Lifting the lid on the household: Introducing the *Individual Deprivation Measure*

Current approaches to measuring poverty do not fully capture poverty as experienced daily by millions of people around the world. Poverty is generally measured at the household level, in effect assuming that everyone in a household is equally poor (or not poor), with similar access to household resources and assets. Measurement approaches often emphasise aspects of life that men and women have in common, rather than dimensions that are particularly important to women, or to men, and obscure the gendered experience of poverty. This four year international research collaboration has developed a new approach that is grounded in the lived experience of poor women and men across six countries and measures the poverty of individuals in a way that reveals gender disparities and the extent of deprivation.



Why this research?

Current measures of poverty do not adequately capture the nature and experience of poverty. They tend to be arbitrary and give highly inconsistent results; they rely on household-level data and so do not assess the situations of individuals; and they do not provide gender sensitive or gender disaggregated data, making it impossible to evaluate relationships between poverty and gender. As well as focusing solely on the household, approaches based on the International Poverty Line (IPL) make international comparisons using methods that include the costs of goods and services that are not relevant to the lives of poor women and men. These global estimates are then used to 'describe the world, to determine resource allocation priorities, and to judge which policies are most poverty reducing.'

Claims about the 'feminisation of poverty' suggest that women are both disproportionately poor and increasingly represented among the poor, yet these claims are currently unsubstantiated. Poverty measures provide data about households rather than individuals and so are unable to reveal with accuracy to what degree and in what sense global poverty is feminised. Gender-sensitive data on poverty is a pre-requisite for quantifying the relationship between gender and poverty and for the design of appropriate, effective, well-targeted and equitable policies and programs. It is therefore also central in assessing the impact – and impact for whom – of such programs.

This research aimed to establish the feasibility of measuring poverty at the individual level, in a way that reveals how access to assets and resources and time use are distributed within households. By exploring which dimensions of life poor women and men themselves considered most important for defining and measuring poverty, the research sought to ground the measure in lived experience.

About the research: what we did

The research was undertaken in six countries: Angola, Fiji, Indonesia, Malawi, Mozambique and the Philippines. Project staff worked in partnership with local research teams in each country in the first two phases, prioritising contextual knowledge and experience.²

The research project adopted an openly feminist methodology, with close analysis of whether men and women differed in their responses to the same questions, and if so how, within individual research sites, across different age groups and in different geographic contexts.

Research was conducted in three phases. The first phase involved qualitative research in three sites in each country, covering urban, rural and highly marginalized contexts.³ The research design aimed for around 100 participants per site, 300 per country and 1,800 in total. Six participatory research methods were used with separate groups of women and men, further divided into three age groups, to maximise the space for women and men to safely contribute their views. Key informant interviews provided insight into the nature of poverty at a particular research site.

Group discussions explored what constitutes poverty, how poverty is experienced by different individuals within a household, whether this experience varies by age and/or sex, and whether participants recognise different levels of poverty. The rich, detailed reports are an important resource and outcome in themselves, in addition to their

contribution to subsequent phases of research.

From this first phase, 25 dimensions of poverty were identified, following a workshop with academics, project staff and researchers from each of the six countries to review results and identify commonalities and differences.

Phase two saw research teams return to all sites to clarify participants' priorities among these 25 aspects of life, and identify a manageable number of dimensions that could be appropriately justified. Participants ranked their top 15 priorities and identified any important dimensions they thought were missing from the list. As in phase one,

¹ Sanjay Reddy and Thomas Pogge (2010) 'How not to count the poor' in Sudhir Anand et. al (eds) *Debates on the measurement of global poverty* (Oxford: Oxford University Press) 42-85.

² In Angola, research was led by Platforma Mulheres Emacção (Women in Action Platform), supported by KULA (Applied Studies and Research); in Fiji research was led by Dr Priva Chattier in coordination with FemLINKPACIFIC; in Indonesia, research was led by Dr Ulfah Muhayani at the Universitas Islam Negeri; in Malawi, by the Women's Legal Resource Centre; in Mozambique by Dr Cristiano Matsinhe and Edite Cumbe at KULA; and in the Philippines by Professor Fatima Castillo of the Philippine Health and Social Science Association.

³ We recognise that many communities will not easily fit into one of these three categories. All communities have many distinguishing features and some will fall on a continuum between urban and rural. All marginalized communities will also be shaped by their urban-rural status, and identifying a marginalized community can be difficult in countries where most communities face systematic deprivation.

research groups were divided by age and sex to create comfortable spaces in which individuals could contribute.

Researchers also reviewed potential dimensions in light of insights from gender and development literature. Some dimensions were found to be inter-related and could be captured in a single dimension; some were included because of their capacity to reveal gender disparity; others again, while considered hardships, were assessed as less relevant or less supported in the data collected.

Weight was given to whether indicators in each dimension could be populated from existing data collection efforts, but the team determined not to be limited by the lack of data, so that current data limitations are not perpetuated into the future. The research team also reviewed recent poverty measurement innovations and assessed what a new measure needed to do in order to improve on existing approaches.

Fifteen areas of life were identified for inclusion in a new gender sensitive multidimensional measure of poverty, to be called the *Individual Deprivation Measure (IDM)*.

The Individual Deprivation Measure (IDM)

The IDM tracks an individual's status in dimensions of material and social importance, measuring sufficiency in both quantity and quality. The dimensions and associated indicators are listed in Table 1.

Phase three involved a nationally representative trial of the measure in the Philippines, undertaken by Pulse Asia Inc., an experienced data collection firm. In each of 750 randomly selected households, researchers were asked to interview all household members 18 years and over, to enable analysis of intra-household differences. While inclusion of all adult household members was not possible in all cases, multiple household members were interviewed; 1,806 respondents completed the questionnaire (983 females and 823 males). Data was collected using a multi-topic survey that included household and individual modules, recognising that some information (for example, about shelter) is better collected at household level.

An IDM was calculated for each participant based on their scores in each of the 15 dimensions. Answers to survey questions were initially scored on a 1-5 scale (the lower the score the greater the degree of deprivation, with 5 representing no deprivation and any score lower than 5 representing some deprivation). Within each dimension, weighting was used to give greater significance to more severe deprivations. Within a dimension, the significance of an individual moving up from interval 1 to interval 2 is greater than an individual moving from interval 4 to interval 5, and vice versa;

a person falling from interval 2 to interval 1 is worse than a person falling from interval 5 to interval 4. This prioritarian weighting within a dimension is justified by a range of considerations: there is greater moral marginal benefit to improving the situation of the worst off; more severe deprivations can have longer lasting impacts; and more severe deprivations can be more difficult to escape, and thus require greater resources.

A second adjustment is made when the dimension scores are aggregated into a composite, multidimensional deprivation score. A simple system was used to give greater weight to those dimensions that were ranked more highly by participants in phase two, as outlined below. The maximum potential sum of the weighted scores was 150. Each participant's score out of 150 was then converted to a percentage, which is the IDM score.

In the case of four dimensions (freedom from violence, family planning, voice and respect in relation to paid and unpaid work) not all respondents received a score for a range reasons. For these individuals, their actual score was divided by their total possible score.

Weighting System

WITHIN EACH DIMENSION	BETWEEN DIMENSIONS		
Improvements from more severe deprivations are morally more important than equal sized improvements from less severe deprivations	Deprivation in some dimensions are more important than deprivations in other dimensions		
Interval 1: 0 points Interval 2: 4 points (4) Interval 3: 3 points (7) Interval 4: 2 points (9) Interval 5: 1 points (10)	Top 5 dimensions: Weighted x 1.5 Next 5 dimensions: Weighted x 1 Bottom 5 dimensions: Weighted x 0.5		

TABLE 1: INDIVIDUAL DEPRIVATION MEASURE						
MODULE	INDICATORS	SOURCES				
Household Characteristics	N/A	Multiple				
A. Financial Status	Asset index	DHS				
1. Food/Nutrition	Hunger in last 4 weeks	FANTA				
2. Water	Water source, water quantity	WHO, UNICEF, new				
3. Shelter	Durable Housing, Homelessness	DHS, new				
4. Health Care/Health	Health status, health care access; for women pregnant now or within the last 3 years, substitute pre-natal care, birth attendance & actual/ intended place of birth	CWIQ, WHS				
5. Education	Years of schooling completed, literacy and numeracy	IHSN, DHS, new				
6. Energy/Cooking Fuel	Source of cooking fuel, any health impacts, access to electricity	DHS, new				
7. Sanitation	Primary toilet, secondary toilet	UNICEF, WHO				
8. Family Relationships	Control of decision making in household, supportive relationships.	OPHI/WEAI, new				
9. Clothing/Personal Care	Protection from elements, ability to present oneself in a way that is socially acceptable	New				
10. Violence	Violence (Including sexual and physical assult) experienced in the last 12 months, perceived risk of violence in the next 12 months	OPHI missing dimensions				
11. Family Planning	Access to reliable, safe contraception, control over its use	DHS, new				
12. Environment	Exposure to environmental harms that can affect health, wellbeing, income and livelihood prospects	New				
13. Voice	Ability to participate in public decision making in the community, ability to influence change at community level	WEAI/ OPHI				
14. Time-use	24 hour clock (labor burden, leisure time)	Various time-use surveys, WEAI				
15. Work	Status/of/respect in/for paid and unpaid work; safety/risk in relation to paid and unpaid work	OPHI				

CWIQ Core Welfare Indicators Questionnaire DHS Demographic and Health Survey **FANTA** Food and Nutrition Technical Assistance project IHSN

International Household Survey Network Oxford Poverty and Human Development Initiative UNICEF United Nations Children's Fund WEAI Women's Empowerment in Agriculture Index

WHO World Health Organisation WHS World Health Survey

IDM Thresholds

OPHI

We have established the following IDM thresholds, to reflect our commitment to develop a measure that can reveal the extent and depth of deprivation, rather than just whether a person is poor or not. This is important ethically, so that resources can be targeted to those who are most deprived. It is also important for development effectiveness, because what is required for someone to be no longer deprived depends on their starting circumstances, and specifically whether they are somewhat or deeply deprived, in relation to a few or many areas of life.

From 90 - 100

We categorise as not deprived

While these individuals do in some areas fall below a threshold we deem sufficient for a minimally decent life, we think it is fair to categorise them as not deprived as their shortfalls are of moderate depth and few in number. It is very likely that a middle-class person in a wealthy country would score in this range.

From 80 - 89.9

We categorise as somewhat deprived

Falling in this category indicates that an individual suffers from non-negligible deprivations, but is still relatively well off. Many individuals who received a score in the 80s may suffer from several important deprivations, but reach the minimal thresholds in most other dimensions.

From 70 - 79.9

We categorise as deprived

These individuals fall below the minimum threshold in a range of deprivations and some of their shortfalls are significant. They might occasionally be hungry, have a house that is made of some rudimentary materials, share a toilet rather than have their own, lack some control over decision making in their household, or experience some other combination of significant shortfalls.

From 69 - 69.9

We categorise as very deprived These individuals are deprived in a larger number of dimensions or are severely deprived in the dimensions where they fall short. A person who is sometimes hungry, has low quality shelter, lacks running water, and is subject to violence may be typical of this range.

Below 60

We categorise as extremely

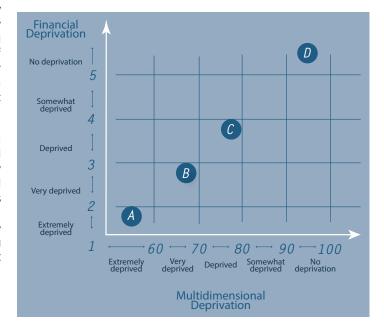
These women and men will be deprived in a large number of dimensions, and very deprived in a subset of those dimensions. A person who is regularly hungry, who lacks any sturdy materials for housing, uses no improved sanitation, cooks with dirty fuel, has little influence over the community, is subject to violence, and perhaps suffers several other deprivations may be typical of this category.

Two axes of achievement

The IDM tracks an individual's status in 15 dimensions of material and social importance. However, these dimensions do not capture a person's financial status. Lack of money is undeniably part of poverty, and lack of income and wealth was heavily emphasised by participants in the first phase. Rural men and women in Philippines described their lives as: 'Borrow-pay-borrow-pay while awaiting one's death – that is the life of the poor.' Money was deliberately excluded from the phase two ranking exercise given its potential to distort preferences: women and men might rightly think that if only they had money, they could address many other deprivations, potentially making it difficult to get a clear reading on their preferences among other substantive dimensions. However, given the importance of money for addressing deprivation, in itself and as expressed by poor women and men, we recommend that tracking individual deprivation take account of both financial deprivation and deprivation in specific dimensions of life.

We follow the recently debuted Mexican multidimensional poverty measure in tracking financial deprivation on one axis and multidimensional deprivation on another. This allows anti-poverty policy makers to track when multidimensional deprivation is related to financial deprivation, and when it is not. It also recognises that financial deprivation is an important component of poverty, independent of its relationship to multidimensional deprivation. We propose collecting information about financial circumstances using a simple assets index, with data collected as part of the multi-topic survey. While more detailed financial information might be useful, the time involved in collection is significant.

In the graph below (which is for illustrative purposes), Person A is severely deprived in many dimensions and has a very bad financial situation. Person B is on the borderline between very poor financially and very deprived multidimensionally. Person C is on the borderline between very poor and poor financially, but in the multidimensionally poor category. Person D is not poor either financially or in the multiple dimensions of deprivation captured in the IDM.



Poverty and gender equity indices

The composite deprivation score generated in calculating the IDM can also be used to calculate a measure of gender equity. Because the composite figure of deprivation can be broken down into its constituent parts, it is possible to calculate gender equity in relation to each of the 15 dimensions of life included in the IDM. The gap between men's achievements and women's achievements in each of the 15 dimensions can be easily measured across a population, or investigated by subgroups, for example within particular wealth

quintiles, or within individual households. Because we also collect information such as linguistic group, geographic region and disability, we can also measure inequalities between other groups. This enables the construction of a composite gender equity measure that is more relevant to the circumstances of poor women and men than existing composite measures that use indicators such as representation in national parliament or gender wage differences in formal employment.

Results and reflections

Phases one and two

The research generated in-depth qualitative data from a range of geographic, social, political, cultural and economic situations, and quantitative data confirming the relative priorities of women and men of different ages and backgrounds regarding potential dimensions of poverty. It confirmed that poor women and men consider poverty to be defined by a *wider range of deprivations* than captured in existing approaches. Participants recognised *levels* of poverty and deprivation, and factors that could move someone up or down between these different levels. Such understandings point to the limitations of binary approaches that define people as either poor or not poor, and the importance of *scalar* measurement that captures whether one is a little deprived or very deprived. They also highlight that vulnerability is part of what characterises poverty.

Some key deprivations as defined by participants go to core material needs, such as the level of food/nutrition and access to sufficient water and shelter. Other dimensions refer more to the level of control someone has over their own life (lack of which was frequently described as a deprivation). These include access to and quality of education, exposure to or freedom from violence and respect within and support from one's family. In-depth participatory research, informed by feminist and human rights insights, was critical in building a nuanced, gender-sensitive, multidimensional measure of poverty. The IDM is not simply about lack of practical necessities, but also about, voice, control, agency and governance, and the ways in which people feel deprived, which help perpetuate poverty over time.

While there was no simplistic connection between gender, age and how participants thought poverty should be defined and measured, the research showed clearly that gender roles and responsibilities affect the *burdens* that participants face when deprived. For example, a lack of employment or income was often seen as a problem experienced more by men, whereas a lack of food was seen to affect women more, as they were responsible for providing food and other household requirements including water, sanitation and firewood. In Malawi, participants in phase one also noted how gendered roles and responsibilities shaped the ability to act to address poverty: 'men can walk long distances to do piece work and get food while women cannot do this as they must take care of children at home.' In Mozambique, participants noted that girls and women without a partner and with more constrained mobility and employment opportunities often have to resort to prostitution with older men to earn money to pay for help with heavy tasks such as building houses, or to trade sex for goods, including food and drinks.

There were also significant differences between urban-rural contexts and variability by age cohorts in how participants conceptualized poverty and in what they considered most important for moving out of poverty.

Although many participants in phase one considered the household as an appropriate unit of analysis in assessing poverty ('if one is poor, the whole family is poor'), they also identified differences in the situation of people within the household.

The grounding of the measure in the perspectives of those with lived experience of poverty is important in itself and provided strong support for a multidimensional approach to poverty measurement, assessed at the individual level, in relation to the specific dimensions we propose.

Phase three

The pilot of the IDM in the Philippines established the feasibility of assessing poverty at the individual level in a way that reveals differences within the household using a questionnaire that can be administered in around an hour. Our survey found the following distribution of deprivation:

TABLE 2: DISTRIBUTION OF DEPRIVATION IN THE PHILIPPINES							
IDM SCORE	M (NO.)	M (%)	F (NO.)	F (%)	SAMPLE (NO.)	SAMPLE (%)	
>= 90 Not deprived	61	7.4	129	13.1	190	10.5	
>= 80 < 90 Somewhat deprived	322	39.1	426	43.3	748	41.4	
>= 70 < 80 Deprived	259	31.5	276	28.1	535	29.6	
>= 60 < 70 Very deprived	130	15.8	120	12.2	250	13.8	
>= 50 < 60 Extremely deprived	44	5.3	30	3.1	74	4.1	
>= 40 < 50	7	0.9	1	0.1	8	0.4	
< 40	0	0	1	0.1	1	0.1	
Total	823	100	983	100	1806	100	

The IDM makes it possible to break down the overall score and review gender differences within the 15 dimensions, revealing how the composition of poverty varies by gender, age or location, even if the overall extent of deprivation – the IDM score – is the same.

The table below compares population-level results using the IDM with other estimates of poverty in the Philippines.

TABLE 3: POVERTY AND DEPRIVATION IN THE PHILIPPINES						
IDM not deprived	10.5%	World Bank \$1.25 PPP	18.4%			
IDM somewhat deprived	41.4%	World Bank \$2.00 PPP	41.5%			
IDM deprived	29.6%	MPI	13.4%			
IDM very deprived	13.8%	Philippine National (food) Poverty Line	7.2%			
IDM extreme deprivation	4.6%	Philippine National (Food plus basic needs) poverty line	20.9%			
IDM (total in three categories of deprivation)	48%					

Given the IDM was developed to address fundamental concerns with existing methods of measurement it is not surprising that we found some differences. Overall, the results of the IDM appear initially consistent with a plausible interpretation of the deprivation experienced in the Philippines. The proposed IDM thresholds also appear to provide a useful guide for anti-poverty work, identifying a small group who are the "poorest of the poor" and a larger group who are extremely poor.

In order to compare the performance of the IDM and the MPI, we measured, as close as possible, the MPI for each household in our sample. We found that the IDM revealed a good deal of deprivation masked by the MPI. In particular, it revealed very significant intrahousehold differences when we compared each respondent in a household to all other respondents in that household. In 40% of scores the difference in IDM between household members was greater than 5 percentage points; in 10% it was greater than 10 percentage points, confirming the importance of assessing poverty at an individual level, rather than treating the household as an aggregate unit.

Perhaps the most striking and unexpected finding was that women appear slightly better off than men in our sample. The average female IDM score (79.97) was slightly higher than the average male IDM score (77.43), and this difference was statistically significant. Female scores were higher in shelter, health, education, toilet, decision making and personal support, clothing and personal care, freedom from violence, family planning, respect in paid and unpaid work. Male scores were higher in leisure time. There are several possible explanations. The Philippines scores highly on other gender equity measures, so the findings may be accurate.

On the other hand, the results may point to the need for revisions to sampling method, indicators or weighting. Or both explanations may be true. The IDM also treats deprivations equally between men and women, but a particular deprivation may be experientially worse for a woman than a man (or vice versa). Additionally, many important gender inequities (for example, regarding representation in national parliament) occur above the minimum deprivation threshold that is tracked by the IDM. Finally, the fact that men are worse off in some dimensions is a separate question from whether this constitutes gender injustice.

This ambiguity will only be resolved with comparative data and specifically further trialling in contexts where gender disparity is pronounced to clarify the performance of the measure and survey tool in revealing gender differences in deprivation where they exist.

Conclusion and future directions

The IDM improves markedly on current approaches to poverty measurement. For the first time we have a measure that is grounded in what poor women and men think defines poverty. It includes dimensions that are gender sensitive, and measures at the individual level so can reveal differences between women and men and among other groups, where these exist, including within the household. Data is captured through a low-cost, easy to administer survey that can be completed in roughly one hour in very diverse circumstances by enumerators who do not require any special training or expertise. It can be used at a range of scales from national to local, by national statistics offices or by development organisations.

Further use of the IDM in contexts where gender disparity is pronounced will help to clarify the performance of the measure and survey tool in revealing gender differences in deprivation where they exist. There is potential for refining the indicators in a number of dimensions. The measure will also benefit from further dialogue with others involved in poverty measurement. However, given the improvement on approaches already in use, we believe the benefits of the IDM can be best realised by a developmental approach that combines use, as one of the suite of tools to assess human development, with close reflection, analysis and refinement as necessary. A study of gender and poverty using the IDM is planned for Fiji in 2014-15 and will provide valuable comparative data and the opportunity to test some alternative indicators in a number of dimensions.

Lifting the lid on the household will transform how poverty is measured, making visible who is poor and in what ways, and enabling more targeted, relevant and effective anti-poverty programs. When taken up by governments, international development agencies, NGOs and communities, it will help determine to what extent efforts to address gender disparity and poverty are changing lives.

As the world considers ways to assess human development progress post-2015, the IDM has much to offer.

Further information

Visit

www.genderpovertymeasure.org

The project website is being progressively updated and includes information about the research process, research reports, information about the researchers and partner organisations involved, and links to publications.

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Read

Sarah Smith and Joanne Crawford, 'Gender really matters: Perspectives from the field and implications for poverty measurement', Gender Matters Issue #4, May 2014.

'After the MDGs: An interview with Thomas Pogge'

Professor Pogge of Yale University (and elsewhere). Lead investigator on the Engendering Poverty Measurement research, discusses its relevance for the post-2015 agenda.

Thomas Pogge and Nicole Rippin, "Universal Agenda on Multiple Dimensions of Poverty", Background Paper, High Level Panel on the Post-2015 Development Agenda.

Alison Jaggar and Scott Wisor, "Feminist Methodology in Practice: Lessons From a Research Program" Just Methods: An Interdisciplinary Reader, ed. A Jaggar (Paradigm, 2013).

Alison Jaggar, "Does Poverty Wear a Woman's Face? Some Moral Dimensions of a Transnational Research Project," Hypatia 2013, (28:2), 240-246.

This summary was prepared by Sarah Smith and Jo Crawford, International Women's Development Agency, and draws heavily on work by project staff Scott Wisor and Kieran Donaghue, principal investigators Thomas Pogge, Sharon Bessell, Janet Hunt, Alison Jaggar and Fatima Castillo. The research particularly benefited from the insights of project teams in the six countries in which research was conducted.

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