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Measuring Multidimensional Poverty: Insights from Around the World

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Why Multidimensional Poverty?

How we measure poverty can importantly influence how we come to understand it, how we analyse it, and how we create policies to tackle it. For this reason, measurement methodologies can be of tremendous practical relevance. Most countries of the world define poverty in a unidimensional way, using income or consumption levels. But poor people go beyond income in defining their experience of poverty. They often include a lack of education, health, housing, empowerment, humiliation, employment, personal security and more. No one indicator, such as income or consumption, is uniquely able to capture the multiple disadvantages that contribute to poverty. Furthermore, levels and trends of income poverty are not highly correlated with trends in other basic variables such as child mortality, primary school completion rates, or undernourishment (Bourguignon et al 2010: 24, 27). A person or household can be income poor but not multidimensionally poor, or income rich yet in multidimensional poverty. At the same time, the number of countries conducting multi-topic household surveys that provide the required inputs for the construction of multidimensional measures have increased dramatically from the mid-1980s, to around 130 developing countries at present. This phenomenon, together with advances in techniques and the increasing demand to understand poverty and social policies, has generated a unique framework for the implementation of these kinds of measures.

Counting approaches to multidimensional poverty measurement: the AF method

Multidimensional poverty measures that are based on people's own deprivation profiles can, at a glance, provide an integrated view of the situation. The most widely used multidimensional poverty measures since the 1970s have been what are called 'counting approaches.'¹

Most applications of counting measures tend to report a **headcount ratio**. While this is very easy to understand and commu-

nicate, it does not provide an incentive to reduce the deprivations of the poorest of the poor. Nor can it be broken down by dimension to show how people are poor.

In 2007, OPHI Director Sabina Alkire and Professor James Foster created a new method for measuring multidimensional poverty (referred to as AF for Alkire Foster). It uses a counting approach to identifying 'who is poor' by considering the range of deprivations they suffer, and combines this with the Foster-Greer-Thorbecke (FGT) methodology that is the most widely used class of income poverty measures. The resulting measure aggregates information to reflect societal poverty in a way that is **robust**, can be broken down by regions and groups to show **who is poor and where they live**, and decomposed by dimension and indicator to show **how people are poor**.

It is intuitive and easy to calculate

To identify the poor, the AF method counts the overlapping or simultaneous deprivations that a person or household experiences in different indicators of poverty. The indicators may be equally weighted or may take different weights. People are identified as multidimensionally poor if the weighted sum of their deprivations is greater than or equal to a poverty cutoff – such as 20%, 30%, or 50% of all possible (weighted) deprivations.

Having identified who is poor, the AF method then summarises information to show the deprivations experienced by the poor as a proportion of all possible deprivations in society. The simplest measure in the class of AF measures – which is the most widely applied – can be computed by simple multiplication. It is the product of $H \times A$: the headcount ratio or percentage of people who are identified as poor (H) multiplied by the average share of weighted deprivations that poor people experience (A), which is termed the intensity of poverty. This product is called the adjusted headcount or M_0 in the AF method; in the construction of a Multidimensional Poverty Index it is termed the MPI value. This measure has been found to be rigorous, easy to 'unpack' and to use for policy, and flexible, which makes it adaptable to different contexts.

It is unique

One unique aspect of the AF method is that it reveals the **intensity** of poverty. Thus it can distinguish between, for example, a group of poor people who suffer only two deprivations on average, and a group of poor people who suffer four deprivations on average at the same time.

This approach can be employed flexibly in a variety of situations by using different dimensions (e.g. education), indicators (e.g. how many years of education a person has), deprivation



1. These are widely applied because most poverty data use categorical or ordinal variables, and counting measures can be created that use these data in a rigorous and appropriate manner. See Alkire, Sabina & Foster, James (2011).

cutoffs (e.g. a person with fewer than five years of education is considered deprived), weights (e.g. education and health dimensions are equally weighted), and poverty cutoffs (e.g. a person who is deprived in one-third or more of the weighted indicators is poor).

It reveals differences within and between groups and regions

The measure can be decomposed by **geographic area, ethnicity, gender or other social groups**, to show the composition of poverty within and between them.

The measure can be broken down after identification to show which deprivations (i.e. which dimensions and indicators) are driving poverty within groups.

It gives information across time

The measure can be used to monitor changes in poverty and the composition of poverty over time using time series or panel data. The AF method reflects deprivations directly and changes immediately as these change. This time sensitivity makes it an effective monitoring tool because improvements in the dimensions measured, such as health and education, are reflected more quickly than with traditional approaches.

Common uses

Poverty measures: The AF method can be used to create national, regional or international measures of poverty, using dimensions and indicators that are tailored to the specific context.

Geographic: The AF method can be used to identify which regions are the poorest, for example for geographic targeting, or to inform allocation decisions.

Monitoring and Evaluation: The AF method can be used to monitor the effectiveness of programmes over time.

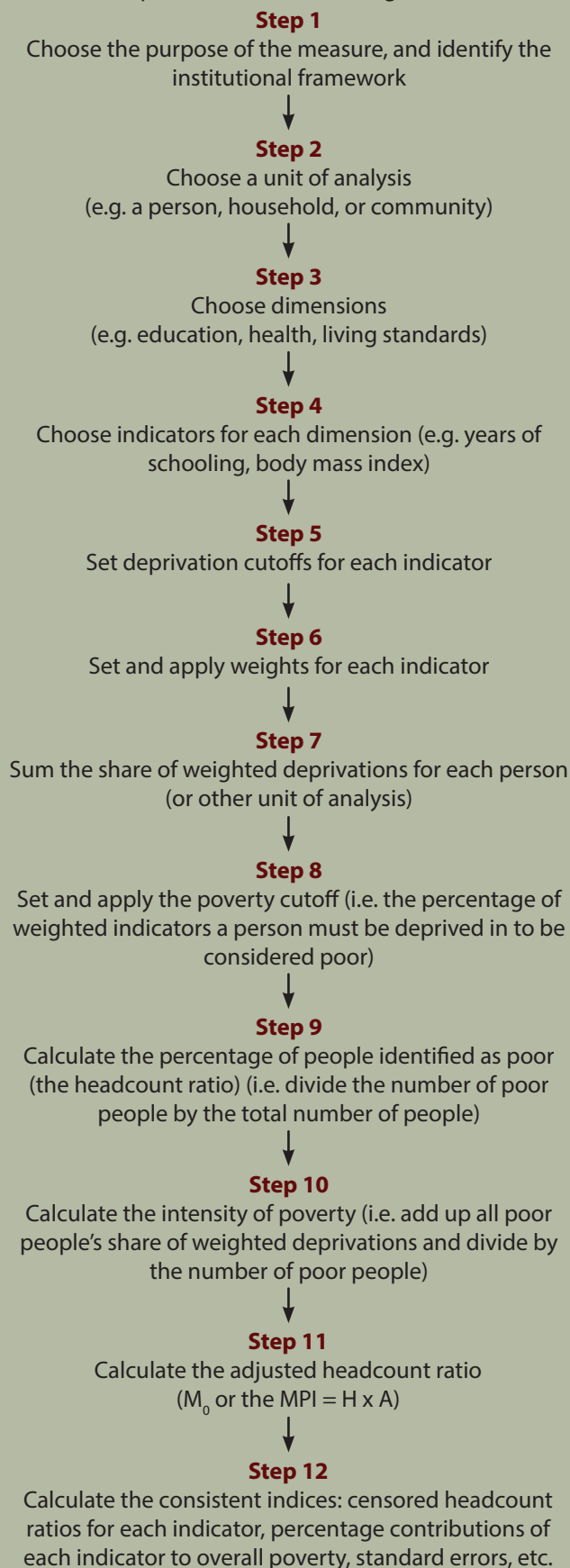
Targeting the poorest groups and beneficiaries: A person's 'deprivation score' can be used to target the poorest beneficiaries and can be broken down to show the indicators in which they are most deprived, to further inform interventions.

Complement other metrics: The AF poverty method can be used to complement other measures, such as income poverty, GDP, and inequality measures.

These are widely applied because most poverty data use categorical or ordinal variables, and counting measures can be created that use these data in a rigorous and appropriate manner. See Alkire, Sabina & Foster, James (2011).

Using the Alkire Foster method

An AF M_0 measure can be intuitively constructed in 12 steps. The first 6 steps are common to many multidimensional poverty measures; the remainder are specific to the AF counting method.



Colombia: Pioneering an MPI-based National Development Plan

In 2011, Colombian President Juan Manuel Santos announced a new National Development Plan, with poverty reduction as the focus. Devised by Ministry of Planning, it features a Colombian Multidimensional Poverty Index (MPI-Colombia), based on the AF method, which is used both to set specific targets and track progress. The most recent National Development Plan of 2015 again places a focus on the MPI.

The plan includes targets for multidimensional poverty reduction, as well as income poverty and inequality. It also has specific targets for each of the dimensions and indicators included in the MPI.

The government's strategy, which combines targets and outputs based on budget priorities, is on track to reduce overall multidimensional poverty from 21.9% in 2014 to 17.8% by the end of 2018.

MPI Colombia—Informing Policy

The MPI-Colombia can be broken down to reveal the contribution of each indicator to overall poverty levels and allows analysis of poverty among specific groups of people or regions. This provides a clear map for coordinating the design and implementation of poverty reduction programmes and policies.

Programmes

Families in Action Plus

Families in Action Plus targets 2.5 million Colombian families (approximately 9 million people). Under the scheme, selected families receive incremental direct cash transfers when the

education outcomes of the members of the household improve. Since 2012, the MPI-Colombia has been used to geographically target the programme, tailoring coverage, intervention, and total monetary value to the particular needs of each region.

UNIDOS

The national strategy (safety net) UNIDOS, currently targeting 1.5 million families (about 5 million people), is the main policy initiative to reduce extreme poverty in Colombia. The strategy aims to enhance the income-generating abilities and the quality of life conditions of the families involved.

Beneficiaries are categorised according to the type of poverty prevailing in the household (income or multidimensional) and a set of social programmes based on each household's needs is then selected for the families.

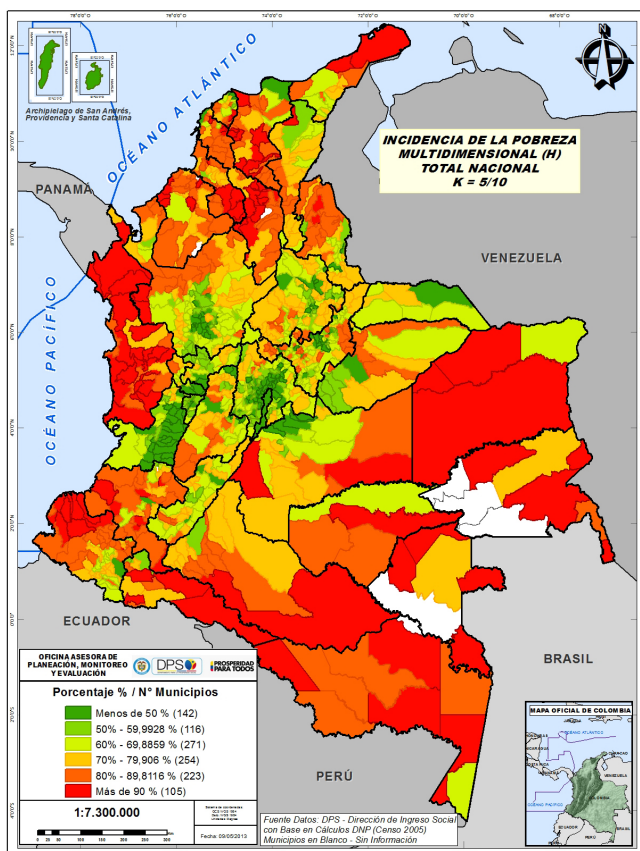
Social Map

The Social Map is based on a board of social indicators (poverty measures, quality of life indicators and administrative data) and includes the MPI-Colombia dimensions and indicators at the municipal level (1,102 municipalities). It aims to improve the efficiency and effectiveness of private investment in social projects and encourages synergies between public and private agents around the main goals of multidimensional poverty reduction.

Targeting Strategy

The MPI is disaggregated by geography, allowing the government to target its social programmes into areas with greater incidence of multidimensional poverty. This is reflected in the

MPI – Incidence at a municipal level



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

National Development Plan 2014-2018 that targets two regions – the Pacific and the Atlantic.

Monitoring and accountability

President Santos established a special ministerial cabinet commission to ensure that targets in the National Development Plan are on track. It is composed of every minister or head of department responsible for the MPI-Colombia indicators. The technical secretariat of the commission monitors advances in the plan, producing reports based on a “traffic light” system. The reports trigger alerts when progress towards any indicator falls off track.

In addition, the National Statistics Department (an independent institution) is now responsible for calculating the MPI-Colombia, and an independent board of national and international experts oversees the data used to construct it. Surveys are now fielded - and the MPI released - on an annual basis and information on progress is made publically available, allowing for the results to be widely scrutinised.

MPI-Colombia at the municipal level

A proxy of the national MPI-Colombia was constructed at the municipal level using census data from 2005. The municipal-level MPI means that local poverty maps can be created and used to target social intervention programmes within municipalities. The municipal MPI reveals that there is a higher level of rural poverty than urban poverty in Colombia, and that poverty is lower in the central regions.

MPI-Colombia Method

Unit of analysis

The MPI-Colombia uses the household as the unit of analysis. Household members are considered to be deprived or not according to the status of all household members simultaneously. For example, a person is considered deprived in literacy if any of his or her fellow household members are deprived in literacy. This respects the family as the fundamental social unit in Colombia.

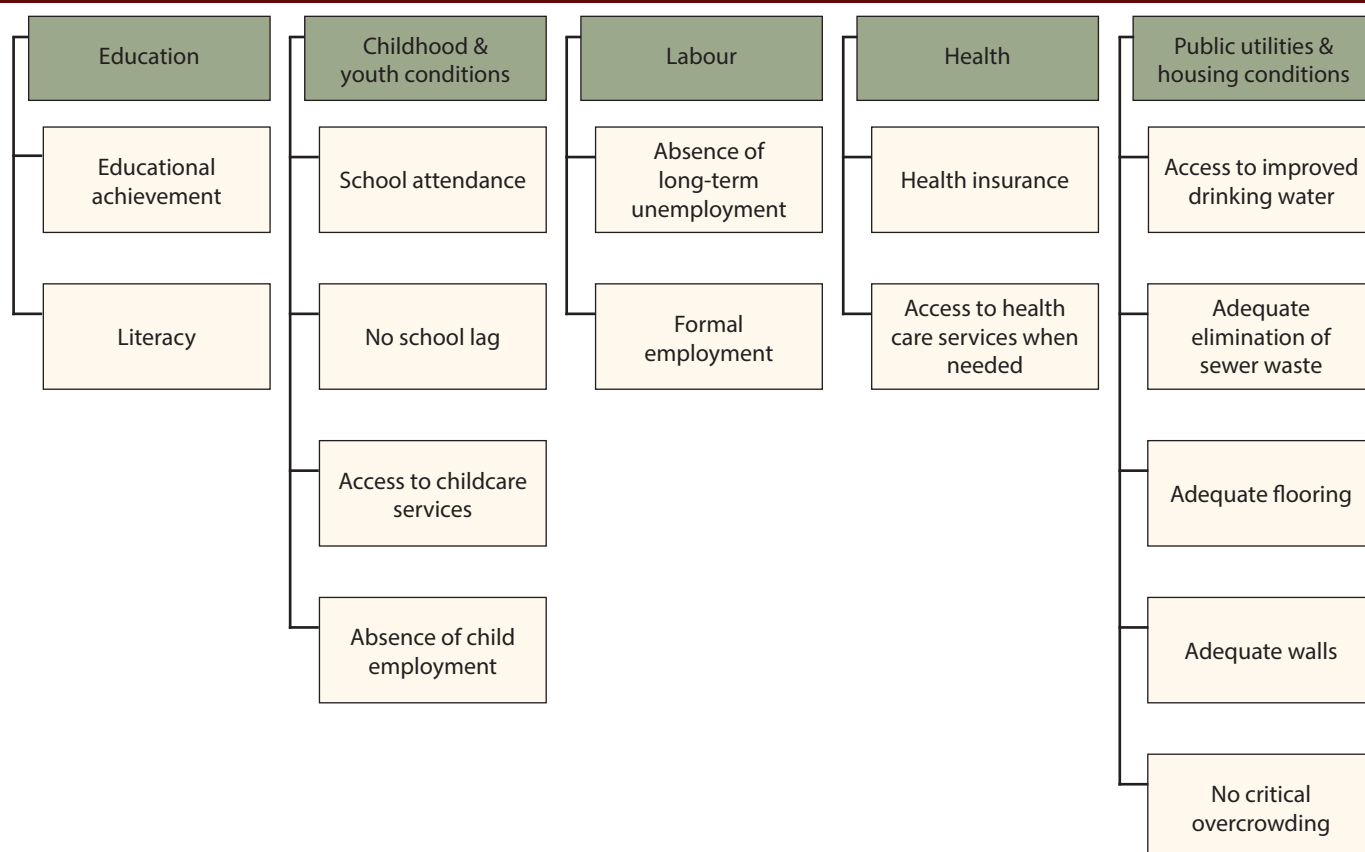
Dimensions and indicators

Building on the flexibility inherent in the AF method, the MPI-Colombia assesses poverty in 15 indicators, grouped into five dimensions (see figure on page 5).

Weights and poverty cutoff

The MPI-Colombia uses a nested weighting structure where each dimension has the same weight (20%), and each indicator has the same weight within each dimension (see figure on page 5). Based on a consultation process in which alternative weighting structures were considered, this set of weights was selected to reflect the equal importance of each dimension as a constituent element of quality of life. The poverty cutoff—the share of dimensions in which a person must be deprived in order to be considered multidimensionally poor—was set at one third of the weighted dimensions.

MPI-Colombia: A nested weighting structure



Mexico: Using a Multidimensional Poverty Measure to Inform Government Policy

The Mexican Multidimensional Poverty Index (MPI) was designed by the independent Council for the Evaluation of Social Policy (CONEVAL) and adopted by the Mexican government on 10 December 2009. It was the first national poverty measure to reflect the full breadth of poverty at the household level.

The Secretariat of Social Development (SEDESOL), which is the public agency responsible for social development efforts in Mexico, has made the measure central to its work on eradicating poverty in the country.

MPI—Informing Policy

The measure enables policymakers to target interventions to support the poor. Several aspects of Mexico's measure are especially important:

- 1) The dimensions included in the measure were chosen by Congress and are based on social rights.
- 2) The poverty cutoffs are primarily derived from the Constitution and other major social regulations. These two elements align the poverty measure with the country's legal framework.
- 3) The methodology highlights the link between poverty and social programmes and public policy strategies.
- 4) Estimations are done every two years at the national and state level, and every five years at the municipal level.

Uses of multidimensional measures

One of the main objectives of the government's National Development Plan 2013-2018 is to create an 'Inclusive Mexico' through the effective access to social rights granted by the Con-

stitution. The plan includes indicators and goals that are based on the different dimensions of the MPI, with each Minister of State – according to his or her particular duty – responsible for ensuring targets are met.

The MPI has been fundamental tool in the creation of two large social protection strategies in Mexico: the National Crusade Against Hunger and the universal pension system. From 2008-2010 lack of access to food was the only indicator in the MPI that showed the situation getting worse. This led to the launch of the National Crusade Against Hunger, a strategy to eradicate extreme multidimensional poverty and provide 7.01 million people with access to food. During the period 2010-2012 the percentage of people considered deprived in access to social security increased. This led to the creation of the Universal Pension System that will guarantee a minimum income for all Mexicans over 65 years. This system will be fully implemented in 2015.

Dimensions and Indicators

Mexico's multidimensional poverty measure incorporates three elements of the population's living conditions: economic well-being, social rights and territorial context. The selected method adopts a social rights approach and develops indicators for the following dimensions: educational gap, access to healthcare, access to social security, basic services at home, quality of living spaces, access to food, the current income per capita and the degree of social cohesion, as is set forth by the General Law for Social Development (LGDS).

To measure the income variable, CONEVAL used the National Household Income and Expenditure Survey (ENIGH). The indicators for social cohesion (reported separately) are economic inequality, social polarisation, social networks and income ratio. This measurement is conducted at national level and for urban and rural areas.

Thresholds

The thresholds for the indicators were determined through legal criteria and through consultation with experts from public institutions (health, housing, social security, education). A person is considered multidimensionally poor when his/her income is insufficient to acquire the goods and services he/she requires to satisfy his/her needs, and experiences deprivation in at least one of the six indicators listed above.

In the educational domain, a person aged 3-15 years is considered deprived if he/she is not attending a formal educational centre. For population above 16 years of age, deprivation is reflected by the lack of mandatory basic education current at the time they should have completed it.

A person is deprived in access to health if he/she is not enrolled in or not entitled to receive medical services from public or private services.

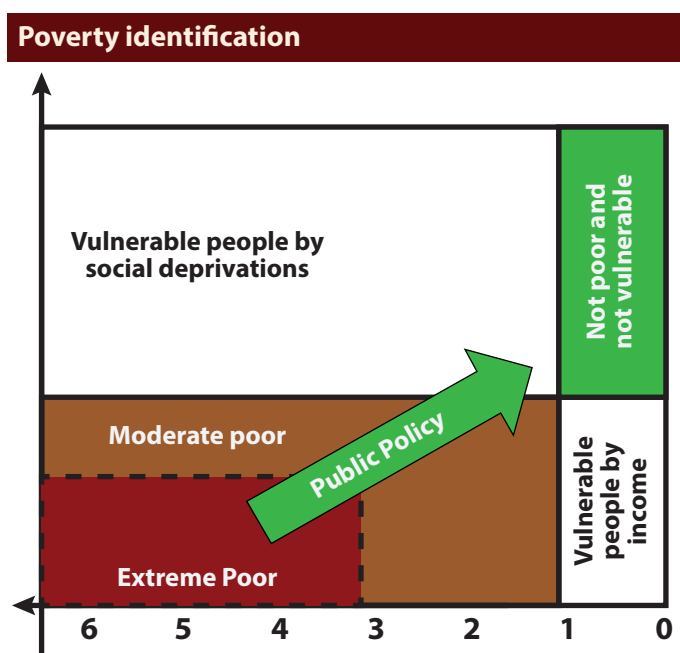




Photo by Gisela Robles Aguilar

A person is considered deprived in the dimension of social security if he/she does not receive medical services through a public, voluntary or family network, and if the person has not access to the pension system directly or through a family network.

A person is considered deprived in access to basic services if he/she is not in a location where he/she has access to fresh or piped water, public drainage services or public electricity, and uses either firewood or charcoal without a chimney for cooking. A person is considered deprived if the construction of walls, floors and roofs is from residue material or soil, and if the ratio of people per room is greater than 2.5.

People living in households with a level of moderate or severe food insecurity are considered deprived in the dimension of access to food.

Weights and poverty cutoff

Mexican legislation requires the measure to cover two essential areas: economic wellbeing and social rights. Thus income and social rights are equally weighted. Each social right is likewise equally weighted, giving an effective weight of 50% to all social rights and the other 50% to income.

A person is identified as multidimensionally poor if they are deprived in income according to the cost of a basic needs basket, and are also deprived in one or more social right. A person is in extreme poverty if they are deprived in income according to the food basket, and are deprived in three or more social rights.

Bhutan

Recognizing the fact that poverty is not just about income but multidimensional and is seen to be similar to the Gross National Happiness (GNH) philosophy of a holistic development approach, the Bhutan Government has started to measure poverty using MPI since 2012. The government has targeted to reduce multi-dimensional poverty from 25.8 % in 2010 to less than 10 % by 2018.

Since 2013, MPI is used as one of the 5 criteria for the allocation of national resources to local government, and is given high importance with the weight of 45 %.

Bhutan's MPI model uses 13 indicators with varying weights: primary schooling and children out of school (education dimension); child mortality, and food insecurity used as a proxy for nutrition (health dimension); and road more than 30 minutes away, electricity, housing, cooking fuel, drinking water less than 30 minutes away, sanitation, asset ownership of livestock, land ownership of less than one acre, and appliances (living standards dimension). Each of the three dimensions is given an equal weight of 1/3. The three indicators used in Bhutan's MPI in addition to the global MPI are access to roads, land ownership and livestock ownership. Efforts to further refine the model and attune it to Bhutan's GNH index are underway as relevant data become available.

The 2012 MPI Bhutan report found that 12.7% of the population was poor. Interestingly, only 3.2% of those identified as income poor (12% of the population) were also multidimensionally poor, showing a significant mismatch between the people captured by each measure. Similarly, among the 12.7% that are multidimensionally poor, 10% are not income poor. Even geographically, those Dzongkhags (districts) that are income poor are not necessarily multidimensionally poor. This highlights the importance of using both measures to inform decision making in the country. The urban poverty rate which is estimated at 1.3% is much lower than the rural poverty rate estimated at 17.8%.

Datasets from two periods 2007 and 2012 can be compared to assess the change in MPI in Bhutan. In the period from 2007 to 2012, the MPI was reduced by 12 percentage points. The largest reductions in MPI were observed in sanitation (19.9%), cooking fuel (18.3%), electricity (17.4%) and road access (15.2%).

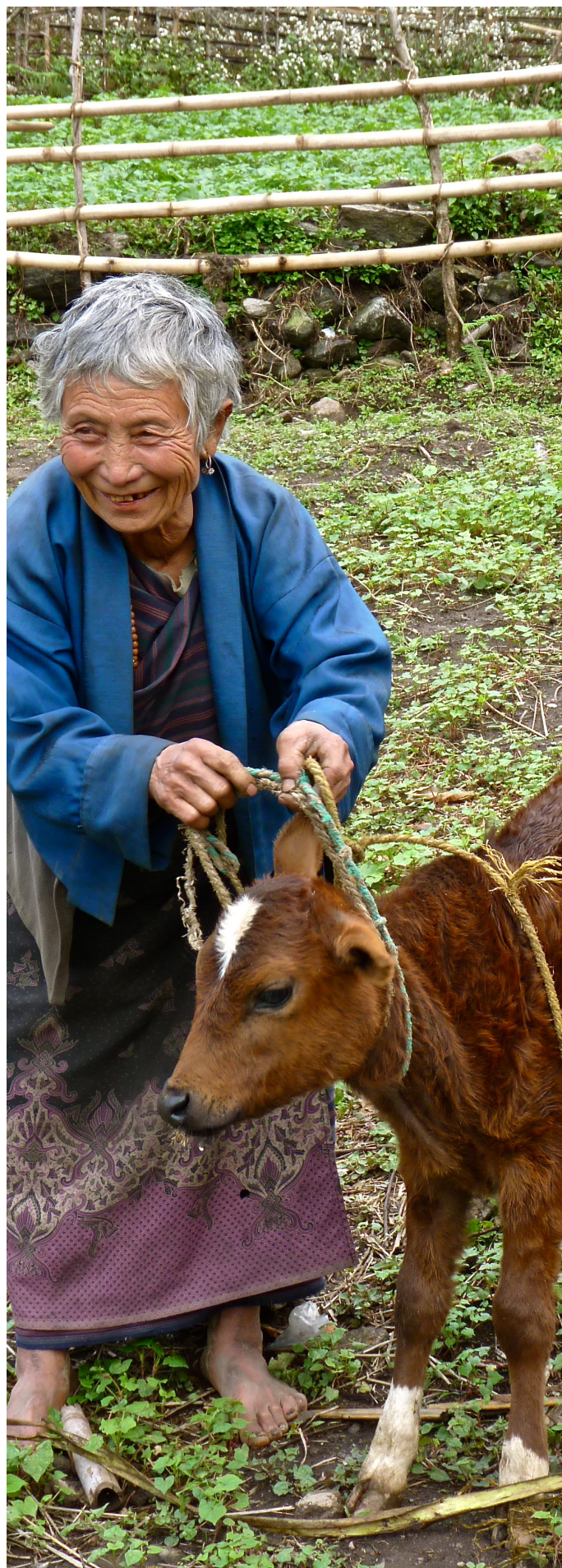


Photo by James Jewel

Chile

In January 2015, the government of Chile announced its new national Multidimensional Poverty Index (MPI), along with its new income poverty measure. The objective behind complementing income measurement with a multidimensional methodology is to be able to have a more complete national socio-economic characterization of households and their members that helps improve and target social policy. According to the MPI, 20.4% of the population in Chile live in multidimensional poverty, while 14.4% are income poor; 5.5% of Chileans experience both multidimensional and income poverty.

The Chilean MPI covers a wide range of deprivations, including education, health, employment and social security, and housing, and uses data from the 2013 National Socioeconomic Survey (CASEN). Announcing the results, Minister of Social Development Maria Fernanda Villegas explained that the MPI is a modern and transparent measure, developed in response to a consensus that the traditional income measure did not reflect the complete reality of poverty. The MPI methodology for Chile was formally presented in December 2014 at a seminar organised by the Ministry for Social Development and the Centre for the Study of Conflict and Social Cohesion (COES). This was the culmination of work that began with a consultation process for a new index during President Bachelet's previous term in office. The intervening administration established a presidential commission that worked to develop a multidimensional measure, before the new government's work in finalising (with OPHI technical assistance) and now publishing the Index.

The Government has also announced its intention to add a new dimension to the measure – 'environment and networks'. This dimension will include indicators on the quality of the environment households live in, and the support networks they rely on when facing financial shocks. It is expected that the new dimensions or indicators (to be decided by an independent advisor committee) will be incorporated into the official measure as soon as data is available (expected by 2016, based on data collected by the end of 2015). For this purpose, the government has established an independent commission to design the new questions to be added to Chile's main household survey.

Vietnam

In December 2014, Ho Chi Minh City, Vietnam launched the first city-wide multidimensional poverty index. HCM is a city of 7.84 million people, and represents an environment in which poverty is especially complex, and defined by a number of interlocking deprivations, given Vietnam's classification as a Middle Income Country by the World Bank. For instance, while only 0.1% of the city's population lives below Vietnam's national income poverty line, the new MPI shows that 11.35% of people are multidimensionally poor. In 2015 HCM City will focus on piloting the MPI for listing poor households, identifying targets for poverty reduction and other social policies/programs, and particularly designing policies/programs following the multidimensional poverty approach. Results from these pilots will be used as inputs for the City to develop its Sustainable Multidimensional Poverty Reduction Programme 2016-2020.

Experiences of the Ho Chi Minh City MPI will inform the development of a national MPI in Vietnam, which the government aims to launch by the end of 2015. In June 2013, Vice-Minister Nguyen Trong Dam announced that Vietnam's Ministry of Labour, Invalids and Social Affairs (MoLISA), as the leading agency developing the national MPI, would join the global Multidimensional Poverty Peer Network as part of the country's move to adopt a multidimensional framework for measuring poverty.

Vietnamese delegates from the National government and Ho Chi Minh City visited Mexico to learn of its experiences with their MPI. The Vietnamese also invited practitioners from Minas Gerais, Brazil to Vietnam to share their experiences. OPHI provided them with two short seminars on the MPI methodology. A technical committee was formed, led by MoLISA and the UNDP but with strong participation from other government ministries and the strong support of the National Assembly's Social Affairs Committee. This MPI committee is tasked with drafting the framework for the national MPI and developing dimensions and indicators.



El Salvador

In 2011, the Government of El Salvador, supported by the United Nations Development Programme (UNDP) and funded by the Grand Duke of Luxembourg, prioritised the development of a national multidimensional poverty measure. The government created an Advisory Board and a Technical Committee, both under the auspices of the Ministry of the Presidency, with representatives from government, academia, civil society and international organizations. The role of these bodies was to help build a poverty measurement methodology. They reviewed existing approaches to measuring multidimensional poverty and examined national statistical information available in household survey data. Focus groups were then conducted throughout the country to identify those living in poverty and try to define poverty from their perspective. The results of this consultation directly with those living in poverty impacted the dimensions and indicators chosen. The results of this qualitative research were published by the UNDP in a short booklet, [Poverty in El Salvador: from the perspective of people living in poverty](#).

Five dimensions significant for measurement emerged from this highly-participatory process: childhood and adolescence, housing, access to work, health and food security, and habitat. In early 2014, the Technical Committee reported to the government its decision to adopt the AF method, as well as the dimensions and indicators selected. The new government reviewed these recommendations for implementation and plans to launch its national MPI in mid 2015.

Costa Rica

The newly elected government in Costa Rica sent three delegates to the Annual Meeting of the MPPN in Berlin in 2014. This led to the decision by the Government to move towards the implementation of its own national MPI. Over the ten months since the MPPN meeting, the Government, led by the Vice President, the Social Inclusion and Human Development Ministry and by the national statistics office (INEC) has worked closely with OPHI to develop its own MPI. The Government plans to launch this measure in June 2015.

The Costa Rican process has been supported and followed by Horizonte Positivo, a grouping of the private sector of Costa Rica interested in helping develop a new way to measure poverty in the country and directly engage supporting the government in the human development process. This is the first close partnership between the private sector and a national government in developing an MPI. Moving forward, it is anticipated that the private sector will also assist in the implementation of some aspects of the MPI.

The Costa Rican Government decided to build its MPI on existing data that had been used previously to assess income poverty and basic needs deprivation: the National Household Survey (ENAH - Encuesta Nacional de Hogares), which is updated yearly since 2010. The unit of analysis is the household and a cutoff of 20% defines the poverty threshold. The MPI-Costa Rica has five dimensions: education, health, housing, employment and social protection and equity. Each dimension is composed of four indicators, all of which are equally weighted. Some indicators were included, in order to capture the achievements of social policies in the realms of childcare, disabilities and elderly and dependent population. In the end, the index incorporated suggestions from the local and international academia, from other countries' statistical institutes and from the National Ministries, whose policies are directly involved with the indicators included in the index. The Costa Rican MPI will be used as a key policy tool for allocating social investment and for a yearly evaluation of the impact of social policies.



Photo by Julia Zulver

Philippines

Strong macroeconomic fundamentals, a wider fiscal space, and a platform of good governance have all contributed to making the Philippines one of Asia's top economic performers today. However, the muted response of income poverty to recent growth has challenged the Philippine government's thrust in promoting inclusive growth.

Recognising that income alone provides a one-dimensional understanding of poverty, the Government of the Philippines incorporated an official multidimensional poverty measure in its updated Philippine Development Plan (2011-2016). Based on the AF method, the new multidimensional poverty indicator is adapted to the national context and priorities of the country. The measure has been used to set a key poverty reduction target in an effort to secure inclusive growth and improvements in quality of life for the country's nearly 97 million citizens.

The Plan serves as the Philippine government's overarching guide and framework in formulating policies and implementing programs toward inclusive economic growth. In late 2013, the Plan was updated to reflect developments halfway through the Aquino administration's term. For the first time, targets on the reduction of multidimensional poverty have been integrated, with the target of reducing multidimensional poverty from 28.2% in 2008 to 18% in 2016. The MPI is envisioned to be eventually part of the official statistics regularly published by the Philippine statistical system.

The baseline for the incidence of multidimensional poverty comes from the 2011 study of Economic Planning Secretary Arsenio M. Balisacan. Its recent update shows that continued progress has indeed been made in reducing multidimensional poverty and at a notably faster rate than the reduction in income poverty. Such progress has also been felt in nearly all of the Philippines' 17 regions, demonstrating that multidimensional poverty has in fact responded favourably to economic growth.

China: Developing a future with MPI

Year 2015 has landmark significance for China's development and welfare society: it is the end point of 12th of Five-Year Plan (FYP), and the year for planning the next FYP for 2016-2020. One goal of this plan will be to "Build a Moderately Prosperous Society in All Aspects." The Communist Party of China (CPC) has placed a high priority on income inequality, poverty reduction, welfare and inclusive growth on its policy agenda.

Institutions

The Chinese government, in partnership with the United Nations Development Program, established the International Poverty Reduction Centre in China (IPRCC) in 2005. Since then, it has undertaken a study of multidimensional poverty in the Wu Ling Mountain Region, which is one of the 14 priority contiguous regions for targeting national anti-poverty programs. The resulting comprehensive report detailed its findings and included policy recommendations. Based on this initial work, IPRCC and the National Bureau of Statistics, China (NBS), with the participation of OPHI, are planning to undertake a national multidimensional poverty measurement study between 2015 and 2016.

Innovation for poverty reduction

To better understand the characteristics of poverty in China, the IPRCC has also developed an innovative Geographic Information System (GIS) for National Poverty Reduction, which identifies and monitors multidimensional poverty in each region. The system was piloted in Wu Ling Mountain Region and Inner Mongolia Autonomous Region by the end of 2014.

To identify accurately the poor households and villages in Rural China, the government of China has launched the "Accurate Development-oriented Poverty Alleviation Project" in 2004, which uses multidimensional poverty indicators to identify and register every poor household and poor village into the information system. This will provide the data for a more effective way to target, to monitor poor households and villages, and to improve the effectiveness of the development-oriented poverty policies and programs.

South-South Experience Sharing

In March 2014, IPRCC hosted a two-day workshop on multidimensional poverty, which brought together officials from China, Colombia, Minas Gerais (Brazil) and OPHI to share their experiences using the MPI in their own countries or regions. This provided a useful sharing of expertise and experiences by way of South-South knowledge exchange.

Developing the MPI in Wu Ling Mountain Region

The Wu Ling Mountain Region, with a population of 36.45 million, is both the largest poverty-stricken area in China as well as home to the highest number of minorities in the country. This region comprises the four provinces of Hubei, Hunan, Chongqing and Guizhou, covering an area of 71,180 km².

Using the AF method, IPRCC is working to determine the domains relevant to wellbeing, their respective indicators and threshold levels, and how best to aggregate it. Uniquely, the study integrates household and village survey information with GIS data on the environment. The resulting measurement includes demographic, economic, social, ecological and environmental dimensions, and employs both standard poverty indicators (e.g. type of house, access to drinking water, electricity) as well as natural resource indicators (e.g. soil quality, environmental safety and ecological fragility).



Nigeria

In 2012, Nigeria's National Bureau of Statistics (NBS), with the support of the United Nations Development Programme, for the first time computed a national MPI. The results demonstrated the importance of considering several scopes in determining poverty.

The recent rebasing of Nigeria's national account estimates resulted in an increase nearly 89% higher than the previous base year (1990). This tremendous economic growth further highlights the significance of adopting a poverty measure that is not based on consumption or income alone, but equally considers other dimensions of deprivations. A broader understanding of the dimensions of poverty in Nigeria will provide a more full indication of standards of living. Plans are underway to include multidimensional poverty indicators in the NBS' regular data production exercise, building it into the biannual General Household Panel Survey, which is already running with the next wave coming up in September 2015.

Pakistan

In 2014, Pakistan's Ministry of Planning, Development and Reform signed an agreement with the UN Development Programme (UNDP), Pakistan and OPHI, to develop an MPI for Pakistan.

The agreement marked the beginning of the process of regularly calculating a new poverty index for Pakistan which will be based on the Alkire Foster method. The government will undertake to map multidimensional poverty at the provincial and district level with the goal of calculating sub national indices that better reflect the local context of poverty in the future. During 2014 and 2015 consultations were held at the provincial and regional level to receive input into the design of the new measure. This input will be considered in the final index that will include dimensions on health, education, and standard of living.

The national multidimensional poverty line will serve as the baseline for comparison in determining the number of people living in multidimensional poverty. For ease of comparison, different districts will be ranked and mapped on the severity and range of multidimensional poverty. The Government plans to launch its new MPI in 2015.

Minas Gerais, Brazil: Targeting programs through door-to-door data collection

In 2014, the elections in Brazil brought a new government to the state of Minas Gerais. The new team is working on the improvement of poverty reduction policies in order to lessen people's deprivations. The focus of the new government is to prioritize the most vulnerable parts of the state by decentralizing its administration and resources. The main strategy is to work along with the Federal Government to advance the use of the existing information provided by National Database on Poverty and to strengthen the scope of existing national policies.

The programme Minas Without Misery aims to eradicate extreme poverty in the state by 2018. To reach that goal the State Government hopes to scale and to improve the national social assistance schemes, such as PRONATEC (job training); PETI

(child labour eradication) and Bolsa Família (cash transfer), Brazil's most important anti-poverty policy. The State will also continue to have a multidimensional approach in its fight against poverty.

In order to foster the implementation of policies that tackle the many dimensions of poverty, the Government is seeking to act on a regional basis. The goal is to promote the full development of the regions, especially the poorest ones in the north and northeast parts of the state. With the new strategies, the Government hopes to take the welfare of the citizens of Minas Gerais, especially the most deprived and poor, to a level not seen before.

South Africa

In early 2014, Statistics South Africa produced a national Multidimensional Poverty Index (MPI) – the South African Multidimensional Poverty Index (or SAMPI). Alongside the three dimensions used in the Global MPI – health, education and living standards – SAMPI includes a fourth dimension on

economic activity, using unemployment as the indicator.

The measure has been designed to “improve poverty measurement for the country and to align ourselves with the growing international trend towards measuring poverty beyond the traditional money-metric method”. It is intended to complement the

money-metric measures already used in the country, including the food poverty line, the lower-bound poverty line and the upper-bound poverty line.

Census data collected in 2001 and 2011 were used to compute an index for each year, allowing analysis of changes of multi-dimensional poverty levels during this time period. The report

finds that there has been a significant improvement in multi-dimensional poverty levels in South Africa over the decade analysed, with a decrease from 17.9% in 2001 to 8% in 2011. However, the contribution of economic activity increased from 32.9% to 39.8%, suggesting that unemployment levels are a serious contributing factor to household poverty in 2011.

Organisation of Eastern Caribbean States (OECS)

The Hon Dr Kenny Anthony, Prime Minister of Saint Lucia, (Saint Lucia is member of the Organisation of Eastern Caribbean States (OECS)) stated at the MPPN meeting in Berlin in 2014: “Between 1997 and 2006, the Government which I led at the time made major investments in alleviating poverty.... The beauty of multidimensional poverty indices is that it can begin to tell us whether these investments worked, and where there could have been a better even more targeted approach”.

The OECS brings together nine island states, and is represented by the OECS Commission. The United Nations Development Programme’s Sub-regional Office for Barbados and the OECS with support from OPHI, has been working with the OECS Commission’s Living Standards Measurement Committee (LSMC), towards the development and implementation of an annual multidimensional poverty index (MPI) through

an adapted Labour Force Survey (LFS), as a part of broader efforts towards an expanded measure for the sub-region. In 2014, a piloting process was outlined and agreed in addition to the dimensions and indicators for an MPI-adapted harmonised Labour Force Survey (LFS).

The basic MPI will consist of four dimensions: living standards, employment, education and health and will be computed based on data from the Labour Force Surveys, currently carried out in several countries of the sub-region. The main core survey already has information on the first three dimensions (partial in the case of education). A small number of new questions will be added to the questionnaire to complement this information. The process continues with the expectation that other OECS member states will be supported to implement the MPI-adapted harmonised LFS by the end of 2015.

Dominican Republic

The Government of the Dominican Republic, through the Sistema Único de Beneficiarios (SIUBEN) of the Vicepresidency of the Republic, is currently working on developing a multi-dimensional poverty measure focused on targeting. Supported by the UNDP and OPHI, the SIUBEN has engaged in extensive consultations with different ministries and government agencies to define the dimensions and indicators of the new measure. A new survey instrument is being designed to inform the multidimensional measure. The pilot to test this instrument and data collection is expected to take place in mid-2015. The SIUBEN plans to use this multidimensional poverty measure to complement its current quality of live index (ICV) used for targeting, and to open the debate in the country regarding the need of new poverty measures. The current preliminary proposal includes the following dimensions: health, education, social gap (access and use of internet, physical safety, and access to recreational spaces), housing, environment, human wellbeing (dignity and empowerment), and employment.



Gross National Happiness

The Gross National Happiness (GNH) Index of the Royal Government of Bhutan is generated to reflect the happiness and general wellbeing of the Bhutanese population more accurately and profoundly than a monetary measure. The measure informs both the Bhutanese people and the wider world about the current levels of human fulfilment in Bhutan, and how these vary across districts and across time. It also informs government policy.

Using an adaptation of the AF methodology, the Government of Bhutan's Centre for Bhutan Studies released a GNH index in 2008 and revised and updated it in 2011. The recent version has 33 indicators in the nine domains. The domains are:

1. *Psychological wellbeing*
2. *Health*
3. *Time use*
4. *Education*
5. *Cultural diversity and resilience*
6. *Good Governance*
7. *Community vitality*
8. *Ecological diversity and resilience*
9. *Living standard*

The index weights the nine domains equally. The nation's wellbeing is measured directly by starting with each person's achievements in each indicator. It identifies four groups of people – unhappy, narrowly happy, extensively happy, and deeply happy – using graded happiness cutoffs. The GNH index uses two kinds of thresholds or cutoffs: sufficiency thresholds, and happiness thresholds. Sufficiency thresholds show how much a person needs in order to enjoy sufficiency in each of the 33 cluster indicators. Happiness cutoffs identify people who enjoy sufficiency in different proportions of indicators (less than 50%, 50-66%, 66-77%, and above 77%).

Project-screening and policy-screening tools are used to provide a systematic appraisal of the potential effects of the proposed activities on the GNH. This 'GNH Policy Lens' requires that the policy consequences on all relevant dimensions be considered prior to implementation. The results of the GNH index will also be tracked over time to evaluate interventions. An important innovation is the ability to track results across districts. The stated goal is that all government projects and policies work together to maximise GNH.

The fieldwork for the data collection for the 2015 GNH survey has now been completed and results are expected later in 2015. The survey will be used to update the GNH index.

An MPI 2015+ and the Sustainable Development Goals

OPHI and the Multidimensional Poverty Peer Network (MPPN) have proposed a Multidimensional Poverty Index (MPI) 2015+ to support poverty eradication in the context of the post-2015 development agenda and track the success of the Sustainable Development Goals (SDGs).

The multidimensional nature of poverty has been highlighted in many official UN documents related to the development of the SDGs. It is part of the proposed Open Working Group goal 1 – to 'end poverty in all its forms everywhere'.

The MPI 2015+ would complement monetary poverty measures by revealing the many overlapping disadvantages that each poor person experiences at the same time. This could include, for example, poor sanitation, malnutrition, gender discrimination, lack of education, or violence.

As well as providing a headline measure of poverty, the MPI 2015+ can be broken down to reveal:

- How people are poor (what disadvantages they experience);
- The intensity of the deprivations they experience;
- Which regions or social groups they are from;
- Inequalities between the poor.

Universal yet responsive to national complexities

The MPI 2015+ can take two forms. A universal MPI enables comparisons, global monitoring, and cross-learning across countries. National MPIs reflect national priorities and are used for policy design and monitoring.

A universal or global MPI 2015+ would be internationally comparable and incorporate agreed dimensions of poverty – economic, social or environmental – based on participatory and expert inputs. It would define at least two degrees of multidimensional poverty, such as 'acute' or 'moderate', to have relevance across countries with different levels of poverty. National MPIs 2015+ enable governments to attack the interconnected dimensions of poverty in an integrated and coordinated way, to combat poverty cost effectively and to leave no one behind, because the MPI pinpoints exactly where and how people are poor.

The MPI 2015+ may also reflect effective policy interventions quickly. With measures of income poverty, a positive social change – for example in schooling or clean water – may not be reflected for a number of years. The MPI 2015+ measures these aspects of poverty directly, and can therefore monitor better policy by showing us which groups experienced the biggest reduction in poverty, and how.

Given the importance of inclusive growth, it is also vital to track growth elasticities of the MPI. Because the poor may also be environmentally marginalized, it is also vital to overlay maps that elucidate links between challenges of poverty and environmental sustainability.

Data revolution

In order to create a comprehensive and accurate MPI 2015+, OPHI and the MPPN have proposed Post-2015 Light Powerful Survey Modules designed to generate data needed to measure human poverty more comprehensively and accurately, but in compact survey modules. The modules cover around 30 pro-

posed SDG indicators of poverty such as health functionings, electricity, cooking fuel, disability, employment, violence, and educational quality. Such harmonized data are needed to build a stronger global MPI+ for both acute and moderate poverty, particularly in less poor countries and regions.

The Multidimensional Poverty Peer Network

The Multidimensional Poverty Peer Network supports policymakers to develop multidimensional measures of poverty. It enables early adopters of such measures to share their experiences directly with policymakers in other countries by way of South-South exchanges, including input into the design of the measures, and the political processes and institutional arrangements that will sustain them.

The aim of the network is to improve poverty eradication by bringing poverty measures closer to the lived realities of poor peoples' lives. It works toward policies that are better designed, more accurately targeted, and more effective in alleviating poverty in all its dimensions.

The network has attracted high-level policymakers such as Ministers from over 30 countries, as well as a number of regional and international agency representatives. The network promotes the adoption of national and sub-regional MPIs, advocates for the MPI 2015+ at the international level, and supports research on multidimensional poverty. OPHI acts as the Secretariat of the network, while the German Federal Ministry for Economic Cooperation and Development (BMZ), the network's participants and OPHI support the network financially.

The Oxford Poverty and Human Development Initiative (OPHI)

The Oxford Poverty and Human Development Initiative (OPHI) is an economic research centre at Oxford University's Department for International Development (ODID). Led by Director Sabina Alkire, our aim is to build and advance a more systematic methodological and economic framework for reducing multidimensional poverty, grounded in people's experiences and values.

One of the ways in which we do this is by developing and implementing multidimensional measures of poverty, well-being and inequality. These measures go beyond traditional one-dimensional approaches, to incorporate dimensions such as health, education, living standards, quality of work and more innovative dimensions.



Photo by James Jewel

Sources and References

Alkire, Sabina & Foster, James (2011) Understandings and misunderstandings of multidimensional poverty measurement. *The Journal of Economic Inequality*. June 2011, Volume 9, Issue 2, pp 289-314.

Balisacan, Arsenia. M (2011) What has Really Happened to Poverty in the Philippines? New Measures, Evidence, and Policy Implications. UP School of Economics Discussion Papers: Discussion Paper No. 2011-2014.

Centre for Bhutan Studies (2012). An Extensive Analysis of GNH Index.
<http://www.grossnationalhappiness.com>

CONEVAL, 'Measurement of Poverty': <http://www.coneval.gob.mx/medicion/Paginas/Medici%C3%B3n/Pobreza-2010.aspx>

Department for Social Prosperity, Republic of Colombia - selected materials

Government of Colombia (2014) 'The Social Map' <http://mapasocial.dps.gov.co/>

IPRCC & OPHI (2012). Measurement of Multidimensional Poverty in Wu Ling Mountain Region in China Duration of the Project Phase (01/06/2012-01/08/2013). First Draft

<http://web.coneval.gob.mx/Informes/Coordinacion/PAGINA%20WEB%20EN%20INGLES/MDGS%20Contact%20Group%20%20GHL.pdf>

OPHI Briefing Note: Multidimensional Poverty Index 2015+ <http://www.ophi.org.uk/multidimensional-poverty-index-2015/>

National Statistics Bureau, Royal Government of Bhutan (2014) 'Bhutan Multidimensional Poverty Index 2012.' <http://www.nsb.gov.bt/publication/files/pub0111571bt.pdf>

SEDESOL (2013) 'National Crusade Against Hunger (SINHAMBRE)' http://www.sedesol.gob.mx/boletines/SinHambre/Informativo_02/

UNDP & IPRCC (2011). Policy Study on Challenges and Response to Poverty Reduction in China's New Stage (Sub-Report One): Multidimensional Poverty Measurement and Targeting.

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