USAID FROM THE AMERICAN PEOPLE

EADS Snapshot on

Multidimensional Poverty Index 2010

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Introduction

Sabina Alkire and Maria Emma Santos from the Oxford Poverty and Human Development Initiative (OPHI) recently developed a new Multidimensional Poverty Index (MPI) based on existing household surveys in 104 developing countries. The new index moves beyond income-based poverty indicators to provide insights to the multiple interconnected deprivations faced by the poor. The index is intended as a tool for policy makers to more effectively target resources and to design policies to eradicate severe poverty. The new MPI will supplement other income based poverty measurements in this year's United Nations Development Report. This snapshot highlights differences between the MPI and other poverty measurements for 83 countries included in the MPI index and that received USAID funding in fiscal year 2009 (See Table 4 on page 4 for country list). The main findings from the report reflect that overall more people are considered poor according to the MPI measurement of deprivations across an array of basic needs than is found using only income based measurements such as living on less than $1.25 a day.

What is the MPI?

The authors call the MPI a "high resolution lens" on poverty that provides insights not only on how many people are poor but in what ways they are poor. Inspired by Nobel Laureate economist Amartya Sen's analysis of the need for a multidimensional approach to poverty and building from the Human Development Index (HDI) categorization of multiple poverty indicators, the MPI highlights interconnections among three dimensions of poverty: Health, Education, and Standard of Living. Each of the three MPI dimensions is weighted equally in order to simplify interpretation of the findings and enhance transparency in the methodology. The dimensions are measured using a total of ten indicators. The main unit of analysis is the household as the authors argue that the suffering of one member of a household affects other members. Likewise, the abilities, such as literacy, of one household member can benefit other members. The MPI is broken down into two types of measures, the headcount, or percentage of people who are poor, and the average intensity of deprivation, which reflects the proportion of dimensions in which a poor household is deprived (For more information on the methodology see OPHI Working Paper No. 38, "Acute Multidimensional Poverty: A New Index for Developing Countries," by Sabina Alkire and Maria Emma Santos, July 2010, http://www.ophi.org.uk/wp-content/uploads/ophi-wp38.pdf).

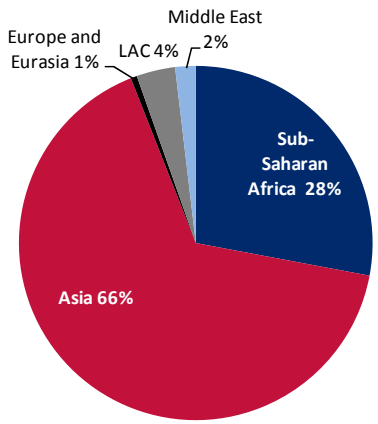
Main Findings

According to the MPI 2010, Niger is the poorest country in the world and has the greatest intensity of poverty – 93% of people in Niger live in poverty and are deprived across 69% of all indicators. While India ranks 28th out of 83 countries according to the overall MPI - 55% of the population is classified as MPI poor with an average intensity of poverty of 53.5% - India has by far the greatest number of MPI poor people due to its large population. Bangladesh, Pakistan and Nepal also have large numbers of MPI poor people. All of the countries that are in the bottom ten in terms of percent of MPI poor and average intensity of poverty come from Sub-Saharan Africa.

Table 1: Ten Poorest Countries Receiving USAID Assistance (FY 2009) According to the MPI 2010

Multidimensional Poverty Index (MPI)		Percent of people who are MPI poor		Average Intensity of MPI Poverty		Number of MPI poor (millions)	
Niger	0.64	Niger	92.7	Niger	69.3	India	645.0
Ethiopia	0.58	Ethiopia	90.0	Burkina Faso	64.9	Nigeria	93.8
Mali	0.56	Mali	87.1	Ethiopia	64.7	Bangladesh	91.2
Burkina Faso	0.54	Burundi	84.5	Mali	64.7	Pakistan	88.3
Burundi	0.53	Liberia	83.9	Burundi	62.7	Ethiopia	70.7
Somalia	0.51	Burkina Faso	82.6	Guinea	61.3	Indonesia	46.7
Guinea	0.50	Guinea	82.4	Mozambique	60.2	Tanzania	27.0
Sierra Leone	0.49	Sierra Leone	81.5	Sierra Leone	60.0	Kenya	22.8
Liberia	0.48	Rwanda	81.4	Madagascar	58.5	Nepal	18.3
Mozambique	0.48	Mozambique	79.8	Angola	58.4	Mozambique	17.5

Figure 1: USAID Regional Distribution of Number of People Living in MPI Poverty



Regional analysis reveals that Asia has the greatest number of MPI poor, while Sub-Saharan Africa has the greatest percent of people who are MPI poor and the greatest average intensity of poverty. Although the proportion of poor people in Latin America and the Caribbean (LAC) is less than Asia, the average intensity of poverty is greater.

The MPI also reveals important information about different patterns of poverty across countries. For example, the average proportion of people deprived in education is greater than the proportion of people deprived in health in Africa, LAC and the Middle East, however, the inverse is true in Asia and Europe and Eurasia. More people are deprived in living standards than health or education in Sub-Saharan Africa, Asia, and LAC.

Table 2: USAID Regional MPI Averages

USAID Region	Average MPI Score	Total # of MPI poor (millions)	Average % Population MPI Poor	Average Intensity of MPI Poverty	Average % of People Deprived in:		
					Education	Health	Living Standards
Sub-Saharan Africa	0.36	391.5	64.1	55.3	49.3	43.9	75.6
Asia	0.13	925.3	25.2	45.5	19.8	24.8	34.2
LAC	0.10	49.6	21.1	45.7	20.1	16.7	26.0
Middle East	0.09	26.2	18.6	43.1	25.4	21.3	12.1
Europe and Eurasia	0.01	8.1	2.1	36.1	5.8	6.3	1.5

While Niger has the greatest proportion of people deprived in education, people in Mali are more likely to be deprived in health. Burundi, Rwanda, and Chad suffer from the greatest proportion of deprivation in living standards. Sub-Saharan African countries tend to suffer the worst deprivation in education and living standards.

Table 3: Ten Poorest Countries Receiving USAID Assistance According to Three Main MPI Dimensions

% Deprived in Education	
Niger	87.1
Ethiopia	83.9
Mali	81.1
Burkina Faso	80.4
Guinea	74.8
Somalia	74.5
Burundi	71.6
Mozambique	69.1
Liberia	68.9
Senegal	66.9

% Deprived in Health	
Mali	65.8
Niger	64.9
Burkina Faso	62.9
Guinea	60.8
Angola	60.8
Liberia	59.6
Nigeria	59.5
Nepal	58.3
Sierra Leone	58.2
India	56.5

% Deprived in Living Standards	
Burundi	97.3
Rwanda	95.3
Chad	95.2
Ethiopia	94.1
Malawi	93.9
Niger	93.0
Sierra Leone	92.4
Liberia	91.6
Tanzania	90.6
Comoros	90.3

How is the MPI related to the Millennium Development Goals (MDGs)?

The MPI is linked to the MDGs and can be used to enhance analysis and reporting of progress towards the MDGs. Eight of the ten indicators included in the MPI relate directly to an MDG goal and the remaining two, electricity and flooring, can be closely related. However, unlike typical reporting on the MDGs, which analyze each indicator independently, the MPI is a composite index. The MPI also focuses more on people rather than countries. For example, the MPI reports not only the percent of a country's population who are poor, but the number of poor people in order to provide a more accurate global picture of poverty. The MPI also provides sub-national analysis of variation in poverty where data is available. Finally, unlike the MDG reports, which focus on the total proportion of the population that is poor, the MPI adds the additional dimension of discerning the relative differences in the type and intensity of poverty or deprivations suffered by the poor.

Comparing the MPI and Income Poverty Indices

The following chart highlights the correlation between the new MPI and the proportion of the population living on less than $1.25 a day. There is a positive correlation between the two indicators, however, there is not a perfect one-to-one relationship (depicted by the dashed line). The regression line has a slope of less than one reflecting that there is overall a greater proportion of MPI poor in USAID assisted developing countries than would be expected given the percent of the population falling below the international income poverty line of $1.25 a day. For example, Ethiopia has a high proportion of MPI poor (90%) and a relatively low proportion of people living underneath the international income poverty line of $1.25 a day (39%). Similarly, Kenya, Mauritania, Mali, Yemen, and Senegal have the greatest proportion of MPI poor compared to the proportion of the population under $1.25. Several Latin American countries also have relatively low income poverty rates but high percentages of MPI poor. These discrepancies reflect that the MPI captures characteristics of poverty that are neglected by measures that focus only on income. Poor people in these countries may not be able to secure their basic needs, such as access to sufficient nutrition, health services, education and safe living conditions, despite having a source of income that in other countries might be enough to provide for these necessities. On the other hand, there are significant outliers above the regression line. Uzbekistan, Tanzania, South Africa, Swaziland, and Kyrgyzstan standout for having relatively high proportions of people under the $1.25 poverty line but relatively lower than expected proportions of people considered MPI poor. These countries may have relatively stronger institutions or safety nets that help a poor family to secure their basic needs despite low income levels.

However, overall among USAID assisted countries, there are more countries where there are a greater proportion of MPI poor people than people who are considered poor based only on income.

Figure 2: Percent of Population that is MPI Poor versus Under the International Income Poverty Line

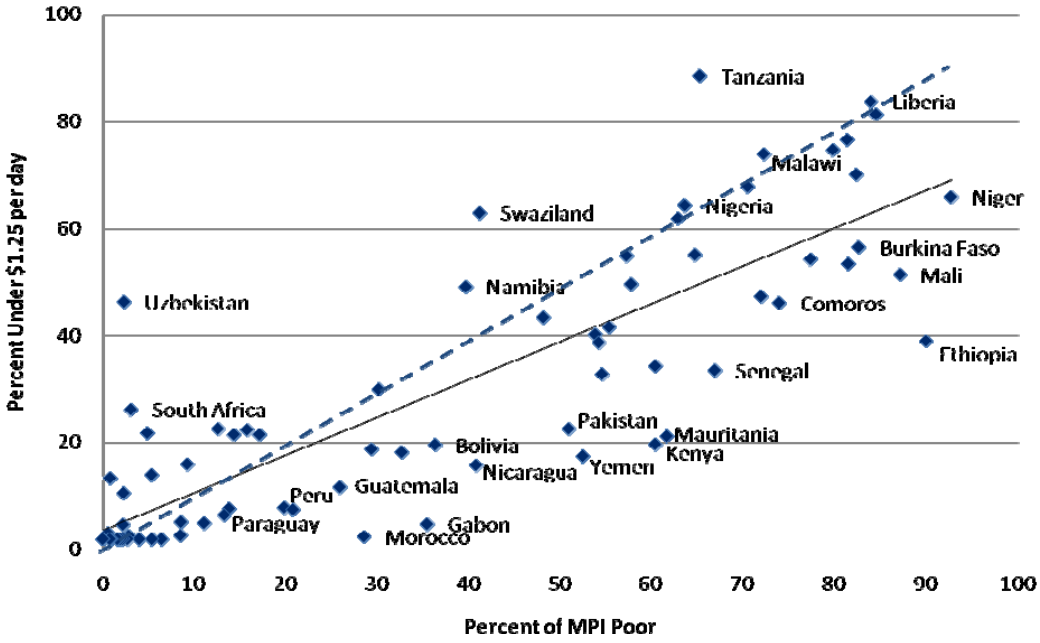


Table 4: List of USAID assisted developing countries in FY2009 included in the MPI Analysis

SSA	Guinea	Senegal	India	**E & E**	Turkey	Honduras
Angola	Kenya	Sierra Leone	Indonesia	Albania	Ukraine	Mexico
Benin	Lesotho	Somalia	Kazakhstan	Armenia		Nicaragua
Burkina Faso	Liberia	South Africa	Kyrgyzstan	Azerbaijan	**LAC**	Paraguay
Burundi	Madagascar	Swaziland	Mongolia	Belarus	Belize	Peru
Cameroon	Malawi	Tanzania	Nepal	Bosnia & Herz.	Bolivia	
Chad	Mali	Togo	Pakistan	Croatia	Brazil	**ME**
Comoros	Mauritania	Zambia	Philippines	Georgia	Colombia	Egypt
Djibouti	Mozambique	Zimbabwe	Sri Lanka	Hungary	Dominican Rep.	Iraq
Ethiopia	Namibia		Tajikistan	Macedonia	Ecuador	Jordan
Gabon	Niger	**Asia**	Thailand	Montenegro	Guatemala	Morocco
Gambia	Nigeria	Bangladesh	Uzbekistan	Serbia	Guyana	Tunisia
Ghana	Rwanda	Cambodia	Vietnam	Slovenia	Haiti	Yemen

For more information…
To access more data on World Bank and United Nations Millennium Development Goal poverty indicators, visit the Economic and Social Database (ESDB) at http://esdb.eads.usaidallnet.gov/. For more information on the Multidimensional Poverty Index visit the Oxford Poverty & Human Development Initiative website at http://www.ophi.org.uk/policy/multidimensional-poverty-index/.