Multidimensional poverty measurement

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1. MPI Policy Demands
   a. National
   b. Institutional & Regional

2. The post-2015 conversation
   A. MPI and $1.25/day data
   B. More and Better Data for MPI 2015+
   C. MPI 2014 and Leaving No one Behind
      a. Destitution
      b. Inequality among the poor
      c. Ethnic Groups
MPI POLICY DEMANDS

National

- Current Income per capita
- Population
- Income
- Wellbeing
- Deprivations
- Social Rights
  - Education
  - Health
  - Social Security
  - Housing
  - Basic services
  - Feeding

Six Social Rights:
Bhutan: Multidimensional Poverty Index 2010, 2014

A national measure with three dimensions and 13 indicators, tailored to the national context:

**Health:** Child mortality and food security

**Education:** Years of schooling and school attendance

**Living standards:** Electricity, sanitation, water, housing material, cooking fuel, road access, assets, land ownership and livestock ownership.
Colombia 2011, 2013: MPI-Colombia

Educational Conditions 0.2
- Schooling
  - School Attendance
  - At the right level
  - Access to infant services
  - No Child Labour

Childhood & Youth 0.2
- Illiteracy 0.1
  - School Attendance
  - At the right level
  - Access to infant services

Work 0.2
- Absence of long-term unemployment
- Formal work
- No Child Labour

Health 0.2
- Coverage
  - Access to health care given a necessity

Housing & Public Services 0.2
- Improved Water
- Sanitation
- Flooring
- Exterior Walls
- Overcrowding

Used to allocate resources in national development plan

0.1

0.05

0.04
Philippines: Multidimensional Poverty in the National Development Plan 2014

- Philippines Development Plan 2011-2016 updated with focus on inclusive growth
- Adds new multidimensional poverty indicator
- And target to reduce multidimensional poverty reduction to 16-18 percent by 2016
• President Piñera appointed an Expert Commission on Poverty Measurement.

• Recommended the creation of a new multidimensional measure of vulnerability and extreme poverty to better capture the full reality of poverty in a high-income context.

• Five dimensions: education; health; employment and social security; housing; and the community, environment and security.
Minas Gerais, Brazil: Multidimensional Poverty Reduction Programme

Programa TRAVESSIA

Secretary of State for Social Development

Secretary of State for Work and Employment

Secretary of State for Education

Secretary of State for Regional Development

Secretary of State for Health

Minas Gerais, Brazil: Multidimensional Poverty Reduction Programme
More National MPIs will be released in 2014-2016

At present we are in dialogue with 35+ countries

Governments seek training and policy dialogue, and are learning from others’ experiences.

Interested countries are LIC to OECD.
Other applications of the AF method

- National/Regional
  - China, El Salvador, Malaysia, Vietnam, Ecuador, Nigeria
  - + Many others

- Adaptations
  - Gross National Happiness
  - Women’s Empowerment
  - Child Poverty
  - Academic Studies
MPI POLICY DEMANDS

Institutional
The Multidimensional Poverty Peer Network

Launched in June 2013 at University of Oxford with:

• President Santos of Colombia
• Ministers from 16 countries
• A lecture from Professor Amartya Sen
• http://www.ophi.org.uk/policy/policynetwork/

Supported by the German Federal Ministry for Economic Cooperation and Development (BMZ)
A post-2015 Multidimensional Poverty Index - MPI2015+

At a side event to the UNGA 2013, the MPPN proposed an MPI2015+ to help ensure extreme poverty is eradicated in all its forms.

Recent Institutional support for multidimensional poverty measurement

- UNDP’s [HDRO](#) – pioneering institution
- SDSN [Indicators for Sustainable Development Goals](#) (2014).
THE POST-2015 CONVERSATION:

MPI & $1.25/day
MPI 2013 vs $1.25/day income poverty

This slide shows MPI2013 and $1.25/day headcount ratios.

We see that there is a trend, but large divergence.
Comparing MPI Destitution and $1.25/day poverty rates for 49 countries.

$1.25/day does not track the poorest of the poor either.

Alkire Conconi and Seth 2014, forthcoming

- **Red**: MPI Destitutes
- **Black**: Income poor (USD 1.25 a day)
THE POST-2015 CONVERSATION:
More and Better Data
More and Better Data

The MPPN developed a zero-draft Survey Instrument for an MPI2015+

- Gendered data
- New Variables:
  - Disability & Health Functionings
  - Violence
  - Work
- Space for Countries to add own modules
LEAVING NO ONE BEHIND:

Destitution
In these slides, MPI 2014 Methodology is unchanged from 2013
Who is the poorest of the poor?

We implement destitution measures for the first time across 90 countries.

- **Indicators:** Same as MPI
- **Weights:** Same as MPI
- **Poverty cutoff:** Same as MPI
- **Deprivation cutoffs:** Deeper

All ‘destitute’ people are already MPI poor.

Alkire, Conconi and Seth 2014.
## Deprivation cutoffs: Destitute

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Deprivation Cutoff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schooling</td>
<td>No one completed at least one year of schooling ((\geq 1))</td>
</tr>
<tr>
<td>Attendance</td>
<td>At least one child not attending school up to the age at which they should finish class 6</td>
</tr>
<tr>
<td>Nutrition</td>
<td>Severe Undernourishment of any adult ((\text{BMI}&lt;17\text{kg/m}^2)) or any child (-3 standard deviations from median)</td>
</tr>
<tr>
<td>Mortality</td>
<td>2 or more children died in the household</td>
</tr>
<tr>
<td>Electricity</td>
<td>The household has no electricity (No change)</td>
</tr>
<tr>
<td>Sanitation</td>
<td>There is no facility/bush, or other (open defecation)</td>
</tr>
<tr>
<td>Water</td>
<td>The household does not have access to safe drinking water, or safe water is more than a 45-minute walk (round trip)</td>
</tr>
<tr>
<td>Floor</td>
<td>The household has a dirt, sand, or dung floor (No change)</td>
</tr>
<tr>
<td>Cooking fuel</td>
<td>The household cooks with dung or wood (coal/lignite/charcoal are now non-deprived)</td>
</tr>
<tr>
<td>Assets</td>
<td>The household has no assets (radio, mobile phone, etc) and no car</td>
</tr>
</tbody>
</table>
Data Coverage – 3.6 Billion

Preliminary results are based on 87 countries covering 3.6 billion people which is roughly half of the planet.

<table>
<thead>
<tr>
<th>Region</th>
<th>Population (‘000)</th>
<th>Pop Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>773,950.5</td>
<td>21.4%</td>
</tr>
<tr>
<td>EECWA</td>
<td>306,600.1</td>
<td>8.4%</td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>514,123.4</td>
<td>14.2%</td>
</tr>
<tr>
<td>LAC</td>
<td>435,265.2</td>
<td>12.0%</td>
</tr>
<tr>
<td>South Asia</td>
<td>1,586,185.9</td>
<td>43.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,619,202.9</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

2011 UN Population data
Overview

People are destitute if they have deeper deprivations.

We can analyse destitution as a percentage of the MPI poor (which varies a lot), and by region, ethnicity, etc so no one is left behind.

Higher deprivation cutoffs can be used in a Universal MPI, with better data, especially for health.
What % of MPI poor are destitute?

Where MPI is high, a higher share of poor are destitute.

Countries with similar MPI have different % of destitutes.

Upper and Lower circles have similar MPI values, but a larger share of MPI poor are destitute in Upper. Can we learn from Lower?
Universal MPI

A Universal MPI would take the same set of indicators, but set different cutoffs, so that all societies, from America to Zimbabwe, could map their societies by these measures, and include those poor by no measure at all.

Example

<table>
<thead>
<tr>
<th></th>
<th>Destitution</th>
<th>MPI</th>
<th>MPI-II (OECD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children out of school</td>
<td>Primary school</td>
<td>Basic Education</td>
<td>Secondary School</td>
</tr>
<tr>
<td>Sanitation</td>
<td>Open Defacation</td>
<td>Adequate Sanitation</td>
<td>Flush Toilet in home</td>
</tr>
</tbody>
</table>
Universal MPI – nested measures, society-wide maps

 MPI-II (OECD Poverty) 60%  
 MPI Poverty 20%  
 Destitution 10%  
 All of Society 40%
LEAVING NO ONE BEHIND:

Inequality among the Poor
Inequality Among the Poor.

Motivated by HDRO, we have computed a new measure of inequality among the poor for all MPI countries.

The measure is rigorous, and satisfies a set of desirable properties:

– Symmetry & Replication invariance
– Zero inequality when everybody has same deprivation score
– Increase in inequality due to regressive transfer between deprivation scores
– Additive Decomposability
– Within-group Mean Independence

(Seth & Alkire 2013)
Inequality Among the Poor.

Inequality increase as MPI increases in general, but with variation

We’ve done inequality measures for each of the MPI2015 countries and for each of the 947 subnational region for which we have data, to show disparities across countries and regions.

Empirical results will be published with MPI 2014.

The policy goal is to end poverty, not just inequality among the poor.

This methodology can be extended to measure multidimensional inequality based on a counting approach.
LEAVING NO ONE BEHIND:

Ethnic Groups
Introduction

How has MPI changed over time for 32 countries, 2.3B.

We analyse the 326 subnational regions of these countries, to see where the poorest are being left behind.

The next 2 slides show changes over time for two countries, where MPI has been decomposed by ethnic groups.

Alkire, Roche and Vaz 2014.
In this country, the **poorest** ethnic group saw no change in MPI over time. They are being left behind.
In this country, the poorest ethnic group reduced MPI the fastest. They are catching up.
Obviously for each group we can see *how* MPI changed, and Monitor each indicator.
In Sum...
The MPI is like a high resolution lens...
The MPI is like a high resolution lens…

You can zoom in
The MPI is like a high resolution lens...

You can zoom in

and see more
MPI and ‘Leaving No One Behind’

- We add a new measure of destitution to see who the poorest of the poor so no one is left behind. This complements our analysis by 947 regions.

- We analyse poverty over time by ethnic groups or across 326 regions – are the poorest catching up or falling behind?

- Measures of inequality among the poor reveal group-based disparities vs individual disparities.

- The studies highlight many policy-relevant cases of success.
The MPI2015+: Added value

• Shows **interconnections** between deprivations
• Can incorporate indicators on the **environment, employment, violence**
• **Reveals changes** over time e.g. by region, social group, indicator (**inequality**) making it a tool for monitoring inclusive growth
• Can be **made universal** via multiple cutoffs
• Globally **comparable** MPI2015+ & national MPIs
• Data needs: **feasible** – e.g. MPPN survey proposal.
MPI 2015+ ‘Going to work’

• Survey and Data agenda
  – Concretize ‘data revolution’ discussions for extreme poverty
  – Pilot multi-purpose surveys reflecting HLP, OWG, UNSG
  – Using existing data to make ‘demonstration’ MPIs.
  – OECD Country indicators

• Measurement agenda for global MPI2015+
  – ‘Universal’ measures without confusion
  – Indicator options
  – National and International MPIs (like income poverty)

• Political agenda
Further research is ongoing.

Your guidance is welcome!

Thank you.