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MEASURING POVERTY A MULTIDIMENSIONAL PERSPECTIVE

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Why New Emphasis on Poverty Measurement?

- Economic growth is <u>not</u> always <u>inclusive</u>
- Reduction of income poverty is important but <u>not</u> <u>sufficient</u>
- MDG dashboards of indicators are dazzlingly <u>complex</u>
- Lack of attention in capturing joint distribution of deprivations

Recent Debates

Political critique of current <u>metrics</u> (Stiglitz, Sen & Fitoussi 2009)

Measures in HDR sparked interest and debate (UNDP 2010)

Post-2015 requires re-thinking Data and Measures

Economic Growth is <u>Not</u> Always Inclusive

Indicators	Year	India	Bangladesh	Nepal
Cross National Income nor Conita	1990	860	550	510
(in International \$)	2011	3620	1940	1260
	Growth (p.a.)	6.8%	5.9%	4.2%
	1990	114.2	138.8	134.6
Under-5 Mortality	2011	61.3	46.0	48.0
	Change	-52.9	-92.8	-86.6
	1990	70	69	43
DPT Immunization Rate	2010	72	95	82
	Change	2	26	39
	1990	51.6	55.5	65.8
Adult Pop. with no Education	2010	32.7	31.9	37.2
	Change	-18.9	-23.6	-28.6
Access to Improved Sanitation (rural pop)	1990	7	34	7
	2010	23	55	27
	Change	16	21	20
Source: Alkire and Seth (2013). The table	is inspired by Dr	èze and Sen (2011), with minor ad	ditions.

Eradicating Income Poverty is not Sufficient



Reduction in income poverty does not reduce other MDG deprivations
automatically.Source: World Bank Data & Global
Monitoring Report Progress Status, 2013

MDG Dashboards

Millennium Development Goals (UN, 2000): 48 indicators to monitor 18 targets to achieve the 8 goals



Disadvantages of Dashboards

Lack of a single outline figure as GDP – Stiglitz, Sen, and Fitoussi (2009)

Ignore identification

 Who is poor? How many poor people are there? How poor are they? (Alkire, Foster and Santos, 2011)

Ignore joint distribution even when possible to capture

– Alkire, Foster and Santos (2011)

Joint Distribution of Deprivations

A simple example (deprived=1, non-deprived=0)

MDG1	MDG2	MDG3	MDG1	MDG2	MDG3
1	0	0	0	0	0
0	1	0	0	0	0
0	0	1	0	0	0
0	0	0	1	1	1
Ca	se 1		(Case 2	

In both cases, 25% (1/4) deprived in each indicator **BUT**, in Case 2, one person is severely deprived

Need for a Meaningful Measure

What Can a Meaningful Multidimensional Poverty Measure Do?

- Provide an overview through a <u>single summary measure</u>
- Show progress quickly and directly: <u>Monitoring</u> <u>/Evaluation</u>
- Inform <u>planning</u> and <u>policy</u> design
- Can be used as a <u>targeting instrument</u> (distinguish the poorest from the poor)
- Can be decomposed by regions, social groups
- Can be broken down by dimensions to see contributions

A Meaningful Multidimensional Poverty Measure

- One such measure with certain meaningful properties has been proposed by Alkire and Foster (2011 *JPubE*)
 - The Adjusted Headcount Ratio

Steps of the Adjusted Headcount Ratio

- 1. <u>Select</u> dimensions, indicators and weights
- 2. Set <u>deprivation cutoff</u> for each indicator
- 3. <u>Identify</u> all deprivations in the society
- 4. Obtain <u>deprivation counts/scores</u> for each unit of analysis (households or persons)
- 5. Set a <u>poverty cutoff</u> to identify who is poor
- 5. Calculate Adjusted Headcount Ratio

Note: Terms deprived and poor are not synonymous

The Adjusted Headcount Ratio (M_0)

The Adjusted Headcount Ratio can be expressed as:

$$M_0 = H \times A$$

H: The percent of people identified as multidimensionally poor, it shows the *incidence* of multidimensional poverty

A: The average of the deprivation counts/scores of the poor people; it shows the *intensity* of people's poverty



Global MPI

Global Multidimensional Poverty Index (MPI)

An adaptation of the M_0 , was introduced by Alkire and Santos (2010) and UNDP (2010) with following indicators and weights



3 Dimensions

Who is Identified as Multidimensionally Poor?

A person is poor if she is deprived in 1/3 or more of the weighted indicators (poverty cutoff = 1/3)

(censor the deprivations of the non-poor)

Total Population in 104 MPI countries

MPI vs. \$1.25-a-day

How Does This Help in National Policy Analysis?

Reduction in MPI across Indian States (99-06)

No data

We combined Bihar and Jharkhand, Madhya Pradesh and Chhattishgarh, and Uttar Pradesh and Uttarakhand (Alkire and Seth 2013)

Comparison with Change in Income Poverty (p.a.) (99-06)

Absolute Reduction in Poverty Across Sub-Groups (99-06)

Absolute Change (99-06) in MPI-I

Improvement in Poverty: *H* or *A*?

(Alkire and Seth 2013)

Policy Relevance: Incidence vs. Intensity

Country A:

Poverty reduction policy (without inequaliy focus)

this.

Country B:

Policy oriented to the poorest of the poor

How Poor the Poor Are?

Madagascar (2009, DHS) MPI = 0.357H = 67% Rwanda (2010, DHS) MPI = **0.350** H = **69%**

Concluding Remarks

How Can MPI Help?

- Can reflect on joint distribution of deprivations
- National MPIs can be tailored to context & priorities
- National MPI can be reported like national income poverty measure
- Political incentives from MPI are more direct
- **Data needs**: Global MPI uses only <u>39 of 625</u> questions in Demographic Health Survey

Applications of Adjusted Headcount Ratio

- Official Multidimensional Poverty Measures
 - Mexico, Colombia, Bhutan, Philippines and Brazil (state of Minas Gerais)
- Progressing toward official measures
 - Chile, China, Ecuador, El Salvador, Malaysia, Nigeria and Vietnam, + Many others in progress
- Other adaptations
 - Gross Nattional Happiness, Women's Empowerment, Child Poverty
- Islamic Development Bank will discuss about supporting the MPI at 2014 Annual Meeting

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

Supported by the German Federal Ministry for Economic Cooperation and Development (BMZ)

Federal Ministry for Economic Cooperation and Development

Participants from 25+ governments and institutions

Connects policymakers engaged in exploring or implementing multidimensional poverty measures

From: Angola, Bhutan, Brazil, Chile, China, Colombia, ECLAC, Ecuador, El Salvador, Dominican Republic, Germany, India, Iraq, Malaysia, Mexico, Morocco, Mozambique, Nigeria, OECD, OECS, OPHI, Peru, Philippines, SADC, Tunisia, Uruguay and Vietnam

Thank you

National Multidimensional Poverty Measures ~

Growing globally

Consejo Nacional de Evaluación de la Polífica de Desarrollo Social Mexico: A national Multidimensional Poverty Measure

Colombia: Multidimensional Poverty Index (MPI-Colombia)

Multidimensional Poverty Index

Bhutan:

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

Health: Child mortality and food securityEducation: Years of schooling and school attendanceLiving standards: Electricity, sanitation, water,housing material, cooking fuel, road access, assets,land ownership and livestock ownership.

Image: Notional Development AUTHORITYPhilippines:Philippines:National Poverty in the

- 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

Chile: Expert Commission Recommends Multidimensional Poverty Measure

- 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.

GOVERNO DE MINAS Minas Gerais, Brazil: Multidimensional Poverty Reduction Programme

Other Applications of the Alkire Foster Method

National Measures

China, El Salvador, Malaysia, Vietnam, Ecuador, Nigeria

> + Many others in progress

> Adaptations

- ➢ Gross Nat'l Happiness
- ≻ Women's Empowerment
- Child Poverty
- ≻ Post-2015 discussions

A Short Guide to Gross National Happiness Index

Karma Ura, Sabina Alkire and Tshoki Zangmo

The Centre for Bhutan Studies

The Multidimensional Poverty Peer Network (MPPN) ~

Created in response to growing demand

A post-2015 Multidimensional Poverty Index - MPI2015+

The MPPN has developed a proposal for an MPI2015+ to help ensure **poverty is eradicated in all its forms** after 2015