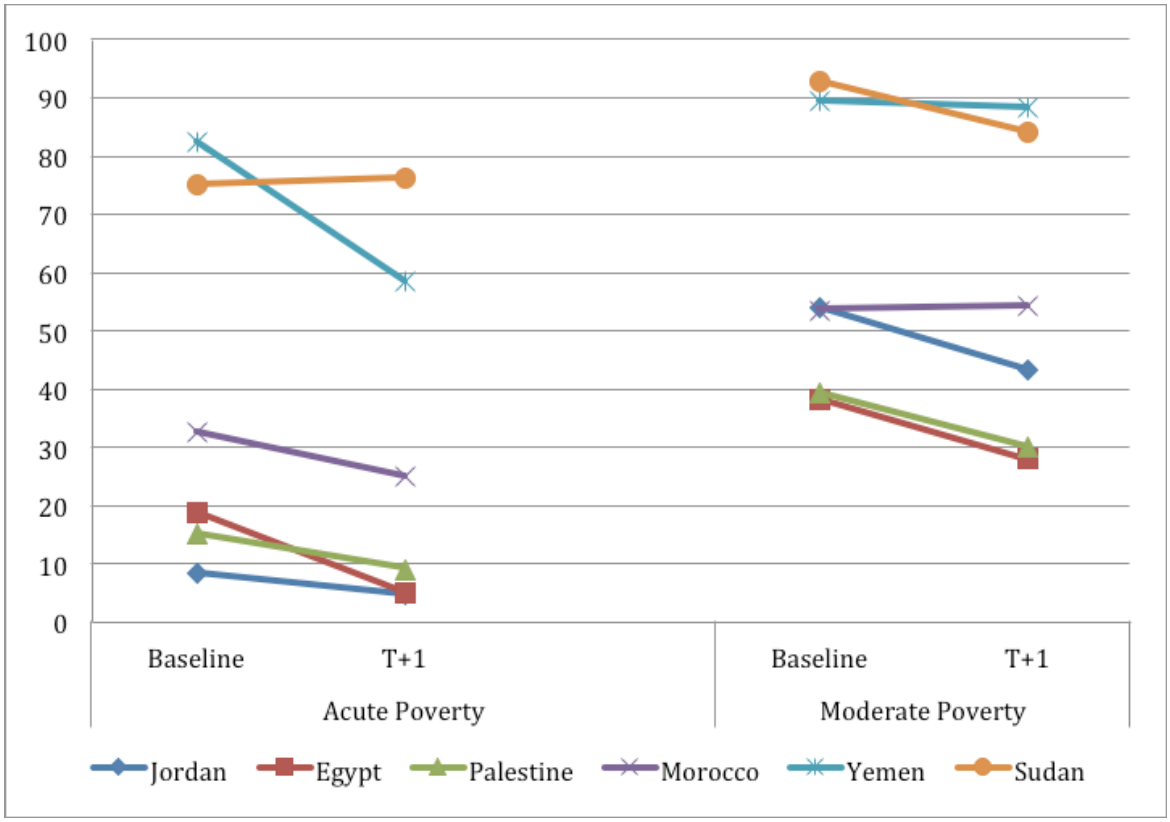
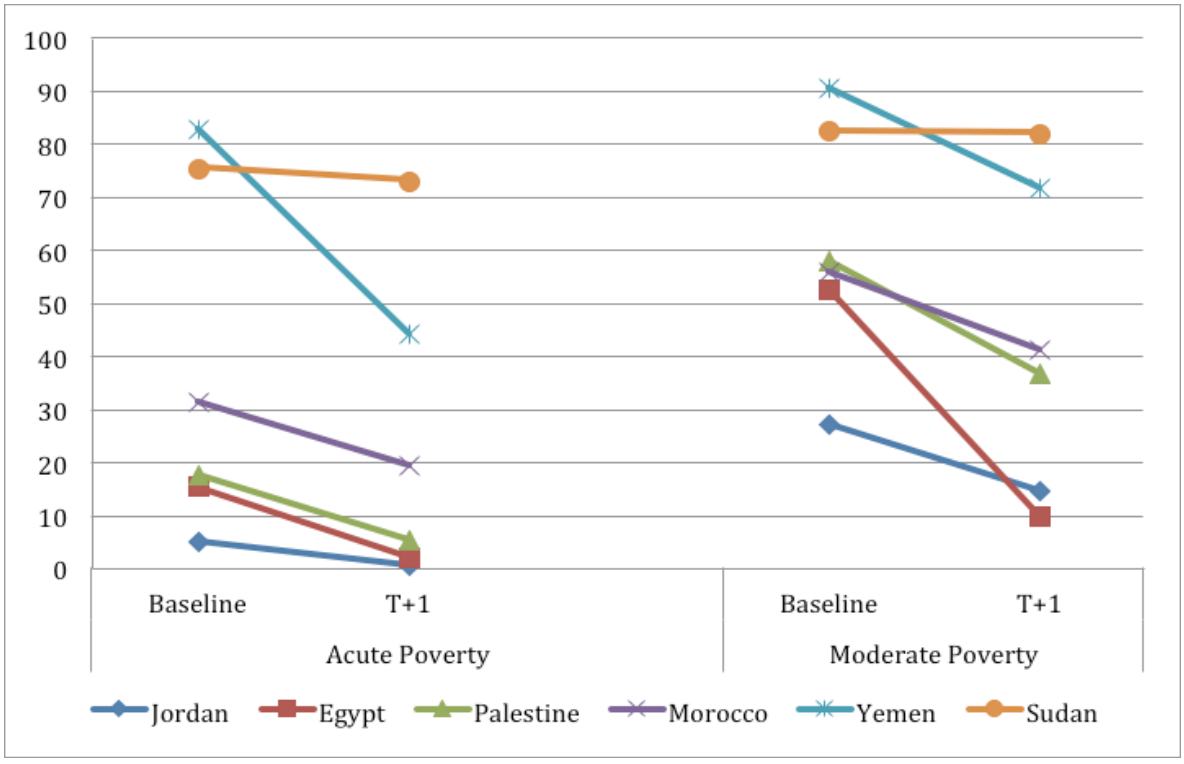


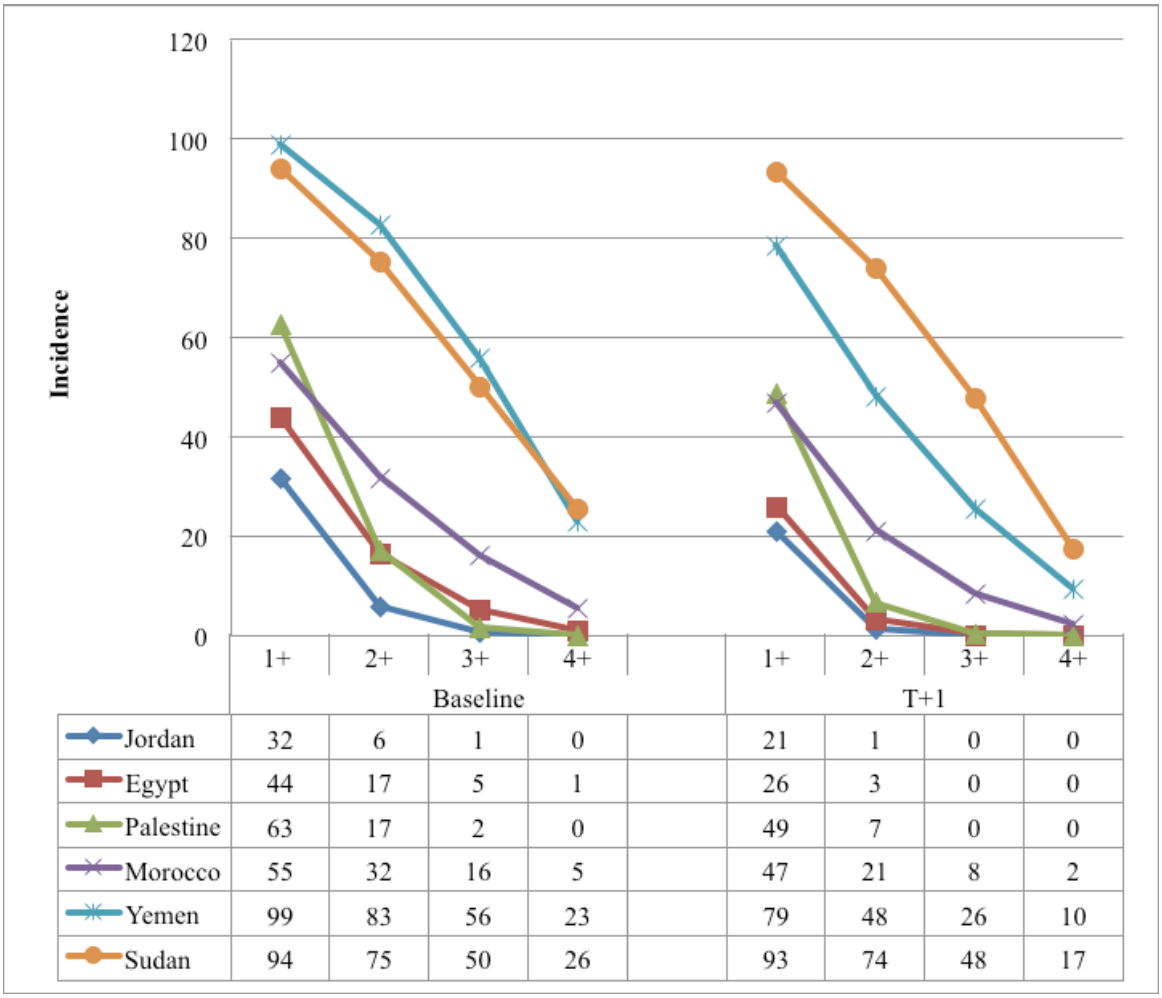
Figure 4.5: Headcount (2+) trends - Children 5-17



4.3 Key trends by number of overlapping deprivations across selected countries

The following figures show trends in acute and moderate deprivations for up to four or more deprivations suffered by children. The baseline for acute deprivations indicates a clear decline in incidence level between children suffering from 1 or more (1+) deprivations and children suffering from 4 or more (4+) deprivations. Furthermore, in comparing the two points in time, Sudan had nearly no changes in 1+, 2+ and 3+ deprivations, but shows some progress in 4+ deprivations. Yemen shows very important decreases in each category of multiple deprivations, with the sharpest declines appearing for 2+ and 3+ deprivations.

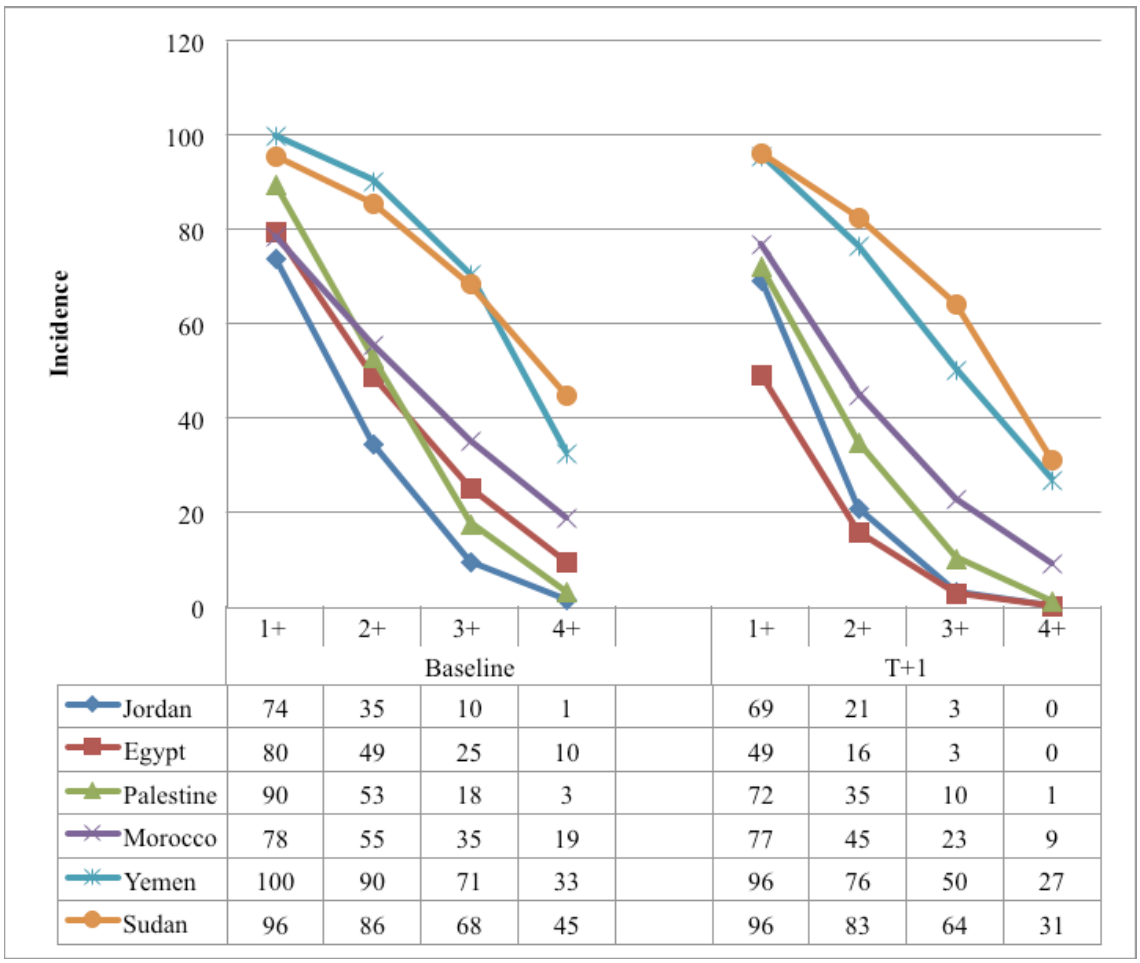
Figure 4.6: Acute Deprivations Trends (%)



	Baseline 1+	Baseline 2+	Baseline 3+	Baseline 4+	T+1 1+	T+1 2+	T+1 3+	T+1 4+
Jordan	32	6	1	0	21	1	0	0
Egypt	44	17	5	1	26	3	0	0
Palestine	63	17	2	0	49	7	0	0
Morocco	55	32	16	5	47	21	8	2
Yemen	99	83	56	23	79	48	26	10
Sudan	94	75	50	26	93	74	48	17

Figure 4.7 highlights trends in moderate deprivation reduction. Egypt made the most significant improvements in all four categories of number of child deprivations suffered. Sudan also greatly reduced its incidence of four or more moderate deprivations suffered by children, while Jordan nearly eliminated all incidence of child having three or more moderate deprivations between the two times observed. Palestine also had a reduction of 18 per cent in incidence of children with one or more moderate deprivation, and Yemen saw important reductions of 14 per cent and 21 per cent in incidence of children, respectively, with two or more and three or more moderate deprivations.

Figure 4.7: Moderate Deprivation Trends (%)



	Baseline				T+1			
	1+	2+	3+	4+	1+	2+	3+	4+
Jordan	74	35	10	1	69	21	3	0
Egypt	80	49	25	10	49	16	3	0
Palestine	90	53	18	3	72	35	10	1
Morocco	78	55	35	19	77	45	23	9
Yemen	100	90	71	33	96	76	50	27
Sudan	96	86	68	45	96	83	64	31

The next chapter outlines the key report findings, lessons learned, and recommended next steps.

Chapter 5.

Conclusions and Recommendations: Investing in children for peace, cohesion and growth

Chapter 5. Conclusions and Recommendations: Investing in children for peace, cohesion and growth

This report analysed child poverty and its distribution in each country by looking at seven dimensions and four profiling variables to better understand the drivers of poverty. To facilitate the analysis, three country clusters were defined. The report highlights the considerable number of children affected by moderate and acute poverty in the 11 LAS member states examined. The present chapter outlines conclusions and policy suggestions identified on the basis of the analysis. Although some similarities can be observed among the countries, each has significant economic, social, cultural and historical specificities. Thus, the recommendations presented in this chapter should be taken as general suggestions to be adapted and tailored to each state's particular situation. It is important to bear in mind that data limitations mean that this report does not fully capture the impact of the instability and conflict that has affected children in the region in recent years. Recommendations will need further fine-tuning once it becomes possible to assess how the deprivation of children in the region has evolved in countries in conflict and witnessing large-scale displacement.

5.1 Challenges

i. Multidimensional child poverty is a reality in the countries studied

Nearly half of all children in the 11 countries, representing approximately 53 million children, experience moderate poverty. The analysis reveals that in all but the five Cluster 1 countries, the incidence of moderate poverty is at least 40 per cent. This share nearly doubles to close to 80 per cent or more in Cluster 3 countries (i.e. Sudan, Yemen, Comoros and Mauritania, see Figure 2.1).

ii. Significant incidence of acute poverty, particularly in Least Developed Countries

In the countries analysed, 1 out of every 4 children on average experience acute poverty. Cluster 3 countries, which includes four least developed countries, largely drive this level of incidence. Although Yemen, for instance, has Cluster 3's lowest level of acute poverty, its incidence reaches 48.8 per cent, twice the all-country average. In Mauritania and Sudan only about one third and one fourth of the child population, respectively, is spared from this level of poverty. A total of approximately 29 million children experience acute poverty in the 11 LAS member states (See Table 2.1).

iii. Overlapping deprivations are serious obstacles in children's lives

Three out of every 4 children across the 11 countries experience at least one moderate deprivation while 1 out of 2 experiences at least one acute deprivation. Overlapping deprivations represent a severe obstacle for children in the 11 countries, especially for children in Cluster 3 countries. While the analysis shows that incidence levels decrease as more deprivations are considered, in Cluster 3, nearly all children experience at least one moderate deprivation, and close to 40 per cent suffer from four or more deprivations simultaneously (see Figure 2.5). Overlapping deprivations hinder children's ability to fully reach their potential. Policy should seek to address this comprehensively, in an integrated manner that focuses on those children who face deprivation in multiple dimensions first and foremost.

iv. There are significant inequalities in child deprivation between and within countries

Children in the disadvantaged wealth group are twelve times more likely to experience acute poverty than children in the advantaged group. Wealth, education of the household head and area disparities are the most important determinants of child poverty. The education of the head of household indicator follows area and wealth as a key determinant of poverty, with important impacts on the sanitation, water, education and information deprivation dimensions. Children whose head of household does not have any education are close to twice as likely to experience both moderate and acute poverty. On the other hand, children in rural areas are nearly 4 times more likely to experience acute poverty and twice as likely to experience moderate poverty than their counterparts in urban areas. In the case of the indicators used in this analysis, the sex of the child does not show significant impact on any dimension of child poverty (see Figures 3.6 and 3.7).

v. Education of the household head is a key driver of deprivation and inequality

The education level of the household head and poverty incidence appear to have a strong correlation. In most countries analysed, the poverty headcount decreased as the education of household head increased (see Figure 3.5). Furthermore, children whose head of household does not have any education

are twice as likely to experience acute poverty than children whose household head has at least a primary school education. This holds true for moderate poverty too. However, children from Cluster 3 living in a household whose head has the highest level of education, still have a high probability of being poor, which indicated that a household head that attains the highest level of education may not necessarily be able to prevent their children from experiencing multidimensional poverty in the least developed countries. The data seems to indicate that low education outcomes play a key role in the intergenerational transmission of poverty. Thus, it is imperative to ensure all children can complete a full course of quality education, irrespective of the poverty status of their household. Also, the quality of education needs improving to ensure that the return on education is high enough for it to enable people to escape poverty.

vi. Gender differences in child deprivation are difficult to measure with current indicators

In general, gender seems to present a weak degree of correlation with the probability of being poor, both at acute and moderate levels and with single deprivations. This is partially the result of including indicators at the household level, which cannot pick up individual differences, and partially due to the fact that gender differences tend to appear in adolescence, and are hidden in specific domains (Ferrone and Prencipe, forthcoming). However, gender does not appear to be strongly correlated even with the individual deprivations considered in this analysis. The single dimension that presents the strongest degree of gender differences is education, especially at the moderate deprivation level: here, gender differentials are strongly significant ($p<0.01$), but the direction is not univocal: often boys are more deprived than girls (the same pattern is observed in Hjelm, Ferrone, Handa, Chzhen 2016), with the exception of a few cases[58].
We cannot here determine the causes for this difference; it should be noted, however, that a significant difference does not always imply a large difference, in absolute terms: this is often the case for the observed gender differences in deprivation, which are much more contained than the differentials observed between rural and urban areas, or wealth quintiles. It should also be noted that the gender indicators used in this report do not show horizontal inequalities (such as discrimination among peers). It would be beneficial to conduct a qualitative and quantitative study to measure these types of inequalities.

vii. Unavailability of recent survey data sets for countries in conflict and for high income countries

The type of analysis used in this report relies on the availability of household survey data sets, such as a DHS, MICS or PAPFAM. However, countries in conflict do not tend to conduct these kinds of surveys and when large shares of the population are on the move, they may be missed by standard surveys. In high income countries, surveys may not be conducted as a result of a lack of interest or limited understanding of the value added of such surveys. This means that we cannot assume that the eleven-country averages produced in the analysis in this report are 'regional' averages. For countries in conflict (e.g. Iraq, Yemen) the data sets used here pre-date the most recent waves of conflict and displacement. High income LAS member states are missing from the analysis altogether. Innovation and advocacy are required to resolve these gaps in the data needed for a comprehensive regional child poverty analysis.

5.2 Opportunities

i. A growing population of children and young people

The increase of their child and youth population in recent decades is a unique opportunity for the 11 countries examined to propel social and economic growth. Many countries have already started a demographic transition process and are expected to reach replacement fertility levels by the middle of this century. As the youth bulge moves up through the population pyramid, the dependency ratio will be reduced significantly as children become adults. However, the transition also poses challenges in terms of social services delivery and social and employment policy implementation. For the demographic transition to result in a demographic dividend, investments must be made to ensure that children have a full range of quality health and education services, adequate nutrition and social protection benefits to alleviate the impact of material deprivation. Only in this way will children grow up into adults that are fully equipped to make an optimal contribution to society and economy, accelerating poverty reduction and progress towards the SDGs.

58 Lisa Hjelm, Lucia Ferrone, Sudhanshu Handa, Yekaterina Chzhen, "Comparing Approaches to the Measurement of Multidimensional Child Poverty," Office of Research – Innocenti Working Paper WP-2016-29, December 2016.

ii. Significant improvements in child poverty trends

The countries included in this analysis, especially Jordan, Egypt and Palestine, show tremendous improvement in both acute and moderate child poverty over time. In all countries, the reduction of acute poverty was greater than the reduction of moderate deprivations, with the exception of Sudan. In Sudan, as a result of population growth, the actual number of children living in multidimensional poverty has increased. While a focus on the most basic needs of children remains necessary for the pockets of children who still face acute poverty, the region now has the opportunity to accelerate its progress towards more aspirational child wellbeing objectives.

iii. Child wellbeing as a basis for peace, social cohesion and growth

Reducing multidimensional poverty experienced by children is the first step towards breaking the intergenerational poverty cycle that many are entrenched in. To this effect, it is necessary to shift towards an approach that considers children's voices and encourages their participation, fostering their capacity as society's most promising agents of change. Children are the most important asset for peacebuilding, social cohesion and economic growth.

Investing in children is imperative. It is critical that all children, regardless of their social status, have access to a full range of quality health and education services, adequate nutrition as well as social protection benefits to alleviate the impact of material poverty. Governments must prioritise investing in childhood. In order to facilitate this needed investment, it is important that governments have a clear understanding of the current level of public expenditure on children. This spending needs to be assessed based on its effectiveness, efficiency and equity, as well as its adequacy, so that investments can have a broader reach and public resources, which are already constrained, can be put to their best possible use.

5.3 Determinants of Child Poverty and Policy Recommendations

The countries considered in this report are characterised by heterogeneous poverty levels. In order to better understand each specific situation, it is imperative to examine more closely national historical, economic and socio-demographic contexts. Understanding and considering the development trajectory of each country can enable policymaking practices that better respond to the needs of the population they seek to serve. The report presented information according to country clusters to facilitate the interpretation of child poverty in the Arab States selected. While this approach is generally helpful for the analysis, tailoring policies to each country is the optimal approach. This section outlines policy recommendations according to the lifecycle of the child, based on the analysis in Chapters 2 to 4.

Children under 5

i. Insufficient antenatal care

At least half of mothers in Cluster 2 and 3 countries and one in five in Cluster 1 had less than 4 antenatal care visits. This is especially true in the poorest groups. This implies serious risks for the mother and baby. The problem is related to a lack of access to services due to a dearth of adequate services or difficulty for the pregnant mother to visit health centres. The recommendation would be to simultaneously expand or improve facilities and to promote and support pregnant mothers in their access to and take-up of antenatal care services.

ii. A high number of undernourished children

Nutrition deprivation is serious and affects all countries examined. On average, 1 out of every 4 children experience under-nutrition. A disaggregation by cluster shows that this deprivation affects close to 20 per cent of children under 5 years of age in Clusters 1 and 2, and almost 50 per cent in Cluster 3 countries. Children in the poorest quintile in Clusters 3 are almost twice as likely to be stunted than children in the richest quintile. The data show that the nutrition problem affects all countries examined and shows limited variation by any background variable. Therefore, it is recommended that steps be taken for integrated, multi-sectoral approaches to nutrition, tailored to the specificity of each country context, including a combination of social protection, WASH, C4D. In Cluster 3 countries, expanding access to safe water and sanitation is key to reducing under-nutrition.

iii. Widespread obesity

Obesity affects all countries equally and all social groups, but is more pronounced amongst the wealthier households and in urban areas. This issue can be addressed through parental education and through targeted communication campaigns that reach families and children, particularly through the school system.

Children 5- 17

iv. Lack of access to quality education and need for greater retention

The all country averages show that 12.3 per cent of all children are not attending school and almost 1 out of every 4 children do not complete primary school. In terms of incidence, children in Cluster 1 fare much better than children in Clusters 2 and 3. Wealth and education of the household head are key drivers of inequality. The wealth indicator suggests that the poorest children are at least 3.6 times more likely to not attend school and 5 times more likely to not complete primary school than the richest children. Policy recommendations depend on the level of deprivation incidence. In the case of Cluster 1 and 2 countries, policies should focus on education quality and programs that are inclusive of all children; while for Cluster 3 countries, emphasis should be given to easing access, improving facilities and providing additional training to teachers.

v. Unequal access to information

Access to information devices and to the internet is key for children's development and integration into society. Despite low incidence levels of children with no access to information, the gap between disadvantaged and advantaged groups with regards to area and education of the household head is very high. Policies that improve access to information and the internet, particularly for the most marginalised, are recommended.

All Children and their Families

vi. Lack of a comprehensive social protection system

The analysis of child poverty in the 11 selected Arab States show that comprehensive systems of social protection are needed to address material and non-material deprivations. Several of the deprivations experienced by children highlight a lack of access to services and protection systems. In Sudan, for instance, 1 out of every 2 children experience moderate deprivation in 4 or more deprivations simultaneously. Social protection systems should guarantee access to a full range of services, and they should be seen as a range of policy instruments that protect families and children from material poverty and deprivation in multiple dimensions. As the 2017 Arab Poverty Report highlights, non-subsidy social safety nets in the Arab region tend to be fragmented and generally have many gaps.59 It is imperative to pursue social protection reforms that are pro-poor and child-sensitive. Policies should seek to bridge gaps in coverage of current social protection systems, expanding family benefits beyond those in formal employment and introducing social protection coverage for children, particularly those of pre-school age.

vii. Need to reduce violent discipline towards children

The incidence of violent discipline towards children is alarmingly high in the countries examined. It affects all countries and all social groups and geographical regions. The lowest incidence is 50 per cent and the all-country average is close to 70 per cent. Sudan has the lowest incidence of violent discipline towards children among all the countries examined. In Yemen, 85 per cent of children experience some form of violent discipline. Inequality levels for all indicators are almost insignificant. This issue is related to social and cultural norms. Experience shows that the policy approach should be built on programs of Communication for Development (C4D).60

59 LAS, ESCWA, UNICEF and OPHI, "Arab Poverty Report: Multidimensional Household and Child Poverty in Arab States," 2017.

60 See UNICEF, "Communication for Development," https://www.unicef.org/cbsc/.

viii. Poor quality housing and overcrowding

Overcrowding and poor-quality floor/roof materials are among the main sources of child deprivation. Approximately 32 per cent of all children suffer from acute housing deprivation, living in houses with primitive flooring and suffering from overcrowding of more than 4 people to a room. When looking at moderate poverty, nearly half of the region's children (44.7 per cent) suffer from housing deprivations. The cluster analysis shows that geographic area is an important factor in determining the likelihood of child habitat deprivation. It is crucial that housing policies take this into account.

ix. Insufficient and inadequate data collection and information systems

The analysis presented in this report was constrained by a number of issues related to data sources. To improve future multidimensional poverty analysis in the region, it is critical that countries invest in survey programs that produce regular estimates against a range of dimensions of deprivation at the household and individual level. The report does not cover a number of countries in the region either because they did not conduct suitable surveys in recent years or because survey data sets were not made available for secondary analysis. In settings of conflict and mass displacement, traditional surveys often cannot be implemented. Data innovations are needed to assess child poverty in these contexts. Where survey sets are available, these often pose limitations in terms of their comparability across countries and over time. Some dimensions could not be covered as they were not treated systematically and comprehensively in survey instruments across the countries examined. As a result, it was impossible to look into the important dimension of child protection across the 11 countries in scope, for example. This points to the importance of further strengthening data collection plans that feed into multidimensional poverty analysis and regional collaboration to this effect.

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Annex

ANNEX I: List of Countries and Data Sources

This study leverages statistical sources (and/or reports), such as MICS, DHS and similar household surveys conducted in the Arab region countries. The following table lists countries in the region with data available for the 2000/2007 period as well as countries with data available for the 2011/2014 period, which are used in the present study.

	Base Line		Most Recent	
	Survey	Year	Survey	Year
Algeria	NA	NA	MICS	2012
Comoros	NA	NA	DHS	2012
Egypt	DHS	2000	DHS	2014
Iraq	NA	NA	MICS	2011
Jordan	DHS	2002	DHS	2012
Mauritania	NA	NA	MICS	2011
Morocco	DHS	2003	PAPFAM	2011
Palestine	PAPFAM	2006	MICS	2014
Sudan	MICS (only north)	2000	MICS	2014
Tunisia	NA	NA	MICS	2011
Yemen	PAPFAM	2003	DHS	2013

ANNEX II: Detailed Definitions of Deprivation Indicators

Dimensions	Acute Deprivation	Moderate Deprivation	Age
Water	Unimproved source of water: unprotected wells/springs, surface waters, truck or carts, bottle water, others according to local definitions (see survey documentation)	Household does not have piped water into dwelling or yard	All children 0-17
	Distance of more than 30 minutes roundtrip	N.A.	
Sanitation	Unimproved toilet facility: latrine without cover, field/bush, other according to local definitions (see survey documentation)	Unimproved toilet facility: latrine without cover, field/bush, other according to local definitions (see survey documentation)	All children 0-17
	N.A.	Shared toilet	
Housing	Primitive floor/type of household: raw, unfinished materials, dirt, sand, wood planks, bamboo. Other according to local definitions (see survey documentation)	Primitive floor/type of household: raw, unfinished materials, dirt, sand, wood planks, bamboo. Other according to local definitions (see survey documentation)	All children 0-17
	Overcrowding (more than 4 people per room)	Overcrowding (more than 3 people per room)	
Health	Un-skilled birth assistance (0-23 months): Traditional birth attendant, community health worker, voluntary health worker, relative/ friend, no one, other according to local definitions (see survey documentation).	Un-skilled birth assistance (0-23 months): Traditional birth attendant, community health worker, voluntary health worker, relative/ friend, no one, other according to local definitions (see survey documentation).	Children 0-4
	Not immunized DPT3: Child between 12 to 59 months and has not received DPT1, DPT2 and DPT3.	Not fully immunized: Child between 12 to 59 months and has not received DPT1, DPT2 and DPT3; Child between 6 and 59 months not full vaccinated according to recommended schedule. BCG: if not received by 6 months (recommended: as soon after birth) DPT and Polio: all 3 doses by 12 months. Measles/ MMR: if not received before 19 months (one does if single dose, both doses if in two doses).	
	N.A.	No ante-natal care (0-23 months): Less than 4 ante-natal care visits (WHO recommendations before 2016).	

Nutrition	Infant and young child feeding (IYCF): Children 0-5 months: Deprived if no breastfeeding; Children 6-8 months and breastfed: Less than 2 feedings in the last 24 hours; Children 9-23 months and breastfed: Less than 3 feedings in the last 24 hours; Children 6-23 months not breastfed: Less than 4 feedings of which one should be a milk product.	Infant and young child feeding (IYCF): Children 0-5 months: Deprived if no breastfeeding; Children 6-8 months and breastfed: Less than 2 feedings in the last 24 hours; Children 9-23 months and breastfed: Less than 3 feedings in the last 24 hours; Children 6-23 months not breastfed: Less than 4 feedings of which one should be a milk product.	Children 0-4
	Wasting: weight for height less than -2 standard deviations (sd) from WHO reference median.	Wasting: weight for height less than -2 standard deviations (sd) from WHO reference median.	
	N.A.	Stunting (>24 months): Height for age is less than -2sd from WHO reference median	
	N.A.	Obesity (>24 months): weight for height more than 2sd from WHO reference median	
Education	Not enrolled in primary school (children of primary age)	Not enrolled in school (all ages)	Children 5-17
	Did not finish primary (from age of end of primary to 17)	Two or more grades behind school or not finished primary	
Information	No access to any information or communication device (communication device: phone, mobile, smartphone; information device: radio, tv, computer, internet).	No access to any information device (ie: radio, tv, computer, internet).	Children 5-17
	N.A.	No access to any communication device (ie: phone, mobile, smartphone)	

ANNEX III: Correlation of the Wealth Index with Deprivation

The Wealth Index (WI) is constructed nationally for each country, using the availability of certain assets, durable and semi-durable goods in the household. Since some of the WI component are also used in the analysis of deprivation, a question arises concerning the decree of correlation between the WI and deprivation: while some degree of correlation is expected, too much correlation could signify that we are actually measuring the same thing, therefore invalidating the analysis.

Table AX shows the correlation of Acute and Moderate deprivation with each quintile of the WI, separately, both as simple correlation and with controls. As we can see, the correlations have a reasonable magnitude, and range from -0.3 to +0.3
To further assess the extent of the correlation, we also perform a controlled correlation between each quintile and household level indicators, reported in Table AX: again, while indubitably present, no correlation reaches a worrying magnitude.

Table AX: Correlation of deprivation with each quintile (separately)

	Acute Deprivation (A)	Acute Deprivation (B)	Moderate Deprivation (A)	Moderate Deprivation (B)
Quintile 1	0.306***	0.237***	0.291***	0.222***
Quintile 2	0.064***	0.024***	0.081***	0.044***
Quintile 3	-0.062***	-0.056***	-0.033***	-0.028***
Quintile 4	-0.169***	-0.106***	-0.158***	-0.098***
Quintile 5	-0.272***	-0.170***	-0.323***	-0.231***
Controlled for				
Country	X	X	X	X
Age group		X		X
Sex		X		X
Head education		X		X
Rural		X		X
HH demographic composition		X		X

Table AX: Correlations of HH indicators with quintiles					
	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Availability of information devices SD	0.160***	0.013***	-0.134***	-0.074***	0.035***
	(0.004)	(0.005)	(0.005)	(0.004)	(0.004)
Availability of information devices MD	0.133***	0.063***	0.031***	-0.092***	-0.135***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Unimproved water source - SD	0.145***	0.016***	-0.052***	-0.040***	-0.069***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Unimproved water source - MD	0.058***	0.026***	0.003*	-0.047***	-0.040***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)
Unimproved Sanitation	0.040***	0.066***	0.034***	-0.044***	-0.096***
	(0.002)	(0.003)	(0.003)	(0.002)	(0.002)
HH shares toilet - MD	0.011***	0.027***	0.017***	-0.005**	-0.049***
	(0.002)	(0.003)	(0.003)	(0.002)	(0.002)
Floor of natural materials	0.257***	-0.005**	-0.070***	-0.056***	-0.126***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Overcrowding: >4 ppl per room SD	0.059***	0.002	-0.018***	-0.024***	-0.019***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Overcrowding: >3 ppl per room MD	0.062***	0.036***	0.006***	-0.024***	-0.081***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)
Controlled for					
Country effect	X	X	X	X	X
Age group	X	X	X	X	X
Sex	X	X	X	X	X
Head education	X	X	X	X	X
Rural	X	X	X	X	X
HH demographic composition	X	X	X	X	X

ANNEX IV: Statistical Significance in Deprivation Analysis

In Cluster 1: For moderate and acute deprivation (2+), area, education, and wealth are strongly associated with deprivation. However, this cluster presents more differences in terms of association patterns of single deprivations. Differences in acute nutrition are almost never significant; gender differences are found in moderate education in all countries, with different degrees of confidence (Egypt p<0.05) and in general boys are found to be more deprived. In Palestine, boys are also more likely (p<0.01) to be deprived in acute education deprivation. In Jordan and Palestine, the area of residence has generally a lower level of significance. Among single deprivations, health also presents a fewer number of significant differences.

Colour coding
p<0.01
p<0.05
p<0.1

Algeria 2012

	Urban	Rural	Female	Male	Head is non educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	4.86	12.06	7.62	7.49	12.35	5.90	21.22	1.12
Nutrition AD	23.99	25.69	24.11	25.17	24.76	24.62	24.74	22.87
Health AD	3.78	5.70	4.76	4.32	8.01	3.61	8.88	2.49
Education AD	1.58	3.02	1.84	2.36	4.11	1.37	4.79	0.46
Information AD	0.05	0.30	0.15	0.13	0.33	0.07	0.58	0.00
Water AD	15.87	21.31	18.17	17.66	20.21	17.13	29.35	8.04
Sanitation AD	1.38	8.36	3.91	4.08	8.21	2.58	14.83	0.38
Housing AD	10.48	16.82	12.62	13.07	18.48	10.88	27.70	1.93
Moderate Deprived (MD) in 2+	22.87	39.39	27.71	30.33	38.19	25.86	57.54	8.35
Nutrition MD	33.56	35.49	33.28	35.29	35.89	33.87	34.50	32.89
Health MD	15.64	23.01	19.21	17.87	25.89	16.51	28.29	9.69
Education MD	18.86	24.89	17.36	24.64	31.51	17.02	29.26	12.20
Information MD	2.26	4.94	3.12	3.37	6.33	2.12	10.21	0.35
Water MD	27.47	39.35	31.89	31.95	33.27	31.45	54.22	20.91
Sanitation MD	8.84	20.84	13.11	13.54	16.16	12.29	29.54	2.94
Housing MD	26.09	35.45	29.61	29.58	38.86	26.37	50.20	9.31

Egypt 2014

	Urban	Rural	Female	Male	Head is non educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	1.34	4.16	3.44	3.00	5.57	2.19	8.37	0.28
Nutrition AD	26.40	26.17	26.39	26.10	25.87	26.36	23.95	24.99
Health AD	2.89	6.51	5.83	5.03	7.11	4.86	9.73	1.50
Education AD	9.22	10.83	10.13	10.41	14.74	8.05	12.54	6.82
Information AD	0.07	0.32	0.26	0.21	0.49	0.11	0.83	0.00
Water AD	1.63	4.01	3.31	3.13	3.34	3.16	5.67	0.26
Sanitation AD	0.02	0.25	0.16	0.17	0.35	0.09	0.71	0.00
Housing AD	3.42	12.33	9.69	9.03	17.67	5.73	26.84	0.55
Moderate Deprived (MD) in 2+	9.19	19.14	15.63	15.97	23.35	12.53	28.31	5.19
Nutrition MD	43.62	41.73	42.00	42.58	42.94	42.10	42.07	42.90
Health MD	34.10	41.61	39.18	39.44	42.92	38.14	45.37	31.18
Education MD	13.03	14.59	13.55	14.51	23.69	9.27	20.69	8.07
Information MD	3.31	7.67	6.43	5.90	10.87	3.83	11.02	0.79
Water MD	4.19	12.17	9.46	9.54	9.53	9.49	12.69	2.87
Sanitation MD	0.98	3.21	2.38	2.54	4.40	1.62	6.24	0.01
Housing MD	9.70	20.94	17.75	16.63	29.41	11.85	37.94	2.86

Jordan 2012

	Urban	Rural	Female	Male	Head is non educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	1.20	2.75	1.69	1.30	2.48	1.37	3.43	0.26
Nutrition AD	32.03	36.22	31.36	34.22	34.80	32.62	33.82	35.25
Health AD	1.73	2.17	1.89	1.75	4.32	1.57	3.98	1.22
Education AD	1.99	1.20	1.69	1.99	5.54	1.37	3.85	0.60
Information AD	0.01	0.00	0.01	0.01	0.00	0.01	0.04	0.00
Water AD	5.30	14.51	7.02	6.97	4.46	7.30	6.18	3.99
Sanitation AD	0.07	0.00	0.04	0.07	0.01	0.06	0.15	0.00
Housing AD	7.20	8.58	7.93	7.00	12.95	6.80	18.69	0.11
Moderate Deprived (MD) in 2+	20.74	21.29	20.05	21.59	25.60	20.27	25.23	12.71

Nutrition MD	37.34	42.56	35.88	40.66	39.76	38.18	42.32	40.07
Health MD	33.90	33.18	33.40	34.10	37.93	33.36	39.46	38.70
Education MD	8.79	7.85	7.54	9.62	17.71	7.47	14.02	3.81
Information MD	0.49	1.20	0.57	0.67	2.29	0.41	2.57	0.11
Water MD	45.28	43.23	44.38	45.40	31.88	46.45	20.70	61.68
Sanitation MD	0.23	0.27	0.21	0.27	0.27	0.24	0.68	0.28
Housing MD	26.41	28.73	27.37	26.33	38.38	25.46	49.05	5.80

Palestine 2014

	Urban	Rural	Female	Male	Head is non educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	7.29	4.87	6.96	6.41	12.52	6.60	21.00	0.24
Nutrition AD	15.94	14.14	16.21	14.86	17.49	15.48	15.50	17.39
Health AD	1.03	1.10	1.14	0.95	0.00	1.06	0.44	1.95
Education AD	2.75	2.45	1.96	3.37	6.09	2.62	3.94	1.41
Information AD	1.94	1.47	2.01	1.64	7.10	1.75	4.04	0.17
Water AD	43.91	30.49	40.66	40.45	44.35	40.49	98.39	0.97
Sanitation AD	0.21	0.45	0.27	0.26	1.82	0.25	0.13	0.14
Housing AD	6.94	7.98	7.72	6.70	11.69	7.14	11.87	1.38
Moderate Deprived (MD) in 2+	35.89	31.26	34.92	34.55	57.18	34.41	75.45	4.70
Nutrition MD	23.47	22.65	23.45	23.11	30.53	23.17	22.89	24.28
Health MD	24.65	22.36	24.02	24.20	16.29	24.21	22.34	26.78
Education MD	5.96	6.00	3.52	8.37	15.99	5.82	8.65	3.25
Information MD	43.70	40.20	43.42	42.20	72.30	42.39	79.31	7.09
Water MD	47.08	36.33	44.59	44.20	52.33	44.28	98.93	6.47
Sanitation MD	1.41	1.45	1.38	1.46	3.12	1.39	3.04	0.23
Housing MD	25.49	27.62	26.98	25.10	42.38	25.80	37.62	11.66

In Cluster 2: Area, education of the household head and wealth are all strongly ($p<0.01$) associated with deprivation, at both acute and moderate level. Gender is strongly associated with the difference in moderate deprivation (2+) in Tunisia. Single deprivations follow a similar pattern, showing strong correlations with area of residence, wealth, and education of the household head. In this cluster, nutrition is less associated with any of these correlates: in Iraq, acute nutrition deprivation is only strongly associated with area, while moderate nutrition deprivation is associated only weakly ($p<0.1$) with education of the household head. In Morocco, acute nutrition deprivation is not significantly associated with any characteristic, while moderate nutrition is more strongly associated. In Tunisia, acute nutrition presents a weak ($p<0.1$) gender differential (boys more deprived) and moderate nutrition deprivation shows moderate

correlation ($p<0.05$) with area and gender. In this cluster we also observe gender differences ($p<0.01$) in education: in Iraq, boys are more deprived in moderate deprivation, girls are more deprived in acute deprivation; in Morocco girls are more deprived; in Tunisia, boys are more deprived in moderate deprivation.

Morocco 2011

	Urban	Rural	Female	Male	Head is non-educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	3.20	45.17	24.22	23.34	30.39	5.79	73.96	0.48
Nutrition AD	22.44	23.15	23.10	22.54	23.01	22.34	23.46	21.32
Health AD	6.18	29.51	18.99	18.06	22.68	8.50	40.29	4.34
Education AD	7.47	25.84	17.79	14.71	20.09	5.19	30.57	4.11
Information AD	0.19	3.12	1.35	1.82	2.14	0.01	6.72	0.00
Water AD	4.88	39.38	21.94	21.65	26.79	8.22	55.02	1.99
Sanitation AD	1.08	30.11	14.72	15.90	19.96	2.70	55.02	0.00
Housing AD	9.27	43.84	26.50	26.33	32.25	10.51	71.47	2.72
Moderate Deprived (MD) in 2+	21.48	70.25	45.29	45.48	53.68	22.86	93.97	9.04
Nutrition MD	31.38	39.44	34.30	36.98	37.36	31.45	43.74	30.46
Health MD	42.18	63.02	52.36	54.14	57.64	42.60	71.94	38.43
Education MD	41.34	42.64	44.04	39.95	44.02	36.06	43.54	42.09
Information MD	3.47	17.87	10.10	10.58	12.96	2.85	32.14	0.11
Water MD	12.07	65.86	38.81	38.08	45.59	19.00	82.69	5.82
Sanitation MD	8.76	34.05	20.55	21.75	25.67	8.89	58.78	2.23
Housing MD	20.11	54.44	37.26	37.00	43.80	18.97	80.02	7.49

Iraq 2011

	Urban	Rural	Female	Male	Head is non-educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	6.86	28.38	14.20	13.89	22.50	12.31	37.90	2.07
Nutrition AD	25.77	23.90	25.38	24.91	25.72	25.02	24.18	25.52
Health AD	19.53	37.23	25.80	25.12	33.20	23.76	40.10	13.06
Education AD	11.53	18.10	14.15	13.07	18.04	12.80	19.43	5.68
Information AD	0.05	0.67	0.28	0.23	0.82	0.14	1.12	0.00
Water AD	2.24	25.69	10.05	10.07	16.43	8.76	32.98	0.23
Sanitation AD	0.88	9.13	3.67	3.59	6.68	3.01	12.75	0.05
Housing AD	22.88	39.79	28.71	28.33	37.65	26.66	54.58	7.08

Moderate Deprived (MD) in 2+	38.94	61.60	46.28	46.70	55.27	44.70	73.86	20.58
Nutrition MD	39.53	39.83	40.04	39.24	41.02	39.33	40.18	39.88
Health MD	41.35	57.67	47.38	46.28	55.92	44.84	61.27	33.34
Education MD	27.39	33.93	27.66	31.38	33.92	28.70	33.70	18.35
Information MD	1.16	4.94	2.48	2.36	5.62	1.78	8.47	0.00
Water MD	31.96	52.85	39.16	38.70	42.14	38.28	63.65	23.70
Sanitation MD	3.99	12.14	6.80	6.63	9.90	6.06	16.63	2.08
Housing MD	48.74	65.83	54.55	54.33	62.80	52.72	76.98	24.81

Tunisia 2012

	Urban	Rural	Female	Male	Head is non-educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	1.44	18.40	7.38	7.84	19.32	5.81	28.19	0.49
Nutrition AD	23.21	23.85	21.33	25.33	25.67	23.22	23.06	26.30
Health AD	3.67	4.55	3.11	4.79	5.07	3.88	6.31	2.81
Education AD	1.92	5.54	2.91	3.52	6.37	2.70	6.39	0.69
Information AD	0.07	1.00	0.50	0.31	1.76	0.17	1.75	0.00
Water AD	9.78	35.86	19.63	18.96	33.11	17.14	45.17	5.25
Sanitation AD	0.12	13.37	5.09	4.81	13.87	3.56	20.43	0.22
Housing AD	4.59	16.77	8.08	9.89	17.35	7.74	26.98	0.35
Moderate Deprived (MD) in 2+	42.08	66.10	49.01	52.50	61.41	49.20	79.17	39.09
Nutrition MD	31.55	35.79	30.73	35.26	37.17	32.70	37.26	33.28
Health MD	59.09	68.30	62.08	62.84	66.70	62.04	70.69	48.18
Education MD	12.53	23.30	14.51	18.25	31.35	13.88	28.39	4.65
Information MD	1.31	8.30	4.09	3.65	10.60	2.70	14.59	0.00
Water MD	31.27	46.45	37.42	36.24	42.04	35.99	55.79	51.75
Sanitation MD	2.46	18.05	8.40	7.91	16.76	6.81	26.70	0.68
Housing MD	11.23	30.67	17.63	18.94	31.60	16.26	47.07	1.28

In Cluster 3: Area of residence, education of the household head and wealth quintile are strongly correlated ($p<0.01$) with deprivation in all countries, for both acute and moderate deprivation. Less significant differences are found by gender in Yemen ($p<0.05$) and Comoros ($p<0.1$). Regarding each individual dimension: in general, these three correlates (area of residence, education of the household head, and wealth) show consistent strong correlation for all dimensions, both according to moderate and acute definitions. Gender is often not significant, or significant at lower confidence levels ($p<0.05$ or $p<0.1$); strong ($p<0.01$) gender differences are found in education in all countries: in Yemen (girls are more deprived), Sudan (boys are more deprived), Mauritania (boys are more deprived at moderate deprivation level), and in Comoros boys are more deprived). Among single dimensions, nutrition presents the weakest links with correlates, in particular with education of the household head.

Comoros 2012

	Urban	Rural	Female	Male	Head is non-educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	35.02	63.26	53.75	55.96	63.79	45.77	82.67	20.64
Nutrition AD	32.23	38.43	32.69	35.10	32.50	35.10	33.98	33.76
Health AD	27.38	19.39	22.39	27.83	29.36	21.51	37.61	17.28
Education AD	11.97	5.46	10.52	9.43	13.66	5.44	21.21	2.78
Information AD	23.75	8.55	18.37	19.82	27.72	8.68	57.01	0.00
Water AD	34.94	12.07	28.30	27.98	29.09	27.34	20.71	24.83
Sanitation AD	69.51	48.94	62.75	64.02	67.53	59.67	68.02	41.15
Housing AD	44.22	37.98	41.11	43.59	50.31	34.43	88.36	7.58
Moderate Deprived (MD) in 2+	69.71	89.62	83.03	84.36	88.61	78.40	98.23	53.09
Nutrition MD	52.37	51.47	50.91	52.52	52.26	51.36	55.41	48.20
Health MD	54.89	60.06	56.80	60.45	64.32	54.07	75.12	45.15
Education MD	37.66	48.78	42.98	47.73	50.80	38.92	55.01	33.20
Information MD	22.49	48.52	40.73	40.41	50.17	28.33	88.43	2.30
Water MD	42.93	68.97	60.75	61.68	61.53	60.57	61.16	51.78
Sanitation MD	62.38	77.38	72.31	73.52	75.94	70.31	79.42	48.11
Housing MD	48.46	53.83	50.83	53.60	59.86	44.47	91.42	14.37

Mauritania 2011

	Urban	Rural	Female	Male	Head is non-educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	49.42	83.77	70.84	70.79	78.32	53.45	99.93	21.39
Nutrition AD	34.34	37.25	36.18	36.11	35.72	37.07	35.93	33.00
Health AD	35.39	50.93	45.47	44.77	49.70	36.35	61.07	29.86
Education AD	20.91	30.57	26.95	26.08	30.07	18.97	35.48	14.62
Information AD	1.93	15.06	10.32	9.99	12.92	3.17	30.04	0.00
Water AD	45.28	62.58	56.18	55.93	61.00	44.54	88.15	31.00
Sanitation AD	28.66	78.40	59.66	59.70	68.63	39.17	99.83	8.52
Housing AD	50.91	82.16	70.07	70.68	77.60	53.49	99.27	22.80

Moderate Deprived (MD) in 2+	75.61	93.38	86.65	86.71	91.30	75.86	100.00	52.22
Nutrition MD	50.76	55.74	53.92	53.79	54.99	51.56	57.61	44.55
Health MD	65.43	69.98	68.75	67.78	70.53	63.71	72.95	58.15
Education MD	37.72	37.67	39.54	35.77	38.02	36.65	34.83	34.10
Information MD	18.40	50.73	39.18	38.10	45.89	20.52	72.58	1.32
Water MD	62.91	77.28	72.22	71.49	76.87	60.28	98.85	41.19
Sanitation MD	48.66	84.55	70.80	71.23	77.38	56.30	99.86	30.13
Housing MD	65.17	87.65	78.93	79.42	85.45	64.52	99.53	39.91

Sudan 2014

	Urban	Rural	Female	Male	Head is non-educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	51.57	83.09	73.90	74.43	87.21	62.50	99.03	14.84
Nutrition AD	29.85	32.43	30.73	32.67	31.94	31.48	35.08	26.28
Health AD	15.67	32.87	27.17	29.14	40.81	19.10	55.14	7.80
Education AD	17.20	26.82	22.94	24.60	31.91	17.15	32.96	8.54
Information AD	6.74	22.82	18.09	18.33	28.13	8.69	44.08	0.04
Water AD	27.87	48.30	42.13	42.90	53.05	32.98	72.66	4.44
Sanitation AD	34.76	74.13	63.21	62.74	76.20	51.20	93.99	8.92
Housing AD	77.74	95.06	90.18	90.13	96.31	84.79	99.81	49.95
Moderate Deprived (MD) in 2+	72.39	92.75	86.87	87.10	95.63	79.32	100.00	41.08
Nutrition MD	45.02	54.02	50.68	52.35	54.75	49.26	53.85	39.30
Health MD	32.38	52.00	46.45	46.84	56.92	39.24	65.68	21.47
Education MD	37.31	44.28	40.89	43.42	49.45	35.86	47.53	31.63
Information MD	28.23	57.55	49.13	49.16	64.76	34.19	80.74	4.45
Water MD	47.03	75.08	66.64	67.62	81.38	54.37	99.94	7.62
Sanitation MD	47.10	80.02	70.96	70.41	81.21	61.36	94.84	23.69
Housing MD	83.13	96.58	92.80	92.74	97.73	88.44	99.95	62.42

Yemen 2013

	Urban	Rural	Female	Male	Head is non-educated	Head has primary +	Poorest	Richest
Acutely Deprived (AD) in 2+	15.66	61.73	49.40	48.30	56.83	43.20	94.01	6.06
Nutrition AD	27.34	31.87	29.47	31.76	31.06	30.43	34.69	26.05
Health AD	22.54	52.30	45.41	42.43	50.29	40.34	63.16	15.66
Education AD	4.70	16.02	17.62	8.20	19.54	7.63	31.87	2.02
Information AD	1.21	11.90	8.78	8.98	13.66	5.25	33.19	0.02
Water AD	26.60	57.24	48.72	48.59	54.40	44.60	73.83	18.18
Sanitation AD	6.43	46.29	34.60	35.61	42.92	29.63	74.32	1.81
Housing AD	24.78	58.76	49.39	49.10	56.16	44.39	92.54	15.06
Moderate Deprived (MD) in 2+	49.03	87.03	77.07	75.74	82.45	72.15	99.25	40.15
Nutrition MD	46.84	62.79	57.65	59.24	60.50	57.39	68.78	41.32
Health MD	65.06	87.85	81.88	81.38	85.61	79.36	94.33	59.75
Education MD	10.43	24.44	27.07	14.15	29.87	13.39	38.19	6.77
Information MD	6.64	33.55	26.00	25.90	33.74	20.13	69.75	1.67
Water MD	61.45	89.77	81.64	82.03	85.38	79.26	97.51	64.92
Sanitation MD	11.15	52.09	40.14	41.09	47.89	35.52	78.57	5.32
Housing MD	47.17	74.14	67.08	66.12	70.78	63.66	96.38	38.07

ANNEX V: Changes introduced to OoR Data for Comparability Purposes

Country		Changes Made
Palestine		
2006	**2014**	
PSU, Strata	-	-
Water distance	-	Not changed, because water deprivation in 2014 is 0.4% deprivation.
Jordan		
2002	**2012**	
Non-potable Water	Non-potable Water	Not necessary
Distance to Water	Distance to Water	Not necessary
Protection	-	Not necessary
Egypt		
2000	**2014**	
Protection	-	No necessary
Morocco		
2004	**2011**	
Water distance	-	Removed from 2011_dyn compare
Toilet shared defined as public toilet	-	Maintained toilet sharing in 2011_dyn
Grade for age	Grade for age	Not necessary
Sudan		
2000	**2014**	
Skilled attendance	-	Removed from 2014_dyn
ANC	-	Removed from 2014_dyn
Toilet sharing	-	Removed from 2014_dyn
Info device MD	-	Removed from 2014_dyn
Yemen		
2003	**2013**	
Water distance	-	Removed from 2013_dyn
Grade for age	Grade for age	Not necessary

Missing

ANNEX VI: Deprivation Incidence Statistical Table

Threshold		Acute									Moderate								
			Area		Sex		Head Educ.		Wealth				Area		Sex		Head Educ.		Wealth		
Country	Total Indicator of Child Deprivation		Urban	Rural	Female	Male	Non educ.	Prim+	Poorest	Total Richest		Urban	Rural	Female	Male	Non educ.	Prim+	Poorest	Richest
All countries	Incidence of Deprived in 2+	24.7	10.2	36.3	25.1	24.2	38.7	17.1	46.9	3.9	44.1	30.2	55.3	44.3	44.0	57.8	36.7	67.3	18.2
	Average intensity 2+	48.9	43.6	50.8	49.1	48.7	52.6	46.2	53.6	41.1	54.9	47.7	58.7	55.2	54.7	60.4	51.1	63.1	43.3
	Adjusted HC 2+	13.6	4.9	20.5	13.8	13.3	22.3	8.8	27.9	1.6	26.0	15.2	34.6	26.2	25.8	36.7	20.1	43.9	8.2
Cluster 1	Incidence of Deprived in 2+	4.4	2.7	5.8	4.5	4.2	7.5	3.4	12.3	0.5	20.6	16.6	24.2	20.2	21.1	28.1	18.0	39.1	6.6
	Average intensity 2+	42.2	41.4	42.3	42.4	42.1	42.8	42.0	43.1	40.2	45.4	44.0	45.9	45.6	45.3	46.6	44.7	48.0	41.4
	Adjusted HC 2+	1.9	1.1	2.5	1.9	1.8	3.3	1.4	5.4	0.2	9.5	7.4	11.2	9.3	9.6	13.2	8.1	19.1	2.7
Jordan	Incidence of Deprived in 2+	1.2	1.0	2.2	1.4	1.0	2.2	1.1	3.0	0.2	20.3	20.3	20.5	19.4	21.1	25.4	19.7	25.3	12.1
	Average intensity 2+	41.4	41.0	42.1	41.6	41.0	42.1	41.2	42.1	40.0	43.1	42.9	43.6	43.0	43.1	43.3	43.0	44.4	42.5
	Adjusted HC 2+	0.5	0.4	0.9	0.6	0.4	0.9	0.4	1.3	0.1	8.7	8.7	9.0	8.3	9.1	11.0	8.5	11.2	5.1

	Incidence of Deprived in 2+	3.2	1.3	4.2	3.4	3.0	5.8	2.3	8.4	0.3	16.6	9.6	20.1	16.5	16.7	24.5	13.2	29.4	5.4
Egypt	Average intensity 2+	41.4	40.7	41.5	41.6	41.2	41.6	41.6	42.0	40.0	44.3	42.5	44.7	44.6	44.0	45.2	43.5	46.1	40.8
	Adjusted HC 2+	1.3	0.5	1.7	1.4	1.2	2.4	1.0	3.5	0.1	7.4	4.1	9.0	7.3	7.4	11.1	5.7	13.6	2.2
	Incidence of Deprived in 2+	5.2	0.7	13.1	5.1	5.3	14.6	3.8	20.4	0.4	21.2	11.5	38.0	20.3	21.9	38.6	18.5	55.5	8.4
Tunisia	Average intensity 2+	45.3	41.2	45.6	45.5	45.1	46.9	44.3	45.9	40.0	48.6	43.8	51.2	49.1	48.2	52.4	47.4	52.5	43.4
	Adjusted HC 2+	2.4	0.3	6.0	2.3	2.4	6.8	1.7	9.4	0.2	10.3	5.0	19.4	10.0	10.6	20.2	8.8	29.1	3.6
	Incidence of Deprived in 2+	6.7	7.3	4.9	7.0	6.4	12.5	6.6	21.0	0.2	34.7	35.9	31.3	34.9	34.6	57.2	34.4	75.4	4.7
Palestine	Average intensity 2+	40.8	40.7	41.0	40.4	41.2	44.0	40.7	41.0	40.0	46.6	46.8	45.7	46.3	46.8	48.3	46.5	49.4	41.9
	Adjusted HC 2+	2.7	3.0	2.0	2.8	2.6	5.5	2.7	8.6	0.1	16.2	16.8	14.3	16.2	16.2	27.6	16.0	37.3	2.0
	Incidence of Deprived in 2+	7.7	4.9	12.2	7.7	7.6	12.5	6.0	21.4	1.1	29.1	22.9	39.4	27.7	30.4	38.2	25.9	57.6	8.4
Algeria	Average intensity 2+	44.0	42.7	45.0	44.2	43.9	45.7	42.9	45.7	40.7	47.9	45.7	50.0	47.9	47.9	50.1	46.7	51.8	42.1
	Adjusted HC 2+	3.4	2.1	5.5	3.4	3.3	5.7	2.6	9.8	0.5	13.9	10.4	19.7	13.3	14.5	19.1	12.1	29.8	3.5
	Incidence of Deprived in 2+	17.9	5.7	36.5	18.2	17.6	28.3	11.2	52.1	1.4	44.6	31.6	64.7	44.6	44.7	51.5	40.3	81.4	14.6
Cluster 2	Average intensity 2+	48.2	42.3	49.9	48.3	48.0	50.8	45.1	50.7	40.6	51.6	46.1	54.9	51.7	51.4	55.2	48.1	57.6	43.0
	Adjusted HC 2+	8.7	2.4	18.4	8.9	8.5	14.4	5.0	26.9	0.6	22.8	14.6	35.5	22.9	22.8	28.3	19.4	47.0	6.3

Iraq	Incidence of Deprived in 2+	14.0	6.9	28.4	14.2	13.9	22.5	12.3	37.9	2.1	46.5	38.9	61.6	46.3	46.7	55.3	44.7	73.9	20.6
	Average intensity 2+	45.8	42.1	47.5	45.8	45.7	47.5	45.1	48.0	41.1	48.6	46.3	51.5	48.5	48.7	50.7	48.1	53.0	43.9
	Adjusted HC 2+	6.4	2.9	13.5	6.5	6.4	10.7	5.6	18.2	0.9	22.6	18.0	31.7	22.5	22.7	28.0	21.5	39.2	9.0
Morocco	Incidence of Deprived in 2+	23.8	3.2	45.2	24.2	23.3	30.4	5.8	74.0	0.5	41.8	16.6	68.0	42.0	41.6	50.1	19.1	93.0	5.8
	Average intensity 2+	51.5	42.5	52.1	51.7	51.3	51.9	45.2	54.4	40.0	55.6	45.7	58.1	56.0	55.2	56.6	48.4	63.4	41.5
	Adjusted HC 2+	12.2	1.4	23.6	12.5	12.0	15.8	2.6	40.3	0.2	23.2	7.6	39.5	23.5	23.0	28.4	9.2	59.0	2.4
Cluster 3	Incidence of Deprived in 2+	64.3	38.2	74.9	64.5	64.2	76.1	54.2	97.1	11.8	83.0	64.1	90.6	83.2	82.8	90.8	76.3	99.7	41.5
	Average intensity 2+	57.6	50.3	59.0	57.7	57.5	60.3	54.4	66.4	43.0	67.7	57.6	70.6	67.8	67.6	71.9	63.5	80.8	46.5
	Adjusted HC 2+	37.2	19.6	44.3	37.3	37.1	46.1	29.6	64.4	5.1	56.2	37.2	63.9	56.5	56.0	65.3	48.4	80.6	19.3
Yemen	Incidence of Deprived in 2+	48.8	15.7	61.7	49.4	48.3	56.8	43.2	94.0	6.1	76.4	49.0	87.0	77.1	75.7	82.4	72.2	99.3	40.1
	Average intensity 2+	55.6	46.3	56.6	56.3	55.0	58.0	53.4	64.5	43.6	62.6	49.1	65.5	63.3	61.8	65.2	60.4	79.1	46.5
	Adjusted HC 2+	27.2	7.2	34.9	27.8	26.5	33.0	23.1	60.7	2.6	47.8	24.1	57.0	48.8	46.8	53.7	43.6	78.5	18.7

	Incidence of Deprived in 2+	54.9	35.0	63.3	53.7	56.0	63.8	45.8	82.7	20.6	84.1	70.5	89.8	83.4	84.7	89.1	78.6	98.3	53.5
Comoros	Average intensity 2+	49.6	46.6	50.3	49.5	49.7	51.1	47.4	55.8	42.2	62.8	57.4	64.5	62.1	63.4	65.1	59.9	74.6	48.8
	Adjusted HC 2+	27.2	16.3	31.8	26.6	27.8	32.6	21.7	46.1	8.7	52.7	40.5	57.9	51.8	53.7	58.0	47.1	73.3	26.1
	Incidence of Deprived in 2+	70.8	49.5	83.8	70.9	70.8	78.3	53.5	99.9	21.5	86.7	75.7	93.4	86.7	86.7	91.3	76.0	100.0	52.5
Mauritania	Average intensity 2+	59.1	50.9	62.0	59.1	59.1	60.6	53.9	69.8	44.9	69.2	61.2	73.1	69.5	68.9	71.5	62.8	82.1	50.8
	Adjusted HC 2+	41.9	25.2	52.0	41.9	41.8	47.5	28.8	69.8	9.6	60.0	46.4	68.3	60.3	59.8	65.3	47.7	82.1	26.7
	Incidence of Deprived in 2+	74.2	51.6	83.1	73.9	74.4	87.2	62.5	99.0	14.8	87.0	72.4	92.7	86.9	87.1	95.6	79.3	100.0	41.1
Sudan	Average intensity 2+	58.8	52.6	60.3	58.6	59.0	61.7	55.2	67.4	42.4	70.7	61.5	73.6	70.5	71.0	75.5	65.6	81.9	45.9
	Adjusted HC 2+	43.6	27.1	50.1	43.3	43.9	53.8	34.5	66.7	6.3	61.5	44.5	68.2	61.2	61.9	72.2	52.1	81.9	18.9

ANNEX VII: Deprivation Dimensions Statistical Table

Threshold		Severe									Moderate								
			Area		Sex		Head Educ.		Wealth				Area		Sex		Head Educ.		Wealth		
Country	Total Dimension		Urban	Rural	Female	Male	Non educ.	Prim+	Poorest	Total Richest		Urban	Rural	Female	Male	Non educ.	Prim+	Poorest	Richest
All countries	Housing	32.2	19.4	42.5	32.7	31.8	45.6	25.0	55.4	11.3	44.7	34.0	53.2	45.3	44.1	57.1	37.9	67.5	20.8
	Water	20.5	10.7	28.3	20.7	20.2	29.4	15.6	39.1	4.6	39.3	28.0	48.2	39.5	39.0	48.3	34.2	59.7	19.4
	Sanitation	17.5	5.0	27.5	17.7	17.3	29.4	11.0	34.9	1.9	22.3	9.8	32.3	22.5	22.1	34.3	15.7	39.8	5.6
	Nutrition	26.7	25.4	27.7	26.4	26.9	27.5	26.7	26.9	24.9	42.7	38.7	45.8	42.2	43.2	45.9	41.5	45.2	38.9
	Health	17.0	10.2	22.2	17.4	16.6	25.8	13.3	30.9	6.4	44.1	35.0	50.9	44.2	43.9	54.4	39.5	56.3	31.3
	Education	12.4	8.1	16.1	13.0	11.8	19.5	8.6	19.5	4.9	24.5	19.9	28.3	24.4	24.5	33.2	19.4	32.6	14.4
	Information	4.4	0.9	7.3	4.5	4.4	8.9	1.8	12.6	0.0	15.8	6.7	23.2	16.1	15.5	26.4	9.8	32.4	1.3
Cluster 1	Housing	9.9	6.3	13.1	10.1	9.8	17.5	7.2	26.0	0.9	21.0	17.5	24.0	21.4	20.6	31.5	17.1	42.0	4.8
	Water	8.5	9.0	8.1	8.7	8.3	7.7	8.8	16.0	2.4	19.5	20.2	18.9	19.6	19.5	15.6	20.7	28.9	13.5
	Sanitation	1.3	0.5	2.1	1.3	1.3	2.5	0.9	5.1	0.1	5.1	3.5	6.6	5.0	5.2	6.7	4.3	12.5	0.8
	Nutrition	25.2	24.4	25.8	25.0	25.3	25.8	25.6	23.7	24.3	38.8	37.0	40.2	38.2	39.4	41.2	38.6	38.5	39.1
	Health	5.0	3.2	6.3	5.3	4.7	7.6	4.5	9.0	1.8	32.9	26.3	37.8	32.9	32.9	39.4	31.1	38.6	25.5
	Education	7.1	5.1	8.9	6.9	7.3	12.0	5.6	9.5	4.2	18.4	16.1	20.4	16.9	19.8	28.8	14.2	24.9	11.2
	Information	0.3	0.2	0.4	0.3	0.2	0.5	0.2	0.9	0.0	6.4	5.0	7.7	6.6	6.2	10.5	5.1	12.9	0.9

	Housing	7.5	7.2	8.6	7.9	7.0	13.0	6.8	18.7	0.1	26.8	26.4	28.7	27.4	26.3	38.4	25.5	49.1	5.8
	Water	7.0	5.3	14.5	7.0	7.0	4.5	7.3	6.2	4.0	44.9	45.3	43.2	44.4	45.4	31.9	46.5	20.7	61.7
	Sanitation	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.7	0.3
Jordan	Nutrition	22.0	21.7	23.2	21.3	22.6	22.2	22.0	24.2	26.1	27.5	27.0	29.5	25.8	29.1	27.3	27.5	32.7	31.0
	Health	1.8	1.7	2.2	1.9	1.7	4.3	1.6	4.0	1.2	33.8	33.9	33.2	33.4	34.1	37.9	33.4	39.5	38.7
	Education	1.8	2.0	1.2	1.7	2.0	5.5	1.4	3.8	0.6	10.1	10.3	9.1	9.0	11.2	19.8	8.9	16.1	4.7
	Information	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	1.2	0.6	0.7	2.3	0.4	2.6	0.1
	Housing	9.3	3.4	12.3	9.7	9.0	17.4	5.8	26.8	0.6	17.2	9.7	20.9	17.8	16.6	29.0	11.7	37.9	2.9
	Water	3.2	1.6	4.0	3.3	3.1	3.4	3.2	5.7	0.3	9.5	4.2	12.2	9.5	9.5	8.5	9.8	12.7	2.9
	Sanitation	0.2	0.0	0.2	0.2	0.2	0.3	0.1	0.7	0.0	2.5	1.0	3.2	2.4	2.5	3.6	1.7	6.2	0.0
Egypt	Nutrition	26.2	26.4	26.2	26.4	26.1	26.2	27.2	24.0	25.0	42.3	43.6	41.7	42.0	42.6	43.2	42.7	42.1	42.9
	Health	5.4	2.9	6.5	5.8	5.0	7.4	5.1	9.7	1.5	39.3	34.1	41.6	39.2	39.4	44.2	37.7	45.4	31.2
	Education	10.3	9.2	10.8	10.1	10.4	14.9	8.6	12.5	6.8	19.2	17.8	19.9	18.7	19.6	28.2	14.7	24.9	12.8
	Information	0.2	0.1	0.3	0.3	0.2	0.5	0.2	0.8	0.0	6.2	3.3	7.7	6.4	5.9	11.9	3.8	11.0	0.8
	Housing	9.0	4.6	16.8	8.1	9.9	17.3	7.7	27.0	0.3	18.3	11.2	30.7	17.6	18.9	31.6	16.3	47.1	1.3
	Water	7.0	0.6	18.3	7.0	7.0	18.3	5.3	23.8	0.8	36.8	31.3	46.5	37.4	36.2	42.0	36.0	55.8	51.7
	Sanitation	4.9	0.1	13.4	5.1	4.8	13.9	3.6	20.4	0.2	8.1	2.5	18.1	8.4	7.9	16.8	6.8	26.7	0.7
Palestine	Nutrition	23.5	23.4	23.6	21.8	25.0	25.8	23.2	23.0	26.9	33.0	31.5	35.6	30.9	34.9	37.2	32.6	37.2	33.5
	Health	4.0	3.6	4.5	3.1	4.7	4.9	3.9	6.1	2.8	16.9	15.6	18.9	16.5	17.2	19.4	16.6	22.3	13.7
	Education	3.2	1.9	5.5	2.9	3.5	6.4	2.7	6.4	0.7	16.5	12.5	23.3	14.5	18.3	31.4	13.9	28.4	4.7
	Information	0.4	0.1	1.0	0.5	0.3	1.8	0.2	1.8	0.0	3.9	1.3	8.3	4.1	3.7	10.6	2.7	14.6	0.0

	Housing	7.2	6.9	8.0	7.7	6.7	11.7	7.1	11.9	1.4	26.0	25.5	27.6	27.0	25.1	42.4	25.8	37.6	11.7
	Water	40.6	43.9	30.5	40.7	40.4	44.4	40.5	98.4	1.0	44.4	47.1	36.3	44.6	44.2	52.3	44.3	98.9	6.5
	Sanitation	0.3	0.2	0.4	0.3	0.3	1.8	0.2	0.1	0.1	1.4	1.4	1.5	1.4	1.5	3.1	1.4	3.0	0.2
Algeria	Nutrition	15.5	15.9	14.1	16.2	14.9	17.5	15.5	15.5	17.4	23.3	23.5	22.7	23.5	23.1	30.5	23.2	22.9	24.3
	Health	1.0	1.0	1.1	1.1	1.0	0.0	1.1	0.4	2.0	24.1	24.7	22.4	24.0	24.2	16.3	24.2	22.3	26.8
	Education	2.7	2.7	2.5	2.0	3.4	6.1	2.6	3.9	1.4	6.0	6.0	6.0	3.5	8.4	16.0	5.8	8.6	3.2
	Information	1.8	1.9	1.5	2.0	1.6	7.1	1.7	4.0	0.2	42.8	43.7	40.2	43.4	42.2	72.3	42.4	79.3	7.1
	Housing	12.9	10.5	16.8	12.6	13.1	18.5	10.9	27.7	1.9	29.6	26.1	35.4	29.6	29.6	38.9	26.4	50.2	9.3
	Water	17.9	15.9	21.3	18.2	17.7	20.2	17.1	29.3	8.0	31.9	27.5	39.3	31.9	31.9	33.3	31.5	54.2	20.9
	Sanitation	4.0	1.4	8.4	3.9	4.1	8.2	2.6	14.8	0.4	13.3	8.8	20.8	13.1	13.5	16.2	12.3	29.5	2.9
Cluster 2	Nutrition	24.6	23.9	25.6	23.9	25.2	24.9	24.5	24.5	22.8	34.3	33.5	35.5	33.2	35.3	36.0	33.8	34.4	32.9
	Health	5.2	4.3	6.7	5.5	4.9	8.8	4.3	10.2	2.7	18.8	15.9	23.3	19.6	18.1	26.1	16.8	28.7	9.9
	Education	2.1	1.6	3.0	1.8	2.4	4.1	1.4	4.8	0.5	21.1	18.9	24.9	17.4	24.6	31.5	17.0	29.3	12.2
	Information	0.1	0.1	0.3	0.2	0.1	0.3	0.1	0.6	0.0	3.2	2.3	4.9	3.1	3.4	6.3	2.1	10.2	0.4
	Housing	27.7	18.5	41.7	27.8	27.6	33.7	23.9	61.1	5.3	47.8	39.4	60.4	47.8	47.7	48.9	47.0	78.2	17.9
	Water	14.7	3.1	32.4	14.7	14.6	24.0	8.7	41.7	1.0	38.7	25.4	59.2	39.0	38.5	44.7	34.9	71.2	16.4
	Sanitation	8.2	0.9	19.3	8.0	8.4	16.4	3.0	29.4	0.0	12.4	5.6	22.8	12.2	12.5	21.5	6.5	33.3	2.1
Tunisia	Nutrition	24.3	24.8	23.6	24.6	24.1	23.9	24.6	24.0	24.0	38.2	37.2	39.7	38.0	38.5	38.6	38.0	41.6	36.5
	Health	23.0	15.8	33.7	23.4	22.7	26.0	21.3	40.2	9.9	49.1	41.6	60.1	49.1	49.0	57.1	44.5	65.0	35.2
	Education	14.7	10.1	21.9	15.6	13.7	19.6	11.5	24.0	5.0	26.3	21.7	33.3	26.2	26.3	28.1	25.1	35.0	13.2
	Information	0.8	0.1	1.9	0.7	0.9	1.8	0.1	3.4	0.0	5.6	2.0	11.3	5.6	5.7	11.1	2.0	18.1	0.0

	Housing	28.5	22.9	39.8	28.7	28.3	37.7	26.7	54.6	7.1	54.4	48.7	65.8	54.6	54.3	62.8	52.7	77.0	24.8
	Water	10.1	2.2	25.7	10.0	10.1	16.4	8.8	33.0	0.2	38.9	32.0	52.8	39.2	38.7	42.1	38.3	63.6	23.7
	Sanitation	3.6	0.9	9.1	3.7	3.6	6.7	3.0	12.7	0.1	6.7	4.0	12.1	6.8	6.6	9.9	6.1	16.6	2.1
Iraq	Nutrition	25.1	25.8	23.9	25.4	24.9	25.7	25.0	24.2	25.5	39.6	39.5	39.8	40.0	39.2	41.0	39.3	40.2	39.9
	Health	25.4	19.5	37.2	25.8	25.1	33.2	23.8	40.1	13.1	46.8	41.4	57.7	47.4	46.3	55.9	44.8	61.3	33.3
	Education	13.6	11.5	18.1	14.2	13.1	18.0	12.8	19.4	5.7	29.6	27.4	33.9	27.7	31.4	33.9	28.7	33.7	18.4
	Information	0.3	0.1	0.7	0.3	0.2	0.8	0.1	1.1	0.0	2.4	1.2	4.9	2.5	2.4	5.6	1.8	8.5	0.0
	Housing	26.4	9.3	43.8	26.5	26.3	32.2	10.5	71.5	2.7	37.1	20.1	54.4	37.3	37.0	43.8	19.0	80.0	7.5
	Water	21.8	4.9	39.4	21.9	21.6	26.8	8.2	55.0	2.0	38.4	12.1	65.9	38.8	38.1	45.6	19.0	82.7	5.8
	Sanitation	15.3	1.1	30.1	14.7	15.9	20.0	2.7	55.0	0.0	21.2	8.8	34.0	20.5	21.7	25.7	8.9	58.8	2.2
Morocco	Nutrition	22.9	22.4	23.3	23.1	22.6	23.1	22.3	23.6	21.4	35.7	31.3	39.6	34.4	37.1	37.5	31.4	44.0	30.6
	Health	18.5	6.2	29.5	19.0	18.1	22.7	8.5	40.3	4.3	53.2	42.1	63.0	52.3	54.1	57.6	42.5	71.9	38.4
	Education	16.2	7.5	25.8	17.8	14.7	20.1	5.2	30.6	4.1	21.4	11.0	32.7	24.1	18.8	26.2	7.8	37.0	6.2
	Information	1.6	0.2	3.1	1.4	1.8	2.1	0.0	6.7	0.0	10.3	3.5	17.9	10.1	10.6	13.0	2.8	32.1	0.1
	Housing	73.3	56.1	80.2	73.5	73.1	80.8	66.9	97.0	34.3	81.8	68.4	87.2	82.1	81.5	87.2	77.2	98.5	51.1
	Water	45.4	28.5	52.2	45.2	45.6	53.9	38.0	73.4	11.5	72.9	53.6	80.4	72.4	73.2	82.1	64.7	98.5	32.4
	Sanitation	52.4	24.2	63.8	52.5	52.3	64.4	42.1	86.9	6.4	59.6	34.4	69.5	59.6	59.4	69.7	50.8	89.0	17.1
Cluster 3	Nutrition	31.7	29.6	32.5	30.7	32.6	32.1	31.4	35.0	26.8	54.1	46.3	57.2	53.3	54.9	56.5	52.5	59.3	40.6
	Health	35.2	20.0	41.3	35.2	35.3	44.7	28.6	58.4	12.5	61.6	47.7	66.9	61.5	61.7	68.0	57.0	77.2	39.4
	Education	19.4	12.5	22.5	20.9	17.9	27.1	12.9	32.5	6.1	33.3	26.9	36.0	35.4	31.2	41.5	26.1	43.3	21.4
	Information	14.2	4.4	18.2	14.2	14.3	21.9	7.1	39.4	0.0	39.7	19.7	47.6	39.8	39.5	52.4	27.9	76.3	3.1

	Housing	49.2	24.8	58.8	49.4	49.1	56.2	44.4	92.5	15.1	66.6	47.2	74.1	67.1	66.1	70.8	63.7	96.4	38.1
	Water	48.7	26.6	57.2	48.7	48.6	54.4	44.6	73.8	18.2	81.8	61.5	89.8	81.6	82.0	85.4	79.3	97.5	64.9
	Sanitation	35.1	6.4	46.3	34.6	35.6	42.9	29.6	74.3	1.8	40.6	11.1	52.1	40.1	41.1	47.9	35.5	78.6	5.3
Yemen	Nutrition	30.6	27.3	31.9	29.5	31.8	31.1	30.4	34.7	26.0	58.5	46.8	62.8	57.7	59.2	60.5	57.4	68.8	41.3
	Health	43.9	22.5	52.3	45.4	42.4	50.3	40.3	63.2	15.7	81.6	65.1	87.8	81.9	81.4	85.6	79.4	94.3	59.8
	Education	12.8	4.7	16.0	17.6	8.2	19.5	7.6	31.9	2.0	20.5	10.4	24.4	27.1	14.1	29.9	13.4	38.2	6.8
	Information	8.9	1.2	11.9	8.8	9.0	13.7	5.2	33.2	0.0	25.9	6.6	33.5	26.0	25.9	33.7	20.1	69.8	1.7
	Housing	42.4	38.0	44.2	41.1	43.6	50.3	34.4	88.4	7.6	53.8	52.2	48.5	50.8	53.6	59.9	44.5	91.4	14.4
	Water	28.1	12.1	34.9	28.3	28.0	29.1	27.3	20.7	24.8	69.0	61.2	42.9	60.8	61.7	61.5	60.6	61.2	51.8
	Sanitation	63.4	48.9	69.5	62.8	64.0	67.5	59.7	68.0	41.1	77.4	72.9	62.4	72.3	73.5	75.9	70.3	79.4	48.1
Comoros	Nutrition	33.9	38.4	32.2	32.7	35.1	32.5	35.1	34.0	33.8	51.5	51.7	52.4	50.9	52.5	52.3	51.4	55.4	48.2
	Health	25.1	19.4	27.4	22.4	27.8	29.4	21.5	37.6	17.3	60.1	58.6	54.9	56.8	60.4	64.3	54.1	75.1	45.1
	Education	10.0	5.5	12.0	10.5	9.4	13.7	5.4	21.2	2.8	47.8	39.8	51.4	45.5	50.1	53.7	40.7	59.4	34.2
	Information	19.1	8.6	23.7	18.4	19.8	27.7	8.7	57.0	0.0	48.5	40.6	22.5	40.7	40.4	50.2	28.3	88.4	2.3

	Housing	70.4	50.9	82.2	70.1	70.7	77.6	53.5	99.3	22.8	79.2	65.2	87.6	78.9	79.4	85.5	64.5	99.5	39.9
	Water	56.1	45.3	62.6	56.2	55.9	61.0	44.5	88.2	31.0	71.9	62.9	77.3	72.2	71.5	76.9	60.3	98.8	41.2
	Sanitation	59.7	28.7	78.4	59.7	59.7	68.6	39.2	99.8	8.5	71.0	48.7	84.6	70.8	71.2	77.4	56.3	99.9	30.1
Mauritania	Nutrition	36.7	35.3	37.5	36.7	36.6	35.9	38.2	36.1	34.6	54.4	51.8	56.0	54.5	54.3	55.3	52.6	57.8	46.2
	Health	44.9	35.2	50.7	45.2	44.7	49.6	36.0	61.2	29.8	68.3	65.4	70.0	68.7	67.8	70.5	63.7	73.0	58.2
	Education	26.5	20.9	30.6	27.0	26.1	30.1	19.0	35.5	14.6	37.7	37.7	37.7	39.5	35.8	38.0	36.7	34.8	34.1
	Information	10.2	1.9	15.1	10.3	10.0	12.9	3.2	30.0	0.0	38.7	18.4	50.7	39.2	38.1	45.9	20.5	72.6	1.3
	Housing	90.2	77.7	95.1	90.2	90.1	96.3	84.8	99.8	50.0	92.8	83.1	96.6	92.8	92.7	97.7	88.4	99.9	62.4
	Water	42.5	27.9	48.3	42.1	42.9	53.1	33.0	72.7	4.4	67.1	47.0	75.1	66.6	67.6	81.4	54.4	99.9	7.6
	Sanitation	63.0	34.8	74.1	63.2	62.7	76.2	51.2	94.0	8.9	70.7	47.1	80.0	71.0	70.4	81.2	61.4	94.8	23.7
Sudan	Nutrition	31.7	29.9	32.4	30.7	32.7	31.9	31.5	35.1	26.3	51.5	45.0	54.0	50.7	52.4	54.7	49.3	53.8	39.3
	Health	28.2	15.7	32.9	27.2	29.1	40.8	19.1	55.1	7.8	46.7	32.4	52.0	46.5	46.8	56.9	39.2	65.7	21.5
	Education	23.8	17.2	26.8	22.9	24.6	31.9	17.1	33.0	8.5	42.2	37.3	44.3	40.9	43.4	49.4	35.9	47.5	31.6
	Information	18.2	6.7	22.8	18.1	18.3	28.1	8.7	44.1	0.0	49.1	28.2	57.5	49.1	49.2	64.8	34.2	80.7	4.5

ANNEX VIII: Deprivation Indicators Statistical Table

Country	Indicator	Total	Area		Sex		Head Educ.		Wealth		Age	
			Urban	Rural	Female	Male	Non educ.	Prim+	Poorest	Richest	Under 5	Old Children
All countries	Domestic violence	69.9	68.4	71.1	69.0	70.9	69.3	70.1	70.5	64.2	73.3	68.3
	Floor raw materials	23.3	9.8	34.2	23.7	23.0	37.4	15.7	44.0	6.5	22.5	23.7
	More than 3 people per room	34.5	29.4	38.5	34.9	34.1	41.0	30.8	50.3	16.5	29.6	36.6
	More than 4 people per room	16.3	12.6	19.3	16.5	16.1	20.3	14.1	27.5	5.6	13.1	17.7
	Unimproved sanitation facility	17.5	5.0	27.6	17.7	17.3	29.4	11.0	34.9	1.9	17.3	17.6
	Shared sanitation facility	7.9	5.9	9.8	8.0	7.9	9.7	6.8	10.0	4.0	9.3	7.3
	Unimproved water source	17.4	9.6	23.7	17.5	17.2	24.1	13.7	32.8	4.2	17.2	17.5
	No piped water	39.2	28.0	48.2	39.4	39.0	48.0	34.2	59.6	19.4	39.2	39.2
	Water source more than 30min	7.9	2.5	11.9	7.9	7.8	13.5	4.7	17.8	0.9	7.7	7.9
	Infant feeding	48.5	50.1	47.4	48.9	48.2	48.3	48.6	48.7	46.2	n.a.	
	Child is wasted	9.2	7.2	10.7	8.8	9.5	10.4	8.7	10.3	7.8	n.a.	
	Child is stunted	26.6	19.2	32.4	26.4	26.8	33.4	24.0	32.6	19.5	n.a.	
	Child is obese	9.3	9.8	9.0	8.6	10.1	7.9	9.9	7.9	11.6	n.a.	
	Antenatal care	37.5	28.2	44.3	38.5	36.6	51.8	31.0	54.6	18.3	n.a.	
	Unskilled birth attendance	15.0	5.0	22.4	15.7	14.3	26.6	10.0	31.0	3.0	n.a.	
	DPT vaccination	11.1	8.2	13.4	11.1	11.2	15.3	9.4	19.2	5.4	n.a.	
	Full immunization	31.7	25.0	36.9	31.4	32.1	38.6	28.6	40.7	24.6	n.a.	
	Primary school attendance	6.5	3.7	8.8	7.3	5.7	9.6	4.9	10.4	3.2	n.a.	
	All school attendance	12.3	8.5	15.5	14.0	10.7	18.7	8.7	18.8	5.2	n.a.	
	Primary school completed	22.5	15.3	29.1	22.7	22.3	34.5	15.0	36.7	7.4	n.a.	
	More than 2 grades behind	18.1	15.5	20.5	16.1	20.0	26.6	14.4	21.7	13.0	n.a.	
	Information devices – SD	4.4	0.9	7.3	4.5	4.4	8.9	1.8	12.7	0.0	n.a.	
	Information devices –MD	15.9	6.7	23.4	16.2	15.6	26.2	9.8	32.6	1.3	n.a.	

Cluster 1	Domestic violence	75.5	72.5	78.0	74.5	76.4	77.5	74.5	77.9	67.8	80.0	73.2
	Floor raw materials	4.0	0.7	6.9	4.0	4.0	9.2	2.3	14.0	0.1	3.3	4.4
	More than 3 people per room	18.7	17.2	20.0	19.2	18.2	26.5	15.6	34.7	4.7	14.8	20.4
	More than 4 people per room	6.7	5.8	7.6	6.9	6.6	10.4	5.3	15.4	0.8	5.1	7.5
	Unimproved sanitation facility	1.3	0.5	2.1	1.3	1.3	2.5	0.9	5.1	0.1	1.4	1.3
	Shared sanitation facility	4.0	3.1	4.8	3.9	4.0	4.6	3.6	8.2	0.7	5.3	3.4
	Unimproved water source	7.2	8.2	6.3	7.3	7.0	6.0	7.6	13.5	1.9	7.4	7.1
	No piped water	19.5	20.2	18.9	19.6	19.5	15.6	20.7	28.9	13.5	19.9	19.3
	Water source more than 30min	2.0	1.2	2.6	2.1	1.9	2.8	1.7	4.7	0.6	1.9	2.1
	Infant feeding	47.0	47.9	46.2	47.5	46.5	45.4	47.3	46.4	44.3	n.a.	
	Child is wasted	7.3	6.4	8.1	7.3	7.4	9.4	7.0	6.5	7.1	n.a.	
	Child is stunted	18.1	15.9	19.8	17.5	18.7	21.4	17.7	19.1	18.3	n.a.	
	Child is obese	13.1	12.5	13.5	12.3	13.8	13.0	12.9	12.5	15.7	n.a.	
	Antenatal care	19.1	16.0	21.5	20.3	18.1	27.2	16.6	30.0	8.5	n.a.	
	Unskilled birth attendance	4.9	1.8	7.3	5.7	4.3	8.3	4.2	9.7	0.7	n.a.	
	DPT vaccination	3.0	2.5	3.4	3.0	3.0	4.5	2.7	5.2	1.6	n.a.	
	Full immunization	24.5	19.6	28.3	24.0	25.0	28.3	23.4	26.4	21.9	n.a.	
	Primary school attendance	6.5	4.7	8.1	6.6	6.4	9.4	5.5	7.4	5.1	n.a.	
	All school attendance	9.9	7.6	11.9	9.9	9.8	16.7	7.2	14.0	5.0	n.a.	
	Primary school completed	8.1	5.8	10.3	7.4	8.8	15.3	4.7	12.8	2.8	n.a.	
	More than 2 grades behind	9.7	9.8	9.7	8.1	11.2	14.5	7.9	12.9	6.8	n.a.	
	Information devices – SD	0.3	0.2	0.4	0.3	0.2	0.5	0.2	0.9	0.0	n.a.	
	Information devices –MD	6.5	5.1	7.7	6.7	6.3	9.8	5.2	13.0	0.9	n.a.	

Jordan	Domestic violence	64.8	65.6	61.2	63.0	66.4	65.2	64.7	68.9	49.1	74.3	61.1
	Floor raw materials	0.1	0.1	0.4	0.1	0.1	0.4	0.1	0.6	0.0	0.1	0.1
	More than 3 people per room	26.8	26.3	28.7	27.3	26.3	38.3	25.4	48.8	5.8	21.1	28.3
	More than 4 people per room	7.3	7.1	8.3	7.8	6.9	12.6	6.7	18.2	0.1	5.6	7.8
	Unimproved sanitation facility	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.1
	Shared sanitation facility	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.5	0.3	0.2	0.2
	Unimproved water source	7.0	5.3	14.5	7.0	7.0	4.5	7.3	6.2	4.0	7.0	7.0
	No piped water	44.9	45.3	43.2	44.4	45.4	31.9	46.5	20.7	61.7	50.3	43.4
	Water source more than 30min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	
	Infant Feeding	51.9	52.2	50.6	53.5	50.5	52.0	51.9	57.3	57.6	n.a.	
	Child is wasted	2.4	2.5	1.9	2.4	2.4	1.0	2.5	2.5	2.6	n.a.	
	Child is stunted	6.4	6.0	8.2	4.9	8.0	7.9	6.3	11.8	2.8	n.a.	
	Child is obese	3.2	3.1	3.7	2.7	3.6	1.9	3.3	3.3	6.0	n.a.	
	Ante-natal care	5.4	4.7	8.0	5.3	5.4	9.3	5.0	12.6	0.6	n.a.	
	Unskilled birth attendance	0.7	0.9	0.1	1.4	0.2	1.6	0.6	3.0	0.0	n.a.	
	DPT vaccination	1.5	1.4	2.1	1.3	1.7	3.7	1.3	2.8	1.2	n.a.	
	Full immunization	32.2	32.6	30.8	31.8	32.7	35.1	32.0	35.9	38.5	n.a.	
	Primary School attendance	1.4	1.6	0.9	1.4	1.5	3.7	1.2	2.9	0.4	n.a.	
	All School attendance	5.6	6.1	3.8	4.6	6.6	12.9	4.7	10.0	2.1	n.a.	
	Primary school completed	2.4	2.6	1.6	2.1	2.7	7.6	1.7	5.2	0.8	n.a.	
	More than 2 grades behind	9.4	9.6	8.6	8.2	10.5	19.1	8.1	15.3	4.1	n.a.	
	Information devices – SD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	
	Information devices –MD	0.6	0.5	1.2	0.6	0.7	2.3	0.4	2.6	0.1	n.a.	

Egypt	Domestic violence	78.4	75.2	80.0	77.7	79.1	80.5	77.2	79.7	71.3	82.5	76.3
	Floor raw materials	6.0	1.1	8.4	6.0	5.9	11.6	3.6	20.6	0.2	4.8	6.5
	More than 3 people per room	13.7	9.1	16.0	14.3	13.0	22.4	9.4	26.7	2.7	10.6	15.1
	More than 4 people per room	4.5	2.5	5.5	4.8	4.2	8.2	2.7	10.8	0.4	3.6	4.9
	Unimproved sanitation facility	0.2	0.0	0.2	0.2	0.2	0.3	0.1	0.7	0.0	0.2	0.2
	Shared sanitation facility	2.3	1.0	3.0	2.2	2.4	3.4	1.6	5.6	0.0	2.7	2.1
	Unimproved water source	2.6	1.5	3.2	2.7	2.6	2.6	2.6	5.0	0.2	2.5	2.6
	No piped water	9.5	4.2	12.2	9.5	9.5	8.5	9.8	12.7	2.9	9.7	9.4
	Water source more than 30min	0.8	0.2	1.1	0.8	0.7	1.1	0.7	1.2	0.0	0.7	0.8
	Infant Feeding	43.2	42.7	43.4	44.2	42.3	41.9	43.5	42.0	39.9	n.a.	
	Child is wasted	9.6	10.3	9.4	9.8	9.5	11.3	9.4	8.5	9.4	n.a.	
	Child is stunted	22.7	23.9	22.1	22.0	23.2	24.1	22.9	24.6	24.3	n.a.	
	Child is obese	15.5	17.1	14.8	14.6	16.3	14.3	15.5	14.9	19.0	n.a.	
	Ante-natal care	16.3	12.0	18.1	17.5	15.2	23.6	13.4	26.1	6.8	n.a.	
	Unskilled birth attendance	7.0	2.9	8.8	8.2	6.0	10.8	6.1	14.5	0.9	n.a.	
	DPT vaccination	2.6	1.7	2.9	2.5	2.6	3.3	2.5	4.1	1.1	n.a.	
	Full immunization	32.3	29.4	33.6	31.6	33.0	34.9	31.3	35.1	28.7	n.a.	
	Primary school attendance	10.2	9.6	10.4	10.3	10.0	12.4	9.2	11.0	8.5	n.a.	
	All school attendance	12.0	10.4	12.9	12.6	11.5	18.5	8.8	15.6	6.7	n.a.	
	Primary school completed	10.5	8.5	11.6	9.8	11.1	18.2	5.7	14.8	4.0	n.a.	
	More than 2 grades behind	8.5	8.6	8.5	7.3	9.6	12.4	6.8	11.4	6.8	n.a.	
	Information devices – SD	0.2	0.1	0.3	0.3	0.2	0.5	0.1	0.8	0.0	n.a.	
	Information devices –MD	6.2	3.3	7.7	6.4	5.9	10.9	3.8	11.0	0.8	n.a.	

Palestine	Domestic violence	73.4	71.8	76.3	71.3	75.4	73.7	73.4	79.8	66.7	82.1	70.4
	Floor raw materials	0.9	0.2	2.1	0.8	1.0	3.1	0.6	2.3	0.0	0.4	1.1
	More than 3 people per room	17.8	11.1	29.5	17.1	18.5	29.6	16.0	46.0	1.3	14.9	18.9
	More than 4 people per room	8.3	4.4	15.1	7.4	9.2	14.7	7.4	25.5	0.3	6.4	9.1
	Unimproved sanitation facility	4.9	0.1	13.4	5.1	4.8	13.9	3.6	20.4	0.2	4.2	5.2
	Shared sanitation facility	3.6	2.3	5.9	3.7	3.4	3.7	3.6	8.2	0.5	5.3	2.9
	Unimproved water source	4.4	0.3	11.7	4.6	4.3	12.6	3.2	15.7	0.1	4.3	4.5
	No piped water	36.8	31.3	46.5	37.4	36.2	42.0	36.0	55.8	51.7	39.9	35.7
	Water source more than 30min	5.2	0.3	13.9	5.2	5.3	14.2	3.9	18.0	0.7	4.5	5.5
	Infant feeding	54.4	52.0	58.6	54.4	54.4	58.0	54.0	58.9	52.9	n.a.	
	Child is wasted	2.8	3.0	2.4	1.8	3.6	3.4	2.7	2.0	3.6	n.a.	
	Child is stunted	9.0	7.0	12.4	8.5	9.5	14.2	8.5	14.1	7.3	n.a.	
	Child is obese	11.4	10.5	13.0	10.5	12.3	12.5	11.3	15.7	7.7	n.a.	
	Antenatal care	14.9	11.9	20.3	14.5	15.3	23.9	14.1	27.5	3.3	n.a.	
	Unskilled birth attendance	1.1	0.3	2.4	1.0	1.2	3.4	0.9	5.2	0.3	n.a.	
	DPT vaccination	3.6	3.5	3.6	2.7	4.3	3.9	3.5	4.2	2.7	n.a.	
	Full immunization	12.3	12.1	12.7	12.0	12.7	12.8	12.3	13.0	12.9	n.a.	
	Primary School attendance	0.5	0.2	1.1	0.8	0.3	1.2	0.4	1.0	0.0	n.a.	
	All School attendance	7.5	4.6	12.8	6.9	8.1	16.1	6.1	15.8	1.1	n.a.	
	Primary school completed	6.2	3.8	10.3	5.1	7.2	10.1	5.4	12.0	1.5	n.a.	
	More than 2 grades behind	6.9	6.1	8.1	5.9	7.7	13.0	5.9	10.2	2.9	n.a.	
	Information devices – SD	0.5	0.0	1.2	0.6	0.4	2.4	0.2	2.2	0.0	n.a.	
	Information devices –MD	4.0	1.5	8.2	4.2	3.8	11.6	2.8	15.4	0.0	n.a.	

Algeria	Domestic violence	73.3	72.9	74.4	71.7	74.8	73.7	73.2	82.3	64.6	79.3	70.6
	Floor raw materials	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	More than 3 people per room	26.0	25.5	27.6	27.0	25.1	42.4	25.8	37.6	11.7	20.8	28.3
	More than 4 people per room	7.2	6.9	7.9	7.7	6.7	11.7	7.1	11.7	1.4	5.5	7.9
	Unimproved sanitation facility	0.3	0.2	0.4	0.3	0.3	1.8	0.2	0.1	0.1	0.3	0.3
	Shared sanitation facility	1.2	1.2	1.1	1.1	1.2	3.1	1.1	3.0	0.1	1.6	1.0
	Unimproved water source	40.5	43.9	30.5	40.7	40.4	44.4	40.5	98.4	1.0	43.7	39.1
	No piped water	44.4	47.1	36.3	44.6	44.2	52.3	44.3	98.9	6.5	47.5	43.0
	Water source more than 30min	0.4	0.3	0.8	0.4	0.5	1.6	0.4	0.6	0.0	0.5	0.4
	Infant Feeding	34.2	34.8	32.1	36.6	32.0	41.3	34.1	35.3	34.6	n.a.	
	Child is wasted	1.2	1.1	1.4	1.2	1.2	0.0	1.2	0.7	1.7	n.a.	
	Child is stunted	7.4	7.4	7.5	7.0	7.8	20.6	7.2	7.5	4.9	n.a.	
	Child is obese	7.1	6.9	7.8	6.2	8.0	1.7	7.2	5.5	9.3	n.a.	
	Antenatal care	3.9	3.6	5.1	4.5	3.4	3.9	3.9	4.5	2.5	n.a.	
	Unskilled birth attendance	0.3	0.3	0.4	0.4	0.2	0.0	0.3	0.4	0.1	n.a.	
	DPT vaccination	0.8	0.8	0.9	0.9	0.7	0.0	0.8	0.3	1.5	n.a.	
	Full immunization	22.8	23.5	20.5	22.5	23.1	14.7	22.9	20.8	26.1	n.a.	
	Primary school attendance	0.3	0.3	0.2	0.1	0.4	0.7	0.3	0.5	0.0	n.a.	
	All school attendance	4.3	4.2	4.6	2.1	6.4	10.5	4.2	5.5	2.2	n.a.	
	Primary school completed	5.8	6.0	5.2	4.4	7.2	11.5	5.7	9.4	3.0	n.a.	
	More than 2 grades behind	1.9	2.0	1.6	1.5	2.2	6.3	1.8	3.5	1.2	n.a.	
	Information devices – SD	1.8	1.9	1.5	2.0	1.6	7.1	1.7	4.0	0.2	n.a.	
	Information devices –MD	42.8	43.7	40.2	43.4	42.2	72.3	42.4	79.3	7.1	n.a.	

Cluster 2	Domestic violence	71.0	70.9	71.0	69.9	72.0	69.9	71.3	74.5	64.2	74.1	69.5
	Floor raw materials	1.3	0.5	2.6	1.2	1.3	3.3	0.6	5.4	0.0	1.2	1.3
	More than 3 people per room	29.2	25.9	34.6	29.2	29.1	37.9	26.1	48.4	9.3	23.7	32.0
	More than 4 people per room	12.2	10.2	15.5	12.0	12.4	16.9	10.5	24.8	1.9	8.6	14.0
	Unimproved sanitation facility	4.0	1.4	8.4	3.9	4.1	8.2	2.6	14.8	0.4	4.5	3.7
	Shared sanitation facility	9.9	7.6	14.0	9.8	10.1	9.0	10.2	17.6	2.6	13.4	8.2
	Unimproved water source	14.5	13.5	16.3	14.7	14.4	15.9	14.1	22.5	6.3	15.0	14.3
	No piped water	31.9	27.5	39.3	31.9	31.9	33.3	31.5	54.3	20.9	33.1	31.3
	Water source more than 30min	4.8	3.1	7.6	4.9	4.7	7.0	4.0	11.0	2.0	4.5	4.9
	Infant feeding	56.3	55.4	57.7	55.1	57.4	53.7	56.9	53.2	52.9	n.a.	
	Child is wasted	4.1	4.0	4.3	3.7	4.4	5.3	3.8	5.0	3.7	n.a.	
	Child is stunted	11.8	11.2	12.7	11.5	12.0	15.1	10.9	12.0	9.8	n.a.	
	Child is obese	9.7	10.1	9.1	9.3	10.0	10.3	9.5	9.6	11.2	n.a.	
	Antenatal care	31.6	26.6	39.5	32.9	30.4	39.1	29.5	45.3	15.9	n.a.	
	Unskilled birth attendance	1.7	1.2	2.4	1.8	1.6	2.0	1.6	3.4	0.5	n.a.	
	DPT vaccination	4.5	3.8	5.7	4.8	4.3	8.0	3.6	8.8	2.5	n.a.	
	Full immunization	6.2	5.3	7.5	6.4	5.9	10.7	4.9	10.9	4.0	n.a.	
	Primary school attendance	0.6	0.5	0.9	0.7	0.6	1.2	0.5	1.1	0.3	n.a.	
	All school attendance	6.7	5.4	9.0	6.2	7.2	11.2	5.0	11.5	3.0	n.a.	
	Primary school completed	4.2	3.1	6.0	3.5	4.9	6.9	2.8	9.9	0.6	n.a.	
	More than 2 grades behind	15.3	14.3	16.9	11.9	18.5	21.3	12.8	18.9	9.8	n.a.	
	Information devices – SD	0.1	0.1	0.3	0.2	0.1	0.3	0.1	0.6	0.0	n.a.	
	Information devices –MD	3.2	2.3	4.9	3.1	3.4	6.3	2.1	10.2	0.4	n.a.	

Tunisia	Domestic violence	62.7	61.5	65.0	61.4	63.9	62.2	62.8	64.7	54.2	66.0	61.2
	Floor raw materials	12.1	2.8	26.2	12.2	12.0	23.1	5.1	41.0	0.5	12.1	12.1
	More than 3 people per room	41.0	37.7	45.9	41.0	41.0	34.6	45.0	57.7	17.3	37.6	42.4
	More than 4 people per room	18.2	16.2	21.4	18.2	18.2	14.4	20.7	31.0	4.8	15.3	19.5
	Unimproved sanitation facility	8.2	0.9	19.3	8.0	8.4	16.4	3.0	29.4	0.0	8.1	8.2
	Shared sanitation facility	4.6	4.7	4.4	4.7	4.6	6.1	3.7	5.9	2.1	5.5	4.3
	Unimproved water source	11.3	2.6	24.7	11.3	11.4	17.1	7.7	34.7	0.7	11.4	11.3
	No piped water	38.3	25.4	58.1	38.6	38.1	43.7	34.9	70.6	16.4	39.7	37.7
	Water source more than 30min	6.2	0.8	14.3	6.2	6.2	12.8	1.9	16.8	0.3	5.8	6.3
	Infant feeding	53.5	54.8	51.7	54.5	52.5	51.8	54.6	51.6	52.9	n.a.	
	Child is wasted	4.9	5.1	4.7	4.7	5.2	3.9	5.5	5.8	4.4	n.a.	
	Child is stunted	19.2	16.5	23.2	19.4	19.0	20.7	18.3	27.5	14.7	n.a.	
	Child is obese	9.5	9.7	9.2	8.2	10.7	9.1	9.7	7.4	12.1	n.a.	
	Antenatal care	52.8	42.9	66.8	53.1	52.4	63.9	46.0	73.0	30.2	n.a.	
	Unskilled birth attendance	15.7	6.3	28.9	16.1	15.2	27.6	8.5	33.0	4.3	n.a.	
	DPT vaccination	17.1	13.4	22.5	17.2	16.9	15.0	18.3	28.2	8.2	n.a.	
	Full immunization	34.1	27.9	43.3	33.8	34.4	40.4	30.4	47.4	25.1	n.a.	
	Primary school attendance	4.5	2.4	7.6	5.8	3.3	6.9	2.9	8.6	1.4	n.a.	
	All school attendance	15.1	10.5	22.3	18.6	11.7	20.6	11.5	23.0	6.4	n.a.	
	Primary school completed	33.0	23.5	49.7	33.0	32.9	40.3	27.7	58.3	10.3	n.a.	
	More than 2 grades behind	17.6	16.7	19.5	12.9	22.1	20.3	17.1	20.1	11.3	n.a.	
	Information devices – SD	0.8	0.1	1.9	0.7	0.9	1.8	0.1	3.4	0.0	n.a.	
	Information devices –MD	5.6	2.0	11.3	5.6	5.7	11.1	2.0	18.1	0.0	n.a.	

Iraq	Domestic violence	62.7	61.5	65.0	61.4	63.9	62.2	62.8	64.7	54.2	66.0	61.2
	Floor raw materials	5.8	1.5	14.5	6.0	5.7	12.1	4.6	24.3	0.0	5.8	5.8
	More than 3 people per room	53.0	48.4	62.3	53.1	53.0	59.7	51.6	71.1	24.8	46.6	55.9
	More than 4 people per room	25.3	22.0	32.0	25.4	25.3	31.0	24.2	41.5	7.1	20.4	27.6
	Unimproved sanitation facility	3.6	0.9	9.1	3.7	3.6	6.7	3.0	12.7	0.1	3.6	3.6
	Shared sanitation facility	3.2	3.1	3.2	3.2	3.1	3.4	3.1	4.2	2.0	3.9	2.8
	Unimproved water source	9.4	2.2	23.6	9.3	9.4	15.2	8.2	30.9	0.2	9.4	9.4
	No piped water	38.9	32.0	52.8	39.2	38.7	42.1	38.3	63.6	23.7	40.2	38.3
	Water source more than 30min	1.9	0.4	5.0	1.9	1.9	4.0	1.4	6.4	0.0	1.9	1.9
	Infant feeding	55.2	55.5	54.4	55.8	54.5	55.7	55.0	54.7	52.1	n.a.	
	Child is wasted	6.4	6.5	6.2	6.3	6.5	6.5	6.4	6.5	6.6	n.a.	
	Child is stunted	20.8	19.8	22.7	21.6	20.0	23.4	20.2	24.5	18.9	n.a.	
	Child is obese	9.7	9.9	9.2	9.3	10.1	8.8	9.9	7.3	13.8	n.a.	
	Antenatal care	49.5	44.9	58.9	50.3	48.7	57.3	47.7	64.2	34.2	n.a.	
	Unskilled birth attendance	9.4	6.4	15.5	9.2	9.5	13.9	8.3	17.9	4.6	n.a.	
	DPT vaccination	22.4	17.3	32.6	22.8	22.0	28.8	21.0	35.1	11.4	n.a.	
	Full immunization	31.6	26.5	41.7	31.8	31.3	38.9	29.9	44.2	20.4	n.a.	
	Primary school attendance	3.0	2.3	4.6	4.4	1.8	3.8	2.9	5.2	0.8	n.a.	
	All school attendance	13.2	11.6	16.8	16.7	10.1	16.8	12.6	16.8	7.4	n.a.	
	Primary school completed	33.1	28.0	45.3	32.5	33.6	42.0	31.4	53.9	12.6	n.a.	
	More than 2 grades behind	17.6	16.7	19.5	12.9	22.1	20.3	17.1	20.1	11.3	n.a.	
	Information devices – SD	0.3	0.1	0.7	0.3	0.2	0.8	0.1	1.1	0.0	n.a.	
	Information devices –MD	2.4	1.2	4.9	2.5	2.4	5.6	1.8	8.5	0.0	n.a.	

Morocco	Domestic violence	n.d.										
	Floor raw materials	21.8	5.3	38.6	21.8	21.8	27.1	7.5	66.6	1.1	23.0	21.4
	More than 3 people per room	22.3	16.1	28.7	22.6	22.1	25.6	13.5	37.0	6.4	21.9	22.5
	More than 4 people per room	7.2	4.3	10.1	7.2	7.2	8.4	3.9	14.9	1.6	6.2	7.6
	Unimproved sanitation facility	15.3	1.1	30.1	14.7	15.9	20.0	2.7	55.0	0.0	16.0	15.0
	Shared sanitation facility	6.9	7.8	5.7	6.9	6.9	7.1	6.4	8.4	2.2	8.4	6.3
	Unimproved water source	14.4	3.4	25.8	14.2	14.5	17.7	5.3	40.4	1.5	15.0	14.1
	No piped water	37.3	12.0	63.7	37.6	37.0	44.2	18.7	81.4	5.7	38.9	36.7
	Water source more than 30min	12.8	1.7	24.3	12.7	12.9	15.9	4.2	32.7	0.7	12.8	12.8
	Infant feeding	50.7	53.0	48.7	52.3	49.0	50.0	52.3	46.1	54.2	n.a.	
	Child is wasted	2.3	1.6	3.0	1.8	2.8	2.8	1.1	4.5	0.8	n.a.	
	Child is stunted	16.5	8.7	23.8	15.7	17.3	19.6	9.1	32.7	7.6	n.a.	
	Child is obese	9.1	9.1	9.1	6.4	11.7	9.2	8.7	7.6	9.2	n.a.	
	Antenatal care	58.6	37.9	75.7	57.9	59.2	66.8	38.1	88.5	23.5	n.a.	
	Unskilled birth attendance	26.8	6.2	43.9	28.1	25.5	33.7	9.5	59.3	3.9	n.a.	
	DPT vaccination	7.7	3.7	11.2	7.5	7.8	8.8	4.8	16.1	2.8	n.a.	
	Full immunization	38.7	31.3	45.2	37.4	40.0	41.1	32.8	52.8	33.0	n.a.	
	Primary school attendance	6.5	2.6	10.6	7.8	5.4	7.9	2.9	13.4	2.1	n.a.	
	All school attendance	17.8	8.6	27.9	21.5	14.2	21.8	6.3	31.8	4.9	n.a.	
	Primary school completed	32.8	15.0	54.2	33.7	31.8	39.8	10.0	64.5	7.1	n.a.	
	More than 2 grades behind	n.d.										
	Information devices – SD	1.6	0.2	3.1	1.4	1.8	2.1	0.0	6.7	0.0	n.a.	
	Information devices –MD	10.3	3.5	17.9	10.1	10.6	13.0	2.8	32.1	0.1	n.a.	

Cluster 3	Domestic violence	64.3	65.4	63.9	63.7	64.9	62.8	65.6	61.8	62.8	65.3	63.8
	Floor raw materials	65.0	46.4	72.5	65.3	64.8	74.5	57.0	94.1	22.8	66.2	64.6
	More than 3 people per room	55.4	47.5	58.6	55.4	55.4	59.3	52.2	68.5	36.2	49.3	58.0
	More than 4 people per room	30.7	24.5	33.3	30.8	30.7	34.0	28.0	43.6	14.5	25.7	32.8
	Unimproved sanitation facility	52.4	24.2	63.8	52.5	52.3	64.4	42.1	86.9	6.4	53.9	51.8
	Shared sanitation facility	17.3	15.5	18.5	17.3	17.3	17.3	17.2	16.4	11.6	19.8	16.3
	Unimproved water source	39.6	25.5	45.3	39.4	39.8	46.5	33.6	61.7	11.3	40.0	39.4
	No piped water	72.8	53.4	80.7	72.4	73.2	82.1	64.7	98.6	32.4	73.4	72.6
	Water source more than 30min	18.5	8.4	22.3	18.4	18.6	24.0	13.8	38.4	1.9	19.4	18.2
	Infant feeding	47.1	47.4	46.9	46.3	47.8	48.5	46.1	49.7	44.2	n.a.	
	Child is wasted	16.2	13.4	17.3	15.2	17.2	16.2	16.1	20.3	11.7	n.a.	
	Child is stunted	48.5	33.5	54.8	48.1	48.8	54.6	44.5	58.3	25.3	n.a.	
	Child is obese	2.5	2.4	2.5	2.4	2.6	2.2	2.7	1.3	3.7	n.a.	
	Antenatal care	57.5	35.5	65.8	57.8	57.1	65.7	52.0	75.3	26.3	n.a.	
	Unskilled birth attendance	32.6	11.7	40.6	33.0	32.2	43.0	25.6	62.1	6.2	n.a.	
	DPT vaccination	20.8	14.8	23.2	20.3	21.3	25.7	17.3	32.4	10.0	n.a.	
	Full immunization	42.7	34.6	45.9	42.2	43.2	46.9	39.7	56.6	29.2	n.a.	
	Primary school attendance	8.1	3.3	10.1	9.7	6.6	11.7	5.3	16.9	1.4	n.a.	
	All school attendance	13.9	7.3	16.7	16.7	11.2	19.2	9.3	22.8	4.7	n.a.	
	Primary school completed	37.1	26.1	42.4	38.5	35.6	48.9	25.9	56.5	12.9	n.a.	
	More than 2 grades behind	40.5	37.0	42.2	38.8	42.1	45.9	35.8	45.5	32.6	n.a.	
	Information devices – SD	14.2	4.4	18.2	14.2	14.3	21.9	7.1	39.4	0.0	n.a.	
	Information devices –MD	39.6	19.4	47.9	39.8	39.5	52.4	27.9	76.3	3.1	n.a.	

Yemen	Domestic violence	84.3	83.9	84.5	83.5	85.1	83.9	84.7	85.3	81.2	85.0	84.0
	Floor raw materials	31.9	6.2	41.9	31.8	32.0	41.4	25.2	84.6	0.1	33.0	31.5
	More than 3 people per room	59.0	45.8	64.2	59.5	58.6	61.8	57.1	79.6	38.1	53.1	61.3
	More than 4 people per room	34.5	22.1	39.3	34.9	34.1	38.4	31.8	56.8	15.0	29.0	36.5
	Unimproved sanitation facility	35.1	6.4	46.3	34.6	35.6	42.9	29.6	74.3	1.8	36.2	34.7
	Shared sanitation facility	9.8	5.6	12.3	9.7	9.9	10.1	9.7	18.8	3.6	11.0	9.4
	Unimproved water source	47.0	26.3	55.0	47.0	46.9	52.3	43.2	71.1	18.0	47.8	46.7
	No piped water	81.8	61.5	89.8	81.6	82.0	85.4	79.3	97.5	64.9	83.0	81.4
	Water source more than 30min	9.3	3.5	11.6	9.4	9.2	10.3	8.6	15.6	1.8	9.8	9.1
	Infant feeding	42.9	39.2	44.2	41.9	43.8	42.5	43.2	45.1	39.6	n.a.	
	Child is wasted	16.6	14.4	17.4	15.0	18.2	16.9	16.4	21.0	12.6	n.a.	
	Child is stunted	56.1	38.3	62.9	56.5	55.9	60.7	53.7	70.6	29.8	n.a.	
	Child is obese	1.7	1.6	1.8	1.7	1.8	1.9	1.6	1.6	1.7	n.a.	
	Antenatal care	75.3	50.0	84.6	76.1	74.5	80.7	72.2	92.1	38.2	n.a.	
	Unskilled birth attendance	52.6	23.3	63.3	54.2	51.1	59.0	49.0	78.9	15.3	n.a.	
	DPT vaccination	24.7	13.5	29.2	25.2	24.3	28.8	22.5	35.8	9.5	n.a.	
	Full immunization	64.7	50.7	70.0	64.4	65.0	67.9	63.0	78.7	48.8	n.a.	
	Primary school attendance	14.6	5.9	17.8	19.0	10.4	22.2	9.4	33.6	2.5	n.a.	
	All school attendance	20.5	10.4	24.4	27.1	14.1	29.9	13.4	38.2	6.8	n.a.	
	Primary school completed	10.0	2.9	13.0	15.5	4.6	16.0	4.3	28.6	1.3	n.a.	
	More than 2 grades behind	n.d.										
	Information devices – SD	8.9	1.2	11.9	8.8	9.0	13.7	5.2	33.2	0.0	n.a.	
	Information devices –MD	25.9	6.6	33.5	26.0	25.9	33.7	20.1	69.8	1.7	n.a.	

Comoros	Domestic violence	n.d.										
	Floor raw materials	35.4	30.6	37.4	35.1	35.7	43.2	27.4	85.9	2.1	35.3	35.5
	More than 3 people per room	34.0	31.3	35.2	32.3	35.6	39.6	28.4	51.3	12.3	28.9	36.2
	More than 4 people per room	15.3	13.3	16.2	14.1	16.5	18.3	12.5	23.7	5.5	12.5	16.5
	Unimproved sanitation facility	63.4	48.9	69.5	62.8	64.0	67.5	59.7	68.0	41.1	63.1	63.5
	Shared sanitation facility	21.2	30.2	17.4	21.2	21.1	20.2	22.4	26.8	9.1	24.3	19.9
	Unimproved water source	28.1	12.1	34.9	28.3	28.0	29.1	27.3	20.7	24.8	28.6	27.9
	No piped water	61.2	42.9	69.0	60.8	61.7	61.5	60.6	61.2	51.8	61.9	60.9
	Water source more than 30min	77.2	83.0	75.5	76.1	78.3	80.0	73.7	95.8	30.9	79.1	76.5
	Infant feeding	56.9	61.5	55.0	55.5	58.2	55.4	57.5	58.5	55.7	n.a.	
	Child is wasted	11.5	13.7	10.7	11.0	12.1	12.3	11.1	13.2	11.2	n.a.	
	Child is stunted	31.6	27.8	33.0	32.6	30.7	33.2	30.3	38.1	26.8	n.a.	
	Child is obese	10.3	10.0	10.4	10.0	10.7	9.0	11.8	7.4	10.0	n.a.	
	Antenatal care	45.8	43.9	46.5	44.1	47.4	52.7	40.9	60.7	30.0	n.a.	
	Unskilled birth attendance	14.2	5.4	17.7	11.5	16.8	19.9	10.3	30.9	3.7	n.a.	
	DPT vaccination	19.8	17.7	20.6	18.2	21.3	22.1	17.4	26.7	15.9	n.a.	
	Full immunization	44.6	42.3	45.4	42.7	46.4	49.4	40.2	58.0	35.1	n.a.	
	Primary school attendance	12.5	7.7	14.5	12.7	12.4	16.5	7.5	23.9	3.6	n.a.	
	All school attendance	13.6	9.3	15.5	13.8	13.4	17.8	8.4	25.7	5.7	n.a.	
	Primary school completed	5.8	2.1	7.6	7.1	4.5	9.0	2.2	15.1	1.8	n.a.	
	More than 2 grades behind	49.0	40.4	52.9	46.7	51.3	54.3	42.7	59.7	35.5	n.a.	
	Information devices – SD	19.1	8.6	23.7	18.4	19.8	27.7	8.7	57.0	0.0	n.a.	
	Information devices –MD	40.6	22.5	48.5	40.7	40.4	50.2	28.3	88.4	2.3	n.a.	

Mauritania	Domestic violence	78.1	72.7	81.4	78.1	78.2	80.0	74.0	86.0	69.7	78.7	77.9
	Floor raw materials	57.9	34.3	72.2	58.0	57.9	65.7	40.3	97.8	8.7	57.9	58.0
	More than 3 people per room	59.7	52.2	64.2	59.2	60.2	64.6	48.2	76.0	34.7	54.2	62.2
	More than 4 people per room	38.6	30.3	43.6	38.3	38.9	42.8	28.6	58.5	16.1	33.0	41.1
	Unimproved sanitation facility	59.7	28.7	78.4	59.7	59.7	68.6	39.2	99.8	8.5	59.9	59.6
	Shared sanitation facility	31.1	30.4	32.1	30.8	31.3	31.4	30.6	46.1	23.6	32.0	30.7
	Unimproved water source	50.5	41.6	55.9	50.7	50.4	55.3	39.2	81.4	29.2	52.1	49.8
	No piped water	71.9	62.9	77.3	72.2	71.5	76.9	60.3	98.8	41.2	73.4	71.2
	Water source more than 30min	28.8	14.4	36.4	28.6	29.0	32.7	19.3	53.0	8.2	28.3	29.0
	Infant feeding	66.5	67.8	65.6	66.2	66.8	65.1	69.3	60.7	66.6	n.a.	
	Child is wasted	14.0	9.2	16.9	13.0	15.0	15.4	11.0	19.5	6.4	n.a.	
	Child is stunted	35.7	30.4	39.0	35.6	35.9	39.1	28.6	45.1	20.6	n.a.	
	Child is obese	3.0	4.2	2.4	3.2	2.9	2.5	4.5	2.6	4.8	n.a.	
	Antenatal care	47.4	38.7	53.0	47.5	47.2	51.7	39.3	62.0	30.6	n.a.	
	Unskilled birth attendance	32.2	8.1	48.1	32.7	31.7	41.4	16.1	71.3	2.6	n.a.	
	DPT vaccination	36.6	37.4	36.1	36.1	37.0	37.9	33.9	39.8	33.8	n.a.	
	Full immunization	54.3	55.5	53.5	54.6	54.1	55.6	51.6	55.0	50.7	n.a.	
	Primary school attendance	4.9	4.0	5.6	5.1	4.8	5.5	3.8	7.8	2.6	n.a.	
	All school attendance	12.0	9.7	13.7	13.2	10.7	13.5	9.0	17.1	7.2	n.a.	
	Primary school completed	62.3	48.2	72.7	63.9	60.6	68.2	47.4	85.1	33.4	n.a.	
	More than 2 grades behind	29.7	30.7	29.1	30.5	28.9	29.5	30.0	25.6	28.6	n.a.	
	Information devices – SD	10.2	1.9	15.1	10.3	10.0	12.9	3.2	30.0	0.0	n.a.	
	Information devices –MD	38.7	18.4	50.7	39.2	38.1	45.9	20.5	72.6	1.3	n.a.	

Sudan	Domestic violence	49.6	52.3	48.5	49.3	49.9	47.9	51.1	44.3	48.7	52.0	48.5
	Floor raw materials	88.4	74.8	93.7	88.4	88.3	95.8	81.9	100.0	41.0	87.8	88.7
	More than 3 people per room	53.0	48.2	54.9	52.8	53.2	57.5	49.1	61.0	35.5	46.8	55.7
	More than 4 people per room	27.8	25.5	28.7	27.6	27.9	30.5	25.4	34.1	14.2	23.3	29.7
	Unimproved sanitation facility	63.0	34.8	74.1	63.2	62.7	76.2	51.2	94.0	8.9	63.8	62.6
	Shared sanitation facility	20.9	19.8	21.5	20.8	20.9	19.3	22.0	11.6	16.2	23.9	19.6
	Unimproved water source	33.8	23.2	38.0	33.5	34.1	42.1	26.3	54.5	4.3	34.2	33.6
	No piped water	67.1	47.0	75.1	66.7	67.6	81.4	54.4	100.0	7.6	67.9	66.8
	Water source more than 30min	22.5	9.3	27.2	22.1	22.8	29.5	16.3	50.3	0.9	23.1	22.2
	Infant feeding	47.4	49.1	46.8	46.8	48.0	48.8	46.4	51.1	44.6	n.a.	
	Child is wasted	16.3	13.3	17.4	15.6	16.9	16.1	16.3	20.0	11.6	n.a.	
	Child is stunted	45.5	31.2	51.7	44.7	46.2	54.4	39.6	52.7	22.9	n.a.	
	Child is obese	2.7	2.4	2.8	2.5	2.9	2.1	3.2	0.9	4.9	n.a.	
	Antenatal care	47.9	26.1	55.8	48.1	47.7	60.4	39.5	67.0	18.0	n.a.	
	Unskilled birth attendance	20.8	5.4	26.5	20.7	21.0	35.4	10.9	51.6	0.7	n.a.	
	DPT vaccination	16.8	12.3	18.5	15.7	17.8	22.1	13.0	29.6	7.8	n.a.	
	Full immunization	28.1	21.7	30.6	27.6	28.7	34.5	23.5	43.4	14.0	n.a.	
	Primary school attendance	3.9	1.4	5.0	3.8	4.0	6.1	2.2	6.6	0.3	n.a.	
	All school attendance	9.5	4.9	11.7	10.0	9.0	13.6	6.2	13.2	2.8	n.a.	
	Primary school completed	53.9	39.5	60.8	52.1	55.7	67.1	41.8	72.8	19.7	n.a.	
	More than 2 grades behind	41.4	37.8	43.1	39.5	43.2	48.1	36.0	47.1	32.9	n.a.	
	Information devices – SD	18.2	6.7	22.8	18.1	18.3	28.1	8.7	44.1	0.0	n.a.	
	Information devices –MD	49.1	28.2	57.5	49.1	49.2	64.8	34.2	80.7	4.5	n.a.	


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