Oxford Poverty and Human Development Initiative (OPHI)

www.ophi.org.uk

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

Country Briefing: Mexico

Multidimensional Poverty Index (MPI) *At a Glance*

For an explanation of the MPI and details of the resources available in the MPI Data Bank, please see the last page of the briefing.

This Country Briefing presents the results of the Multidimensional Poverty Index (MPI) and explains key findings graphically. More information, international comparisons and MPI resources are available at www.ophi.org.uk/multidimensional-poverty-index/.

The MPI was constructed by OPHI for UNDP's 2013 Human Development Report (http://hdr.undp.org/en/).

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For information on the original MPI methodology, see the revised paper, Alkire, S. and Santos, M.E. (2013), "Measuring Acute Poverty in the Developing World: Robustness and Scope of the Multidimensional Poverty Index", OPHI Working Paper 59. Available at www.ophi.org.uk/wp-content/uploads/ophi-wp-59.pdf.

For information on updates that took place in 2011, see Alkire, S., Roche, J.M., Santos, M.E. and Seth, S. (2011), "Multidimensional Poverty Index 2011: Brief Methodological Note". Available at: www.ophi.org.uk/wp-content/uploads/MPI_2011_Methodology_Note_4-11-2011_1500.pdf.

For information on updates that took place in 2013, see Alkire, S., Conconi, A. and Roche, J.M. (2013), "Multidimensional Poverty Index 2013 : Brief Methodological Note and Results". Available at: www.ophi.org.uk/multidimensional-poverty-index/.

Inside the MPI

The MPI has three dimensions and 10 indicators, which are shown in the box below. Each dimension is equally weighted, each indicator within a dimension is also equally weighted, and these weights are shown in brackets within the diagram.
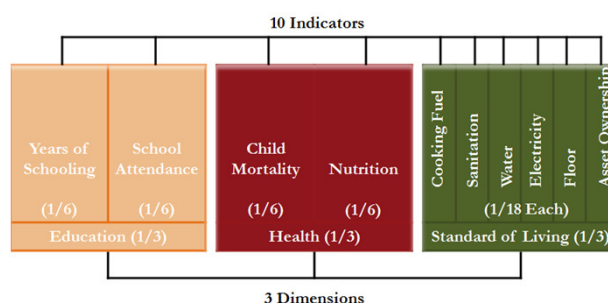
Country Profile   Mexico-ENSANUT-2006

Country: Mexico   **Year:** 2006   **Survey:** ENSANUT

Region: Latin America and Caribbean
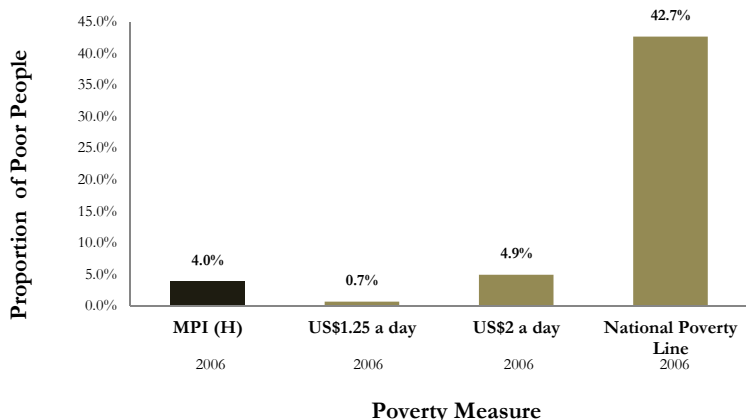
Multidimensional Poverty Index (MPI)

The MPI reflects both the **incidence** or headcount ratio (H) of poverty – the proportion of the population that is multidimensionally poor – and the average **intensity** (A) of their poverty – the average proportion of indicators in which poor people are deprived. The MPI is calculated by multiplying the incidence of poverty by the average intensity across the poor (H×A). A person is identified as poor if he or she is deprived in at least one third 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 used to generate the MPI results. Those identified as "Vulnerable to Poverty" are deprived in 20% - 33% of weighted indicators and those identified as in "Severe Poverty" are deprived in 50% or more.

Survey	Year	Multidimensional Poverty Index (MPI = H×A)	Percentage of Poor People (H)	Average Intensity Across the Poor (A)	Percentage of Population Vulnerable to Poverty	Percentage of Population in Severe Poverty
ENSANUT	2006	0.015	4.0%	38.9%	5.8%	0.5%

Comparing the MPI with Other Poverty Measures

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 ratio). The second and third columns denote the percentages of people who are poor according to the $1.25 a day income poverty line and $2.00 a day line, respectively. The final column denotes the percentage of people who are poor according to the national income poverty line. The table on the right-hand side reports various descriptive statistics for the country. The monetary poverty statistics are taken from the year closest to the year of the survey used to calculate the MPI. The year is provided below each column in chart A.

A. Comparative Poverty Measures

Summary

|	
Multidimensional Poverty Index	0.015
Percentage of MPI Poor (H)	4.0%
Average Intensity of Deprivation (A)	38.9%
Percentage of Income Poor ($1.25 a day)[‡]	0.7%
Percentage of Income Poor ($2.00 a day)[‡]	4.9%
Percentage of Poor (National Poverty Line)[‡]	42.7%

‡ The World Bank (2012). "The World DataBank". Washington, DC. [available at http://databank.worldbank.org/data/home.aspx, accessed September 2012]

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

Chart B shows the percentage of people who are MPI poor (also called the incidence or headcount ratio) in the developing countries analysed. The column denoting this country is dark, with other countries shown in light grey. The dark dots denote the percentage of people who are income poor according to the $1.25 a day poverty line in each country. Chart A tells you the year this data comes from for this country. Dots are only shown where the income poverty data available are taken from a survey fielded within three years of the MPI survey year.

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

■ Percentage of MPI Poor   ● Percentage of Income Poor (living on less than $1.25 a day)
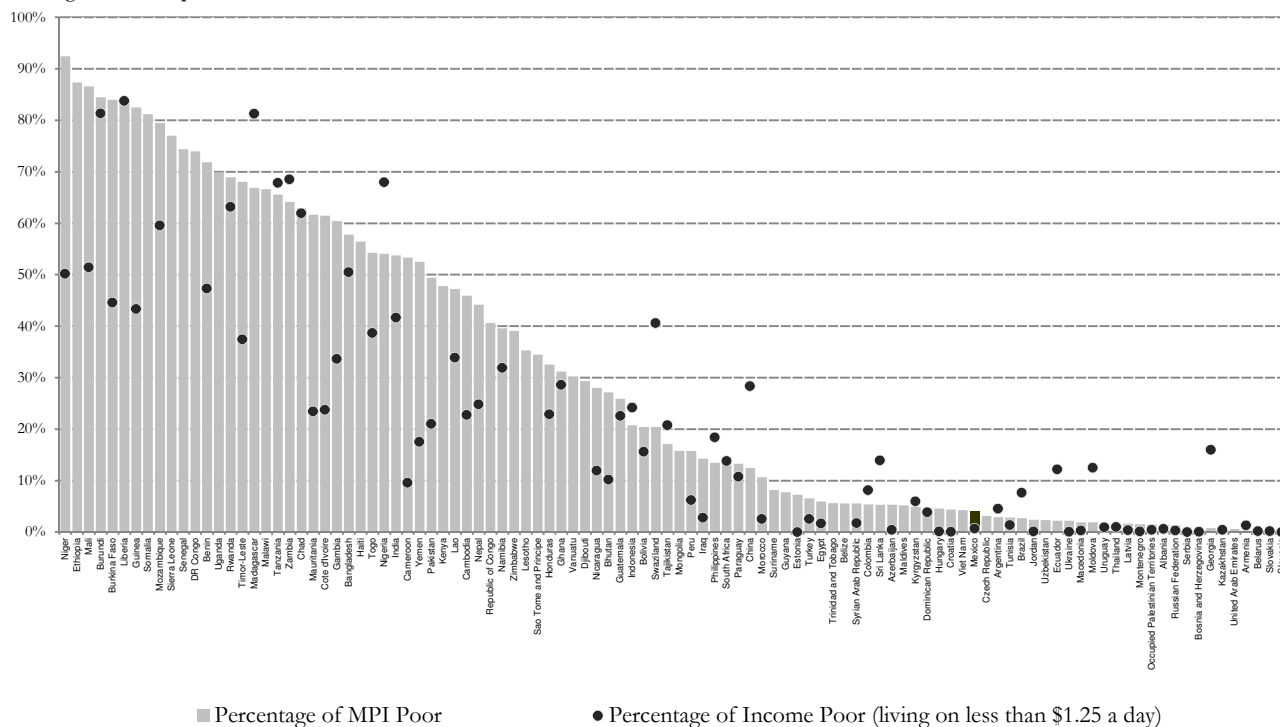
Incidence of Deprivation in Each of the MPI Indicators

The MPI uses 10 indicators to measure poverty in three dimensions: education, health and living standards. 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. The MPI is also the weighted sum of these deprivation counts, which makes it useful for monitoring change.

C. Deprivations in each Indicator

Percentage of the Population who are MPI poor and deprived in each indicator
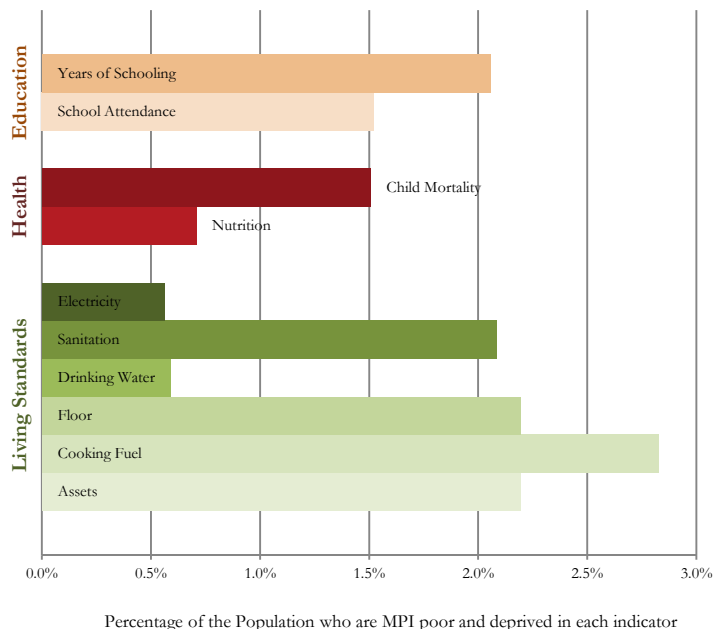
D. Percentage of the Population MPI Poor and Deprived
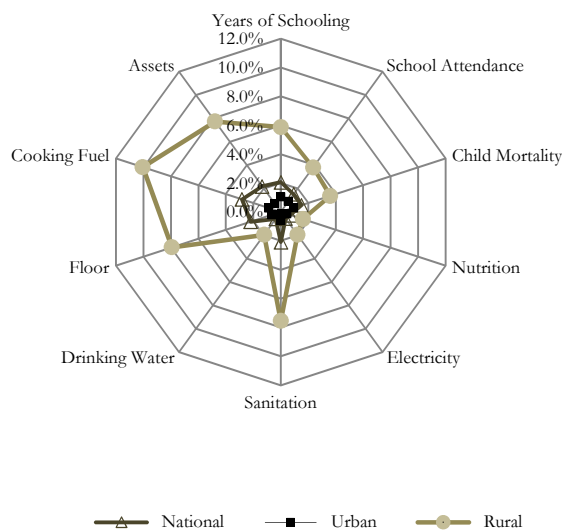
Composition of the MPI

The MPI can be broken down to see directly how much each indicator contributes to multidimensional poverty. The following figure shows the composition of the 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 slice of the pie chart, the bigger the weighted contribution of the indicator to overall poverty.
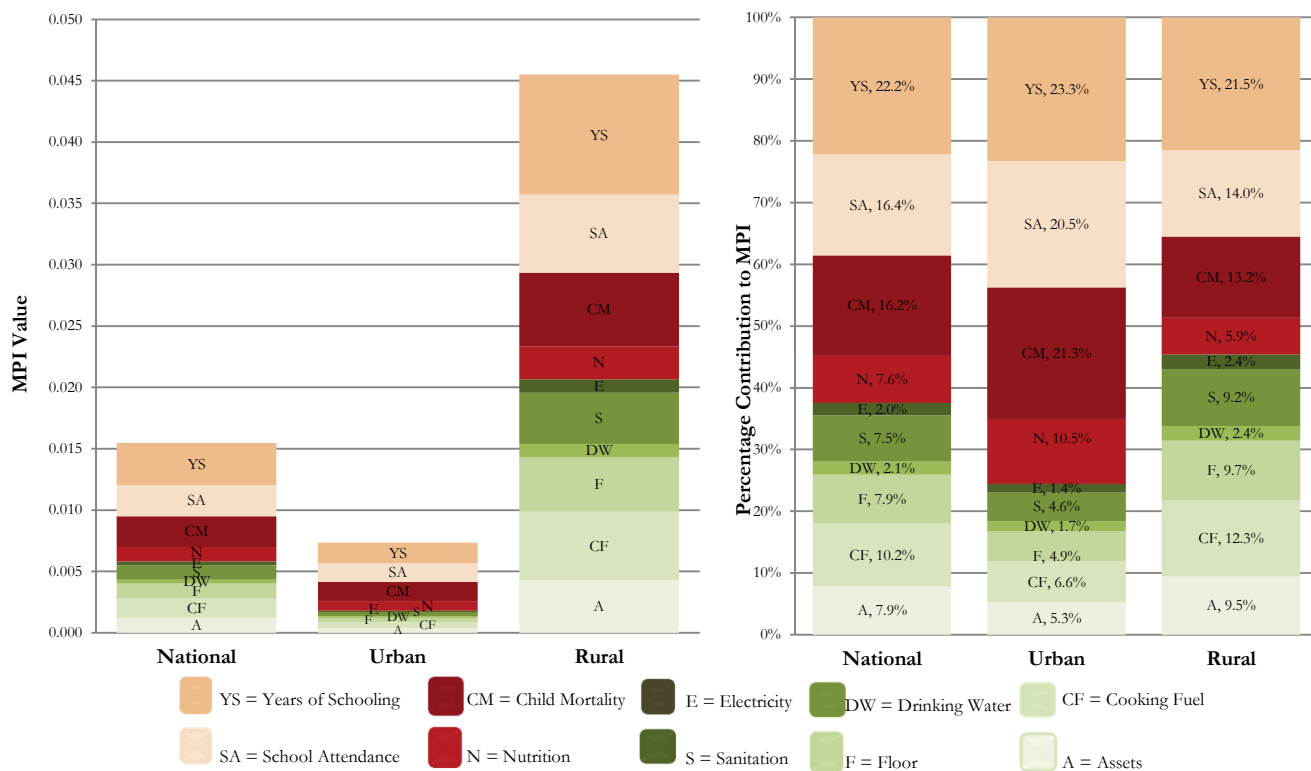
E. Contribution of Indicators to the MPI
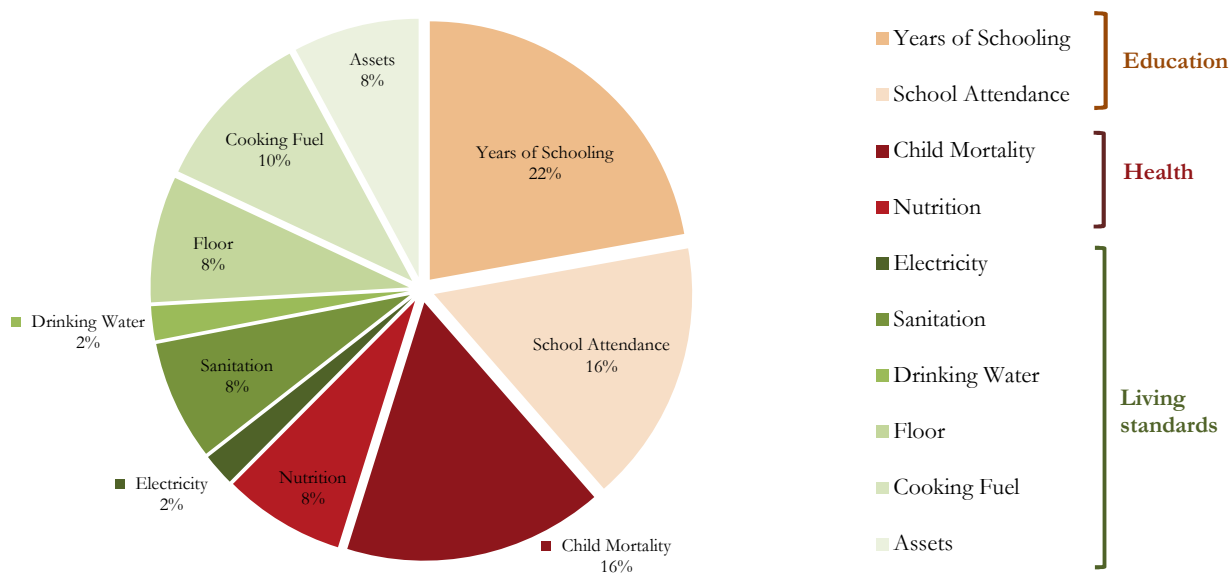
Decomposition of MPI by Region

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. On the left-hand side of column chart F, 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 weighted indicators to the overall MPI. On the right-hand side of column chart F, 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.

F. Contribution of Indicators to the MPI at the National Level, for Urban Areas, and for Rural Areas

YS = Years of Schooling   CM = Child Mortality   E = Electricity   DW = Drinking Water   CF = Cooking Fuel
SA = School Attendance   N = Nutrition   S = Sanitation   F = Floor   A = Assets

Intensity of Multidimensional Poverty

Recall that i) a person is considered poor if they are deprived in at least one third of the weighted indicators and ii) the intensity of poverty denotes the proportion of weighted indicators in which they are deprived. A person who is deprived in 90% has a greater intensity of poverty than someone deprived in 40%. The following figures show the percentage of MPI poor people who experience different intensities of poverty. The pie chart below breaks the poor population into groups based on the intensity of their poverty. For example, the first slice shows deprivation intensities of greater than 33% but strictly less than 40%. 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 H 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 weighted indicators.
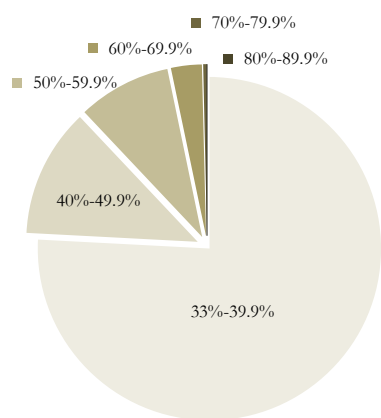
H. Percentage of People Deprived in X% or more of the MPI Weighted Indicators
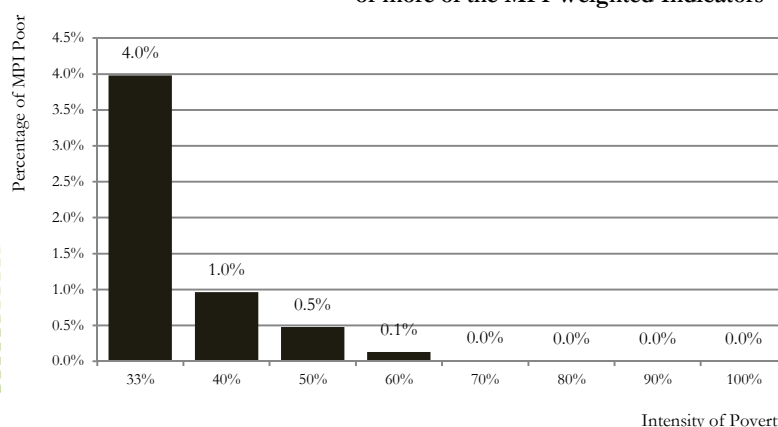
G. Intensity of Deprivation Among MPI Poor

Multidimensional Poverty at the Sub-national Level

In addition to providing data on multidimensional poverty at the national level, the MPI can also be 'decomposed' by sub-national regions to show disparities in poverty within countries. This analysis can be easily performed when the survey used for the MPI is representative at the sub-national level. The following table shows the MPI value and its two components at the sub-national level: the incidence of poverty (H) and the average intensity of deprivation faced by the poor (A). The fifth and sixth columns present the percentage of the population vulnerable to multidimensional poverty and living in severe poverty, respectively. The last column presents the population share of each region, which has been obtained by using the sampling weight in the respective survey dataset, applied to the final sample used for the computation of the reported poverty statistics in this country profile. All figures in Table I, including the population-weighted regional MPIs, headcount ratios (H), and intensities (A), sum to the national figures. The map following the table shows visually how the MPI varies across regions; a darker colour indicates higher MPI and therefore greater poverty. For each region, we also provide the incidence of deprivation indicators, and the composition of MPI poor. These are found in the Excel tables and the interactive maps available at http://www.ophi.org.uk/multidimensional-poverty-index/.

I. Multidimensional Poverty across Sub-national Regions

Region	Multidimensional Poverty Index (MPI = H×A)	Incidence of Poverty (H)	Average Intensity Across the Poor (A)	Percentage of Population Vulnerable to Poverty	Percentage of Population in Severe Poverty	Population Share
Aguascalientes	0.007	1.9%	35.8%	2.8%	0.1%	1.0%
Baja California	0.005	1.4%	38.5%	2.0%	0.2%	2.8%
Baja California Sur	0.004	1.0%	36.7%	3.3%	0.1%	0.4%
Campeche	0.017	4.3%	40.2%	8.6%	0.7%	0.7%
Chiapas	0.042	10.9%	39.0%	12.9%	1.6%	4.1%
Chihuahua	0.013	3.5%	38.0%	3.3%	0.5%	3.1%
Coahuila	0.004	1.2%	36.7%	2.4%	0.0%	2.4%
Colima	0.009	2.2%	39.3%	3.3%	0.3%	0.5%
Distrito Federal	0.002	0.7%	33.3%	0.5%	0.0%	8.4%
Durango	0.009	2.2%	39.8%	5.7%	0.5%	1.4%
Guanajuato	0.013	3.6%	36.6%	8.2%	0.0%	4.7%
Guerrero	0.050	12.3%	41.1%	16.1%	2.3%	3.0%
Hidalgo	0.014	3.9%	37.5%	7.0%	0.4%	2.3%
Jalisco	0.005	1.5%	35.2%	3.0%	0.0%	6.5%
Mexico	0.008	2.2%	37.8%	2.7%	0.1%	13.7%
Michoacan	0.020	5.2%	38.7%	6.5%	0.7%	3.9%
Morelos	0.008	2.1%	37.2%	5.0%	0.2%	1.6%
Nayarit	0.021	5.3%	40.0%	6.6%	0.9%	0.9%
Nuevo Leon	0.004	1.2%	36.7%	1.9%	0.0%	4.0%
Oaxaca	0.050	12.2%	40.8%	14.8%	2.1%	3.4%
Puebla	0.018	4.9%	37.1%	9.7%	0.2%	5.2%
Queretaro	0.018	4.6%	39.9%	5.6%	0.7%	1.5%
Quintana Roo	0.011	3.0%	37.9%	4.2%	0.2%	1.1%
San Luis Potosi	0.021	5.6%	37.9%	8.2%	0.7%	2.3%
Sinaloa	0.016	3.7%	43.4%	5.1%	1.1%	2.5%
Sonora	0.007	1.7%	37.7%	3.5%	0.1%	2.3%
Tabasco	0.010	2.6%	38.3%	6.1%	0.5%	2.0%
Tamaulipas	0.011	3.1%	36.6%	3.9%	0.0%	2.9%
Tlaxcala	0.008	2.2%	38.4%	3.4%	0.2%	1.0%
Veracruz	0.030	7.5%	40.2%	9.8%	1.1%	6.9%
Yucatan	0.014	3.8%	37.8%	9.0%	0.3%	1.8%
Zacatecas	0.013	3.5%	36.1%	6.5%	0.3%	1.3%

J. Mapping Poverty Rates at the Sub-national Level

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by OPHI or the University of Oxford. This map is intended for illustrative purposes only.