The Multidimensional Poverty Index or MPI is an international poverty measure developed by the Oxford Poverty and Human Development Initiative (OPHI) for the United Nations Development Programme’s flagship Human Development Report. The innovative index reflects the multiple deprivations that a poor person faces with respect to education, health and living standards. This brief summarises the key findings for 2011, summarises the method and shows how the MPI can be used.

What’s New?

• In 2011, the MPI has been calculated for 5 new countries and updated for 20 countries
• The MPI has been calculated for sub-national regions across 66 countries
• Changes of MPI over time have been analysed for 10 countries and their regions
• Standard errors and robustness tests enable rigorous assessments of MPI

MPI - Brief Overview

The MPI is an index of acute multidimensional poverty. It assesses the nature and intensity of poverty at the individual level, creating a vivid picture of people living in poverty within and across countries, regions and the world.

The MPI has three dimensions: health, education, and living standard. These are measured using 10 indicators (see the box 'Inside the MPI'). It assesses multidimensional poverty for people across 109 countries (up from 104 in 2010). The first international measure of its kind, it offers an essential complement to income poverty because it measures deprivations directly.

The MPI can be used as an analytical tool to identify multidimensionally poor people, show aspects in which they are deprived and help to reveal the interconnections among deprivations. It can also identify the poorest among the poor, reveal poverty patterns within countries by province or social group, and track changes over time. This can enable policy makers to target resources and design policies more effectively.

Key Findings

• Most poor people live in middle-income countries. Over twice as many poor people live in middle-income countries (1,189 million) as in low-income countries (459 million).
• The poorest 26 regions of South Asia have higher poverty rates and more MPI poor people than the 38 countries of Sub-Saharan Africa combined.
• Income classifications hide wide disparities in MPI poverty. In low-income countries, the percentage of poor people ranges from 5% in Kyrgyzstan to 92% in Niger. In middle-income countries it ranges from 0% in Belarus to 77% in Angola.
• India is home to more MPI poor people than all low-income countries plus 36 fragile states (using the OECD’s 2011 definition).
• Multidimensional poverty within countries varies greatly. Nepal is poorer according to the MPI than Cambodia, but Cambodia’s poorest region is poorer than the poorest region of Nepal.
• Poverty reduction over time varies by dimension. Bangladesh reduced poverty across all dimensions; Kenya reduced its MPI mainly through improvements in living standards; and Madagascar made great strides in reducing malnutrition, but deprivations in sanitation actually rose.
Multidimensional Poverty Index

The Multidimensional Poverty Index (MPI) looks at poverty through a "high-resolution" lens. By directly measuring the nature and magnitude of overlapping deprivations at the household level, the MPI provides information that can help to inform better policies to reduce acute poverty. The MPI is the first international measure to reflect the intensity of poverty – the number of deprivations that each person faces at the same time. It can be broken down by population group (such as ethnicity), geographical area and dimension. It can also be used to track changes to poverty over time. It was developed by OPHI and the UNDP's Human Development Report Office for inclusion in the flagship Human Development Report.

**MPI 2011 Findings**

The MPI measures acute poverty – people suffering deprivation in more than one third of the dimensions. This year’s analysis has also been carried out for the poorest of the poor (or ‘severely’ poor) – people who are deprived in more than half of the dimensions.

Most ‘severely’ poor people also live in lower-middle-income countries and South Asia, followed by Africa. Middle-income countries are home to more severely poor people at 586 million severely poor people versus 285 million in low-income countries. This shows that poor people in middle-income countries are not barely poor – there are many among them who are among the most deprived in the world; people who have simply been bypassed as their nation’s comparative wealth increased.

South Asia is home to 435 million severely poor people, whereas Sub-Saharan Africa is home to 310 million people. But there are differences. The percentage of people living in severe poverty is higher among Sub-Saharan African countries. About two-thirds of poor people living in Sub-Saharan Africa experience severe poverty, compared with half of poor people in South Asia (see Figure 2).

**Zooming in – sub-national poverty in 66 countries**

A key advantage of the MPI is that it is able to ‘zoom in’ and explore the incidence, intensity and character of poverty by states, provinces or other geographical regions. Analysis of poverty at the sub-national level has been carried out for 683 regions across 66 countries to date.

National averages hide intense disparities and pockets of poverty.

**Figure 2. Total number (in millions) of MPI poor people and ‘severely’ MPI poor people by income category and world region, along with average MPI by region**

**Population estimates calculated using 2008 population data (UN Population Division, 2011)**

**Figure 3: Distribution of people living in MPI poverty across global regions and income categories**
In all regions. In Nigeria, the picture is more mixed. The South South shows a reduction in the number of people living in poverty, yet the rest of the country does not show such major progress (Figure 4).

Changes to incidence and (or) intensity of poverty can drive overall MPI poverty reductions. Figure 4 shows differing pathways to poverty reduction for the regions of Ghana, Nigeria and Ethiopia (the size of the bubbles represents the size of the population in each region). Most regions of Ghana experienced high reductions in both the incidence and intensity of poverty. In Ethiopia, while in Addis Ababa, capital, reductions were driven by lifting people out of poverty (incidence), the poorest regions saw a reduction mainly in the intensity of poverty. In Nigeria, meanwhile, the only region that showed clear improvement, the South South, reduced just the incidence of poverty. Capturing reductions in the number of people who are poor as well as in the intensity of poverty is a key innovation of the MPI. A poverty reduction policy oriented towards the poorest of the poor would reduce both the incidence and intensity of poverty and improve equity.

Poverty reduction is often very uneven between dimensions. Figure 5 shows that Bangladesh made balanced improvements in most dimensions, while Kenya’s improved relatively strongly in living standards. Madagascar made great strides in reducing malnutrition, but deprivations in sanitation actually rose during the period analysed. Bolivia shows substantial improvements in school attendance and sanitation but less progress in other areas such as child mortality.

Capturing broader aspects of poverty

The MPI captures distinct and broader aspects of poverty. The MPI captures deprivations directly – in health and educational outcomes and key services such as water, sanitation and electricity. In some countries, these resources are provided free or at low cost; in others, it is very hard even for working people with an income to obtain them.

People living in MPI poverty may not be income poor. In some countries, the difference between MPI poverty and income poverty is particularly marked. Only 40 per cent of Ethiopia’s people are income poor (living on less than US $1.25 a day), whereas 89 per cent are poor by the MPI. Less than one fifth of Yemen’s people are income poor, whereas more than half are poor by the MPI. Conversely, in Mongolia, 22 per cent are income poor, compared to 6 per cent MPI poor.

Income classifications hide wide disparities in MPI poverty. In low-income countries, the percentage of people living in MPI poverty ranges from 5 per cent in Kyrgyzstan to 92 per cent in Niger. In lower middle-income countries, this varies from 1 per cent in Georgia to 77 per cent in Angola of people who are MPI poor, and in upper middle-income countries from 0 per cent in Belarus to 40 per cent in Namibia.

Patterns of deprivation within the MPI

Similar MPIs can be unfolded to see the composition of poverty (Graph 1). Barisal in Bangladesh, Jinotepe in Nicaragua and Ziguinchor in Senegal have a similar MPI, yet the character of poverty is very different. In Ziguinchor, child mortality contributes the most to the region’s MPI, in Barisal nutrition contributes most, while in Jinotepe, the entire health dimension has a very low contribution.

Different MPI can show similar compositions of poverty (Graph 2). The three regions of South Asia shown have similar patterns of deprivation by dimension, but rather different overall MPI levels (Chittagong has lower MPI poverty than the other two regions). By identifying patterns of deprivation, the MPI can help us to understand the interconnections among deprivations, identify poverty traps and strengthen the impact of policies to reduce poverty in specific aspects, such as the MDGs.


ILLUMINATING LIVES – WHO IS POOR ACCORDING TO THE MPI?

Who are the people the MPI identifies as poor? To answer this question we spoke with people who were poor according to the MPI in their country. We learned about their lives – their hopes and strengths, and their challenges. Naturally their lives are far richer than any measure can capture.

Consider Addl, 32, who lives with his wife, Farha, two daughters and son in a poor hamlet in the Indian state of West Bengal. He is a daily wage-labourer, and the family live in a mud hut with no electricity. The hamlet is served by one hand pump for water, shared among many households. Like 89 per cent of people in the village of Madhiaipur, the family are Muslim.

Addl’s family owns no agricultural land. He and his neighbours depend on local farmers (who own land) for wage opportunities. Such employment is seasonal and depends on personal and social relations that individuals are able to maintain.

Five years ago, Addl left for Mumbai as a contractual labourer with the help of middlemen, called dalals, who put labourers in touch with potential employers and take a small fee from both. Initially, it was tough, as I did not know anybody, and was completely dependent on the dalal. I now realise he swindled me of several hundred rupees,’ he says.

After he left for Mumbai, tragedy struck the family twice, when within a span of three years, they lost two children. ‘They were too weak and could not cope with the fever that afflicted them,’ he says. He suspects they were weak because they rarely had enough to eat those days.

As Addl began sending money home, the family realized that there were enormous

![Figure 6: Addl’s household poverty profile](image)

![Figure 7: Bubble chart showing the relationship between the percentage of MPI poor people, average intensity of MPI poverty and income. Low income countries are spread across the chart, from Kyrgyzstan to Tajikistan. Countries with greatest MPI poverty (highest incidence and greatest intensity) are located in the top right.](image)
economic benefits in him working in Mumbai. ‘We now have three meals a day, instead of the one or two that we could barely manage before I left.’ He soon found his own way in Mumbai, making contacts and finding work on his own as a mason, restaurant worker and truck driver.

Although he does not have the security that the contractual labour provided, he says ‘at least I have the freedom to choose the kind of things I would like to work on. Of course, it is also true that this is no freedom at all. I have to leave home. I don’t want to work, my family will starve.’

Today, Adil earns at least INR 5,000 (US $65.82) (after all expenses) for each trip that he makes to Mumbai. Adil regrets that he has to spend so many days nearly a third of each year – away from Farha and the children. He still grieves that he could not be by his wife’s side when two of his children died. But he hopes his struggles will not be in vain. ‘I really wish my family and I could live together.’

He is grateful that he is able to use the opportunity provided by the government to educate his children. With that education, he hopes they will find work and will not face the difficulties he faces daily. ‘One should be able to work and earn their living. We don’t want free food or anyone’s benevolence. We want employment. They should be able to take care of their children. I don’t want my children to laze around, nor do I want them to beg or steal. Hard work promotes honesty, and honesty brings honour. I would like them and the future generations to lead honourable lives.’

The figure below shows Adil’s household poverty profile according to the MPI. The shaded boxes show the indicators in which their household is deprived, telling us important details about the nature of the poverty that they face. Adil’s household is deprived in 61 per cent of the weighted dimensions – this is a high intensity of poverty.

The MPI looks at the poverty of each person in this way. It builds from the person right up to international level to create a vivid picture of poverty. As such the index can then be broken down by dimension and group to clearly show how the composition of multidimensional poverty changes in incidence and intensity for different regions, countries, states, ethnic groups and more. It also shows the joint distribution of deprivations, capturing how many deprivations poor people are deprived in at the same time.

### Constructing the MPI

The MPI reflects deprivations in education, health and living standards for people across 109 countries (indicators and the criteria for someone to be considered deprived in each indicator are presented in the box ‘Inside the MPI’). Although deeply constrained by data, the MPI reveals a different pattern of poverty than income poverty, as it illuminates deprivations directly.

Poor households are identified and an aggregate measure constructed using a methodology proposed by Alkire and Foster (2011) (see box ‘Inside the MPI’). In the global MPI, each dimension is equally weighted; each indicator within a dimension is also equally weighted. The method allows for adaptations to this weighting structure.

The MPI goes beyond other poverty measures to reveal the combination of deprivations that batter a person at the same time. A person is identified as multidimensionally poor if and only if he or she is deprived in some combination of indicators whose weighted sum exceeds one third of all deprivations.

The indicators are based on participatory exercises with poor people, emerging international consensus and the availability of suitable data. Most are linked to Millennium Development Goals. The estimates mainly use the most recent data available from the Demographic and Health Survey, the Multiple Indicators Cluster Survey, and the World Health Survey.

The MPI is the product of two numbers: the incidence or headcount (H) – the percentage of people who are poor, and the average intensity of deprivation (A) – which reflects the proportion of dimensions in which households are, on average, deprived. Alkire and Foster show that this measure is very easy to calculate and interpret, is intuitive yet robust, and reveals many desirable properties. Better data are needed at the international level to be able to expand the measure to include other important dimensions, such as informal work, empowerment and safety from violence, and others, in the future.

### Beyond the Global MPI – National Adaptation

The MPI goes beyond other international measures of poverty to:

- Identify the poorest people and aspects in which they are deprived simultaneously. Such information is vital to allocate resources where they are likely to be most effective.
- Identify which deprivations constitute poverty and which deprivations are most common among different groups, so that policies can be designed to address their particular needs.
- Reflect the results of effective policy interventions quickly. The MPI can be quicker to reflect the effects of changes in policies than income alone.
- Integrate many different aspects of poverty related to the MDGs into a single measure, reflecting interconnections among deprivations and helping to identify poverty traps.

The government ‘does it mean to live in poverty?’ has often been answered by lack of income. But the traditional narrow focus on income is the only measure of a person’s wellbeing. A lack of it, is being increasingly challenged. Recent high profile initiatives, such as the Stiglitz–Sen-Fitoussi Commission, have called for broader measures that take account of other vitally important aspects of life.

The human development approach has long argued that although income is important, it needs to be complemented by more direct measures (Anand and Sen 1997). The MPI complements income poverty measures because it directly measures the combination of deprivations that each household experiences at the same time.