

Comment on Interlinkages from Academic Stakeholder

[Sabina Alkire](#), Oxford Poverty & Human Development Initiative, University of Oxford

The opening session of the IAEG-SDG Mexico raised the agenda of studying interlinkages across indicators. Instead of giving a talk I would like to share a detective story.

Suppose we have a small dashboard of indicators. For example, we might have indicators such as the following, which identify different percentages of people that suffer deprivations in different indicators across 101 countries. Over one half lack clean cooking fuel, over two in five lack adequate sanitation, over one quarter live on dirt floors, without safe water, and with someone in their household who is undernourished. Over one in five lack electricity or basic assets, and one in six live in a household that has lost a child.

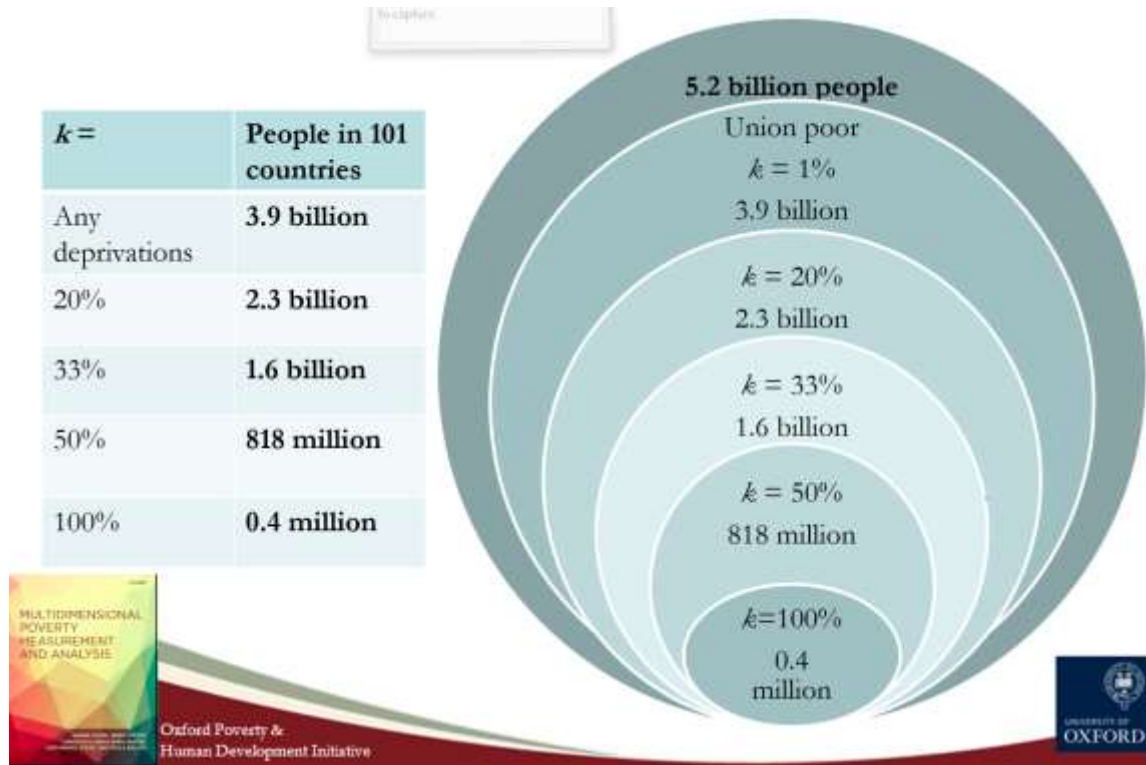
Indicator	Headline for 5.2 billion people across 101 countries	Weight
Cooking Fuel	53.0% lack clean cooking fuel	1/18
Improved Sanitation	40.2% lack adequate sanitation or it is shared	1/18
Nutrition	26.8% have someone in their household who is undernourished	1/6
Flooring	26.5% live in houses where floors are dirt, sand, or natural	1/18
Safe Drinking Water	25.1% lack safe water or must walk 30 minutes or more to obtain it	1/18
Assets	23.4% live in households that do not own more than one small asset (telephone, tv, radio, bicycle, motorcycle, & refrigerator) and do not own a car or truck.	1/18
Electricity	21.8% lack electricity	1/18
Child Mortality	16.9% of people live in households where a child has died	1/6
Years of Schooling	13.6% live in a household in which no member has completed five years of schooling	1/6
Child School Attendance	13.6% live in a household where a child is not attending school up to class 8	1/6

Here is the puzzle: how many people are deprived in at least one deprivation at a time? Is it 53% who are deprived in cooking fuel – are they also deprived in the others? Or are 100% of the 5.2 billion people deprived in at least one indicator each? How are the 13.2 billion deprivations in these indicators distributed?

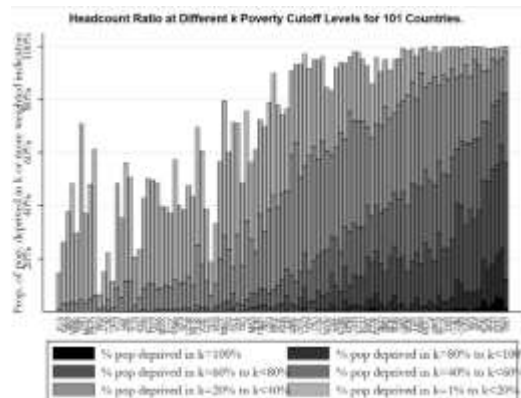
With a dashboard, it is a mystery. We cannot answer the question. A dashboard leaves us blind to the overlap between deprivations. Yet sources ranging from *Voices of the Poor* to Nobel Laureate Amartya Sen observe the importance of studying how deprivations overlap with each other, because part of the lived experience of poverty is that many deprivations batter their lives at the same time.

When we have the data from the same data source for the same person or household, we can answer the question. In regards the ten indicators above, 3.9 billion people – 75% of them – are deprived in at least one of these indicators. And 1.05 billion experience exactly one deprivations and no others.

In fact, we may want to zoom in to see who is multiply deprived to varying degrees. Using the weights of the global Multidimensional Poverty Index (MPI),¹ we see that 2.3 billion are deprived in 20% of them, 1.6 billion are deprived in one-third or more – and that is the global MPI figure – and 800 million experience deprivations in half of the weighted indicators at the same time.



The numbers above provide a global overview. This information can be easily reproduced at the national or subnational level (MPI covers 990 subnational regions), in order to zoom in on communities with varying intensities of multidimensional poverty, as the figure below shows.



Also, while here we have focused on the overlap among poverty-related indicators, such analysis of interlinkages can also include overlaps across other indicators including ecosystems and natural resources.

Thus the step of scrutinizing interlinkages is of fundamental importance. And it will bring into view information that we cannot see at the moment – information which is vital for integrated and multi-sectoral policies to fight poverty in all its dimensions.

Analysis is taken from: Alkire, S. and Robles, G. (2016). “Measuring multidimensional poverty: Dashboards, Union identification, and the Multidimensional Poverty Index (MPI).” *OPHI Research in Progress* 46a, University of Oxford

¹ The health and education indicators are weighted 1/6 each, and the living standard indicators are weighted 1/18 each to obtain equal weighting across each of the three dimensions, and equal weighting within each dimension.