



Global Multidimensional Poverty Index 2014

Sabina Alkire, Mihika Chatterjee, Adriana Conconi, Suman Seth and Ana Vaz | June 2014

The Global Multidimensional Poverty Index (MPI) is an index of acute multidimensional poverty that covers over 100 developing countries. It assesses the nature and intensity of poverty at the individual level, by directly measuring the overlapping deprivations poor people experience simultaneously. It provides a vivid picture of how and where people are poor, within and across countries, regions and the world, enabling policymakers to better target their resources at those most in need through policy interventions that tackle the many different aspects of poverty together.

This brief explains how the Global MPI is constructed and how it can be used, and summarises a number of analyses of the Global MPI figures released in June 2014.

Inside this briefing

Page 2: What is the Global Multidimensional Poverty Index (MPI)? See how it's made, by directly measuring overlapping deprivations

Page 3: Global MPI 2014: Distribution and Disparity An overview of the 2014 findings

Page 4: Reducing Multidimensional Poverty over Time: Pace and Patterns in 34 countries

Page 5: Destitution: Who and Where are the Poorest of the Poor? We find out using a new measure

Page 6: Poverty Levels in Rural and Urban Areas – and how they differ

Page 7: Inequality Among the MPI Poor: Levels and Trends using new and cutting-edge measures

Page 8: Multidimensional Poverty and Income Poverty: Comparing Headcount Ratios View at a glance how MPI and \$1.25/day poverty headcount ratios vary

Global MPI 2014: Updates and coverage

- In 2014, we have added two new countries and updated 31; the index now includes 108 countries
- The Global MPI has been calculated for 780 sub-national regions across 69 countries
- The 108 countries analysed include 31 Low-Income Countries, 67 Middle-Income Countries and 10 High-Income Countries
- These countries have a total population of 5.4 billion people, which is 78% of the world's population¹
- Data on destitution are currently available for 49 countries, and we will add others soon
- Changes in MPI over time have been analysed for 34 countries and 338 sub-national regions, covering 2.5 billion people

Key findings from 2014

- A total of 1.6 billion people are living in multidimensional poverty; more than 30% of the people living in the 108 countries analysed
- Of these 1.6 billion people, 52% live in South Asia, and 29% in Sub-Saharan Africa. Most MPI poor people 71% live in Middle Income Countries
- The country with the highest percentage of MPI poor people is still Niger; 2012 data from Niger shows 89.3% of its population are multidimensionally poor
- Of the 1.6 billion identified as MPI poor, 85% live in rural areas; significantly higher than income poverty estimates of 70-75%
- Of 34 countries for which we have time-series data, 30 covering 98% of the MPI poor people across all 34 - had statistically significant reductions in multidimensional poverty
- The countries that reduced MPI and destitution most in absolute terms were mostly Low Income Countries and Least Developed Countries
- Nepal made the fastest progress, showing a fall in the percentage of the population who were MPI poor from 65% to 44% in a five-year period (2006-2011)
- Nearly all countries that reduced MPI poverty also reduced inequality among the poor
- Across the 49 countries analysed so far, half of all MPI poor people are destitute; over 638 million people
- India is home to 343.5 million destitute people 28.5% of its population is destitute. Overall in South Asia, over 420 million people are destitute
- In Niger, 68.8% of the population is destitute the highest share of any country

Aruna - an individual poverty profile



Aruna, her husband and their four children live beside the railway tracks beneath a bridge in Mumbai, India. Their only light comes from the streetlights, and they rely on a pay-and-use toilet, which closes at night, for water and sanitation. 30-year-old Aruna earns a living by making and selling flower

garlands with a gentle smile, and the children blow up balloons and sell them at the seaside each day after school, returning 'home' at 10pm. Aruna and her family are multidimensionally poor.

WHAT IS THE GLOBAL MAP?

The Global MPI looks at poverty through a 'highresolution' lens. It directly measures the nature and magnitude of overlapping deprivations in health, education and living standard at the household level. So, the MPI provides vital information on who is poor and how they are poor, enabling policymakers to target resources and design policies more effectively.

The Global MPI is the first international measure to reflect the **intensity** of poverty – the number of deprivations each person faces at the same time. It offers an essential complement to income poverty indices because it measures and compares deprivations directly, without the need for PPPs (Purchasing Power Parity rates). It can be broken down by social group and geographical area to reveal poverty patterns within countries, and can also be used to track changes in poverty over time.

The Global MPI was developed in 2010 by the Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme for UNDP's flagship *Human Development Reports* (Alkire and Santos 2010). The figures and analysis have been updated using newly released data for each *Human Development Report* since then (Alkire, Roche, Santos and Seth 2011; Alkire, Conconi and Roche 2013; Alkire, Conconi and Seth 2014).

INSIDE THE MPI: THREE DIMENSIONS, TEN INDICATORS

Who is poor? A person is identified as multidimensionally poor (or 'MPI poor') if they are deprived in at least one third of the weighted MPI indicators set out in the table below. The coloured indicators show Aruna's deprivations: she is deprived in 66% of the MPI indicators.



CONSTRUCTING THE GLOBAL MPI

The Global MPI was created using a method developed by Sabina Alkire, OPHI Director, and James Foster, OPHI Research Associate and Professor of Economics and International Affairs at George Washington University (2011). The **Alkire Foster** method is flexible and can be used with different dimensions, indicators, weights and cutoffs to create measures specific to different societies and situations.

The MPI is the product of two components:

- **Incidence:** the percentage of people who are poor (or the headcount ratio, **H**);
- Intensity: the average share of indicators in which poor people are deprived (A).

So: MPI = H x A



Table 1: The dimensions, indicators, deprivation thresholds and weights of the MPI²

Dimension	Indicator	Deprived if	Relative Weight
Education	Years of Schooling	No household member has completed five years of schooling.	1/6
	Child School Attendance	Any school-aged child is not attending school up to the age at which they would complete class 8.	1/6
Health Child Mortality		Any child has died in the household.	1/6
неан	Nutrition	Any adult or child for whom there is nutritional information is malnourished.	1/6
Living Standard	Electricity	The household has no electricity.	1/18
	Improved Sanitation	The household's sanitation facility is not improved (according to MDG guidelines), or it is improved but shared with other households.	1/18
	Safe Drinking Water The household does not have access to safe drinking water (according to MDG guidelines) or safe drinking water is more than a 30-minute walk from home, roundtrip.		1/18
	Flooring	The household has a dirt, sand or dung floor.	1/18
	Cooking Fuel	The household cooks with dung, wood or charcoal.	1/18
	Assets	The household does not own more than one radio, TV, telephone, bike, motorbike or refrigerator and does not own a car or truck.	1/18

THE GLOBAL MPI 2014 - DISTRIBUTION AND DISPARITY

DISTRIBUTION

The Global MPI 2014 covers **108 countries**, which are home to 5.4 billion people using 2010 population data (UNDESA 2013). In 2014, a total of **1.6 billion people** are living in multidimensional poverty; more than 30% of all people living in these countries.

Where do the world's poor call home? Of these 1.6 billion people, 52% live in South Asia, and 29% in Sub-Saharan Africa. Most MPI poor people - 71% - live in Middle Income Countries.

The country with the highest percentage of MPI poor people is **Niger**, where 2012 data shows it has a headcount ratio (H) of 89.3%. This means that in 2014, no country has a proportion of MPI poor people higher than 90%, although subnational headcount ratios exceed 90% for 43 out of the 780 subnational regions for which we have subnational MPI figures.

DISPARITY

We can zoom in further on the MPI poor and see the disparities between people in terms of the **intensity** of poverty being experienced. Aruna (see opposite page) was deprived in 66% of deprivations – what deprivation scores did others experience?

Figure 2 shows this distribution for the Central African Republic and Guinea-Bissau. In both countries, nearly 77.5 percent of the population are multidimensionally poor. However, the distribution of people's deprivation scores is quite different. Nearly 12 percent of the MPI poor in the Central African Republic experience intensities of poverty above 70%; in Guinea-Bissau, this proportion climbs to 21 percent of the MPI poor.

You can see this breakdown in each of the 108 Country Briefings, or via the Global MPI Interactive Databank visit www.ophi.org.uk/multidimensional-poverty-index.

Data sources

The MPI relies on the most recent data available, mainly from three datasets that are publicly available and comparable for most developing countries: USAID's Demographic and Health Survey (DHS), UNICEF's Multiple Indicators Cluster Survey (MICS), and the WHO's World Health Survey (WHS).

Additionally, we used six special surveys covering urban Argentina (ENNyS), Brazil (PNDS), Mexico (ENSANUT), Morocco (ENNVM), the Occupied Palestinian Territories (PAPFAM), and South Africa (NIDS). The Global MPI was computed for different numbers of countries and dates of data.

- In 2010: 104 developing countries with data 2000-2008
- In 2011: 109 countries with data 2001-2010, including 25 new datasets
- In 2013: 104 countries with data 2002-2011, including 16 new datasets
- In 2014: 108 countries with data 2002-2013, including 33 new datasets
- Recall that the most up-to-date data in the 2010 Global MPI was from 2008; in the 2014 MPI, 57 countries have data that is more recent from 2009-2013.
- In 2010, we observed that the poorest 8 large states in India were home to more MPI poor people than the 26 poorest African countries. If we update that comparison using MPI 2014 estimations, the poorest 8 large Indian states are home to more MPI poor people than the 28 poorest African countries (435M vs 428M), and their combined MPI values are very similar (0.374 vs 0.377).
- However this comparison is sorely affected by the fact that India's data are from 2005/6, whereas data for 25 of those Africa countries are more recent than India's, and 17 have data that are 2010 or later. India's data are out of date.



Figure 2: Distribution of poverty intensities in the Central African Republic (left) and Guinea-Bissau (right)

MPI 2014 | Global Multidimensional Poverty Index 2014

REDUCING MULTIDIMENSIONAL POVERTY OVER TIME: PACE AND PATTERNS

In 2014, we analysed how multidimensional poverty changed in 34 countries and 338 sub-national regions covering 2.5 billion people - just over one-third of the world's population. These nations are in every geographic region in the developing world, and include Low, Lower Middle, and Upper Middle Income Countries, with a Gross National Income per capita in 2012 ranging from \$320 in Malawi to \$10,040 in Gabon.

Of the 34 countries, 30 - covering 98% of the poor people across all 34 - showed statistically significant reductions in multidimensional poverty.³ Nepal had the fastest progress, showing a fall in MPI from 0.350 to 0.217 – about -0.027 per year – and a fall in incidence (H) from 65% to 44% in a five-year period (2006-2011). Rwanda and Ghana were close behind, reducing poverty rates by 3.4 percentage points per year. Bangladesh, Cambodia, Tanzania and Bolivia showed the next fastest reduction of MPI, reducing poverty rates between 2.5 and 3.4 percentage points, and MPI by -0.017 to -0.021 per year.

Strikingly, the countries that reduced MPI most in absolute terms were predominantly **Low Income Countries** and **Least Developed Countries**; in 2012 Nepal's GNI per capita is \$700; Rwanda's is \$600; Bangladesh's \$840; Cambodia's \$880 and Tanzania's \$570. All are Low Income Countries, with Rwanda's pace of growth being the fastest at over 8% during the survey period.

Absolute reductions in the **intensity** of MPI poverty – the average share of deprivations poor people experience at once - were strongest in Rwanda, Ethiopia, Nepal, Bolivia, Niger, Tanzania, Cambodia and Ghana. These countries made most progress in ensuring their ongoing poor people are 'less poor', by reducing the number of hardships they experience.

BREAKDOWN BY INDICATOR

Ten countries reduced all MPI indicators significantly: Bolivia, Cambodia, Colombia, the Dominican Republic, Gabon, India, Indonesia⁴, Mozambique, Nepal, and Rwanda. Seven countries reduced 9 MPI indicators significantly, and six countries reduced 8 MPI indicators significantly.

Countries had different profiles. Figure 3 shows how country profiles of reductions in censored headcount ratios vary: Rwanda had the highest reductions in sanitation; Ghana in school attendance; Tanzania in child mortality as well as sanitation, and Uganda in water and assets.



DISAGGREGATING BY REGION

Eight countries – Bangladesh (2007-11), Bolivia, Gabon, Ghana, Malawi, Mozambique, Niger, and Rwanda showed statistically significant reductions in each of their subnational regions, which is truly stellar progress. And in total, 208 out of 338 regions housing 78% of the poor had statistically significant reductions in MPI.

Happily, in nine countries, the poorest subnational area made the biggest strides in reducing multidimensional poverty. In Bangladesh (2007-2011), Bolivia, Colombia, Egypt, Kenya, Malawi, Mozambique, Namibia and Niger, the poorest region reduced poverty the most.

MPI, INCOME POVERTY AND ECONOMIC GROWTH

Around half of the countries for which we have income data for a similar period reduced multidimensional poverty faster than income poverty; in the others income poverty fell faster. Bolivia, Ghana, and Rwanda cut MPI poverty two to three times faster than income poverty, while Nepal made stellar progress in both. In Nigeria and Zambia, while MPI poverty fell, income poverty actually increased.

How did poverty change across ethnic groups?

Benin and Kenya both had statistically significant reductions in MPI poverty. But when we disaggregate by ethnic groups, we see these gains were distributed very differently.





Benin reduced MPI poverty significantly for only two out of the eight main ethnic groups, and poverty reduction was practically zero among the poorest ethnic group, the Peulh, reflecting an increase in horizontal inequality among the poor.

In contrast Kenya had an excellent performance. The multidimensionally poorest group, the Somali, had the biggest poverty reduction. The Somali group reduced poverty at a yearly rate of 4.6 percent, well above the national rate of 3.5 percent. In Kenya the poorest ethnic groups are catching up.

DESTITUTION - WHO AND WHERE ARE THE POOREST OF THE POOR?

Table 2: The deprivation thresholds of those who are both MPI poor and destitute							
Dimension	Indicator	Deprived if	Relative Weight				
E du antinu	Years of Schooling	No household member has completed at least one year of schooling (>=1).	1/6				
Education	Child School Attendance	No child is attending school up to the age at which they should finish class 6 .	1/6				
	Child Mortality	2 or more children have died in the household.	1/6				
Health	Nutrition	Severe undernourishment of any adult (BMI<17kg/m ²) or any child (-3 standard deviations from the median).	1/6				
	Electricity	The household has no electricity (no change).	1/18				
	Improved Sanitation	There is no facility (open defecation) .	1/18				
Living Standard	Safe Drinking Water	The household does not have access to safe drinking water, or safe water is more than a 45-minute walk (round trip).	1/18				
	Flooring	The household has a dirt, sand, or dung floor (no change).	1/18				
	Cooking Fuel The household cooks with dung or wood (coal/lignite/charcoal are now non-deprived).		1/18				
	Assets	The household has no assets (radio, mobile phone etc.) and no car.	1/18				

This year the Global MPI shines a light on the poorest of the poor – the **destitute**. Those identified as 'Destitute' are already MPI poor. In addition, they are deprived in at least one-third of the same weighted indicators, but according to more **extreme criteria** than those used to identify the MPI poor, described in the table above; for example, two or more children in the household have died (rather than one); the household practises open defecation.

Data on destitution is available for 49 of the 108 countries analysed in 2014. These 49 countries house 1.2 billion out of the total 1.6 billion MPI poor in the complete set of 108 countries. Over the coming months we will be making data on destitution available for over 40 more countries covered by the Global MPI; check <u>www.ophi.org.uk/</u> multidimensional-poverty-index for updates.

DESTITUTION – KEY FINDINGS

- Over 638 million people are destitute across only 49 countries analysed so far
- Across these 49 countries half of MPI poor people are destitute.
- India is home to 343.5 million destitute people 28.5% of its population is destitute. And overall in South Asia, over 420 million people are destitute.
- In Niger, 68.8% of the population is destitute the highest share of any country. In Ethiopia this figure is 58.1% and in Burkina Faso, 57.5%.
- Ethiopia reduced the percentage of destitute people 30 percentage points from 2000-2011
- Of the 34 countries for which we have time-series data, eight of the top ten performers at tackling destitution were Low Income Countries or Least Developed Countries.

ENDING DESTITUTION

In the same 34 countries as before we study how destitution has changed.⁵ Fully 28 of these countries significantly reduced destitution⁶, while in Armenia, Egypt, Jordan, Madagascar and Pakistan there was no change.

The good news is that in nearly all of the countries analysed, destitution is being reduced in relative annualized terms⁷ faster than multidimensional poverty. In Ethiopia, Guyana, Niger and Tanzania that is also true in

absolute terms. When this happens, the poorest of the poor are being reached, and there is potential for those who are destitute to 'catch up'. Strikingly, the countries doing best at tackling destitution are mostly **Low Income** and **Least Developed Countries** (LICs and LDCs). The largest absolute reduction in the destitution MPI was seen in Ethiopia, followed by Niger, Ghana, Bolivia, Rwanda, Tanzania, Nepal, Haiti, Bangladesh and Zambia – all of them LICS or Least Developed Countries except Ghana and Bolivia.⁸



What does it mean to be destitute?

- 46% of the destitute don't have anyone in their home with more than one year of schooling
- 36% of the destitute have all primary-aged school children out of school
- 41% of the destitute live in a household which has lost two or more children
- 67% of the destitute have someone at home with severe malnutrition
- 71% of the destitute don't have electricity to turn on the light
- 90% of the destitute practise open defecation to relieve themselves
- 40% of the destitute don't have clean water, or must walk 45 minutes to get it
- 83% of the destitute have only a dirt floor
- 98% of the destitute cook with wood, dung, or straw
- 69% of the destitute don't even own a mobile phone or a radio – nor a refrigerator or bike or television
- All of the destitute are deprived in at least one-third of the weighted indicators mentioned above

MPI 2014 | Global Multidimensional Poverty Index 2014 POVERTY LEVELS IN RURAL AND URBAN AREAS

As the analyses of destitution and dynamics elsewhere in this brief show, there are marked discrepancies between poverty levels in **urban and rural areas**. The population split in 105 countries that allow for urban/rural comparisons shows that in the most recent period analysed, 1/3 of people in these countries live in urban areas, and 2/3 live in rural areas.

We find that across these countries, 85% of the MPI poor live in rural areas, and 15% in urban ones. The populationweighted 'average' urban MPI is 0.059, and the 'average' rural MPI is 0.284. Strikingly, the highest proportion of MPI poor people in an urban area is 68.5% (Liberia), while in a rural area it is 96.9% (Somalia). The greatest intensity (A) in an urban area is 55% (Mali), while in a rural setting it is 69.5% (Niger).

As Table 3 shows, this share varies across geographical regions – from 28.6 percent in high-income countries to 86% in Sub-Saharan Africa and South Asia. Most of the MPI poor – both urban and rural – live in South Asia. The rural-urban difference in the headcount ratio (proportion of poor) is particularly stark in South Asia and Sub-Saharan Africa – 39.3 and 46.3 percentage points, respectively. The

intensities of poverty are consistently higher in rural areas for all regions and much higher in Sub-Saharan Africa and Middle East and North Africa, where they differ by nearly ten percentage points.

CHANGES IN RURAL AND URBAN POVERTY OVER TIME

We compare changes over time in rural and urban areas for 34 countries, with a combined population of over 2.5 billion people. For three countries, Bangladesh, Ethiopia and Peru, we have changes over two periods.

In terms of changes over time, both rural and urban regions reduced MPI strongly although rural areas as a whole reduced MPI significantly faster than urban areas – as might be expected given the higher rates of poverty in rural areas. For example, rural areas reduced the headcount ratio by 1.3 percentage points per year instead of 1 percentage point per year for urban areas. The annualized average rural MPI reduction was 0.009, whereas the urban MPI reduction was 0.005.

Rural and urban areas both reduced sanitation deprivations most, and tended to have stronger reductions in living standard indicators. However, rural areas had faster rates of reduction in most indicators.

Table 3: MPI Poverty by Regio	h
-------------------------------	---

	Number of Countries	Total Population (thousands)	Number of MPI Poor (thousands)	Number of Rural Poor (thousands)	Number of Urban Poor (thousands)	MPI poor living in rural areas 'Rural Share' (%)
All Countries ⁹	105	4,001,345	1,433,456	1,214,322	219,134	84.7%
East Asia & Pacific	9	514,360	64,663	46,863	17,800	72.5%
Europe & Central Asia	17	233,731	8,820	5,543	3,277	62.8%
Latin America & Caribbean	15	469,739	28,697	19,953	8,744	69.5%
Middle East & North Africa	9	206,909	25,345	19,074	6,271	75.3%
South Asia	8	1,606,945	833,946	719,496	114,450	86.3%
Sub-Saharan Africa	38	789,187	469,342	402,637	66,705	85.8%
High Income Countries	9	180,474	2,643	756	1,887	28.6%

Source: This and other tables use the MPI estimations for 105 countries (Alkire, Conconi and Seth 2014) using data from 2002-2013, with 60 countries' data being from 2008-13. Argentina and Slovenia are excluded as their surveys do not cover rural areas. China is also excluded since data are from 2002.¹⁰ Estimates are aggregated using 2010 UN Population Statistics from UNDESA (2013).

Table 4: MPI in Rural and Urban Regions

		3					
	Urban Areas			Rural Areas			
	MPI	Incidence (H)	Intensity (A)	MPI	Incidence (H)	Intensity (A)	
All Countries	0.059	13%	45.7%	0.284	52.4%	54.1%	
East Asia & Pacific	0.032	8.1%	39.7%	0.073	15.9%	45.9%	
Europe & Central Asia	0.009	2.5%	37.6%	0.023	5.5%	41.3%	
Latin America & Caribbean	0.010	2.5%	39.5%	0.080	17.5%	45.6%	
Middle East & North Africa	0.023	5.8%	39.3%	0.095	19.1%	49.6%	
South Asia	0.113	24.2%	46.7%	0.338	63.5%	53.2%	
Sub-Saharan Africa	0.131	27.4%	47.7%	0.424	73.8%	57.5%	
High Income Countries	0.005	1.2%	36.8%	0.011	2.7%	39.7%	

Source: This table uses the 105 MPI countries (Alkire, Conconi and Seth 2014), aggregated using 2010 UN Population Statistics from UNDESA (2013). Regional definitions use the World Bank regional classifications; see http://data.worldbank.org/about/country-classifications/country-classifications/country-and-lending-groups.

INEQUALITY AMONG THE MPI POOR: LEVELS AND TRENDS

Poverty reduction is not necessarily uniform across all poor people in a country, or across population sub-groups; an improvement overall may yet leave the poorest of the poor behind. In 2014 we used a separate, decomposable measure of inequality – a positive multiple of **variance** – to analyse inequality among the MPI poor (Alkire and Seth 2014).

The measure gives a value between zero and one; if all poor people have the same deprivation score, there is **no inequality and the value is zero.** But if half of MPI poor people are deprived in all of the MPI indicators, and half of them are deprived in only one third – the minimum at which they are identified as MPI poor – the inequality measure would show the **maximum value of one.**

In 2014, we measured inequality among the poor in **90 countries**, and found the highest levels are to be found in 15 Sub-Saharan African countries; in Pakistan, India and Afghanistan; and in Yemen and Somalia. The lowest rate of inequality we found was in **Belarus at 0.006**, and the greatest inequality was in **Burkina Faso, with a value of 0.3**. In general, countries with higher rates of MPI poverty also show greater inequality among the poor, but there are several instances where this is not the case.

An analysis of how inequality among the MPI poor has changed in 34 countries reveals a generally positive story: nearly all countries that reduced MPI poverty also reduced inequality among the poor.

REGIONAL DISPARITIES

We used another new measure to analyse changes in subnational disparity in MPIs – in other words, **disparity between subnational MPI values** – in 31 countries. We found that national reductions in MPI poverty are not shared uniformly across all sub-national regions within these countries; less than half of the 31 countries analysed significantly reduced sub-national disparity. In those that did not, horizontal inequalities were replicated – or worse, the poorest groups were being left behind.

The inequality measure can provide insights into these disparities and help us to understand whether the differences are due to geographical causes or something else, such as rural-urban differences or cultural factors.

The table below, for example, shows results for Togo and Bangladesh. The two countries show fairly similar values for MPI, H (the incidence of poverty) and A (the intensity

of poverty). Inequality among the poor is also very similar. However, though both countries have roughly the same number of sub-national regions, the level of sub-national disparity is much higher in Togo than in Bangladesh.

NOTES

1. Unless otherwise specified, all population-weighted aggregates use data from the 2012 Population Revision of UNDESA's Population Division (2013).

2. For more details, see 'Multidimensional Poverty Index 2014: Brief Methodological Note and Results', Alkire, Conconi and Seth (2014).

3. All statistical significance is evaluated at of $\Box = 0.05$. 29 of the 30 countries' changes were significant at $\Box = 0.01$. Ethiopia, Peru and Bangladesh had comparisons for two periods. Guyana had statistically significant reductions but only at $\Box = 0.10$, as did Peru 2005-2008. Madagascar had a statistically significant increase in MPI at $\Box = 0.01$.

4. Indonesia reduced all nine indicators for which it has information.

5. These 71 datasets have been harmonized for strict comparability, so the numbers may not match the published destitution figures exactly.

6. We use a significance level of 0.05. Senegal's reduction in the destitution MPI was statistically significant only at 0.1 level. Bangladesh, Ethiopia and Peru reduced destitution significantly in both periods.

7. The relative rate of change is the difference in levels across two periods as a percentage of the initial period. The annualized relative rate of change is the compound rate of reduction per year between the initial and the final periods.

8. According to the DAC figures for 2012 and 2013 aid flows.

9. Regions are based on the World Bank regional classification: <u>http://data.worldbank.org/about/country-classifications/country-and-lending-groups</u> accessed 24 May 2014.

10. Figures do not change significantly when including China. Results with and without China and India are available at OPHI's website.

REFERENCES

Alkire, S., A. Conconi and S. Seth (2014): 'Measuring Destitution in Developing Countries: An Ordinal Approach for Identifying Linked Subsets of the Multidimensionally Poor', OPHI Research in Progress.

Alkire, S., A. Conconi, and S. Seth (2014): 'Multidimensional Poverty Index 2014: Brief Methodological Note and Results', Oxford Poverty and Human Development Initiative, University of Oxford.

Alkire S, J. M. Roche, and A. Vaz (2014): 'Multidimensional Poverty Dynamics: Methodology and Results for 34 Countries'. *Mimeo.*

OECD (2013) 'DAC List of ODA Recipients – Effective for reporting on 2012 and 2013 flows'. <u>www.oecd.org/dac/stats/DAC List used for</u> 2012 and 2013 flows.pdf

Seth S. and S. Alkire (2014): 'Measuring and Decomposing Inequality among the Multidimensionally Poor Using Ordinal Data: A Counting Approach', *OPHI Working Paper* 68, Oxford Poverty and Human Development Initiative, University of Oxford.

Table 5: Similar inequality among the poor but different levels of sub-national disparity: Togo and Bangladesh								
Country	Year	MPI	A	н	Inequality Among The Poor V ¹	Disparity Between MPIs V ^D	Number of Regions	
Тодо	2010	0.250	50.3%	49.8%	0.194	0.042	6	
Bangladesh	2011	0.253	49.5%	51.2%	0.192	0.004	7	

Source: Seth and Alkire (2014)

Comparing the Headcount Ratios of MPI Poor, Destitute and \$1.25/day Poor



governmental organisations, and private benefactors. For a list of our funders and donors, please OPHI gratefully acknowledges support from research councils, non-governmental and visit our website: <u>www.ophi.org.uk</u>.

Oxford OX1 3TB UK

present the \$1.25/day headcount rates if the \$1.25/day and MPI survey years are more than three years apart.

DXFORD POVERTY & HUMAN DEVELOPMENT INITIATIVE