

## Oxford Poverty and Human Development Initiative (OPHI)

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*Oxford Dept of International Development,  
Queen Elizabeth House, University of Oxford*



## Country Briefing: Madagascar

### Multidimensional Poverty Index (MPI) *At a Glance*

July 2010

This Country Briefing presents the results of the Multidimensional Poverty Index (MPI) and explains key findings graphically. Further information as well as international comparisons are available at [www.ophi.org.uk/policy/multidimensional-poverty-index/](http://www.ophi.org.uk/policy/multidimensional-poverty-index/).

*The MPI was constructed by OPHI for the UNDP's 2010 Human Development Report (<http://hdr.undp.org/en/>).*

Citation: Alkire, Sabina & Maria Emma Santos. 2010. Madagascar Country Briefing. Oxford Poverty & Human Development Initiative (OPHI) Multidimensional Poverty Index Country Briefing Series. Available at: [www.ophi.org.uk/policy/multidimensional-poverty-index/mpi-country-briefings/](http://www.ophi.org.uk/policy/multidimensional-poverty-index/mpi-country-briefings/).

*For more information on the MPI please see Alkire, Sabina & Maria Emma Santos. "Acute Multidimensional Poverty: a new index for developing countries" OPHI Working Paper 38 and UNDP Research Paper Series.*

### Country Profile

Madagascar-DHS-2004

Country: | Madagascar      ▼ Year: 2004      Survey: DHS  
Region: Sub-Saharan Africa

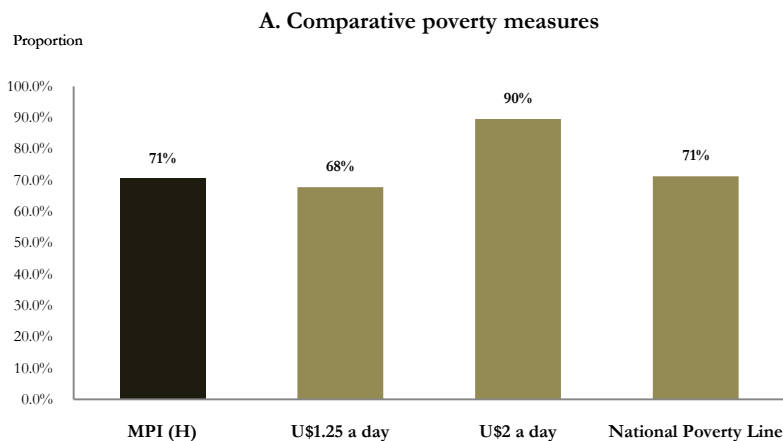
### Multidimensional Poverty Index (MPI)

The MPI reflects both the incidence (H) of poverty – the proportion of the population that is multidimensionally poor – and the average intensity (A) of their deprivation – the average proportion of indicators in which they are deprived. The MPI is calculated by multiplying the incidence of poverty by the average intensity across the poor. A person is identified as poor if he or she is deprived in at least 30 percent of the weighted indicators. The following table shows the multidimensional poverty rate (MPI) and its two components: incidence of poverty (H) and average intensity of deprivation faced by the poor (A). The first and second columns of the table report the survey and year which was used to generate the MPI results.

Survey	Year	Multidimensional Poverty Index (MPI = H×A)	Incidence of Poverty (H)	Average Intensity Across the Poor (A)
DHS	2004	0.413	70.5%	58.5%

### Comparing the MPI with Other Poverty Measures

Column chart A. compares the poverty rate using the MPI with three other commonly used poverty measures. The height of the first column denotes the percentage of people who are MPI poor (also called the incidence or headcount). The second and third columns denote the percentages of people who are poor according to the \$1.25 a day poverty line and \$2.00 a day poverty line, respectively. The final column denotes the percentage of people who are poor according to the national poverty line. The table on the right hand side reports various descriptive statistics of the country.



#### Summary

Multidimensional Poverty Index	0.413
Percentage of MPI Poor (H)	0.705
Average Intensity of Deprivation (A)	0.585
Number of MPI Poor People (in millions)	13.1
Percentage of Income Poor (\$1.25 a day)	68%
Percentage of Income Poor (\$2.00 a day)	90%
Percentage of Poor (National Poverty Line)	71%
Population* (in millions)	18.6
Human Development Index	0.543
HDI rank (104 countries)	28
HDI category	Medium

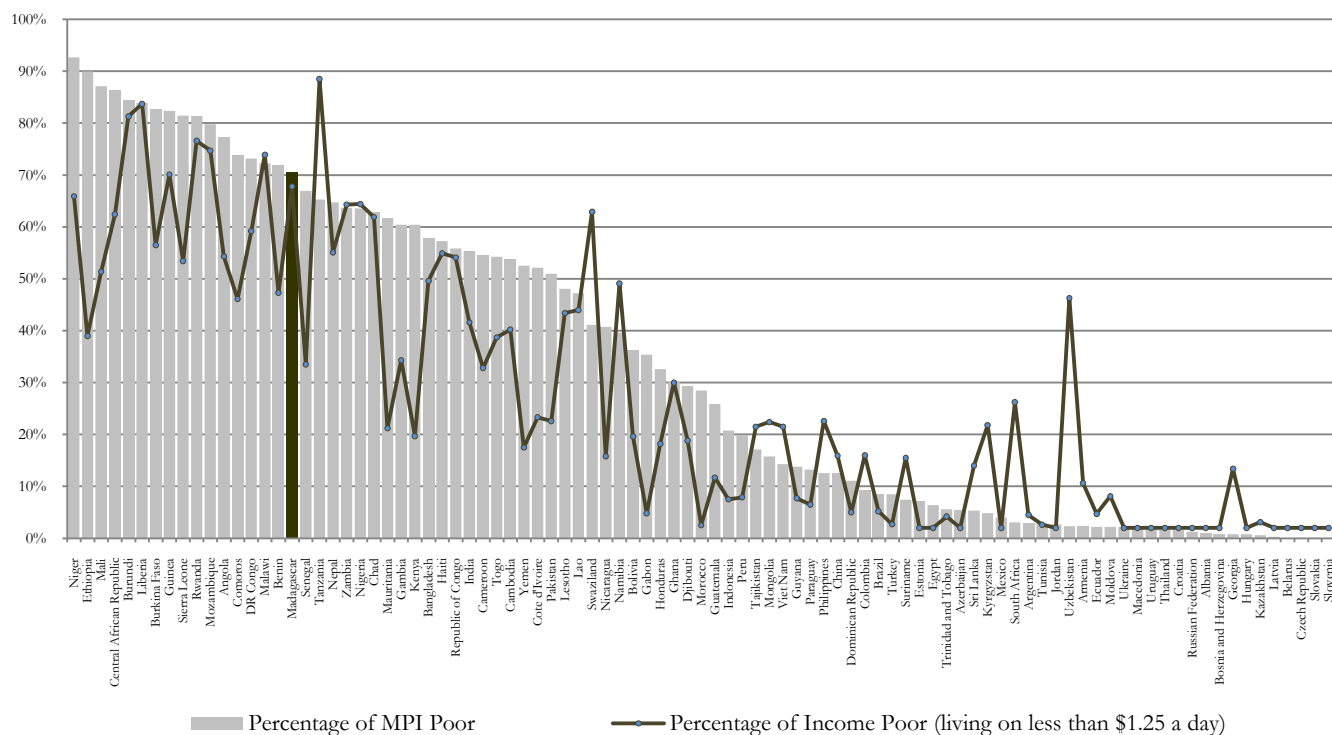
\* Human Development Report 2009, Statistical Annex I.

### Comparing the MPI with Other Poverty Measures

Columnchart B. shows the percentage of people who are MPI poor (also called the incidence or headcount) in the 104 developing countries analysed. The column denoting this country is dark, with other countries shown in light grey. The line across the column chart denotes the percentage of people who are income poor according to the \$1.25 a day poverty line in each country.

Percentage of Poor People

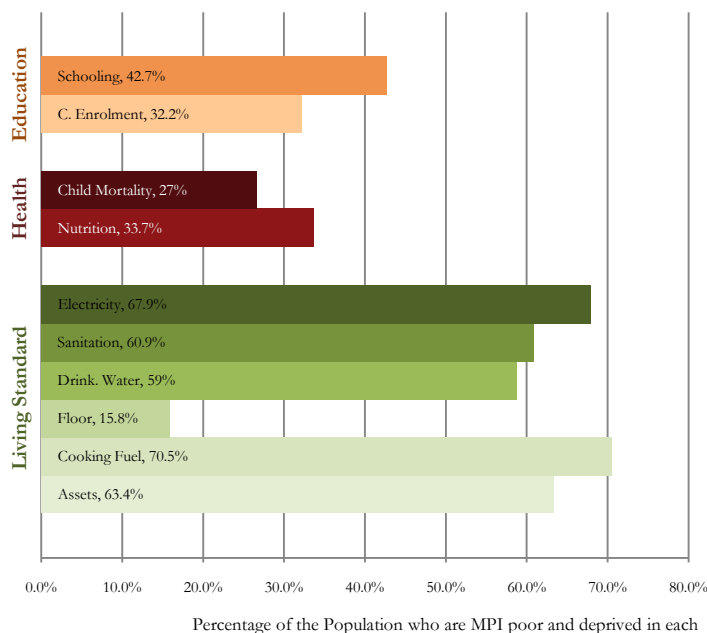
B. Headcounts of MPI poor and \$1.25/day Poor



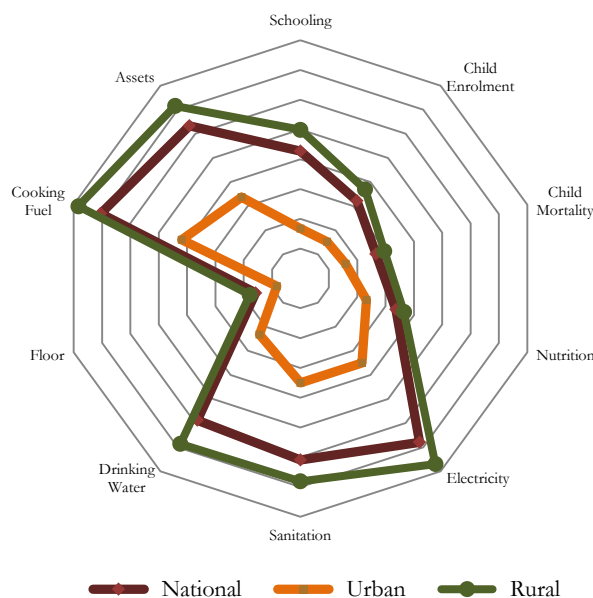
### Incidence of Deprivation in Each of the MPI Indicators

The MPI uses 10 indicators to measure poverty in three dimensions: education, health and living standard. The bar chart to the left reports the proportion of the population that is poor and deprived in each indicator. We do not include the deprivation of non-poor people. The spider diagram to the right compares the proportions of the population that are poor and deprived across different indicators. At the same time it compares the performance of rural areas and urban areas with that of the national aggregate. Patterns of deprivation may differ in rural and urban areas.

C. Deprivations in each Indicator

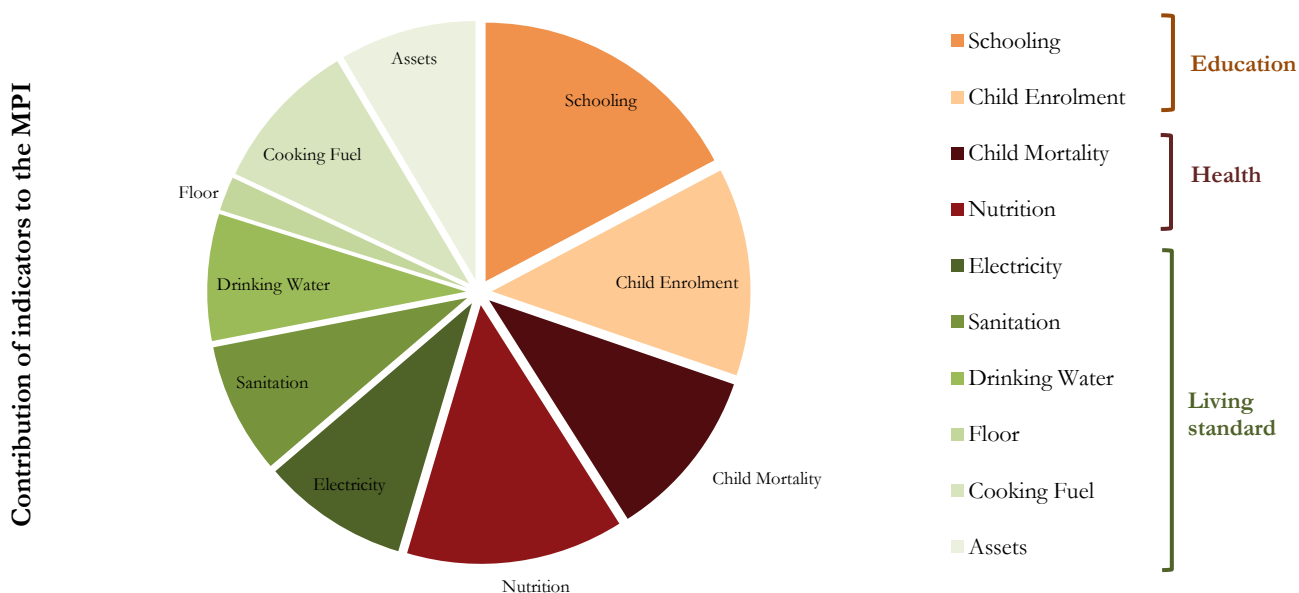


D. Percentage of the Population MPI poor and Deprived



### Composition of the MPI

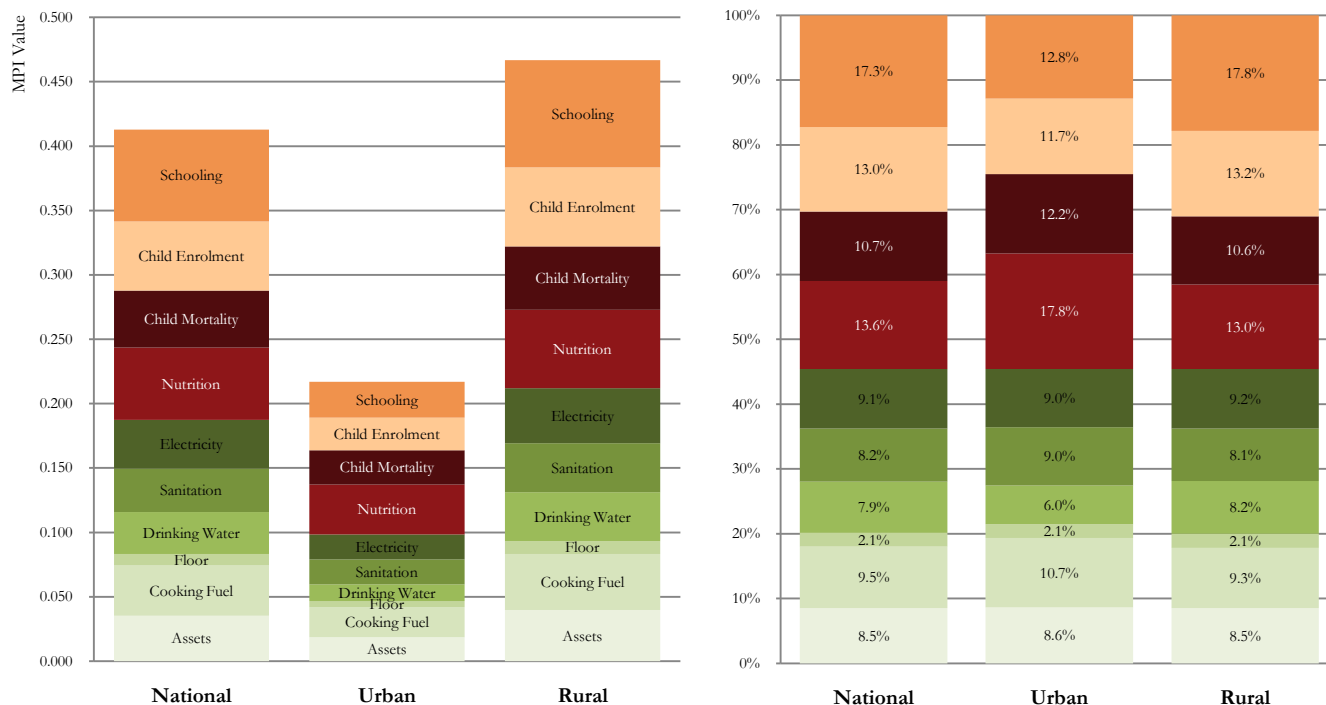
The MPI can be broken down to see directly how much each indicator contributes to multidimensional poverty. The following figure shows the composition of MPI using a pie-chart. Each piece of the pie represents the percentage contribution of each indicator to the overall MPI of the country. The larger the contribution, the bigger is the weighted share of the indicator to the overall poverty.



### Decomposition of MPI by Region

The MPI can be decomposed by different population subgroups, then broken down by dimension, to show how the composition of poverty differs between different regions or groups. In the column chart to the left, the height of each of the three bars shows the level of MPI at the national level, for urban areas, and for rural areas, respectively. Inside each bar, different colours represent the contribution of different indicators to the overall MPI. In the column chart to the right the colours inside each bar denote the percentage contribution of each indicator to the overall MPI, and all bars add up to 100%. This enables an immediate visual comparison of the composition of poverty across regions.

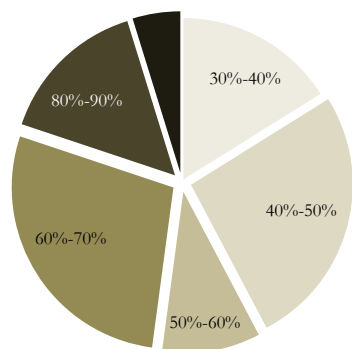
**E. Contribution of Indicators to the MPI at the national level, for urban areas, and for rural areas**



### Intensity of Multidimensional Poverty

Recall that i) a person is considered poor if they are deprived in at least 30% of the weighted indicators and ii) the intensity of poverty denotes the proportion of indicators in which they are deprived. A person who is deprived in 100% of the indicators has a greater intensity of poverty than someone deprived in 40%. The following figures show the percentage of people who experience different intensities of poverty. The pie chart to the left breaks the poor population into seven groups based on the intensity of their poverty. It shows the proportion of poor people whose intensity (the percentage of indicators in which they are deprived) falls into each group. The column chart to the right, reports the proportion of the population in a country that is poor in that percentage of indicators or more. For example, the number over the 40% bar represents the percentage of people who are deprived in 40% or more indicators.

**F. Intensity of Deprivation Among MPI Poor**



**G. Percentage of people deprived in X% or more of the MPI weighted indicators**

