Multidimensional poverty measures using the Alkire Foster method

Multidimensional poverty measures complement traditional one-dimensional indices such as income measures. The Alkire Foster method can be used to create global and national multidimensional poverty measures with context-specific dimensions and indicators. It provides policymakers with powerful tools for poverty monitoring and policy design.

Why use a multidimensional poverty measure?

No one indicator can capture the multiple aspects that constitute poverty, wellbeing or empowerment. And for policy analysis, it is essential to track the multiple and interconnected disadvantages poor people experience.

The Alkire Foster method of multidimensional measurement was developed at OPHI by Sabina Alkire and Professor James Foster. It is a flexible technique that can incorporate several different ‘dimensions’ of poverty or wellbeing, according to the context, to create measures that complement income poverty indices.

The Alkire Foster method – intuitive and easy to calculate

The Alkire Foster method identifies ‘who is poor’ by considering the range of deprivations they suffer. It aggregates that information to reflect societal poverty in a way that is robust and can be easily broken down (for example by indicator or by geographic area, ethnicity, gender and other social groups) to reveal how people are poor.

Measures constructed using the Alkire Foster method can identify interconnections among deprivations and improve policy design.

The method captures the percentage of people who are poor (incidence) and the intensity of poverty experienced by the poor. It is flexible and can incorporate a wide range of dimensions, indicators, cutoffs and weights.

As an index constructed using the Alkire Foster method reflects changes in indicators directly, it is also time sensitive, making it an effective monitoring tool. For example, an increase in people with access to clean water will show up in an index as soon as new data are collected; one does not need to wait until this change affects income.

Common uses of the method include:

- Poverty and wellbeing measures: To build national, regional or international measures of poverty or wellbeing using context-specific indicators which reflect social, economic and other dimensions.
- Geographic and group-based targeting: To identify poor regions or groups (e.g. for geographic targeting or allocation decisions).
- Monitoring and evaluation: To track the effectiveness of programmes over time.
- Targeting the poorest groups and beneficiaries: To inform conditional cash transfers, district interventions or public programmes.

An application of the method – the global Multidimensional Poverty Index (MPI)

In 2010, OPHI and UNDP’s Human Development Report Office designed an index of acute multidimensional poverty in developing countries. Showing deprivations in health, education and living standards, and updated annually with relevant new datasets, the global MPI covers over 100 countries. Sub-national decompositions and indicator-level information are available in OPHI’s MPI Data Bank. There are calls for a new global MPI 2015+ with improved indicators to be used to inform policies in the post-2015 development context.
**National Multidimensional Poverty Measures**

Increasing numbers of policymakers are turning to multidimensional poverty measurement to improve their understanding of poverty, allocate resources more effectively and improve poverty reduction plans.

The governments of Mexico, Colombia and Bhutan, and the state governments of Minas Gerais and Sao Paolo in Brazil are among those to have adopted official multidimensional poverty measures using the Alkire Foster method. Each has dimensions, indicators and cutoffs tailored to a specific context and goals. The measures are used as official poverty statistics, and to monitor programmes, inform resource allocation, and target services. They may include or complement income poverty measures. Their design often incorporates participatory, technical and expert input. Other countries are well on the way toward developing a national or regional MPI.

**Why an MPI rather than a dashboard?**

A traditional dashboard cannot show who contends with several deprivations at once. An MPI reflects the multiple deprivations each person faces at the same time. Global and national MPIs are always reported with a dashboard of consistent indicators, and they build on cross-deprivation profiles. The MPI dashboard’s key statistics include:

- **Incidence of poverty**: The percentage of multidimensionally poor people.
- **Intensity of poverty**: The average proportion of deprivations poor people face at once.
- **Composition of poverty**: The percentage of people who are poor and deprived in each indicator.

For more information, please see: [www.ophi.org.uk/policy/alkire-foster-methodology](http://www.ophi.org.uk/policy/alkire-foster-methodology)

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**Colombia’s national Multidimensional Poverty Index (MPI) was created using the Alkire Foster method. It incorporates five dimensions and 15 indicators, customised to national social and economic realities.**

### National Multidimensional Poverty Index (MPI)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Educational achievement, Literacy, Absence of child employment</td>
</tr>
<tr>
<td>Childhood &amp; youth conditions</td>
<td>School attendance, No school lag, Access to childcare services</td>
</tr>
<tr>
<td>Labour</td>
<td>Absence of long-term unemployment, Formal employment</td>
</tr>
<tr>
<td>Health</td>
<td>Health insurance, Access to health care services when needed</td>
</tr>
<tr>
<td>Public utilities &amp; housing conditions</td>
<td>Access to improved drinking water, Adequate elimination of sewer waste, Adequate flooring, Adequate walls, No critical overcrowding</td>
</tr>
</tbody>
</table>

**Source:** Archivo Oficina de Comunicaciones, Departamento para la Prosperidad Social - DPS