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EXPLORING MULTIDIMENSIONAL POVERTY IN EGYPT USING THE GLOBAL MPI



Islamic Development Bank Institute

Oxford Poverty and Human Development Initiative



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FOREWORD

The COVID-19 pandemic has shifted focus away from the global campaign against poverty. The stresses on supply chains, prices, and health protocols have disproportionately affected the poor, as those in insecure employment faced the least employment protection and were the first to lose work. For people living in informal housing or using shared sanitary and drinking water facilities, social distancing mandates were difficult to follow, increasing their exposure to the virus. The poor continue to struggle with the aftershocks of the pandemic and tend to endure the worst of other political and economic shocks. As the world rebalances to a post-pandemic era, governments and development institutions must prioritise their support to vulnerable communities, to rebuild their lives and livelihoods with dignity and equity.

As the Islamic Development Bank (IsDB) works to empower the people of its Member Countries by fostering green, resilient, inclusive, and sustainable growth, tackling poverty remains at the centre of its strategic priorities and policies. Together with the Oxford Poverty and Human Development Initiative (OPHI) at the University of Oxford, we produce data-driven research in support of evidence-based policymaking and implementation.

With the aftershocks of the COVID-19 pandemic threatening the feasibility of the 2030 Agenda, we at the IsDB recognise that an inclusive recovery is necessary to ensure no one is left behind. In this context, we have undertaken a Strategic Realignment, centred on the strategic priorities of the Bank and its focus areas for support to our member countries based on their needs.

To generate greater impact, the path towards post-pandemic recovery must start with an understanding of the lived experiences of poor people by measuring multidimensional poverty. Through our collaboration, we offer via this series of Briefs a more comprehensive story of the different deprivations faced by people living in poverty. These Briefs reflect on the formulation of targeted government interventions aimed to improve the lives of poor people, as well as monitor poverty reduction trends over time. The disaggregation afforded by multidimensional poverty analysis – by governorates, urban and ru-



ral areas, and age groups – offers data-driven evidence that supports rigorous policymaking.

To meet the targets of the UN Sustainable Development Goals, we must understand the pre-pandemic trajectories of poverty reduction to actualise effective, targeted, and comprehensive policy platforms – recovering lost progress, and achieving even more. Multisectoral policies and multi-stakeholder interventions must be at the heart of government and IsDB partnerships and all efforts to end poverty in its many forms and dimensions.

Let us act together and with urgency to build a green, resilient, inclusive post-pandemic world.

A handwritten signature in blue ink, consisting of several overlapping loops and lines, positioned above the printed name.

Muhammad Al Jasser

Chairman,
Islamic Development Bank Group

PREFACE

When people ask themselves, ‘what does it mean to be poor?’, often the first answer that comes to mind is whether their income falls below a monetary poverty line. However, to understand poverty only as a feature of wealth neglects the very real lived experiences of poor people globally who, when asked, emphasise the multiple burdens they face and the multidimensional nature of their situations. People living in poverty often describe their deprivations in non-monetary dimensions, such as poor health, inadequate education, inaccessibility of basic services and utilities, social isolation, and lack of assets or resources.

The global Multidimensional Poverty Index (MPI) – the database on which the briefs in this series are based – focuses on just that: the empirical application of the multidimensional poverty experiences of poor people globally. The series, which aims to enhance poverty-related interventions by multilateral institutions including the Islamic Development Bank (IsDB) Group, utilises the partnership between the IsDB Institute and the Oxford Poverty and Human Development Initiative (OPHI) to strengthen the IsDB Group’s evidence-based policies and interventions within Member Countries.

This brief on multidimensional poverty in the Member Country of Egypt introduces the next set of briefs produced as part of the IsDBI–OPHI collaboration. It analyses two periods of the most recent multidimensional poverty data in Egypt, evaluating the levels and composition of poverty at the national, governorate, and urban–rural population levels, as well as by age group. Our data show that over 4.7 million Egyptians were living in multidimensional poverty, with over three-quarters of

these poor people living in rural areas. Around half were children under 18 years of age. The brief also examines Egypt’s success in reducing poverty between 2008 and 2014, offering a yardstick for future anti-poverty interventions and policies, and building the evidence base on the relationship between government policies, IsDB country programmes, and multidimensional poverty. Between 2008 and 2014, poverty in all the poorest population groups reduced faster than the national average – for the youngest children, the poorest governorates, and in rural areas – showing that ending poverty for the most vulnerable is an achievable aspiration. This brief also compares multidimensional poverty trends to other measures of poverty, including monetary metrics, the national poverty line, and economic growth trends – revealing that multidimensional poverty reduced despite an increase in monetary poverty over the same period. Moreover, it examines the intersection of multidimensional poverty and different risks in Egypt, including the country-specific contexts of climate change and the COVID-19 pandemic.

Tracking and highlighting the important progress made against poverty during this period provides a benchmark for policymakers and development institutions to continue their work to fulfil the sustainable development pledge to Leave No One Behind. We hope this brief offers valuable insights for the development community to advance our efforts to cement the gains against poverty in the face of environmental and public health risks.

Together, we can build a better future and end poverty in all its forms and dimensions.

Dr Sami Al-Suwailem

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and Chief Economist, IsDB Group

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Director, Oxford Poverty and Human Development
Initiative (OPHI)

EXECUTIVE SUMMARY

Two years into the COVID-19 pandemic, the world has become more aware of the critical challenges that our interdependent world must confront if we are to enshrine a global community that honours the dignity and wellbeing of all people. We must reassess the global progress in poverty reduction in the last two decades in light of the current COVID-19 crisis. To fortify these gains, policymakers must invest in targeted, evidence-driven interventions to build back better. This brief analyses the most recent trends in multidimensional poverty in the Islamic Development Bank (IsDB) Member Country of Egypt prior to the pandemic, which is essential both for understanding the previous progress made against poverty and for using this as a yardstick for the future. The brief also evaluates multidimensional poverty in the context of the worsening climate crisis, as well as the COVID-19 social protection and monetary policy responses, and other multidimensional poverty policy efforts put in place by the Government of Egypt. The most recent data on multidimensional poverty for Egypt come from the 2014 Demographic and Health Survey (DHS).

KEY FINDINGS

Analysis of Egypt's 2014 multidimensional poverty data shows that over 4.7 million people (5.2% of the population) were living in multidimensional poverty:

- Rural areas were poorer than urban areas, and over three-quarters of poor people lived in rural areas. Overall, poor people faced the greatest deprivations in nutrition (3.9%), school attendance (3.4%), and years of schooling (2.9%).
- Disparities across governorates were striking, ranging from 0.2% of people being poor in Port Said, to more than 1 in 10 people in Assuit (10.2%), Matroh (11.0%), and Souhag (10.4%).
- Approximately 1 in 12 (8.8%) children under 10 years of age were MPI poor, accounting for about 1.9 million people. The ratio was approximately 1 in 25 (4.8%) among those aged 10 to 17 (690,000 people) and adults aged 18 or over (3.9%, or over 2.1 million people).
- As the overall poverty levels were low according to the global Multidimensional Poverty Index (MPI), there is a clear need for a national MPI in Egypt that will better contextualise poverty within the country. Work is already underway, in partnership with the Central Agency for Public Mobilization and Statistics (CAPMAS) and OPHI, to develop a national measure of multidimensional poverty that best captures the multiple overlapping deprivations faced by everyday Egyptians.

In terms of multidimensional poverty trends over time (2008 to 2014), in 2008, approximately 1 in 12 (8.0%) people in Egypt were living in multidimensional poverty, but by 2014, this number had fallen by more than a third (to 4.9%):

- Between 2008 and 2014, nearly 2 million people left poverty. The number of poor people declined from 6.4 million to 4.4 million, amid an overall population growth of 10.8 million.
- Poverty reduction in Egypt was most pronounced in the most vulnerable groups, meaning that, in absolute terms, multidimensional poverty reduced faster in populations who were initially among the poorest in 2008 than in less poor groups – fulfilling the sustainable development pledge to Leave No One Behind.
- The four poorest governorates – Assuit, Beni Suef, Fayoum, and Menya – reduced poverty the fastest. For example, in Assuit, the percentage of the population living in poverty fell from 19.0% to 8.8% over six years.
- Reductions in rural areas were faster than in urban areas in both absolute and relative terms.
- These findings also extend to children, with incidence of poverty among the poorest and youngest age group (0-9 years) falling from 12.9% to 8.2% between 2008 and 2014.

EXECUTIVE SUMMARY

- Despite a steady increase in the national monetary poverty rate between 2008/09 and 2015, multidimensional poverty significantly decreased over a similar period, reinforcing the importance of multidimensional and monetary poverty measures as complementary measures that capture different deprivations within a population.

Analysis of Egypt's multidimensional poverty in the context of climate and COVID-19 risks shows that rural and urban populations faced different climate risks in the context of multidimensional poverty:

- Sanitation deprivation fell among the urban population but increased among their rural counterparts. The rural population saw no significant change among drinking water deprivations, while the urban population observed a significant increase.
- In addition, the number of severely MPI-poor people in urban areas rose from 108,000 in 2008 to 117,000 in 2014, despite the overall reduction in the number of poor people nationwide. This suggests that conditions for severely MPI-poor people in urban areas were worsening, which is an important consideration for Egypt as its rate of urbanisation grows.
- Inadequate water, sanitation, and hygiene practices caused an estimated 2.2 billion to 3.7 billion days lived with disease and 4,400 to 9,200 deaths in Egypt in 2017 (Larsen, 2019). The annual cost of these health effects is estimated at LE 26-56 billion in 2016/17, equivalent to about 0.75% to 1.61% of Egypt's GDP during that period (Larsen, 2019).

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INTRODUCTION

The impact of the global COVID-19 pandemic on global poverty is only beginning to be understood. At the time of writing, over 6 million people have died from the pandemic (Johns Hopkins University, 2022) – and Egypt, the focus of this brief, has recorded over 24,000 deaths attributed to COVID-19, nearly 1 in 20 of the total cases. The World Bank (2022a) has estimated that the pandemic led to 97 million more people living in extreme poverty in 2020, but this only captures those living under the international US\$1.90 a day poverty line, which is only part of the story. Now more than ever, comparable measures of poverty are needed to monitor progress in poverty reduction and for development partners and governments to target interventions.

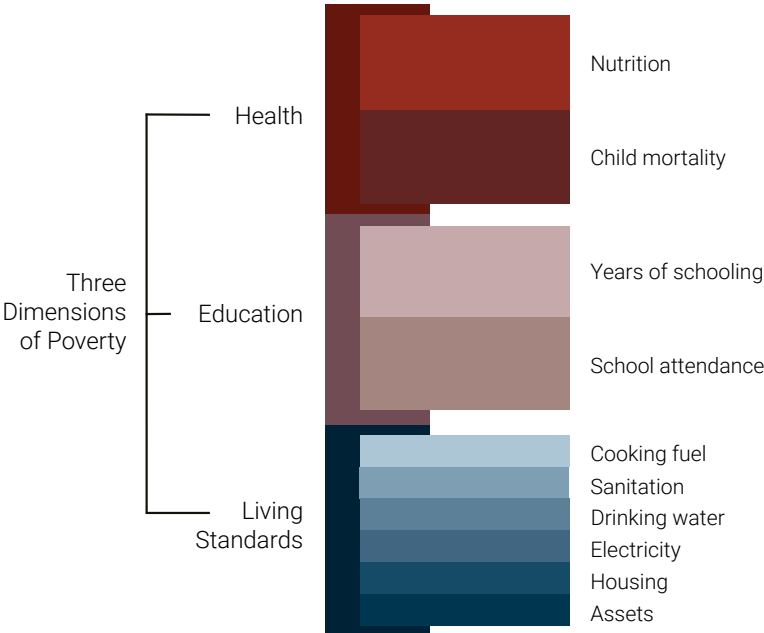
To end poverty, we need to monitor poverty, compare it to different households and regions within a country, and compare its levels and composition over time. In doing so, development partners and governments can evaluate the impact of poverty reduction strategies that focus on those most vulnerable. The global Multidimensional Poverty Index (MPI) – a measure co-designed by the Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP) – captures acute multidimensional poverty in the developing regions of the world. The global MPI is disaggregated by age groups, urban–rural areas, sub-national regions, and gender of the household head. It uses internationally comparable surveys to make use of good data on poverty, so that governments can make effective policies that will help their citizens. This brief analyses the most recent trends in multidimensional poverty in the Islamic Development Bank (IsDB) Member Country of Egypt prior to the pandemic, which is essential both for understanding the progress made in the past and for using this as a benchmark for the future.

This brief first presents the structure and methodology of the global MPI. Part 1 surveys the most recent data on multidimensional poverty in Egypt, including the headline levels of poverty, deprivations by indicator, and composition of poverty at the national level. It then overviews the levels and composition of poverty by urban–rural areas, governorates, and age groups. Part 2 overviews the trends in multidimensional poverty reduction during the period for which data are available, 2008 to 2014. Part 3 compares multidimensional poverty in Egypt with monetary poverty measures, including income poverty, the national poverty line, and GNI per capita growth trends. Part 4 evaluates multidimensional poverty in the context of the worsening climate crisis and specific climate risks faced by Egypt, and Part 5 unpacks the COVID-19 policy responses to poverty alleviation in Egypt, as well as other policy efforts to monitor multidimensional poverty reductions.

GLOBAL MPI: STRUCTURE AND METHODOLOGY

The global MPI reflects the acute multiple deprivations of those unable to reach minimum standards in the three dimensions of health, education, and living standards (Alkire, Kanagaratnam, and Suppa 2021). It measures acute poverty by counting people as multidimensionally poor if they are deprived in one-third or more of 10 weighted indicators (Figure 1), where each indicator is equally weighted within its dimension. The health and education indicators are weighted 1/6 each, and the standard of living indicators are weighted 1/18 each. The MPI ranges from 0 to 1, and higher values imply higher multidimensional poverty. In Egypt, data for the cooking fuel indicator are not available, and so the MPI is computed using the nine available indicators, and the living standards indicators take on a weight of 1/15 each.

Figure 1. The global MPI structure



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Source: OPHI 2018.

The global MPI has been estimated annually for over 100 countries in developing regions since its launch in 2010. For 2021, the global MPI covers 109 countries worldwide (Alkire, Kanagaratnam, and Suppa 2021), including 42 of the IsDB Member Countries. The data come from household surveys such as the Multiple Indicator Cluster Surveys (MICS) and Demographic and Health Surveys (DHS). In 2021, data on trends in the global MPI over time were available for 80 countries with a combined population of around five billion people, using two and three rounds of comparable cross-sectional data (Alkire, Kanagaratnam, and Suppa 2021). For Egypt, these trends are analysed using DHS data from 2008 to 2014. While data from 2014 are unfortunately out of date, analysing the trends from this period can still uncover specific patterns within Egypt that will be relevant when the data are updated after the pandemic. It also illustrates a methodology of analysis that can be used in comparing trends for national or other MPIs.

A BRIEF INTRODUCTION TO THE ALKIRE-FOSTER METHOD

The MPI conveys information regarding both the incidence and the intensity of poverty. The incidence of poverty is the proportion of people who are identified as poor. This is the proportion of the population experiencing multiple and simultaneous deprivations and is denoted by H, which stands for headcount ratio. The intensity of poverty is the average proportion of (weighted) deprivations poor people experience and is denoted by A. The MPI is the product of both and can be simply obtained by the interaction of the incidence of poverty and the intensity of poverty: $MPI = H \times A$.

Source: Alkire and Foster (2011).

1. MULTIDIMENSIONAL POVERTY IN EGYPT

The analysis in this section uses the global MPI (Alkire, Kanagaratnam and Suppa 2021), which provides multidimensional poverty data for Egypt in 2014, then home to more than 90 million people (UNDESA, 2019).

It is clear that, since the latest global MPI data release for Egypt was the 2014 DHS, poverty conditions within the country have likely subsequently changed due to government interventions and the global pandemic. Furthermore, the most recent global MPI data suggest that global MPI levels were relatively low throughout Egypt. The global MPI is important, as it provides a globally comparable measure of poverty needed to monitor progress in poverty reduction and for development partners and governments to target interventions, but it should be accompanied by a tailored measure of moderate poverty to capture the extent and diversity of multidimensional poverty in Egypt.¹ This highlights the need to calculate the

national MPI, currently under review by the Central Agency for Public Mobilization and Statistics (CAPMAS), to assess the Government of Egypt's development efforts.

1.1 HEADLINE FINDINGS

This section analyses multidimensional poverty for Egypt at the national level. It first considers the headline statistics of MPI, incidence, and intensity, then analyses the results by each indicator and highlights the key policy areas or implications uncovered by the findings. Over 4.7 million people were living in acute multidimensional poverty in Egypt in 2014.

Level of poverty: MPI, incidence, and intensity

Table 1 presents the MPI; the headcount ratio or incidence (H), the percentage of people identified as multidimensionally poor; and the intensity (A), the average percentage of weighted deprivations that poor people

Table 1. Multidimensional poverty in Egypt 2014

Country	MPI data source		Multidimensional poverty					Population 2014	
			MPI (MPI = H*A)		H		A	Total population ^a	Number of MPI-poor people ^b
	Survey	Year	Range 0 to 1	Standard error	% population	Standard error	Average % of weighted deprivations	(thousands)	(thousands)
Egypt	DHS ^c	2014	0.020	-0.001	5.2	-0.3	37.6	90,425	4,737

Notes: MPI Multidimensional Poverty Index.

H Headcount ratio: percentage of people living in multidimensional poverty.

A Intensity: average deprivation score among poor people.

a UNDESA (2019) Population Data, accessed 28 April 2021. Please note that here and following we use the 2014 population projections when discussing population and number of poor estimates, rather than the most recent population data available in the Alkire, Kanagaratnam, and Suppa (2021) tables

b Own calculations using the MPI results and the 2014 population projection (UNDESA, 2019). This was computed by multiplying the headcount (H) by the 2014 population projection, and rounding to the nearest thousand.

c Demographic and Health Survey.

Source: Alkire, Kanagaratnam, and Suppa (2021).

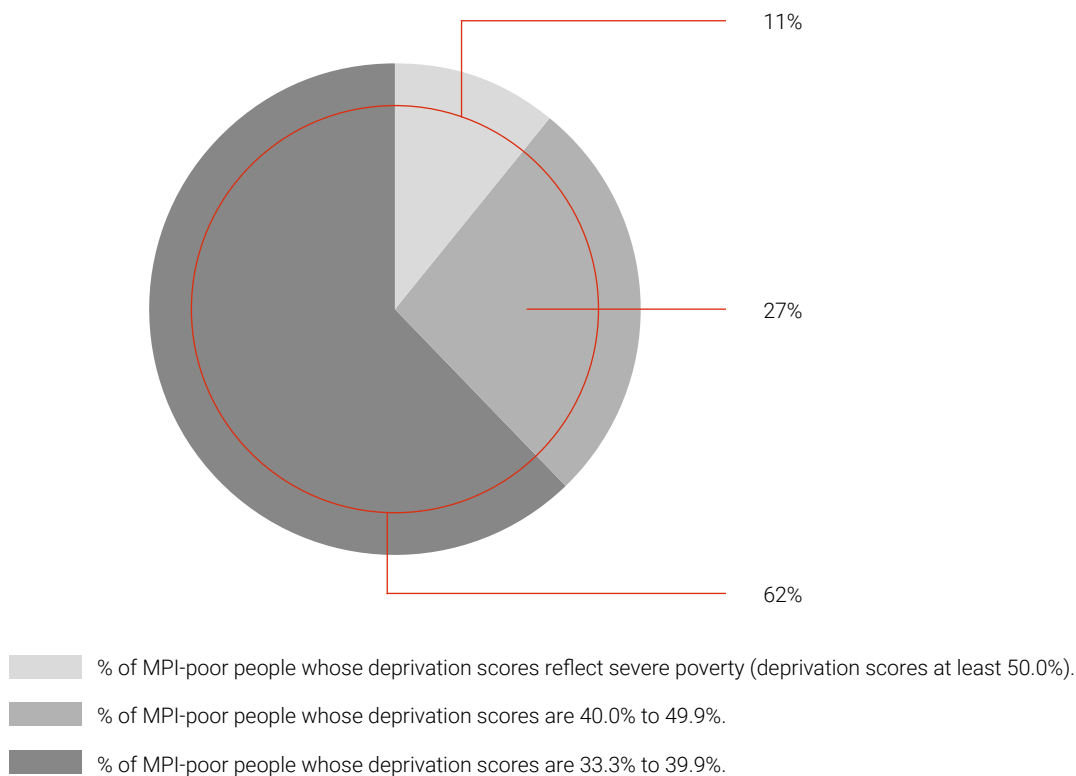
experience simultaneously, for Egypt. With an MPI of 0.020, around 1 in 20 (5.2%) of Egypt’s population were living in acute multidimensional poverty, experiencing, on average, 37.6% of the weighted deprivations.

The intensity of poverty (A) shows the average proportion of weighted indicators in which poor people are deprived, so a person deprived in 80% of the weighted indicators (a deprivation score of 80%) has a greater intensity of deprivation than someone deprived in 33% of the weighted indicators. Figure 2 shows the proportion of MPI-poor people who experienced different intensities of deprivation in Egypt. Approximately 62% of the multidimensionally poor people experienced at least 33.3% but less than 40% of the weighted deprivations, and are therefore not far below the poverty line. Twenty-seven per cent of the poor population had deprivation

scores between 40% and 49.9%, while around 1 in 10 of multidimensionally poor people lived in severe poverty, meaning they experience 50% or more of the weighted deprivations. Analysing the intensity of poverty among multidimensionally poor people allows us to understand not just who is poor, but also how poor they are.

It can be useful to try several poverty cutoffs (k) to see how the value of MPI and the incidence of multidimensional poverty (H) change. The poverty cutoff identifies who is multidimensionally poor and who is not. It establishes the minimum deprivation score needed to be considered poor – the lower the cutoff, the fewer deprivations are needed to be counted as MPI poor. The global MPI uses a poverty cutoff of 33.3% (Alkire, Kanagaratnam, and Suppa 2021). Figure 3 displays the respective values for MPI and incidence of multidimensional pover-

Figure 2 . Intensity of deprivation among MPI-poor people in Egypt

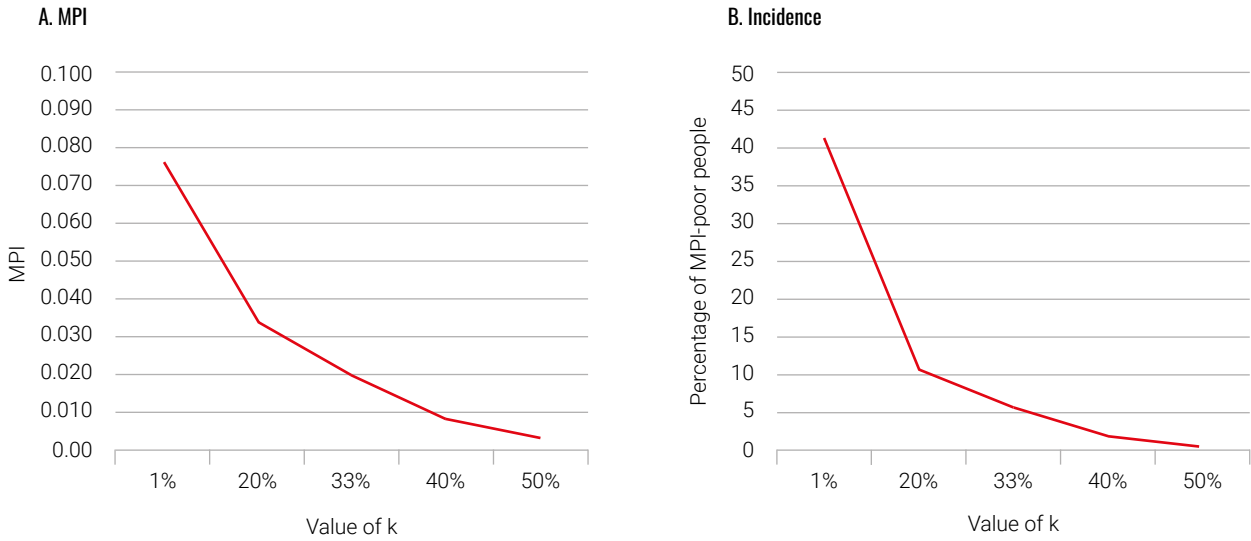


Notes: MPI Multidimensional Poverty Index.

Source: OPHI (2021).

ty (H) in Egypt based on poverty cutoffs of 1%, 20%, 40%, and 50%. Although the 33.3% cutoff is the key poverty threshold for this report, further research on MPI cutoffs in Egypt could be considered to relate them to the different deprivation profiles of people living in multidimensional poverty. These four cutoffs are presented to show the range in MPI values and incidences between a union cutoff (1%) to severe poverty (50%). The union cutoff (1%) in a multidimensional poverty measure identifies a person as poor if they are deprived in any indicator. The 20% cutoff covers the range of individuals considered vulnerable to multidimensional poverty, those who are deprived in 20% to 33.33% of weighted indicators. The 40% cutoff is also included to highlight the gradient of values between the key 33.3% global MPI threshold and those living in severe poverty.

Figure 3. MPI and H for different values of k poverty cutoff for Egypt



Notes: MPI Multidimensional Poverty Index.
 H Headcount ratio or the percentage of people identified as multidimensionally poor.

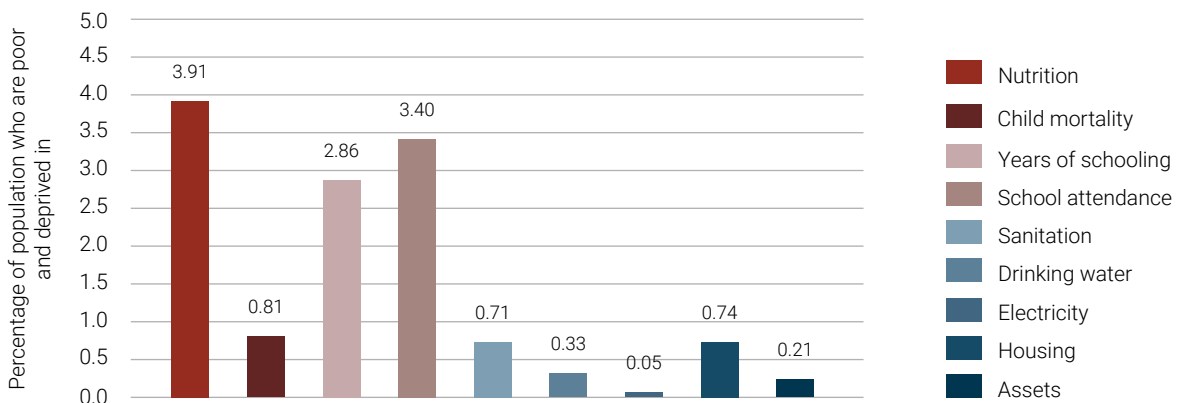
Source: Alkire, Kanagaratnam, and Suppa (2021).

How people are poor: deprivations by indicator

This section shows the percentage of people who are MPI poor and deprived in each of the indicators. In Egypt, data on cooking fuel are not available, so the global MPI is computed for nine indicators, equally weighted among and between the three dimensions. In Figure 4, it is clear that the levels of deprivation differ greatly by indicator.

In Egypt, 3.9% of the population were multidimensionally poor and deprived in nutrition, with a similar proportion deprived in school attendance (3.4%). Another 2.9% were poor and deprived in years of schooling, with less than 1% deprived in child mortality (0.8%), housing (0.7%), sanitation (0.7%), drinking water (0.3%), assets (0.2%), and electricity (0.05%).

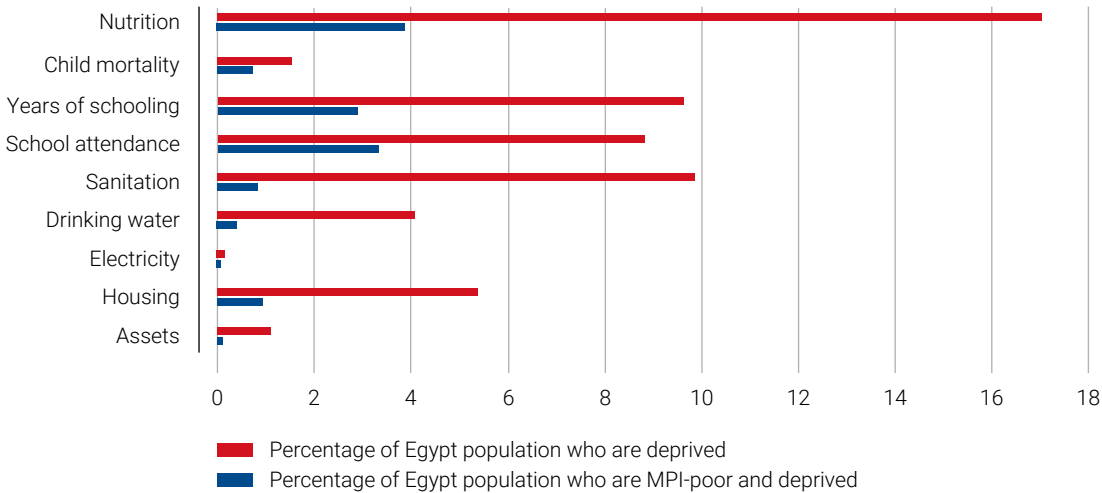
Figure 4. Percentage of population who are poor and deprived in each indicator for Egypt



Notes: The living standards dimension in the global MPI comprises six indicators: cooking fuel, sanitation, drinking water, electricity, housing, and assets. Deprivation in cooking fuel is not presented here because no such data were collected for the Egypt DHS (2014).

Source: Alkire, Kanagaratnam, and Suppa (2021).

Figure 5. Deprivations for each indicator by population and MPI-poor people in Egypt

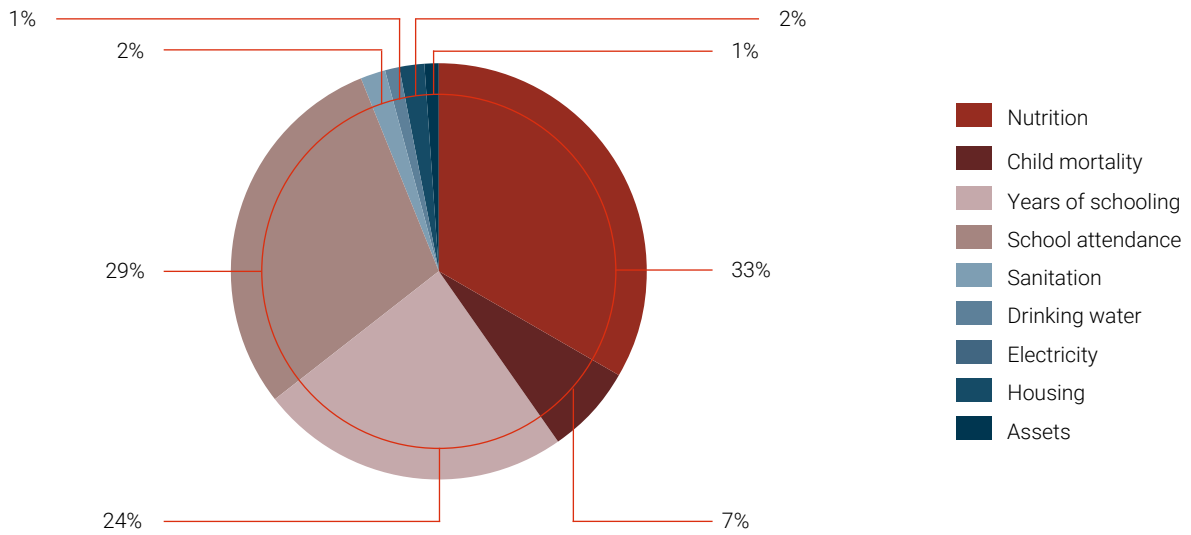


Notes: The living standards dimension in the global MPI comprises six indicators: cooking fuel, sanitation, drinking water, electricity, housing, and assets. Deprivation in cooking fuel is not presented here because no such data were collected for the Egypt DHS (2014).

Source: Alkire, Kanagaratnam, and Suppa (2021).

We can also evaluate the differences in deprivations between the multidimensionally poor population and the overall population to unpack additional policy insights. Figure 5 compares the levels of deprivation in each indicator between the overall population and MPI-poor people in Egypt. Some overlap exists, as both populations shared the indicators with the greatest and least deprivation: nutrition and electricity, respectively. That said, although less than 1% of people living in multidimensional poverty were deprived in sanitation, drinking water, and housing, nearly 1 in 10 people in Egypt (9.9%) used inadequate sanitation, and around 1 in 20 lived in rudimentary housing (5.7%) and had inadequate quality or access to clean drinking water (4.1%). These findings suggest there was room to expand the population coverage of interventions related to sanitation, drinking water, and housing in Egypt, beyond those classified as poor. Furthermore, these findings are particularly stark in the context of the global climate crisis, as two of Egypt’s serious environmental concerns are water scarcity and waste management (Larsen, 2019). Without attentive policy design, the climate crisis could worsen these findings.

Figure 6. Percentage contributions by indicator in Egypt



Notes: The living standards dimension in the global MPI comprises six indicators: cooking fuel, sanitation, drinking water, electricity, housing, and assets. Deprivation in cooking fuel is not presented here because no such data were collected for the Egypt DHS (2014).

Source: Alkire, Kanagaratnam, and Suppa (2021).

Composition of poverty

Another way to unpack poverty is to evaluate the percentage contributions of each of the nine indicators to the MPI in Egypt to see what the main contributors to poverty were at the national level (Figure 6). These take into account the relative weights of each indicator in the global MPI and, as a result, the indicators with the largest headcount ratios are not necessarily the largest contributors to the MPI. The largest contributor was the nutrition indicator, followed by school attendance. Reflecting their low headcount ratios, however, the indicators contributing least to the MPI at the national level were electricity and assets.

Table 2. Multidimensional poverty in Egypt, by urban–rural area

Area of residence	MPI ^a	H ^a (%)	A (%)	Number of poor people, 2014 ^b (thousands)	Population share (%)
Urban	0.012 (0.001)	3.4 (0.28)	35.7	1,142	37.01
Rural	0.024 (0.002)	6.3 (0.44)	38.2	3,595	62.99

Notes: MPI Multidimensional Poverty Index.

H Headcount ratio: percentage of people living in multidimensional poverty.

A Intensity: average deprivation score among poor people.

a Standard errors in parentheses.

b UNDESA (2019). Data accessed 28 April 2021. Own calculations using the MPI results and the 2014 population projection (UNDESA, 2019). This was computed by multiplying the headcount (H) by the 2014 population projection, and rounding to the nearest thousand.

Source: Alkire, Kanagaratnam, and Suppa (2021).

1.2 URBAN–RURAL FINDINGS

This section analyses multidimensional poverty in Egypt at the urban and rural levels. Multidimensional poverty was concentrated in rural areas in 2014, as over three-quarters of poor people (75.9%) lived in rural settings, and rural poor people faced the greatest deprivations in nutrition, school attendance, and years of schooling.

Level of poverty: MPI, incidence, and intensity

The MPI in rural areas in Egypt was 0.024, almost twice as high as that for urban areas (0.012). Both the headcount ratio (6.4%) and intensity (38.2%) were higher in rural areas (Table 2). Given the larger population share in rural areas and higher incidence of poverty, it is unsurprising that three-quarters of people who were poor – around 3.6 million – lived in rural areas.

How people are poor: deprivations by indicator

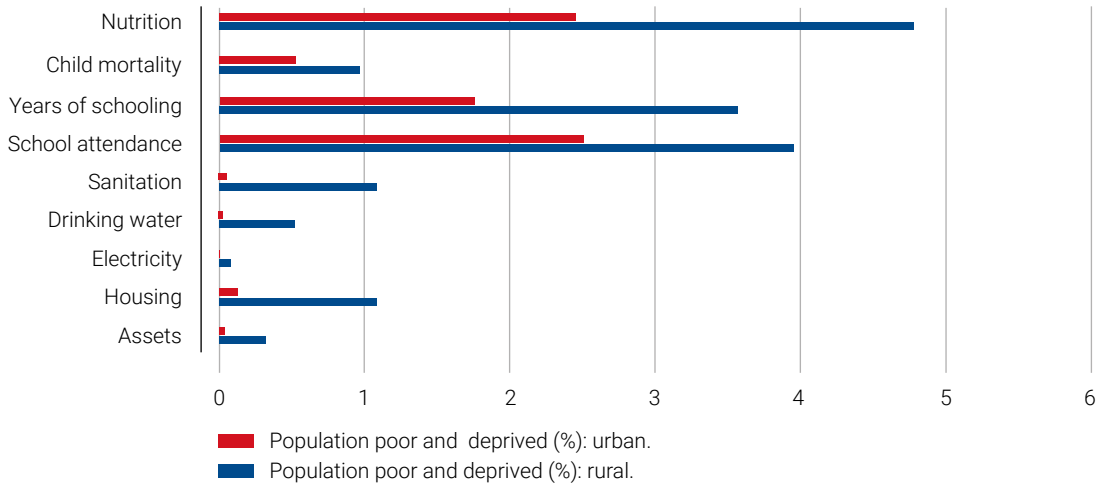
The patterns of multidimensional poverty in Egypt differ in rural and urban areas. Figure 7 shows the percentage of people in rural and urban areas who are poor and deprived in each indicator. The differences in certain indicators are intuitive, such as rural poor people having higher levels of deprivation in electricity, drinking water, and sanitation than their urban peers, since these rates are often higher among rural populations due to limited access to public infrastructure. That said, it is noteworthy that deprivations in nutrition and school attendance still

affected poor people in urban areas (2.5% each), even though these were somewhat lower than in rural areas (4.8% and 3.9%, respectively).

Composition of poverty

Figure 8 shows the contribution of nutrition and child mortality deprivations to the MPI were high and similar between urban and rural poor populations (around one-third and one-fourteenth of their MPIs, respectively), as was deprivation in years of schooling (around a quarter of each MPI). School attendance contributed around one-third of the MPI of urban areas and somewhat less in rural areas. This is because deprivations in sanitation and housing contributed more to the MPI of rural areas than of urban areas – suggesting a more diverse deprivation in rural areas (spanning all three dimensions) than in urban areas. This reinforces the point that education is a key policy area for tackling poverty in Egypt.

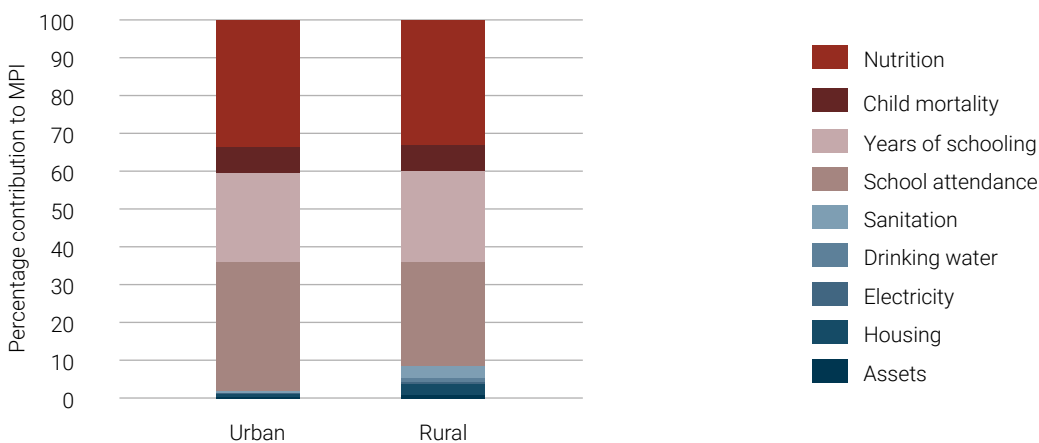
Figure 7. Percentage of the population who are poor and deprived in each indicator, by urban–rural area



Notes: The living standards dimension in the global MPI comprises six indicators: cooking fuel, sanitation, drinking water, electricity, housing, and assets. Deprivation in cooking fuel is not presented here because no such data were collected for the Egypt DHS (2014).

Source: Alkire, Kanagaratnam, and Suppa (2021).

Figure 8. Percentage contributions by indicator in area of residence



Notes: The living standards dimension in the global MPI comprises six indicators: cooking fuel, sanitation, drinking water, electricity, housing, and assets. Deprivation in cooking fuel is not presented here because no such data were collected for the Egypt DHS (2014).

Source: Alkire, Kanagaratnam, and Suppa (2021).

Table 3. Multidimensional poverty in Egypt, by governorate

Governorate	MPI ^a	H ^a (%)	A (%)	Number of poor people, 2014 ^b (thousands)	Population share (%)
Alexandria	0.007 (0.002)	2.1 (0.7)	34.3	85	4.39
Assuit	0.040 (0.005)	10.2 (1.2)	39.6	508	5.5
Aswan	0.018 (0.006)	4.9 (1.6)	37.5	78	1.75
Behera	0.016 (0.003)	4.2 (0.6)	38.9	322	8.55
Beni Suef	0.035 (0.007)	9.4 (1.9)	37.2	292	3.44
Cairo	0.010 (0.002)	2.9 (0.5)	34.2	230	8.89
Dakahlia	0.006 (0.002)	1.9 (0.4)	34.5	124	7.32
Damietta	0.014 (0.004)	3.7 (0.9)	39.4	57	1.72
Fayoum	0.038 (0.005)	9.6 (1.2)	39.5	291	3.35
Gharbia	0.014 (0.003)	3.8 (0.7)	36	215	6.33
Giza	0.027 (0.004)	7.4 (1.1)	36.2	643	9.58
Ismailia	0.014 (0.003)	4.0 (0.8)	35.2	28	0.76
Kafr el-Sheikh	0.011 (0.002)	3.2 (0.6)	35.4	112	3.9
Kalyubia	0.010 (0.003)	2.7 (0.7)	36.3	114	4.68
Luxor	0.018 (0.006)	4.5 (1.1)	40.6	41	1.01
Matroh	0.042 (0.012)	11.0 (2.8)	37.9	28	0.28
Menoufia	0.008 (0.002)	2.3 (0.6)	35.8	98	4.72
Menya	0.030 (0.005)	8.0 (1.3)	37.8	407	5.61
New Valley	0.004 (0.002)	1.1 (0.6)	34.7	2	0.23
Port Said	0.001 (0.001)	0.2 (0.2)	34.1	1	0.4
Qena	0.015 (0.003)	4.1 (0.7)	35.5	128	3.41
Red Sea	0.018 (0.005)	4.7 (1.1)	38.7	14	0.33
Sharkia	0.022 (0.004)	5.7 (0.9)	37.9	457	8.85
Souhag	0.042 (0.016)	10.4 (4.0)	40	460	4.89
Suez	0.005 (0.002)	1.5 (0.4)	36.1	1	0.09

Notes: MPI Multidimensional Poverty Index.

H Headcount ratio: percentage of people living in multidimensional poverty.

A Intensity: average deprivation score among poor people.

a Standard errors in parentheses.

b UNDESA (2019). Data accessed 28 April 2021. Own calculations using the MPI results and the 2014 population projection (UNDESA, 2019). This was computed by multiplying the headcount (H) by the 2014 population projection, and rounding to the nearest thousand.

Source: Alkire, Kanagaratnam, and Suppa (2021).

1.3 DISAGGREGATION BY GOVERNORATES

This section disaggregates multidimensional poverty for Egypt by governorate. It finds that levels of poverty differ widely, from affecting 0.2% of people in Port Said to 11% in Matroh.

Level of poverty: MPI, incidence, and intensity

Table 3 provides details for the 25 subnational governorates of Egypt in 2014. The MPI was highest in Souhag and Matroh at 0.042 (around twice as high as the national value of 0.020), followed by Assuit at 0.040. Cairo, the capital of Egypt, had one of the lower MPIs (0.010), while the lowest MPI (0.001) was in the governorate of Port Said.

The differences in poverty statistics across governorates have important implications when targeting poverty policies. Focusing on levels of incidence and intensity further emphasises the usefulness of the MPI in such targeting. In terms of the incidence, more than 1 in 10 people in Matroh (11.0%), Souhag (10.4%), and Assuit (10.2%) were poor, while in Sharkia (5.7%), Aswan (4.9%), and Red Sea (4.8%), this was closer to 1 in 20 people. Meanwhile, only 1 in 100 people in New Valley (1.1%) and 1 in 400 people in Port Said (0.2%) were poor. The intensity of poverty also varied, with poor people in Luxor (40.6%) and Souhag (40.0%) experiencing the greatest share of overlapping deprivations. The lowest intensity was in Port Said (34.1%), Cairo (34.2%), and Alexandria (34.3%) governorates.

Table 3 also reflects the need for targeting exercises to consider how many poor people reside in each governorate. While Matroh had the highest MPI and Alexandria one of the lowest, Alexandria had around three times as many MPI-poor people than Matroh, (85,000, compared to 28,000 people). Similarly, although Dakahlia had one of the lowest MPIs (0.006), it contained a larger population of poor people than Red Sea, which had an MPI around three times higher (0.018) (124,000, compared to 14,000 people). It is noteworthy that approximately half (52.3%) – 2.5 million – of the total number of poor people lived in only five governorates: Assuit, Giza, Menya, Sharkia, and Souhag.

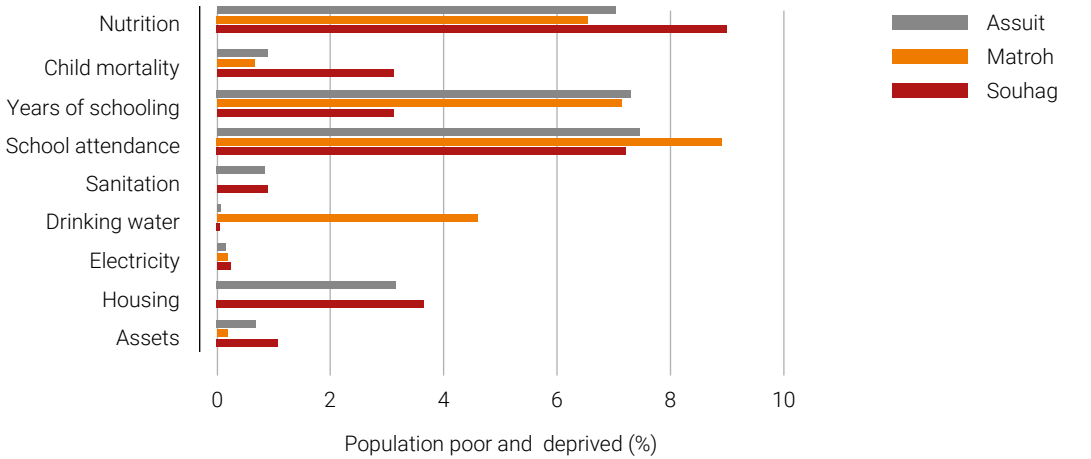
How people are poor: deprivations by indicator

The MPI can show how many people are poor and experience each deprivation. This information is important because if any deprivation reduces, MPI goes down. Analysis shows the levels of deprivation in the different indicators of the MPI varied across each governorate. Figure 9 presents the percentage of the population who were MPI poor and deprived in each indicator for two clusters of governorates: the three poorest (Assuit, Matroh, and Souhag) and three least poor (New Valley, Port Said, and Suez) in terms of MPI.

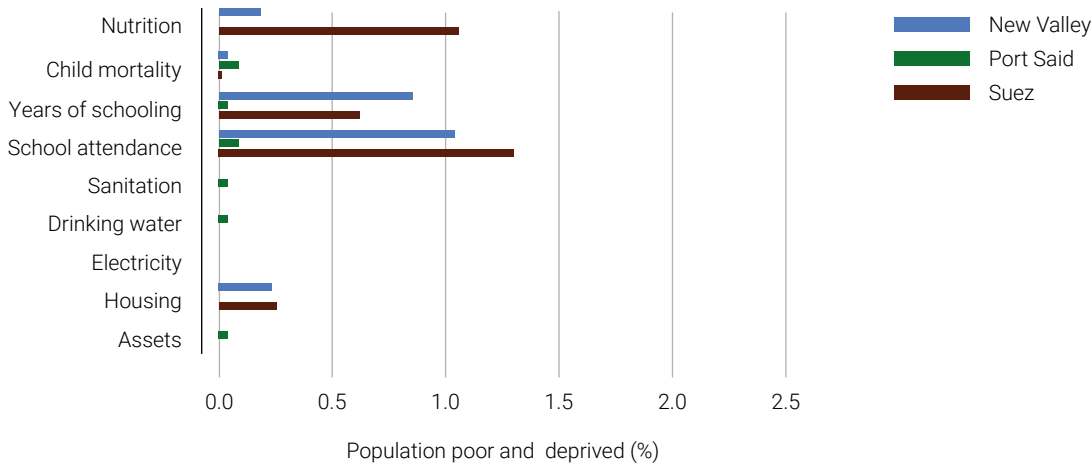
Although the governorates within each cluster had similar levels of overall poverty, the ways in which they were poor varied. For instance, Souhag was most deprived in nutrition, where 8.8% of the poor population were undernourished, while Matroh was most deprived in school attendance. Furthermore, in Matroh, 4.6% of the poor population were deprived in clean drinking water – far higher than the national average of 0.3% – whereas less than 0.1% were deprived in that indicator across the other two poorest governorates (Souhag and Assuit) and the least-poor governorates (Suez, New Valley, and Port Said). While Figure 9 shows intense deprivations in Matroh for drinking water, school attendance, years of schooling, and nutrition, the poor population in Matroh were not deprived in sanitation. The policy importance of breaking down each MPI into its constituent parts cannot be understated.

Figure 9. Percentage of population who are poor and deprived in each indicator for selected governorates

A. Poorest by MPI



B. Least poor by MPI



Notes: Souhag, Matroh, and Assuit, in that order, are the three poorest governorates in terms of MPI. Suez, New Valley, and Port Said, in that order, are the three least-poor governorates. The living standards dimension in the global MPI comprises six indicators: cooking fuel, sanitation, drinking water, electricity, housing, and assets. Deprivation in cooking fuel is not presented here because no such data were collected for the Egypt DHS (2014).

Source: Alkire, Kanagaratnam, and Suppa (2021).

Composition of poverty

The contributions of the different indicators to the MPI in each governorate reflect both the level and the indicators' weights. Figure 10 presents these differences for the same two clusters of governorates. While nutrition was the largest contributor in many of the 25 regions, within our two clusters it ranged from over one-third of the MPI in Souhag to no contribution at all in Port Said. Moreover, the poverty composition in Port Said was largely different from the other two least-poor governorates, New Valley and Suez. School attendance was the largest contributor to the MPI of all three least-poor governorates, but in New Valley and Suez, drinking water, sanitation, and assets did not contribute to their respective MPIs, while in Port Said, each of these contributed one twenty-fifth of the overall MPI.

Given the low uncensored and censored headcount ratios for drinking water at a national level, it is noteworthy that drinking water contributed more to the MPI in Matroh than to the national-level MPI. This has impor-

tant policy implications for tackling poverty in Matroh, with the recommendation that clean water interventions would go a long way to reducing poverty in the governorate. Similarly, given the low deprivation rates for child mortality at the national level, it is a serious concern that child mortality deprivation was one of the two largest contributors to the MPI in Port Said, much more than to the national-level MPI.

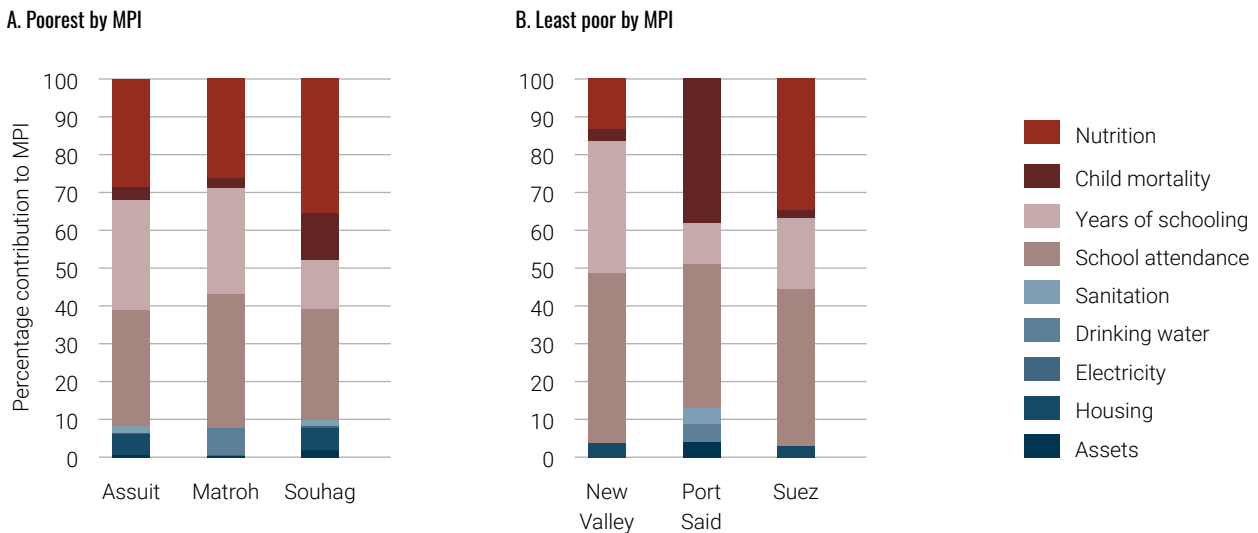
1.4 AGE GROUP FINDINGS

This section analyses multidimensional poverty for Egypt at the age group level. It finds that more than half (55.1%) of all MPI-poor people in Egypt were children under the age of 18. Furthermore, two out of every five (40.5%) of poor people (1.9 million) were children under the age of 10. Overall, 7.2% of children were living in poverty, compared to 3.9% of adults.

Level of poverty: MPI, incidence, and intensity

The analysis considers four age groups: children aged 0-9; adolescents aged 10-17; adults aged 18-59; and

Figure 10. Percentage contributions by indicator in governorates



Notes: Souhag, Matroh, and Assuit, in that order, are the three poorest governorates in terms of MPI. Suez, New Valley, and Port Said, in that order, are the three least-poor governorates. The living standards dimension in the global MPI comprises six indicators: cooking fuel, sanitation, drinking water, electricity, housing, and assets. Deprivation in cooking fuel is not presented here because no such data were collected for the Egypt DHS (2014).

Source: Alkire, Kanagaratnam, and Suppa (2021).

adults aged 60 and above. Table 4 shows that almost a quarter (24.1%) of poor people in Egypt were under the age of 10, while more than half (52.4%) were adults aged between 18 and 59.

Table 4 also shows the level of MPI, incidence, and intensity of poverty for each of the four age groups. Incidence of poverty was lower for the older age groups. Approximately 1 in 12 (8.8%) children under 10 were MPI poor, accounting for about 1.9 million people. This ratio was 1

in 25 among adolescents aged 10 to 17 (690,000 people) and adults aged 18-59 (nearly 2 million people). The ratio among those 60 and older was 1 in 50, or 143,000 people. The MPI values mirror this pattern. Children under 10 had the highest MPI at 0.033. The MPI was lower among adolescents at 0.018 and lower still for adults aged 18-59 (0.016) and adults aged 60 and over (0.008). The average intensity of poverty was similar across the age groups.

Table 4. Multidimensional poverty in Egypt, by age group

Age group	MPI ^a	Headcount ratio ^a (H, %)	Intensity (A, %)	Number of poor people, 2014 ^b (thousands)	Population share (%) ^c
0–9 years old	0.033 (0.002)	8.8 (0.48)	37.5	1,921	24.14
10–17 years old	0.018 (0.001)	4.8 (0.36)	38	690	15.79
18–59 years old	0.016 (0.001)	4.2 (0.26)	37.5	1,983	52.4
60+ years old	0.008 (0.001)	2.1 (0.22)	38	143	7.67

Notes: MPI Multidimensional Poverty Index.

H Headcount ratio: percentage of people living in multidimensional poverty.

A Intensity: average deprivation score among poor people.

a Standard errors in parentheses.

b UNDESA (2019). Data accessed 28 April 2021. Own calculations using the MPI results and the 2014 population projection (UNDESA, 2019). This was computed by multiplying the headcount (H) by the 2014 population projection, and rounding to the nearest thousand.

c UNDESA (2019).

Source: Alkire, Kanagaratnam, and Suppa (2021).

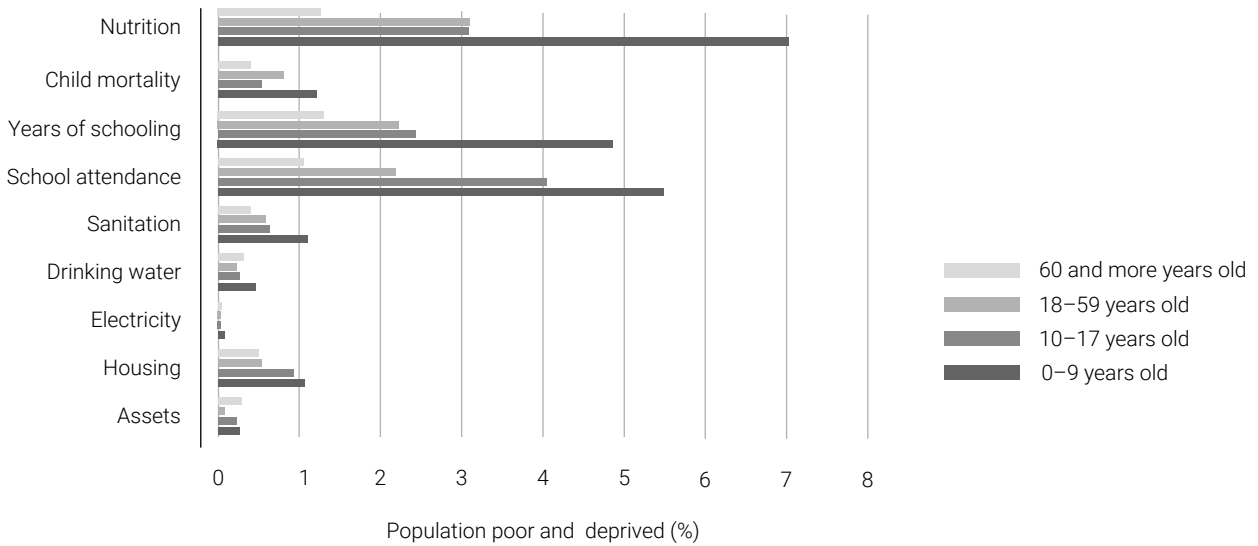
How people are poor: deprivations by indicator

An individual's age matters for policy and programme delivery, as the types of deprivations faced by different age groups reflect the unique experiences of people living in poverty. Across all age groups, nutrition, school attendance, and years of schooling had the highest levels of deprivations, though the level varied significantly across age groups (Figure 11). For children under 10, 7.0% of the population were poor and deprived in nutrition, compared to 3.1% for adolescents and adults aged 18-59, and 1.3% for adults aged 60 and over. This finding reiterates the importance of education and nutrition as key policy areas to target poverty across the population.

Composition of poverty

Figure 12 shows that the composition of poverty by indicator, considering weights, are similar across age groups but with slight variations. For children aged 0-9, nutrition contributed the most whereas electricity contributed the least, a pattern that was mirrored for adults aged 18-59. For adolescents aged 10-17, school attendance contributed the most, and electricity the least, while for adults aged 60 and over, years of schooling contributed the most and electricity again contributed the least.

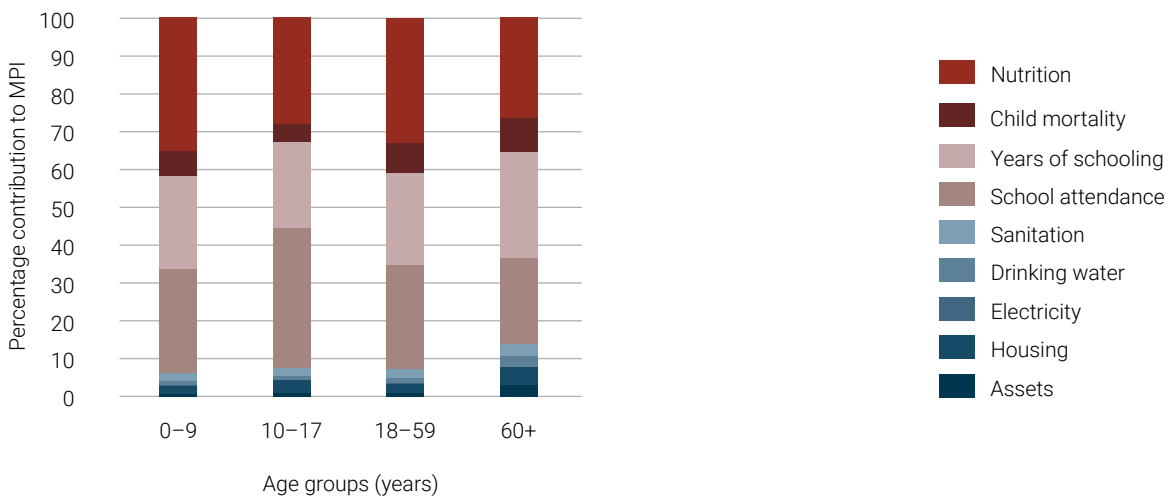
Figure 11. Percentage of the population who are poor and deprived in each indicator, by age group



Notes: The living standards dimension in the global MPI comprises six indicators: cooking fuel, sanitation, drinking water, electricity, housing, and assets. Deprivation in cooking fuel is not presented here because no such data were collected for the Egypt DHS (2014).

Source: Alkire, Kanagaratnam, and Suppa (2021).

Figure 12. Percentage contributions by indicator for age groups



Notes: The living standards dimension in the global MPI comprises six indicators: cooking fuel, sanitation, drinking water, electricity, housing, and assets. Deprivation in cooking fuel is not presented here because no such data were collected for the Egypt DHS (2014).

Source: Alkire, Kanagaratnam, and Suppa (2021).

1.5 CONCLUSIONS

Unpacking the most recent data for multidimensional poverty in Egypt, we observe that deprivations were most intense in the education and health dimensions, regardless of governorate, urban or rural area of residence, or age group. Deprivations in nutrition, school attendance, and years of schooling ranked highest across subnational, urban–rural, and age group statistics. Of the total poor population in Egypt, 3.9% were deprived in nutrition, while 3.4% were deprived in school attendance, compared to less than 1% of the poor population who were deprived in sanitation, drinking water, and housing.

Over 4.7 million Egyptians were living in multidimensional poverty, of which more than half (55.1%) were children and over three-quarters (75.9%) lived in rural areas. Across the governorates, more than 1 in 10 people in Assuit (10.2%), Matroh (11.0%), and Souhag (10.4%) were poor, and the poverty incidence ranged from 6.3% among the rural population to 3.4% among their urban peers. Approximately 1 in 12 (8.8%) children under 10 were MPI poor, accounting for about 1.9 million people – two out of every five of MPI-poor Egyptians (40.5%). These statistics remind us how vulnerable populations – in particular, those living in rural areas and children under 10 years old – face the burden of higher deprivations.

2. MULTIDIMENSIONAL POVERTY REDUCTION BETWEEN 2008 AND 2014

We now turn to the trends in multidimensional poverty over time, from 2008 to 2014. We report changes in multidimensional poverty over time in the harmonised global MPI (MPI_T), as well as the headcount ratio (H_T), the percentage of people identified as multidimensionally poor, and intensity (A_T) or the average percentage of deprivations that poor people experience simultaneously – for the nine indicators available for Egypt's global MPI_T .²

To study trends, these global MPI estimates follow a strict harmonisation methodology using the same information from both the older and newer datasets to ensure that any differences in poverty are due to changes in the conditions of the country rather than changes in the questionnaire. The key differences for Egypt's MPI_T include harmonisation of the following indicators (Alkire, Kovesdi, et al., 2020): nutrition (focusing on children under 5 years old, never-married girls and boys aged 10 to 19, and ever-married women aged 15 to 49); sanitation ('vented improved pit latrine' is considered an improved facility to follow the 2014 classification); and water ('bottled water' as the main source of drinking water is classified as an improved source).

This harmonisation allows us to study poverty alleviation trends over time, to show the composition of poverty by each indicator, and to see in which groups poverty reduced the fastest – for governorates, urban and rural areas, and age groups. We also show which of the indicators drove progress and analyse where population growth competes with this progress.

2.1 HOW FAST DID POVERTY REDUCE? REDUCTIONS IN THE MPI, INCIDENCE, AND INTENSITY

Focusing on trends also allows us to evaluate whether poverty in Egypt's poorest people, regions, and areas in 2008 was reducing faster than in less poor groups. Between 2008 and 2014, the proportion of people who were poor reduced by nearly half. This poverty reduction was most pronounced in the most vulnerable groups, with the four poorest governorates (Assuit, Beni Suef, Fayoum, and Menya) outpacing national reductions and rural poverty reducing quicker than the national average.

These results show great determination to fulfil the sustainable development pledge to Leave No One Behind, as they also extend to children, with the poorest and youngest age group (0-9 years) outpacing the overall reduction nationally during this period.

Headline findings

In 2008, 8.0% of Egyptians were living in acute multidimensional poverty. By 2014, this had reduced to 4.9%, and 2 million people had left poverty. Egypt experienced a significant reduction in the MPI_T from 2008 to 2014, from 0.032 to 0.018 (Table 5). Underpinning this were significant reductions in both the proportion of people identified as multidimensionally poor (the headcount, H_T) and the average percentage of deprivations that these poor people experience simultaneously (the intensity, A_T).

In 2008, approximately 1 in 12 (8.0%) people in Egypt were living in multidimensional poverty. By 2014, only around 1 in 20 (4.9%) were poor. During the same period, the intensity of poverty reduced from 40.1% to 37.6%. These significant reductions in the levels of poverty saw the number of multidimensionally poor people in Egypt fall by nearly 2 million, from 6.4 million people in 2008 to 4.4 million in 2014.

In order to eradicate poverty, the speed of reduction in the headcount ratio (H_T) must outpace population growth. Egypt reduced its MPI_T significantly but also saw overall population growth between 2008 and 2014 of around 10.8 million people. Yet, even with population growth taken into account, Egypt made strong progress in addressing multidimensional poverty, as the number of poor Egyptians declined by nearly 2 million. That population growth did not overshadow Egypt's progress in poverty reduction is a testament to its effective poverty reduction measures, particularly in the areas of education, health, and living standards.

Table 5. Multidimensional poverty reduction trends in Egypt

	MPI data source		Annualised change ^a		Statistical significance
	DHS 2008	DHS 2014	Absolute (p.p.)	Relative (%)	
MPI _T	0.032	0.018	-0.002	-8.81	***
Incidence, H _T (%)	8.0	4.9	-0.51	-7.84	***
Intensity, A _T (%)	40.1	37.6	-0.41	-1.06	***
Population ^b (thousands)	79,636	90,425			
Number of poor people ^c (thousands)	6,356	4,423			

Notes: MPI Multidimensional Poverty Index.

H Headcount ratio: percentage of people living in multidimensional poverty.

A Intensity: average deprivation score among poor people.

a For reference, *** statistically significant at $\alpha=0.01$, ** statistically significant at $\alpha=0.05$, * statistically significant at $\alpha=0.10$. To compare the rates of poverty reduction across countries that have different periods of reference, annualised changes are used here, as in Alkire, Kanagaratnam, and Suppa (2021). The annualised absolute rate of change ($\bar{\Delta}$) is the difference in the MPI between two periods divided by the difference in the two time periods ($t_2 - t_1$). For details on the computation, see Alkire, Kanagaratnam, and Suppa (2021).

b Population is from the year of survey (UNDESA, 2019).

c Own calculations based on the MPI results and population projection from the survey year. This was computed by multiplying the headcount (H) by the populations of 2008 and 2014, respectively, and rounding to the nearest thousand.

Source: Alkire, Kanagaratnam, and Suppa (2021).

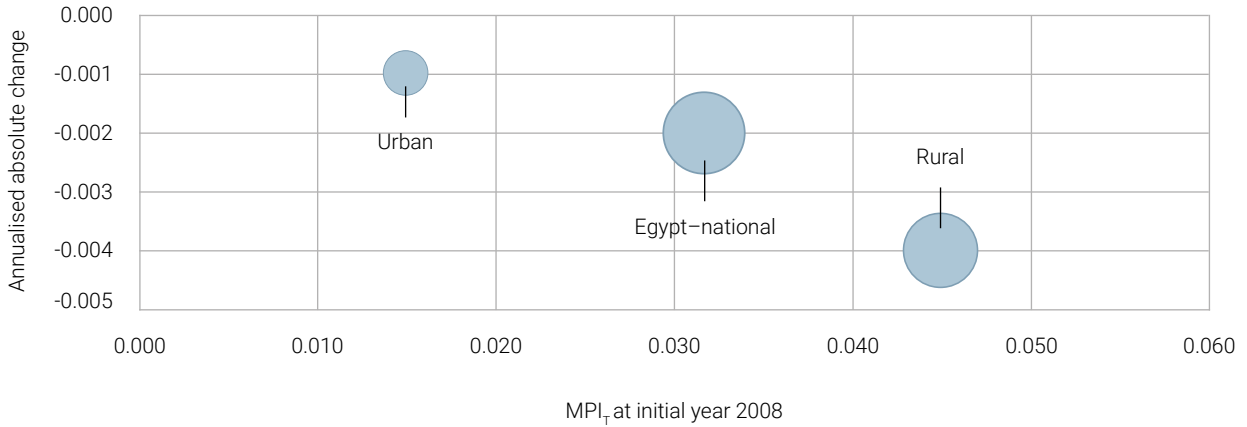
Urban–rural findings

Figure 13 shows that the fastest poverty reduction was in rural areas – which were also the poorest. The horizontal axis shows level of MPI_T in 2008, and the vertical axis shows the speed of reduction, with the lower bubbles indicating faster poverty reduction. Reductions were significant in both rural and urban areas.

Figure 13 clearly shows how rural reductions in the MPI_T outpaced the national reduction (at -0.004), which is another triumph for Egypt, considering that, in 2008, around four out of five multidimensionally poor Egyptians lived in rural areas. Approximately 1.6 million people living in rural areas left poverty between 2008 and 2014, while around 350,000 left poverty in urban areas. This pattern holds even in relative terms. If we consider the initial levels of poverty – accounting for the fact that rural poverty was already much higher than urban poverty in Egypt in 2008 – we see relative reductions of 10.7% per year in rural areas and 4.7% in urban areas (Alkire, Kanagaratnam, and Suppa 2021).

Figure 14 illustrates the poverty reduction trends in incidence and intensity for rural and urban areas. Reductions in incidence were significant for both rural and urban poor people, while the reduction in intensity was only significant among the rural population. Although there are noteworthy gains in rural areas, policymakers should carefully watch the deprivations of the poorest urban poor people to ensure they are not left behind in Egypt's sustainable development agenda.

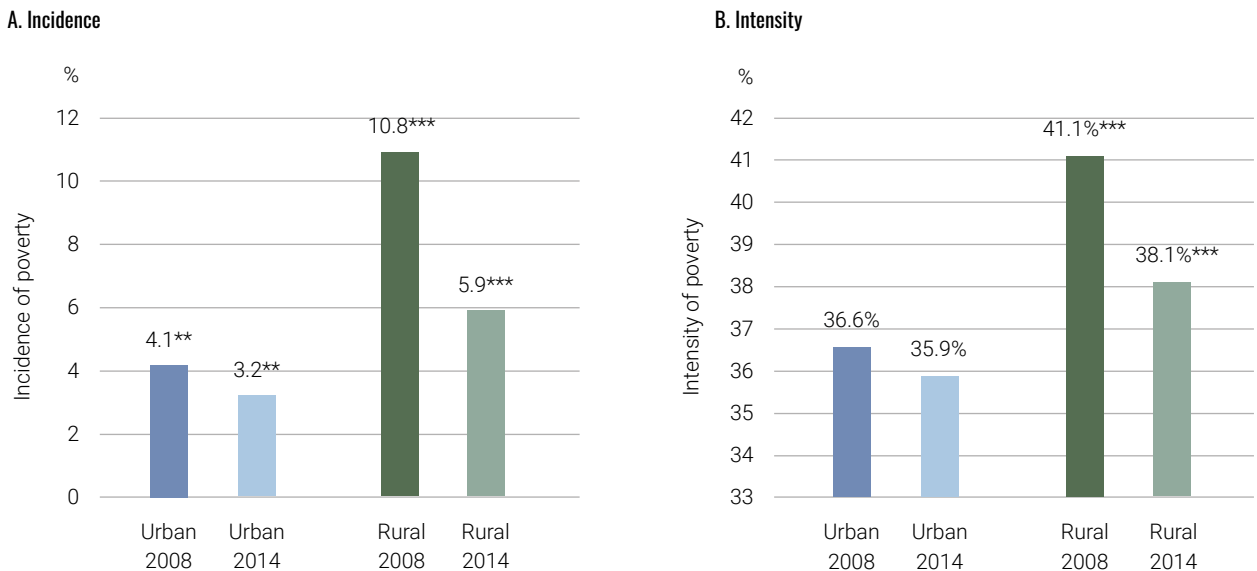
Figure 13. Reductions per year in the MPI, by urban–rural area



Notes: The size of the bubble is a proportional representation of the total number of MPI-poor people in each area in the base year, 2008. Labelled bubbles indicate statistically significant at $\alpha=0.05$. For details on the computation of annualised changes, see Alkire, Kanagaratnam, and Suppa (2021).

Source: Alkire, Kanagaratnam, and Suppa (2021).

Figure 14. Trends in incidence and intensity by urban–rural area



Notes: H Headcount ratio: percentage of people living in multidimensional poverty.

A Intensity: average deprivation score among poor people.

For reference, *** statistically significant at $\alpha=0.01$, ** statistically significant at $\alpha=0.05$, * statistically significant at $\alpha=0.10$.

For details on the computation of annualised changes, see Alkire, Kanagaratnam, and Suppa (2021).

Source: Alkire, Kanagaratnam, and Suppa (2021).

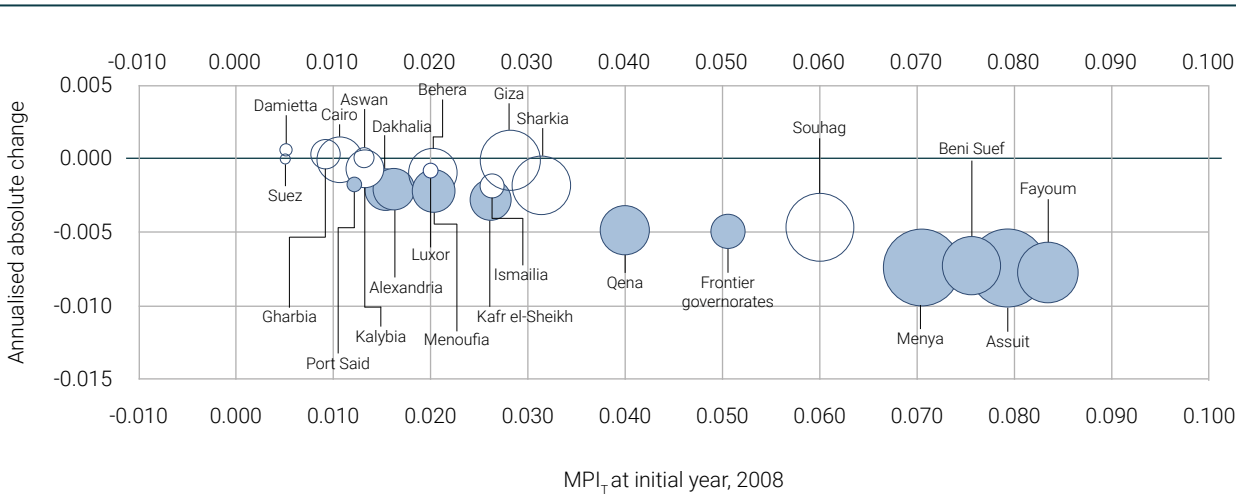
Governorate findings

Figure 15 shows the reductions per year by governorate, with the base level of the MPI_T shown on the horizontal axis. Because of changes in governorate borders between 2008 and 2014, we present estimates for 24 governorates (Alkire, Kanagaratnam, and Suppa 2021). The absolute reductions in the MPI_T were significant for nearly half (11) of the 24 harmonised governorates.

In Figure 15, the lower the bubble is in the chart, the greater is the reduction in poverty between 2008 and 2014. The downward trend of the bubbles indicates that there was greater poverty reduction in governorates in

the poorest regions. The four fastest reducers by MPI_T were Fayoum, Assuit, Beni Suef, and Menya. Two other regions, Frontier Governorates and Qena, also outpaced the national reduction. It is remarkable that the largest reductions in the MPI_T per year were in these four governorates because these were the poorest governorates in 2008. Moreover, these governorates were also those with larger numbers of MPI-poor people in 2008, as indicated by the size of the bubbles. These findings indicate that Egypt is so far succeeding in fulfilling its sustainable development pledge to Leave No One Behind.

Figure 15. Reductions per year in the MPI_T by governorate

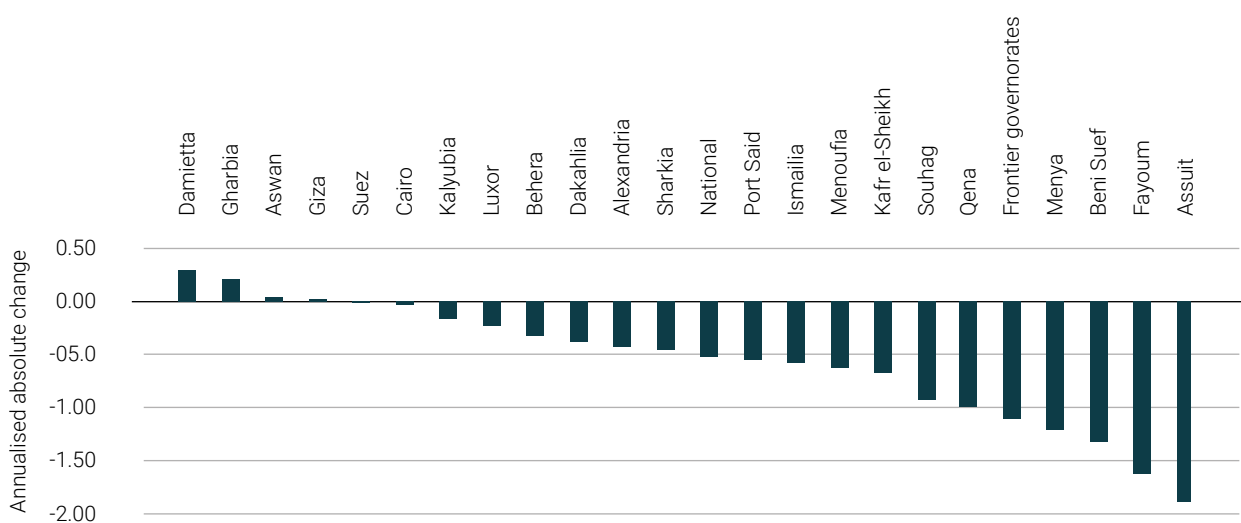


Notes: The size of the bubble is a proportional representation of the total number of MPI-poor people in each governorate in the base year, 2008. Shaded bubbles indicate statistically significant at $\alpha=0.05$. For details on the computation of annualised changes, see Alkire, Kanagaratnam, and Suppa (2021).

Source: Alkire, Kanagaratnam, and Suppa (2021).

Figure 16 shows the reductions in incidence (H_p , the percentage of the population who are multidimensionally poor) for each of the 24 governorates. The poorest governorate by H_p , Assuit, reduced incidence from 19% to 8.8% – a massive drop, almost halving incidence in merely six years. Nine governorates had significant reductions of more than 3 percentage points.

Figure 16. Reductions per year in H_p by governorate



Governorate	Annual absolute change	Governorate	Change
Damietta	0.29	National	-0.51
Gharbia	0.21	Port Said	-0.54
Aswan	0.08	Ismailia	-0.56
Giza	0.04	Menoufia	-0.61
Suez	-0.01	Kafr el-Sheikh	-0.65
Cairo	-0.05	Souhag	-0.89
Kalyubia	-0.21	Qena	-0.99
Luxor	-0.24	Frontier governorates	-1.15
Behera	-0.37	Menya	-1.32
Dakahlia	-0.39	Beni Suef	-1.38
Alexandria	-0.40	Fayoum	-1.61
Sharkia	-0.47	Assuit	-1.70

Notes: *** statistically significant at $\alpha=0.01$, ** statistically significant at $\alpha=0.05$, * statistically significant at $\alpha=0.10$. For details on the computation of annualised changes, see Alkire, Kanagaratnam, and Suppa (2021).

Source: Alkire, Kanagaratnam, and Suppa (2021).

Age group findings

The reductions in the MPI_T can also be broken down by age group. Figure 17 details these reductions per year, with the base level of the MPI_T shown on the horizontal axis. All reductions were again significant.

This disaggregation reflects another consistent finding, that the poorest groups in the initial year witnessed the fastest poverty reductions, as children aged 0-9 were the poorest group in 2008, and nevertheless were the fastest-reducing age group – reducing incidence from 12.9% to 8.2%, and MPI from 0.052 to 0.031. These reductions outpaced the national average, whereas reductions in the other three age groups were below the national average – indicating that poverty reduction measures targeted to young children played a large role in driving the overall decline in MPI.

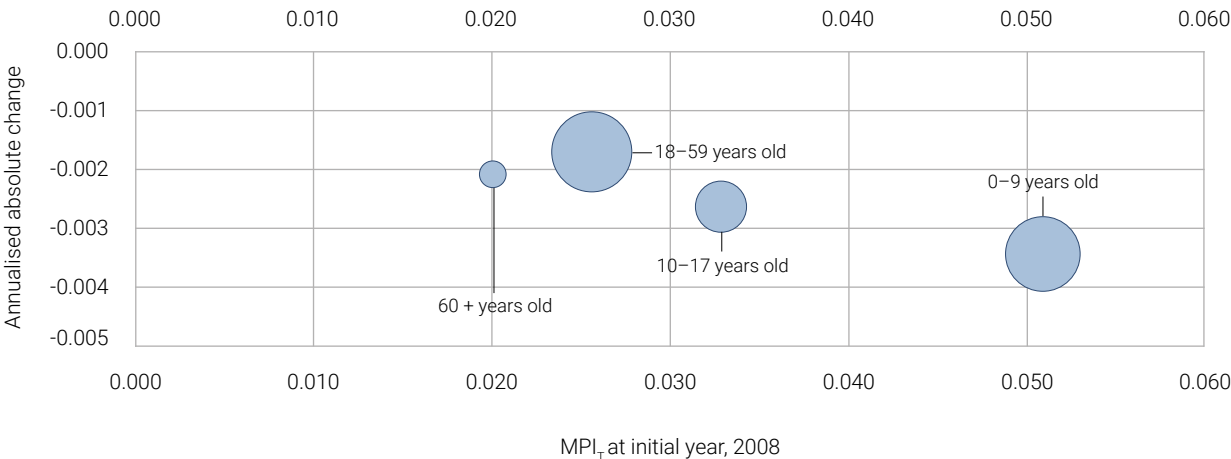
Figure 18 shows the reductions per year in incidence and intensity for the four age groups. Reductions were significant for all age groups in incidence and significant for

all age groups, except for adults aged 60 years and over, in intensity. Once again, the trend for poverty to reduce quickest in the poorest groups, as noted in the overall MPI_T trends, is mirrored here.

2.2 REDUCTIONS BY INDICATOR

We now turn to analysis of these reductions by indicator to evaluate which indicators are driving the significant progress in harmonised multidimensional poverty reductions within Egypt. Figure 19 presents the reductions per year in the percentage of people who are poor and deprived in each of the indicators of the MPI_T . Egypt managed impressive reductions in most indicators. The percentage of people who are poor and deprived in nutrition reduced the fastest (-0.37 percentage points per year), followed by similar reductions in school attendance and housing (-0.36 percentage points and -0.34 percentage points) and years of schooling and assets (both -0.26 percentage points). The lowest annual reductions came in sanitation (-0.16 percentage points) and electricity (-0.03 percentage points), although deprivations in these indicators were already the lowest in 2008.

Figure 17. Reductions per year in the MPI_T by age group

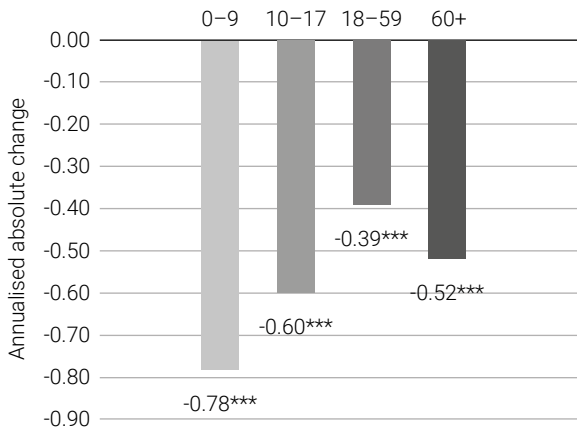


Notes: The size of the bubble is a proportional representation of the total number of MPI-poor people in each area in the base year, 2008. Labelled bubbles indicate statistically significant at $\alpha=0.05$. For details on the computation of annualised changes, see Alkire, Kanagaratnam, and Suppa (2021).

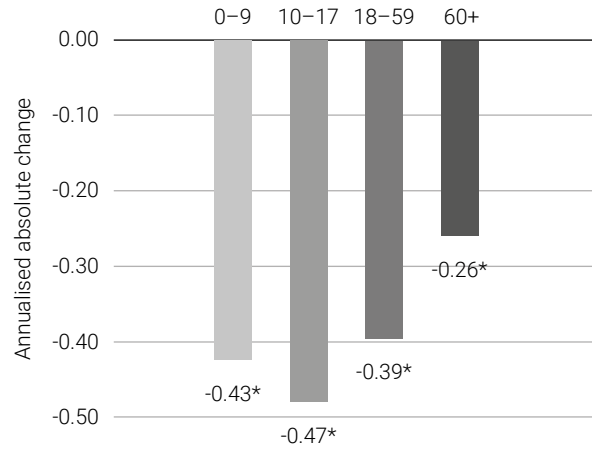
Source: Alkire, Kanagaratnam, and Suppa (2021).

Figure 18. Reductions per year in incidence and intensity by age group

A. Changes in incidence, 2008–2014



B. Changes in intensity, 2008–2014



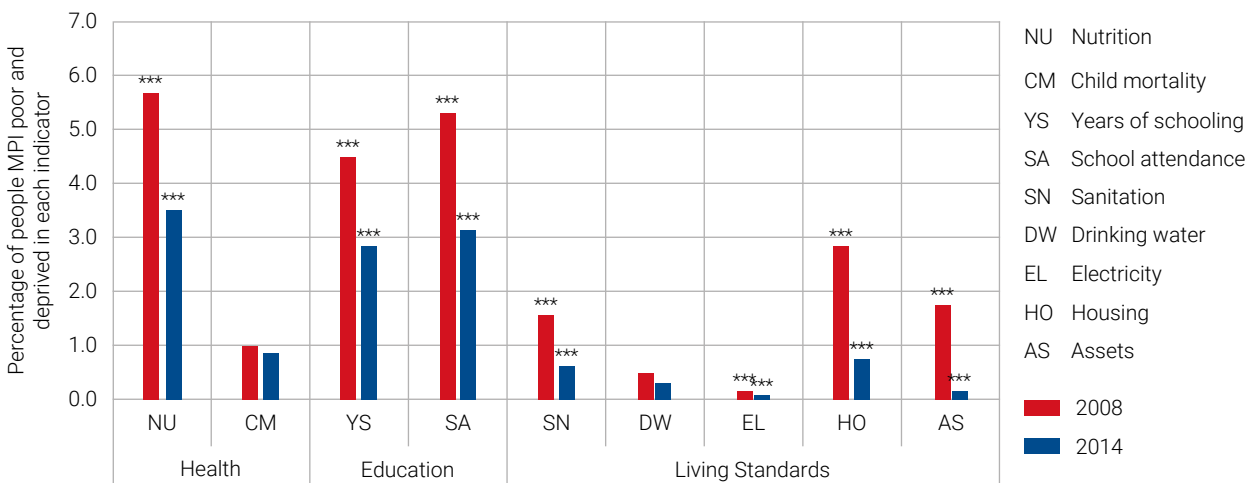
Notes: *** statistically significant at $\alpha=0.01$, ** statistically significant at $\alpha=0.05$, * statistically significant at $\alpha=0.10$. For details on the computation of annualised changes, see Alkire, Kanagaratnam, and Suppa (2021).

Source: Alkire, Kanagaratnam, and Suppa (2021).

Government interventions may be at the heart of some of these poverty reduction trends. As the national poverty line is primarily based on food security, the government’s food subsidy system may have significantly contribut-

ed to the extensive improvements in nutrition among people living in multidimensional poverty (Armanious, 2021). Moreover, since 2012, the Egyptian government has increasingly removed energy subsidies, which may

Figure 19. Percentage of the population who were poor and deprived in each indicator across time at the national level, 2008–14



Notes: *** statistically significant at $\alpha=0.01$, ** statistically significant at $\alpha=0.05$, * statistically significant at $\alpha=0.10$.

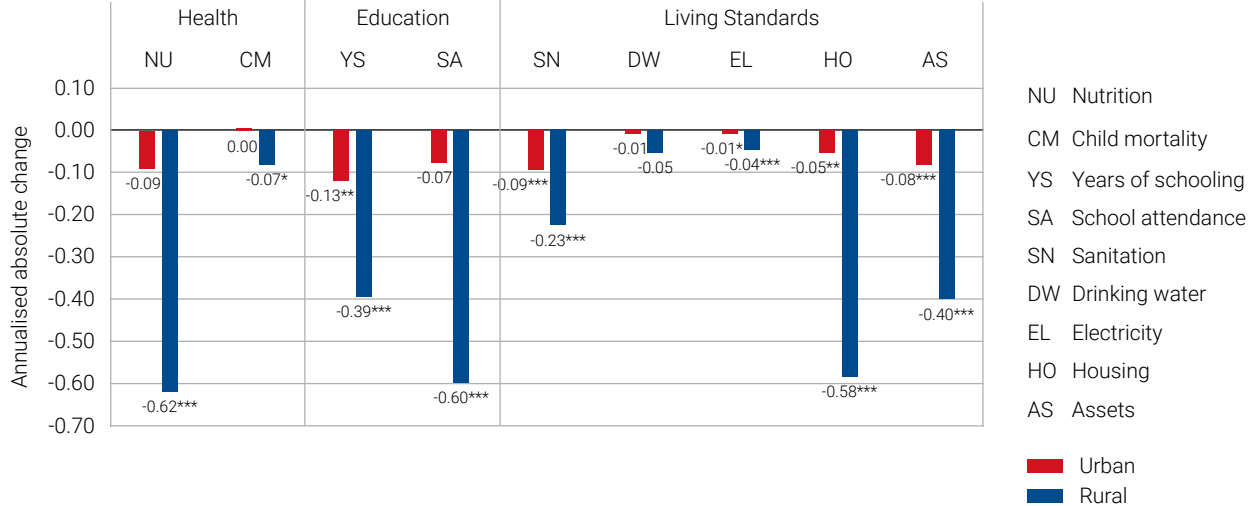
Source: Alkire, Kanagaratnam, and Suppa (2021).

contribute to why the slowest improvements are in electricity deprivation (Armanious, 2021). That said, the rate at which deprivations in the population are reduced is often concave – so lower rates of deprivation are more difficult to bring even lower, compared to higher rates. With that in mind, the fact that electricity deprivation reduced among the poor population when that deprivation was already the least frequent among the indicators suggests positive policy action has taken place.

These findings are particularly important when it comes to assessing the environmental context in Egypt. There were great improvements in the key social indicators of the education dimension and similarly in nutrition among poor Egyptians, although deprivations in the drinking water and child mortality indicators saw no significant reductions, and reductions in sanitation deprivation were among the slowest. The environmental indicators remain an important area to watch as we track the impact of the climate crisis on multidimensional poverty in Egypt.

Examining the reductions in the deprivations of the poor population in rural and urban areas, Figure 20 reinforces the need to focus on the individual patterns and compositions of poverty among different segments of the population, whether by governorate, urban and rural area, or age group. The patterns of reduction vary widely between rural and urban areas, as nutrition and school attendance – the indicators with the fastest reduction at the national level – see no significant reductions in urban areas, suggesting that progress in these indicators was driven by improvements among poor people in rural areas. These results remind us that policymakers must attend to the specific patterns of poverty within a country if they are to ensure that no one is left behind.

Figure 20. Reductions per year in urban–rural areas, 2008–14



Notes: *** statistically significant at $\alpha=0.01$, ** statistically significant at $\alpha=0.05$, * statistically significant at $\alpha=0.10$. For details on the computation of annualised changes, see Alkire, Kanagaratnam, and Suppa (2021).

Source: Alkire, Kanagaratnam, and Suppa (2021).

3. COMPARING MULTIDIMENSIONAL AND MONETARY POVERTY

This section compares multidimensional poverty with monetary poverty measures, including the official Egyptian government national monetary poverty line, international income poverty measures, and GNI per capita growth trends.

3.1 COMPARISONS WITH MONETARY POVERTY

We present comparisons of the latest Egyptian multidimensional poverty headcount ratio for the global MPI using 2014 data with the World Bank's US\$1.90 and US\$3.20 a day rates, as well as the national poverty line, all of which use data from 2017, to evaluate the complementarity of the poverty measures (Table 6).

We can clearly see that the poverty rates vary. If multidimensional and monetary poverty measures both identified the same people as poor, there would be no need for two separate measures. Instead, we observe important variations in the headcount ratios. This suggests that these measures should be seen as complementary to enhance our understanding of poverty in Egypt.

That said, it is worth noting that robust comparisons of the difference between the global MPI incidence and income poverty are difficult due to the different time periods. The global MPI data refers to 2014, whereas the income poverty statistics are from 2017. Several key events occurred in Egypt after 2014 that may have influenced the multidimensional poverty conditions, such as high inflation rates after currency inflation in late 2016, and the application of the World Bank's economic restructuring package, especially cutting subsidies like those in the energy sector (Armanious, 2021). We therefore now consider the global MPI in view of national poverty trends following a similar timeframe.

Table 6. Comparisons with income poverty in Egypt

Multidimensional poverty ^a		Monetary poverty ^b	
Incidence (headcount ratio) % population	US\$1.90 a day (headcount ratio) % population	US\$3.10 a day (headcount ratio) % population	National poverty line (headcount ratio) % population
5.2	3.8	28.9	32.5

Notes: a Egypt 2014 DHS (Alkire, Kanagaratnam, and Suppa (2021).

b Azevedos (2011). For each of the income measures, the relevant year is 2017.

Source: Alkire, Kanagaratnam, and Suppa (2021).

3.2 COMPARISONS WITH NATIONAL MONETARY POVERTY TRENDS

A key measure of poverty in Egypt is the national monetary poverty line, measured by CAPMAS. Before methodological revisions in 2015, this refers to the inability of an individual or household to obtain their basic needs (food, clothing, housing, health, education, transportation, and communications) (CAPMAS, 2014; World Bank, 2020). Figure 21 presents the national monetary poverty line results for a similar period to our multidimensional poverty trends, 2008/09 to 2015.

Figure 21 is striking in that it shows a steady increase in the monetary poverty rate over the seven years covered. Monetary poverty increased from 21.6% in 2008/09 to 27.8% in 2015, such that over 27 million Egyptians were unable to obtain their basic needs. This is in contrast to the multidimensional poverty rates, where we observed a significant reduction in poverty over roughly the same period (between 2008 and 2014), from 8.0% to 4.9% of the population living in poverty. These divergent trends may be the result of higher increases in prices decreasing the real income of households in Egypt (Armanious, 2021), appearing alongside targeted government policies to improve citizens’ wellbeing and quality of life. As the MPI is a measure based on outcomes instead of just the availability of resources (money), even if households’

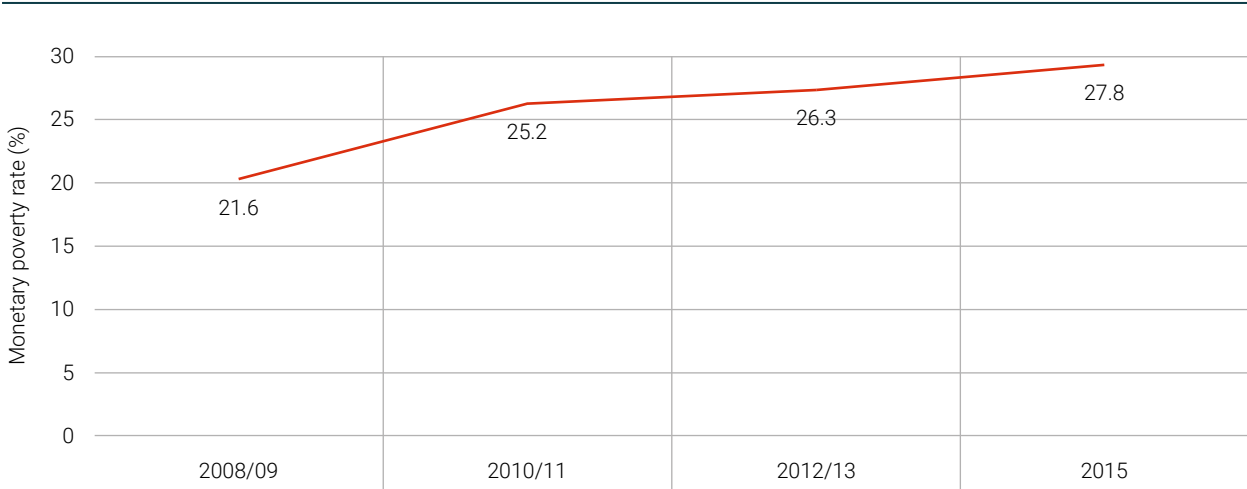
real incomes decline over a period, their nutrition, education, and living standards outcomes may have improved if these have been provided or subsidised by the government. These divergent trends reinforce the importance of multidimensional and monetary poverty measures as complementary measures that capture both different deprivations within a population and the social policy map that underpins them.

3.3 COMPARISONS WITH GROWTH TRENDS

Another key analysis of multidimensional and monetary poverty rates considers the average GNI per capita growth rate, as economic gains within a country may not necessarily translate into a reduction of poverty levels. In the case of Egypt, middling growth in GNI per capita was countered by strong reductions in levels of multidimensional poverty (Table 7). GNI per capita grew at an annual rate of 1.1% from 2008 to 2015, while the relative reduction in the MPI_t was -8.8% during the same period.

Like the comparison with income poverty, the juxtaposition of multidimensional poverty trends and GNI per capita growth trends reveals the importance of both measures for capturing the complex experience of poverty and wellbeing. If we focused solely on economic growth, we would miss the important gains that Egypt

Figure 21. National poverty line estimates in Egypt



Source: Armanious (2021) and El-Laithy (2019).

has made for its poor population, particularly in improving nutrition and education among rural people living in multidimensional poverty. Poverty reduction strategies need to remain at the heart of Egypt's economic policies and programmes, even during periods of economic gain. This will ensure that Egypt delivers on meeting the global goal of ending poverty in all its forms by 2030.

Table 7. Relative change in the MPI_t and GNI per capita growth

Data source		Multidimensional poverty		GNI per capita ^a	
Year 1	Year 2	MPI _t in 2008	Reduction per year, relative to initial poverty levels (%)	GNI per capita in 2008, Atlas method (current US\$)	Average GNI per capita growth (annual %) ^b
DHS 2008	DHS 2014	0.032	-8.81	1,840	1.11

Notes: MPI_t Multidimensional Poverty Index, harmonised.

a GNI figures from the World Development Indicators (World Bank 2022b).

b The average is computed using the available annual values between the first and second time periods.

Source: Alkire, Kanagaratnam, and Suppa (2021).

4. MULTIDIMENSIONAL POVERTY, CLIMATE CHANGE, AND THE ENVIRONMENT

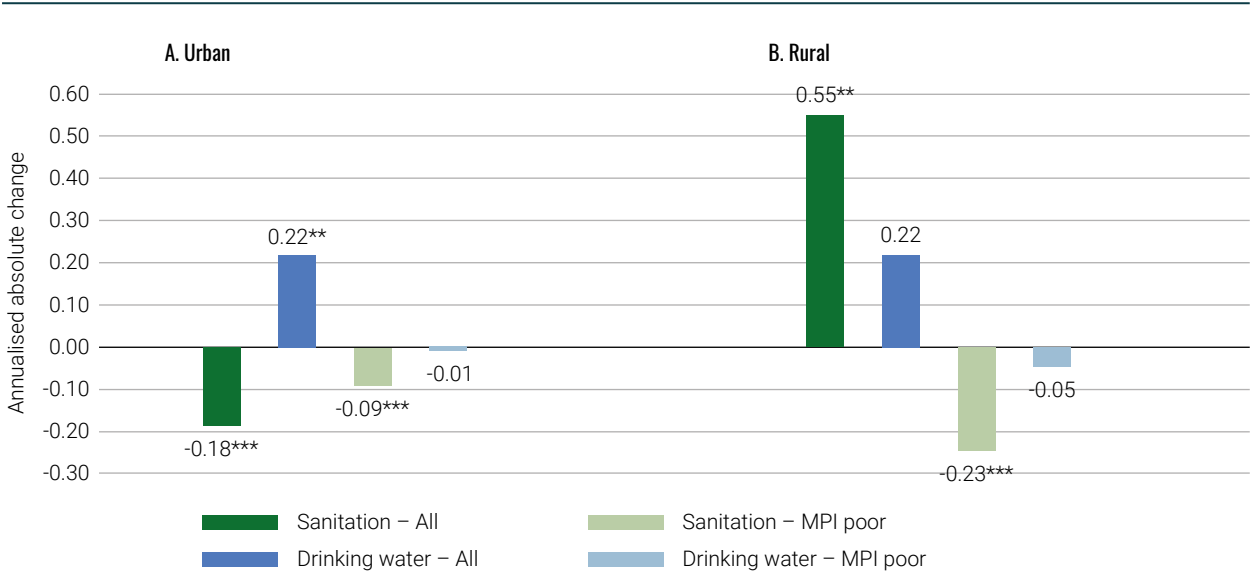
This section focuses on the intersection of multidimensional poverty, climate change, and the environment. It first analyses the environmental indicators in the context of Egypt’s key climate concerns and then evaluates the economic and human costs of environmental degradation in Egypt.

4.1 WATER SCARCITY, WASTE MANAGEMENT, AND URBANISATION

Egypt faces four key climate challenges that can be addressed by the global MPI: water scarcity, air pollution, waste management, and urbanisation (World Bank 2021a). As the Egypt data excludes cooking fuel, we cannot evaluate air pollution trends in the context of cooking with solid fuels. However, we can still break down the drinking water and sanitation trends for the wider population and MPI-poor people in rural and urban areas (Figure 22).

Figure 22 highlights several important findings. Focusing first on MPI-poor people, while there were sizeable reductions in sanitation deprivation among both the rural and urban populations (by -0.23% and -0.09% per year, respectively), there was no significant reduction in either poor population in drinking water deprivation. This may partly be because drinking water deprivation was already low among MPI-poor people in the initial year (0.8% of rural poor people and 0.1% for urban poor people in 2008). Nevertheless, considering that water scarcity is a current concern in Egypt (due to declining mean annual precipitation rates and increased likelihood of extreme weather events like droughts and heat waves), it is critical to ensure that Egypt’s public or private water infrastructure is prepared to overcome water shortages (World Bank 2021a). Without quick and proactive policies, the climate risk of water scarcity may disproportionately affect Egypt’s MPI-poor people.

Figure 22. Changes per year in drinking water and sanitation deprivation by urban–rural area and poverty status, 2008–14



Notes: *** statistically significant at $\alpha=0.01$, ** statistically significant at $\alpha=0.05$, * statistically significant at $\alpha=0.10$. For details on the computation of annualised changes, see Alkire, Kanagaratnam, and Suppa (2021).

Source: Alkire, Kanagaratnam, and Suppa (2021).

In terms of the whole population, in rural areas there was a significant increase in sanitation deprivation (by 0.55% per year). Waste management is another key climate risk for Egypt, as waste management services and infrastructure are struggling to keep up with population growth (GIZ, 2019). Improper waste management can lead to other serious environmental risks such as water, soil, and air pollution, as well as their corresponding risks to human and animal health. Without proper attention to this concerning trend, those who were vulnerable to multidimensional poverty – 8.7% of the rural population and 1.3% of the urban population in 2014 (Alkire, Kanagaratnam, and Suppa 2021) – may have seen their deprivations rise, so that they are now below the poverty threshold. Meanwhile, there was also a significant increase in the lack of clean drinking water among the urban population, highlighting that water scarcity remains a major climate risk for Egypt. The combination of these two reinforcing risks should be considered a critical issue for climate-sensitive policymaking in Egypt.

Finally, focusing on the urban-rural divide and the climate risks posed by urbanisation, we make two observations. First, rural and urban populations faced different risks. Sanitation deprivation fell among the urban population but increased among their rural peers. Moreover, the rural population saw no significant change in clean drinking water, while the urban population observed a significant increase in this indicator. That these populations face different climate risks is a key finding in terms of targeting environmental policies according to different geographic areas. Second, on severe multidimensional poverty – those who are deprived in at least half of the weighted deprivations – we saw that although overall incidence of poverty decreased significantly in both rural and urban areas, intensity of poverty decreased only for those in rural areas. In fact, the number of severely MPI-poor people in urban areas rose from 108,000 in 2008 to 117,000 in 2014 (Alkire, Kanagaratnam, and Suppa 2021). Without urgent, clear, and targeted policy action, these trends risk leaving the most vulnerable behind.

4.2 COST OF ENVIRONMENTAL DEGRADATION

Taking the analysis a step further, we can evaluate these findings in the context of the economic and human costs of environmental degradation and the IsDB Climate Action Plan 2020–2025 (IsDB, 2020). To do so, we present World Bank-published findings by Larsen (2019), who estimated health effects and their annual costs in Egypt for 2016/17 to evaluate the cost of environmental degradation.

Inadequate water supply, sanitation, and hygiene can cause diarrhoea and other serious infectious diseases, as well as heighten the risk of parasitic infections: moreover, repeated diarrheal infections in early childhood can also

lead to malnutrition and, at worst, child mortality (Larsen, 2019). Table 8 presents the human costs for Egypt due to deprivations in water, sanitation, and hygiene.

Inadequate water, sanitation, and hygiene caused an estimated 2.2 billion to 3.7 billion days lived with disease and 4,400 to 9,200 deaths in Egypt in 2017 (Larsen, 2019). Most of these days are from the high year-round prevalence of intestinal nematode infections and schistosomiasis among millions of people. These human costs also have an economic impact. Table 9 shows the estimate annual cost of inadequate WASH indicators as a percentage equivalent of Egypt's GDP.

Table 8. Health effects from inadequate water, sanitation, and hygiene (WASH) in Egypt, 2017

Estimated days lived with disease from inadequate WASH in Egypt, 2017 (million days)			
	Lower estimate	Central estimate	Upper estimate
Diarrheal diseases	318	352	387
Typhoid/paratyphoid	0.29	0.34	0.41
Schistosomiasis	417	476	544
Intestinal nematode infections	1,400	1,950	2,725
Trachoma	12	20	31
ALRI ^a	1.39	1.58	1.78
Total days of disease from WASH	2,147	2,799	3,688

Estimated deaths from inadequate WASH in Egypt, 2017			
	Lower estimate	Central estimate	Upper estimate
Diarrheal diseases	3,083	4,890	6,934
Typhoid/paratyphoid	98	193	335
Schistosomiasis	233	308	394
ALRI ^a	366	433	509
Indirect from WASH	595	799	1,060
Total deaths from WASH	4,374	6,624	9,231

Notes: a Acute lower respiratory infections (ALRI) from inadequate handwashing practices (Rabie and Curtis, 2006).

Source: Larsen (2019).

Table 9. Estimated annual cost of health effects of inadequate WASH in Egypt, 2016/17 (LE billion)

	Lower estimate	Central estimate	Upper estimate
Cost of mortality	13.3	20.2	28.1
Cost of morbidity	12.8	19.2	27.9
Total cost of health effects	26.1	39.4	56
% equivalent of GDP, 2016/17	0.75%	1.14%	1.61%

Source: Larsen (2019).

The annual cost of these health effects is estimated at LE 26 to 56 billion in 2016/17, with a central estimate of LE 39 billion (Larsen, 2019). This is equivalent to about 0.75% to 1.61% of Egypt's GDP during that period, with a central estimate of 1.14%. In this context, it is clear how the IsDB's key priorities of poverty reduction and climate action can work together to improve the lives of people within their Member Countries. From a multidimensional poverty standpoint, it is crucial that the IsDB's climate finance targets, as part of its Climate Action Plan 2020–2025, focus on financing climate change mitigation and adaptation activities in its development operations within Egypt. The trends we observe in the drinking water and sanitation indicators reflect the lived realities of the poor and wider population in Egypt, and they are a call to action for policymakers to offer sustainable, people-centred solutions.

5. POLICY EFFORTS AND THE MONITORING FRAMEWORK FOR THE MPI

Egypt experienced a reduction in the incidence of multi-dimensional poverty from 8.0% in 2008 to 4.9% in 2014. However, income poverty saw a substantial increase from 21.6% in 2008/09 to 27.8% in 2015 (Armanious, 2021; El-Laithy, 2019). This divergence between the poverty measures highlights the realisation that income poverty is an important metric, but insufficient to capture the full experience of poverty within Egypt. There is a need for complementary measures to go beyond the narrow definition of poverty as merely income, consumption, and expenditure to a wide range of deprivations in capabilities, resources, and rights.

Since 2014, the Government of Egypt has piloted several poverty reduction policies and programmes that target multidimensional deprivations. To eradicate poverty, the government introduced the Hayah Karima (Decent Life) policy in 2019, which aimed to promote social, economic, and environmental development in poor villages and provide basic services including access to safe drinking water, sanitation, garbage disposal, electricity, and internet. The programme includes interventions related to education, health care, nutrition, housing, family and childhood services, and financial inclusion. When the programme was first launched in 2019, it targeted the poorest rural communities, but by July 2021, it had scaled up to reach 4,500 villages in 20 governorates. Following the outbreak of COVID-19, the Ministry of Planning and Economic Development launched localisation reports for each governorate to document the progress of each governorate in its efforts towards achieving the SDGs and eradicating poverty at the local level (MPED, 2021). The Egyptian government also embarked on a full education reform programme, Education 2.0, in 2020. This aims to expand access to quality pre-primary education and special education for children with disabilities, develop the school's digital infrastructure and continuous professional and capacity development for teachers, and introduce new teaching techniques. Regarding nutrition, the government launched the 100 Million Health Initiative in 2018, with the goal of eliminating chronic diseases such as di-

abetes, hypertension, malnutrition, stunting, and obesity (MPED, 2021).

While there was a decline in MPI between 2008 and 2014, more recently, population growth rates have begun to shrink, from 2.62% in 2017 to 1.79% in 2020, with fertility rates dropping from 3.4% in 2017 to 2.9% in 2020 (CAPMAS, 2020). Consequently, the Government of Egypt introduced the Family Development Strategy to target women of reproductive age, between 15 and 45 years old. The programme has several main pillars: economic empowerment, digitisation, services intervention, and cultural, education, and media interventions – with an emphasis on enabling access to safe planning methods and increasing their usage rates. Each of these policies and programmes target the deprivations that contribute to the global MPI and aim to improve the lives of the multidimensionally poor in Egypt.

5.1 MULTIDIMENSIONAL POVERTY AND COVID-19

As of March 2022, the global death toll from the COVID-19 pandemic was over 6 million people (Johns Hopkins University, 2022). Egypt had recorded over 24,000 deaths attributed to COVID-19 (nearly 1 in 20 of the total cases), with a rate of 24.18 deaths per 100,000 of the population. This section analyses the regional context of Egypt concerning the multidimensional risk profile for COVID-19, and evaluates the social protection and monetary policy responses to the pandemic.

The multidimensional risk profile of the Europe/MENA Member Countries region

The global MPI can be used to identify populations at higher risk of COVID-19, using three of the indicators that lead to increased risk.³ Alkire et al. (2020a: pp.1-2) outline the reasons behind the selection of these indicators: nutrition is selected because 'undernutrition is strongly associated with weakened immune systems, morbidity, and mortality'; drinking water is selected because 'unsafe drinking water is associated with much of the global disease burden and weakened immune systems'; and

cooking fuel is selected because 'deprivation in clean cooking fuel is associated with indoor air pollution and acute respiratory infections'.

The analysis profiles those individuals within a country who are at risk – deprived in at least one of the indicators (nutrition, drinking water, or cooking fuel), and those who are at high risk – deprived in all three indicators. As Egypt did not have data on cooking fuel, instead we present the risk profile for the Europe/Middle East and North Africa region.

Table 10 details the proportion of the region's total population who are at risk or at high risk. As we do not have

country-level estimates for Egypt due to the lack of data on cooking fuel, we can consider the regional averages to stand in for Egypt's risk profile. Approximately one-third of the region's population (34.3%) are at risk, and MPI-poor people make up around one-third of this population (10.6%). Less than 1% of the region's population are at high risk (0.6%), although most of those at high risk are MPI poor (0.5%).

Social protection and monetary policy responses

The impact of COVID-19 on the economy and on poverty can be further understood by looking at the crises preparedness of the health sector in Egypt prior to the

Table 10. Average MPI and COVID-19 risk in the IsDB Europe/MENA Member Countries region

	At risk (%)	At high risk (%)	MPI poor and at risk (%)	MPI poor and at high risk (%)	Total population, 2018 ^a (thousands)	Number of poor people, 2018 ^b (thousands)
IsDB Europe/MENA region ^c	34.3	0.6	10.6	0.5	456,523	127,026
Albania	42.6	0.1	0.6	0	2,883	20
Algeria	25	0	1.7	0	42,228	583
Iraq	14.4	0	5.3	0	38,434	3,319
Jordan	4.6	0	0.2	0	9,965	43
Libya	48.1	0	1.7	0	6,679	133
Mauritania	78.4	14.1	49.1	14	4,403	2,227
Morocco	34.9	1.7	15.8	1.7	36,029	2,291
Pakistan	69.3	5.7	37.1	5.3	212,228	81,352
State of Palestine	43.4	0.1	0.9	0	4,863	28
Sudan	74.2	16.8	51.1	16.7	41,802	21,874
Syria	25.7	0	5.3	0	16,945	1,253
Tunisia	8.6	0	0.5	0	11,565	92
Yemen	76.5	14.3	46.4	14.2	28,499	13,812

Notes: a UNDESA (2019). Data accessed 28 April 2021. Own calculations using the sum of the country populations according to Table 1 (Alkire, Kanagaratnam, and Suppa 2021).

b UNDESA (2019). Data accessed 28 April 2021. Own calculations using the MPI results and the 2018 population projection (UNDESA, 2019). This was computed by multiplying the headcount (H) by the 2018 population projection, and rounding to the nearest thousand.

c Own calculations using the MPI results and the 2018 population projection (UNDESA, 2019). This was computed by population-weighting the risk profiles of each country in the Europe/MENA region to obtaining a region-wide average. We use the 2018 population estimates, following the risk profile estimates in Alkire et al. (2020a, 2020b, 2020c and 2020d).

Source: Alkire et al. (2020c) and Alkire, Kanagaratnam, and Suppa (2021).

Table 11. Egyptian government responses for social protection during COVID-19

Social assistance		Social insurance	
Cash-based transfers	Utility waivers	Monetary and regulatory	Health insurance
<p>A temporary cash assistance of LE 500 offered to 1.6 million irregular workers was initially planned for three months but later extended to six months, ending in March 2021 (Harndy 2021).</p>	<p>For low- and middle-income households, the government reduced the preferential interest rate from 10% to 8% for housing loans. It also proposed new guarantee funds for mortgages and consumer loans.</p>	<p>The Central Bank of Egypt reduced its policy rate by a total of 400 basis points.</p>	<p>The head of the Egyptian Tax Authority (ETA) recently issued a regulation regarding the payment of health insurance contributions (which amount to 0.25% of the total annual revenues of the ETA). Tax-payers can now pay these contributions electronically via any of the banks that support the ETA's electronic payment system, through the ETA's web portal.</p>
<p>The Takful and Karama cash transfer programme expanded its coverage from 60,000 households in 2015 to almost 3.7 million by May 2021 due to the pandemic, with a budget that had tripled from 2015 to 2021 (MPED 2021).</p>	<p>The Government of Egypt allocated LE 20 billion for a stock purchase programme.</p>	<p>The Central Bank approved a LE 100 billion loan guarantee fund to extend loans at preferential rates to the tourism, industry, agriculture and construction sectors.</p>	
<p>The Government of Egypt increased regular pensions by 14%.</p>	<p>On tax policies: 1) The ETA allowed taxpayers the option of remitting tax payments either electronically or through bank cheque, meaning that taxpayers were exempt from the administrative fees usually associated with these types of payments, for the submission of 2019/20 financial year tax returns. 2) Suspension of the administrative attachment on all taxpayers who have payable taxes against payment of 10% out of their due taxes and send their tax files back to be settled via settlement of tax disputes committees. 3) Stamp taxes were imposed on the total proceeds realised by tax residents of Egypt from selling or buying listed securities on the EGX, having been reduced to 0.05% instead of 0.15%. Capital gains tax was postponed until further notice. 4) The moratorium on the tax law on agricultural land has been extended for two years. 5) Various real estate tax relief measures have been introduced.</p>	<p>The government oversaw a reduction of energy prices.</p>	

Table 11. Egyptian government responses for social protection during COVID-19, continued

Cash-based transfers	Social assistance		Social insurance
	Utility waivers	Monetary and regulatory	
The Government of Egypt implemented a LE 19 billion consumer spending programme, including subsidised loans with low interest rates and subsidised ration cards (IMF 2021b).	<p>The limit for electronic payments via mobile phones was raised to LE 30,000/day and LE 100,000/month for individuals.</p> <p>On loan policies: 1) Microlenders were advised by the Financial Regulatory Authority to consider, on a case-by-case basis, delaying up to 50% of the monthly instalments of struggling clients, and regulations issued in 2020 requiring banks to obtain detailed information of borrowers were relaxed. 2) Suspension of credit score blacklists for irregular clients and the waiver of court cases for defaulted customers were announced. 3) Support was introduced for small firms impacted by COVID-19, mostly in the manufacturing sector, by offering short-term loans of up to a year.</p>	The government oversaw the expansion of export subsidy programmes.	Health insurance

Source: Gentilini et al. (2021: pp. 223-4).

pandemic. Poor health investment is generally associated with poor health outcomes and therefore poor health sector preparedness, as both human and physical infrastructures are required to undertake detective and preventive measures during health crises (IsDBI, 2021). This implies that, to respond well to public health emergencies, scaled-up investment in health infrastructure is critical and pathogen prevention systems must be strengthened.

During the initial stages of the pandemic, Egypt had a moderate number of cumulative deaths per million people (4), with this attributed to the restrictive policies around closures during that period. The death rates gradually increased to reach 115 per million in March 2021 (Krafft, Assaad and Marouani, 2021). The Stringency Index, measuring the level of government restrictions across a variety of dimensions (ranging from 0 to 100), remained 73 from March to April 2020 but jumped to 79 from May to June 2020 with the resurgence of the pandemic (Ritchie et al., 2020). These restrictions included school closures, cancelled public events, public transport closures, internal movement restrictions, and total border closures (IMF, 2021a; Krafft, Assaad, and Marouani, 2021). It is worth noting that Egypt is the only country in the MENA region that had a positive GDP growth rate in 2020 – 3.6% in 2020 compared to 5.6% in 2019 (World Bank, 2021b) – even as Egypt created an emergency social protection plan amounting to 1.8% of its GDP (IMF, 2021a).

Another way to measure government effectiveness during a health crisis is to evaluate social policy responses to the economic costs of a public health emergency. The Egyptian government was able to put in place a wide range of social protection policies to curb the economic costs to everyday Egyptians in 2020 and 2021. Throughout the pandemic, Gentilini et al. (2021) tracked governments' responses across a range of different social protection measures and jobs responses, according to three categories: social assistance, social insurance, and labour markets. In social assistance, they reviewed policies such as cash-based transfers, public works programmes, in-kind support, and utility and financial support. For social insurance, they surveyed unemployment, health insurance support, pensions, and social security contributions (waiver/subsidy). For labour markets, they reviewed wage subsidies, training measures, labour regulation, and shorter work times. In Egypt, there was a mix of support for workers and firms to mitigate the pandemic effects, in terms of social assistance and social insurance policies (Table 11 on pp. 36–37).

6. CONCLUDING REMARKS

With the acute stages of the global COVID-19 pandemic behind us, policymakers and civil society organisations around the world must confront the devastating and multifaceted impacts of the public health crisis. Without clear and cogent attention to the varied conditions among poor people, governments risk jeopardising the last two decades' progress towards eradicating poverty. Governments and policymakers need more information to cope with the multidimensional effects of the pandemic, to act against its adverse consequences, and to protect and improve the lives of the poorest people. To this end, this brief synthesised data on where Egypt stands in terms of pre-pandemic poverty levels and trends, as well as the risks and costs of environmental degradation, to highlight a path forward that ensures sustainable development for all.

Egypt is an important case for several reasons. On the one hand, over 4.7 million of Egypt's population were living in multidimensional poverty according to the most recent data from 2014. Egypt has stark differences in the incidence of poverty between its urban and rural populations (6.3% and 3.4%, respectively), and the MPI among its governorates varies from as little as 0.001 in Port Said to 0.042 in Souhag. On the other hand, Egypt illustrates the possible progress in reducing poverty, even among low-poverty countries. Between 2008 and 2014, Egypt's MPI reduced by nearly half, as did the proportion of the population who was poor. This poverty reduction was most pronounced in the most vulnerable groups, with the four poorest governorates (Assuit, Beni Suef, Fayoum, and Menya) outpacing national reductions and rural poverty outpacing the national average. These results show great determination to fulfil the sustainable development pledge to Leave No One Behind, as they also extend to children, with poverty reduction in the poorest and youngest age group (0-9 years) outpacing the national reduction between 2008 and 2014. Further-

more, despite a steady increase in the national income poverty rate between 2008/09 and 2015, we observe a significant reduction in multidimensional poverty over a similar period, reinforcing the importance of multidimensional and monetary poverty measures as complementary measures that capture different deprivations within a population.

The brief also shows that as the COVID-19 pandemic risks reversing hard-won advances in poverty reduction, better data can aid governments in decision-making, given limited fiscal resources. For example, information on overlapped deprivations analysed in this brief may help to set some principles for identifying those who are most prone to the severest adverse effects of the pandemic. Furthermore, this brief considered the interaction of multidimensional poverty, climate change, and the environment by analysing Egypt's key climate concerns and evaluating the economic and human costs of environmental degradation in Egypt. As we build back better in the wake of the COVID-19 pandemic, evidence-driven policymaking must centre the diverse and multidimensional realities of poor people globally in the context of the worsening climate crisis, or else risk losing the gains established in the first two decades of the twenty-first century.

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ENDNOTES

- 1 Additionally, UNICEF and CAPMAS released an MPI focused on child poverty in 2017, which uses a separate MODA methodology to assess poverty using the 2014 DHS dataset (UNICEF, 2017).
- 2 Harmonisation seeks to make two or more MPI estimations comparable by aligning the indicator definitions. In other words, harmonisation, where necessary, recreates the indicators in the global MPI so that they are using the same information and deprivation cutoffs across survey years. All indicator definitions, weights, and poverty cutoffs used in the survey comparisons follow the same structure within countries. For details on the harmonisation process to create MPI_t estimates, see Alkire, Kanagaratnam, and Suppa (2021: pp. 14–18).
- 3 See Alkire et al. (2020a, 2020b, 2020c and 2020d) for more details on the method and the analysis possible.

