Dimensions

Multidimensional Poverty Peer Network (MPPN)

DISAGGREGATING BY GENDER, ETHNICITY, RACE AND CASTE IN THE GLOBAL MPI

INTERVIEW WITH IVÁN OJEDA:
INE DIRECTOR OF PARAGUAY

THAILAND MPI

SOUTH AFRICAN COVID-19 VULNERABILITY INDEX

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Editorial

L ast October, OPHI and the United Nations Development Programme launched the latest edition of the global Multidimensional Poverty Index, containing data disaggregated by gender, ethnicity, race and caste – key information to leave no one behind. In this edition of *Dimensions*, Kelly-Ann Fonderson briefly describes the main findings of this report.

Statistics of this kind are essential for decision-making, as Iván Ojeda, Director of Paraguay's newly created National Institute of Statistics (INE), explains in this issue. Mr Ojeda took on the dual challenge of founding this new institution while also supporting the process of developing Paraguay's first Multidimensional Poverty Index. Here, he tells us some details about this process.

From Paraguay, we go to Thailand where Rawirin Techaploog and Suphannada Lowhachai review the process of creating a national MPI for Thailand and its future use in public policy.

In this issue we not only talk about MPIs, but also see how the multidimensional Alkire-Foster method has been used in South Africa's COVID-19 Vulnerability Index. Risenga Maluleke talks about how it was created and applied.

Continuing this theme, Jakob Dirksen shows us the use of these indices for guiding public policies in the context of health emergencies, such as the current pandemic. Nicolai Suppa and Ricardo Nogales also discuss the usefulness and challenges of simulations analysing multidimensional poverty in the context of COVID-19.

Turning to the private sector, we have the contribution of Andrés Fernández, who describes how the Business MPI has supported the reduction of multidimensional poverty in Costa Rica.

John Hammock talks about the power of electricity to break the poverty cycle. Electricity is a crucial proxy for multidimensional poverty, and one of its best predictors.

Finally, Michelle Muschett reviews the first edition of OPHI's Executive Education programme, which took place in August 2021, training leaders and policymakers in using the MPI for policy.

We invite you to read *Dimensions,* a new perspective for understanding poverty.

Carolina Moreno

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"The MPI is a great contribution to transparency in public management"

Iván Ojeda, a graduate in Administration from the Universidad Nacional de Asunción, and a specialist in Governance, Political Management and Public Sector Management from George Washington University, is the first Director of Paraguay's newly created National Institute of Statistics (INE). Upon accepting this appointment, Ojeda took on a double challenge: founding this new institution and supporting the process for the development of the new National Multidimensional Poverty Index (MPI) in Paraguay. In this interview, Ojeda talks about the main challenges involved in the creation of Paraguay's MPI, and its importance for public policy.

What was the process of creating the MPI like?

The creation process required about two years of intense work. First of all, the Poverty Committee was enlarged, to face the challenge of building the MPI, with the participation of Paraguayan government agencies, public policymakers and implementers, international organisations, independent research centres in Paraguay, and, of course, independent researchers who had been studying the development of the methodology for a long time. There were 14 meetings of the General Technical Committee, as well as 21 bilateral meetings held between 18 May 2018 and 28 April 2021.

When forming the Committee, we sought to define: the purpose of the measurement, the unit of analysis, the dimensions, the indicators of the dimensions, the weights of each dimension, the weights of the indicators within each dimension, and also the multidimensional poverty threshold. We wanted to identify who is poor in terms of multidimensional poverty, and finally define a communications plan. That was the process we followed to conclude with the launch, where we were honoured and privileged by the presence of both Sabina Alkire and Gonzalo Hernández Licona.

What challenges did you face in making the Multidimensional Poverty Index?

A lot of challenges and limitations, ranging from the economic ones to the ones related to methodology, and even legal limitations at some point. But we overcame all of them.

Another limitation was obviously the issue of the pandemic. We had planned to launch our National MPI a year earlier, but this complex context that the world is experiencing today meant that we delayed the

launch a little bit. However, we continued working, we carried on with the construction and validation, and finally we were able to make it happen.

Another important challenge we had was the demand from the civil society and the citizens to have a complementary measurement, or a measurement that would give us a much more comprehensive vision of the problem of poverty in Paraguay. Therefore, we set out to also have these measurements, so that Paraguay grows and consolidates with a very robust, sound methodology, and, finally, this was also added to another milestone that Paraguay had, which is the modernisation of our laws.

After 78 years, Paraguay has a National Institute of Statistics (INE). Previously, it operated as the General Directorate of Statistics, Surveys and Censuses, and, as of 2020, in the midst of the pandemic, we managed to promulgate a law, which is one of the most modern in the world and in the region, with many reinforcements in principles. Through this new law, INE is the governing body and coordinator of the national statistical system, which greatly strengthened the MPI process.

And in technical terms, did you face any major challenges?

Yes, the biggest challenge was to achieve consensus, because here we had decision-makers or institutions, public policy generators, public policy implementers, international organisations, and also users or researchers, so this enlarged committee had to come to an agreement. The great victory that Paraguay has had is to show that we can agree on some issues, with members from well-defined, very different sectors, but with a common goal: to provide the country and the users with a complementary measurement of monetary poverty, which is the MPI.

Firstly, we agreed on the dimensions. In this sense, the determining factor was to identify the source of information. In this case, the Permanent Household Survey is the starting point for our MPI, since this kind of survey had been applied for some years.

Behind each dimension and behind each indicator, there is a very specific public policy. So, this tool

Iván Ojeda (middle) with members of the enlarged Poverty Committee.

not only helps us to visualise the situation in the dimensions of Labour and Social Security, Housing and Services, Health and Environment, and Education, but also helps us to monitor the public policies that aim to influence these indicators.

> ## INE is the governing body and coordinator of the national statistical system, which greatly strengthened the MPI process.

Another challenge was the economic issue. Sometimes it was necessary to hire specialists, to cover their costs of travel and accommodation. Although OPHI did not set any conditions or charge for many things, there are basic logistical costs that have to be covered, and international organisations, such as the World Bank, the UNDP, and OPHI helped a lot in this process.

The legal challenge was the creation of the National Statistics Institute (INE), because under the new law it is clearer, for example, that the INE is responsible for the coordination of the national statistical system, which has the obligation to provide information to the Institute.

What uses will this MPI of Paraguay have in terms of public policy or other uses by the State?

The first is that today, after 24 years of measuring monetary poverty, users have a much broader picture of the poverty issue.

Secondly, it will be a key tool to address the post-pandemic period. We know that we have to go at a different pace. We can no longer go at the pace we have been going at, because today the world, the planet, is facing a global crisis, which is the pandemic. Therefore, we have to move at a much faster pace, much more effectively, but in order to know where we want to go, we have to have a starting point, and here the MPI is of fundamental importance, as it gives us a very clear baseline. It provides decision-makers and policymakers with the elements, or the dimensions and indicators, that must be improved.

We clearly know that we have to expand our sanitation system, or that we have to reduce unemployment, or that we have to improve the quality of our housing materials, or that we have to try to ensure people no longer live in overcrowded homes. So, every public institution, every governmental and non-governmental body will know what they have to do, and everything will be stipulated.

> We can share experiences not only in measurement, but also in the implementation of programmes, and in the formulation of policies, so that we have the same impact.

The MPI is a great contribution to transparency in public management. Citizens demand greater efficiency in public spending, and the MPI aims to achieve this. We, public officials, aim for greater efficiency in public spending, so that citizens can see and feel that it is worthwhile paying their taxes. Nowadays, Paraguay has a tax burden of around 13%. We are far below many countries, and there are still many demands, so this is another great benefit that the MPI will bring.

It also helps us to set a milestone, so why not enjoy this success we have achieved after 24 years? And we have to highlight the effectiveness of international cooperation, as well. Opening up, allowing international agencies and organisations to enter our national statistics offices, or INE Paraguay, and transparently showing them everything we

have, inviting them to show us the latest trends in methodological matters, is also evidence that there is effective and positive international cooperation so that our countries can all improve our measurements.

Another great success, another great benefit or advantage is that we have generated national technical capacity. Thanks to the participation of OPHI, today there is a national capacity in Paraguay for monitoring or for the permanent evaluation of the measurement.

We also have the inputs to be comparable with other countries, and this is another great advantage, because if we have a problem of housing materials, a problem of overcrowding or a problem of sanitation, we can ask our colleague countries who monitor this what they have done to improve this measurement. In other words, we say to them "we have this problem: what have you done to solve it?" and we can share experiences not only in measurement, but also in the implementation of programmes, and in the formulation of policies, so that we have the same impact.

Obviously, there are asymmetries between countries, and there are very specific characteristics of each country, but there are also common issues. For example, there is this endemic phenomenon of poverty, or the endemic problem of informal employment in Latin America and the Caribbean, where it is around 55%. Paraguay today has an informality rate of 65%. These are common issues to our countries. They are challenges that we face as a country, and also as a region.

We are very happy because every day we find a new use for the MPI. ∎

[MPI Paraguay](#)
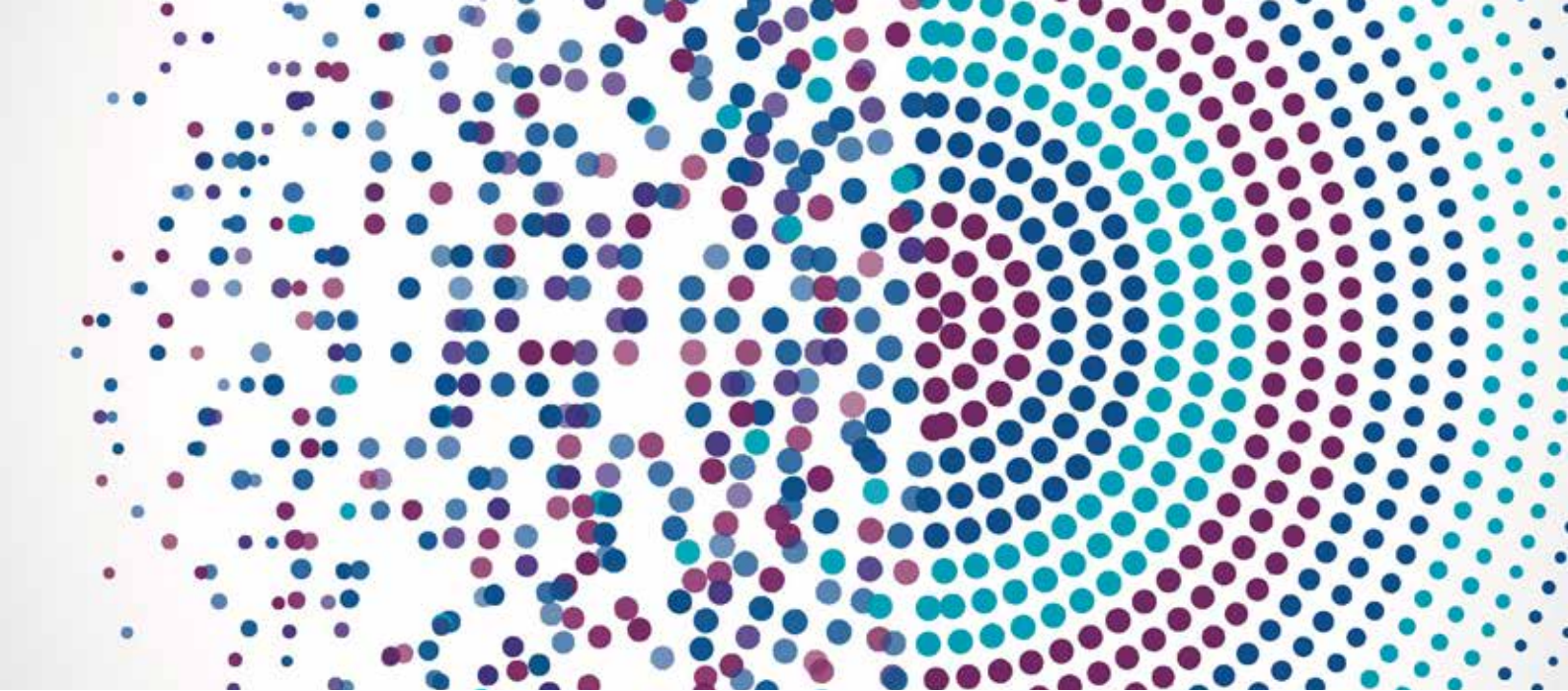
Leaving no one behind: a case for disaggregating by gender, ethnicity, race and caste in the global Multidimensional Poverty Index

Kelly-Ann Fonderson

In 2015, the Sustainable Development Goals were established with the central theme of *Leaving No One Behind*. Since its inception in 2010, the global Multidimensional Poverty Index (global MPI), produced together with the Human Development Report Office of the United Nations Development Programme, has always monitored various dimensions in which the poor experience deprivations. It leaves no one behind by illuminating how people experience poverty.

> ## The 2021 global MPI includes disaggregation from 108 countries on the gender of the household head.

The report *Global Multidimensional Poverty Index 2021: Unmasking disparities by ethnicity, caste and gender* covers 109 countries and 5.9 billion people, of which 1.3 billion are multidimensionally poor. The report has the largest scale of data for multidimensional poverty that is disaggregated by gender, ethnicity, race, and caste. Gender data for 109 countries, ethnicity data for 40 countries, and caste data for India are included in the analysis. Disaggregation

across gender, ethnic, racial, and caste groups offer insights to understanding who is multidimensionally poor and what kind of deprivations they face. Often, women, people from lower castes and ethnic groups with marginalised identities face discrimination which contributes to their experience of poverty. By unmasking disparities by gender, ethnicity, race and caste, the 2021 global MPI provides a foundation of evidence to inform policies aiming to leave no one behind.

The 2021 global MPI includes disaggregation from 108 countries on the gender of the household head. Additionally, intrahousehold data on educational attainment reveals absolute deprivations that multidimensionally poor women and girls face. Two thirds of the multidimensionally poor – 836 million people – live in households without an educated woman or girl who has completed at least six years of schooling. Of these households, approximately 16 million multidimensionally poor people live in households without a woman or a girl. However, 622 million live in households where no one – regardless of their gender – has completed at least six years of schooling. This means that about half of MPI poor people who do live with a woman or a girl, are in households that are educationally deprived in years of

schooling. Gender disparities in education amongst the multidimensionally poor remain stark. About 1 in 6 multidimensionally poor people – 215 million – live in households where a man or boy has at least six years of schooling, but no woman or girl in their household does.

Moreover, since the COVID-19 pandemic, the reduction in formal education activities has been higher for countries with high MPI values. While data revealing the full impact of the COVID-19 pandemic are not yet available, there are clear implications for education, social protection and employment. Households with high-MPI values were less likely to have emergency social protection.

Despite setbacks, there have been notable reductions in multidimensional poverty up until COVID-19.

Leaving no one behind extends to addressing poverty and inequality along ethnic, racial and caste lines. This year's report includes ethnicity, race, or caste data from 41 countries. 690 million people or 28.2% of those living in the 41 countries are multidimensionally poor. The differences in multidimensional poverty between the poorest and least poor ethnic groups in the same countries reflect wide disparities. Cuba, Kazakhstan and Trinidad and Tobago have less than 1% difference, whereas in Nigeria and Gabon the difference in MPI between the most and least poor groups is more than 70%. Stark differences in MPI along ethnic lines imply inequitable access to basic services needed to avert poverty for different ethnic groups.

Although the MPI value of some ethnic groups is similar, the composition of poverty may vary. For instance, in Gambia the two poorest ethnic groups the Wollof and the Sarahule have an MPI of 0.297 and 0.296 respectively. The incidence of poverty for the Sarahule is 60% and 53.9% for the Wollof, while the intensity of the Wollof is 55.2% compared to 49.4% for the Sarahule. Some ethnic and caste groups are overrepresented within the multidimensionally poor. For example, in the Plurinational State of Bolivia, 44%

of the population is indigenous, however 75% of the multidimensionally poor are indigenous. Furthermore, in India, 9.4% of the population is from the Scheduled Tribe, the poorest caste in the country. However, 65 million out of 129 million multidimensionally poor people are from the Scheduled Tribe.

Despite setbacks, there have been notable reductions in multidimensional poverty up until COVID-19. Eighty countries covering 5 billion people had data on multidimensional poverty over three-time intervals. 70 countries reduced multidimensional poverty in at least one period. Notably, in some cases, the poorest subnational regions saw the fastest reduction in MPI, such as the North Central region of Liberia (2013– 2019/2020) or Province 2 of Nepal (2016–2019).

Disparities go beyond gender and ethnicity, and also include age. For instance, out of the 1.3 billion people identified as multidimensionally poor, 644 million are below the age of 18. This means that approximately half of all multidimensionally poor people are children. To fulfil the policy priorities

of Agenda 2030 it is imperative that no one is left behind due to their age, gender, race, caste or ethnicity in the fight against poverty. This is more important than ever with the challenge of COVID-19. Policy priorities should include, but are not limited, to:

» Expanding educational access
» Reducing gender disparities by prioritising the inclusion of girls
» Addressing child poverty
» Increasing policies targeting indigenous and other marginalised ethnic groups and caste groups
» Including disaggregation by gender, ethnicity, race and caste in Voluntary National Reviews reported at the UN's High Level Political Forum on Sustainable Development.

Figure 1. The Arab States have the highest percentage of multidimensionally poor people who live in households in which no girl or woman has completed six or more years of schooling
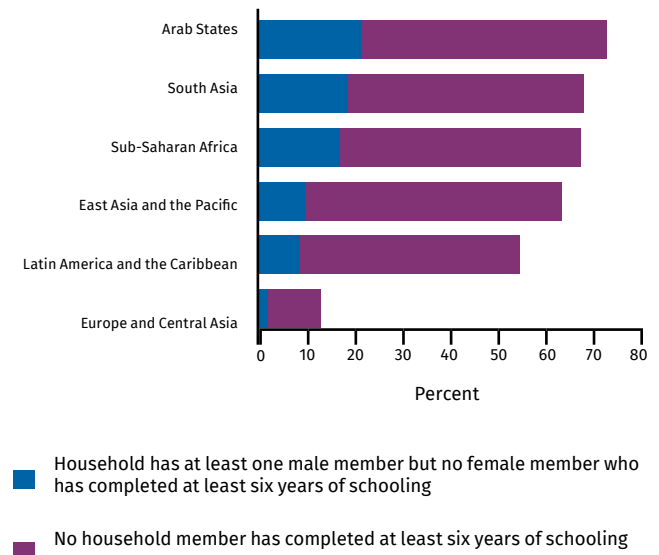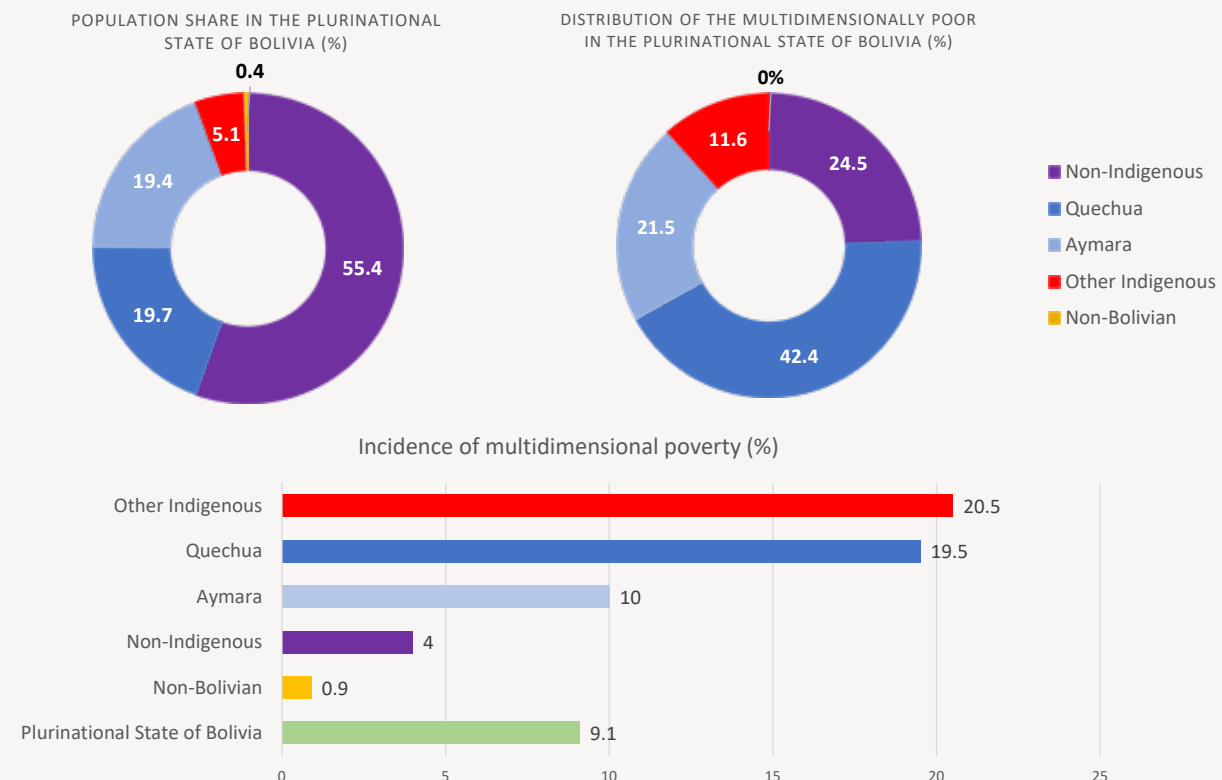

Household has at least one male member but no female member who has completed at least six years of schooling

No household member has completed at least six years of schooling

Figure 2. Indigenous peoples account for 44 percent of the Plurinational State of Bolivia's population, but 75 percent of those who live in multidimensional poverty

POPULATION SHARE IN THE PLURINATIONAL STATE OF BOLIVIA (%)

DISTRIBUTION OF THE MULTIDIMENSIONALLY POOR IN THE PLURINATIONAL STATE OF BOLIVIA (%)

- Non-Indigenous
- Quechua
- Aymara
- Other Indigenous
- Non-Bolivian

Incidence of multidimensional poverty (%)

Source: Alkire, Calderon and Kovesdi forthcoming.

National MPI of Thailand: The compilation process and the policy uses

Rawirin Techaploog and Suphannada Lowhachai

With the success of constructing the Child MPI in Thailand in 2018, the Office of the National Economic and Social Development Council (NESDC) took another step in 2019 by producing the National Multidimensional Poverty Index (National MPI) as an additional official measure of overall poverty in Thailand. It was also constructed with the purpose of monitoring the progress of SDGs, particularly SDG 1.2.

Involving stakeholders in the construction process of N-MPI

The construction of the National MPI followed a similar path to the process taken to produce the Child MPI in the previous year. The Office of the National Economic and Social Development Council (NESDC) received support from UNICEF Thailand and the Oxford Poverty and Human Development Initiative (OPHI) to produce a National MPI that would be conceptually sound. NESDC also held several focus groups with stakeholders from government agencies and academia to take part in selecting dimensions, indicators, weights and deprivation cut-offs that are suitable for Thailand's context.

> The Thailand National MPI consists of four dimensions – namely education, healthy living, living conditions and financial security.

While the Multiple Indicator Cluster Surveys (MICS) data were used to calculate the Child MPI, Household Socio-Economic Surveys (SES) conducted by the National Statistical Office (NSO) were selected as the data source for the National MPI. This is because the household surveys contain rich information on households' social and economic

Dimensions	Indicators	Deprivation cut-off (Deprived if …)	Weights
1. Education	1) Year of education	A household is deprived if at least one member of the household (1) Aged 15–29 has not attained grade 9 level education or (2) Aged 30–59 years and has not attained grade 6 level education.	1/12
	2) Late attendance	Households with at least one child aged 6–17 years who does not go to school or they are up to 2 years behind the grade they should be for their age unless graduated from grade 9.	1/12
	3) Living with parents	Households with at least one child aged 0–6 years who does not live with their father and/or mother. (In case the father and/or mother are still alive).	1/12
2. Healthy living	4) Drinking water	Households drink water from (1) indoor wells or (2) outdoor wells or (3) rivers/ streams/ canals/ waterfalls/ mountains or (4) rainwater or (5) other sources.	1/12
	5) Taking care of yourself	At least one household member aged more than 15 years is unable to take care of himself in daily life without help and is unable to travel outside the residential area without a guardian.	1/12
	6) Food poverty	Households' food expenditures are below the food poverty line, which is calculated from the minimum nutrient (calorie) needs that people of each age and gender require per day.	1/12
3. Living conditions	7) Garbage disposal	Households dispose of waste by (1) burning, or (2) landfills, or (3) dumping into a river, canal, or (4) dumping in a public space, or (5) other.	1/12
	8) Internet access	No household members use the Internet at all.	1/12
	9) Asset owner	Household does not own at least four small objects (radio, TV, air-conditioner, bicycle, phone and refrigerator) and one large object (car and boat).	1/12
4. Financial security	10) Savings	Households do not have financial assets to save.	1/12
	11) Financial burden	In the past 12 months, Households have difficulty paying home rent, water, electricity, or tuition.	1/12
	12) Pensions	At least one household member aged 60 and over has no pension and allowances.	1/12

Source: National MPI of Thailand (NESDC, 2019).

conditions. Using household surveys also has an advantage of consistency and comparability with the monetary poverty line. The Thailand National MPI consists of four dimensions – namely education, healthy living, living conditions and financial security. Each dimension has equal weight. The poverty cut-off is 26%, which implies that a person is multidimensionally poor if he/she has deprivation equivalent to more than one dimension of the MPI.

National MPI results

In 2017, the Thailand MPI was 0.068 with the headcount ratio of 17.6% or 11.9 million people and the intensity of 38.7%. The MPI had decreased from 0.109 in 2013 and 0.078 in 2015. The dimension that contributed the most to the MPI was the living condition dimension, accounting for 37.2%. In terms of indicators, not having a pension (the universal

elderly allowance not included) has the highest contribution at 14.7%, followed by lack of internet and lack of proper garbage disposal.

> The dimension that contributed the most to the MPI was the living condition dimension, accounting for 37.2%.

The household size and geography matter to the National MPI. Results show that the value of MPI, along with headcount ratio and intensity of poverty increased with household size in Thailand. In addition, the skip-generation families (where grandparents raise grandchildren) are likely to be MPI poor with a value of 0.132, almost double the national average. In terms of geography, those living in a non-municipal area have a higher MPI than those in municipal areas – both in the incidence and the intensity of poverty. Similarly, there are also large differences across regions with the Northeast having the highest MPI at 0.102 followed by the South, North, Central and Bangkok at 0.094, 0.074, 0.045 and 0.012 respectively.

Comparing with the Monetary Poverty Line

In 2017, there were 3.42 million people, or 5.06% of the total population, considered to be both MPI poor and monetarily poor. When considered separately, there were 5.32 million (7.87%) monetary poor people while 11.9 million people (17.6%) were MPI poor. This suggests that there was a big overlap between the two poverty measures with many more people being multidimensionally poor, but not monetarily poor. Accordingly, poverty-reduction policy should shift towards including other dimensions of poverty because reducing deprivations in other dimensions will likely improve monetary poverty as well.

Policy uses

The National MPI has already been incorporated into the annually published *Poverty and Inequality Situation of Thailand Report* by the NESDC with the intention to update the MPI data every two years (consistent with data availability). Both Child MPI and National MPI have also been used to monitor the progress of SDG 1.2 for Thailand. Not only that, national MPI has been used as empirical evidence to push forward policies in dimensions with high contributions to MPI, such as pension reform and the expansion of the free internet services programme. ◼

The South African COVID-19 Vulnerability Index

Risenga Maluleke

The COVID-19 pandemic hit the world unexpectedly. The first case of COVID-19 in South Africa was reported in February 2020. In March of the same year, the President of the Republic declared a state of national disaster in South Africa. By the end of March 2020, South Africa went into hard lockdown. The COVID-19 pandemic threatened to have a devastating impact in South Africa, especially for vulnerable communities. A targeted response was crucial in determining where the most vulnerable populations were located in terms of COVID-19 transmission in the country. Research was initiated to identify populations at multiple risk and develop a geographic visualisation tool[1].

> ## According to the SACVI, 40% of the population in South Africa is vulnerable to COVID-19.

Statistics South Africa conceptualised and compiled a South African COVID-19 Vulnerability Index (SACVI) using Census 2011 data. The index aims to statistically and spatially identify vulnerable populations that are more likely to be adversely affected should COVID-19 spread in their areas. The SACVI was compiled using an adaptation of the Alkire-Foster method. The index has four dimensions and eight indicators related to labour force activity, access to media, household services, multigenerational status, age and chronic illness. The indicators have equal weight in the index, therefore each indicator weights 1/8.

According to the SACVI, 40% of the population in South Africa is vulnerable to COVID-19. Those who are vulnerable are deprived in at least 27.1% of the weighted indicators. The major contributors to vulnerability in South Africa are sanitation and multigenerational households.

The strength of the SACVI lies in its decomposability to low levels of geography, resulting from the use of the Census 2011 data.

The SACVI is published at the lowest possible geographic level to best statistically identify vulnerable populations that are more likely to be affected by the pandemic in terms of who will suffer most if a COVID-19 infection occurred in that specific area.

Nine provincial dashboards were created for ease of use for planners, decision-makers and other general users. These dashboards allowed users to select a place within a local municipality in a province to view important statistics, such as vulnerability headcount

1 Thanks to Nozipho Shabalala for her contributions to this article.

and the major contributors to the vulnerability situation in that particular area. In addition, the index allowed ranking of areas based on their vulnerability score to inform prioritisation of intervention. The example of a dashboard for an area in the province of KwaZulu-Natal is presented below. The dashboards consist of a map and a chart interface.

The SACVI can serve various purposes. It can serve as a tool to assist with targeted response planning as it highlights areas that are vulnerable to COVID-19. It can also be used for evidence-based pandemic management planning to provide the best and most feasible location-focused response. It can also be used in designing communication campaigns and targeting possible highly vulnerable areas.

The index can also be used to inform the vaccination roll-out to ensure equitable access to vaccines including identifying priority groups for vaccination.

South Africa commenced with the Phase 1 vaccine roll-out in February 2021. Frontline health workers were prioritised. The elderly (especially those living with the younger generation) and the population living with co-morbidities were identified as those with a high risk of fatality should they contract the virus. To support the process of vaccine rollout in the country, Stats South Africa updated the SACVI by allocating higher weights to indicators that are directly linked to a high risk of fatality should the virus be contracted. This includes people in congregate settings, people over 60 years of age and people over 18 years of age who have co-morbidities.

Therefore, indicators on overcrowding, multigenerational households, age (adults 60+) and chronic medication (indicating co-morbidities) were allocated higher weights. Together these indicators contributed 60% to the total index while the remaining four indicators: employment, media, water and sanitation together contributed 40% to the total index as illustrated in Figure 1.

Figure 1. The South African COVID-19 Vulnerability Index – dimensions and indicators

SACVI adapted to support vaccine rollout process

Crucial information, such as the location of people to be prioritised for vaccination per vaccination phase, can also be derived from this index. The vaccination phases in South Africa are determined using age; with the exception of Phase 1, which focuses on frontline health workers. The SACVI can be decomposed by age, thus enabling ranking of areas with high vulnerability scores within a specific age group to inform vaccination rollout plans in South Africa.

It is important to note that the index used already existing data, therefore it costs nothing to produce as it was compiled and published by Stats SA staff working remotely.

The SACVI has been published on the Stats SA website, and presented widely to various stake-holders. ■

Using Multidimensional Poverty and Vulnerability Indices for Equitable Policy-Making in the Context of Health Emergencies

Jakob Dirksen

The World Health Organization (WHO) and the Oxford Poverty and Human Development Initiative (OPHI) have been collaborating to explore how multidimensional poverty and vulnerability indices (MPIs and MVIs) could be, or are already being, used to inform equitable plans, policies, and interventions in the preparedness for, response to, and recovery from, health emergencies. This article summarises some key findings from this collaboration, which prominently drew upon the applications of MPIs and MVIs by several Multidimensional Poverty Peer Network (MPPN) participants during the ongoing COVID-19 pandemic.

Health emergencies threaten lives and livelihoods alike – but they also threaten to hit those already disadvantaged the heaviest. In order to prevent or mitigate their risks and various impacts, policymakers and practitioners require a solid and focused evidence-base that identifies those least well-off and most vulnerable to make sure that health emergencies do not exacerbate pre-existing inequalities and deprivations.

In addition to several existing rapid assessment tools and methodologies for emergencies, WHO and OPHI studied how MPIs and MVIs may be able to provide exactly such an evidence-base for the information of well-targeted, equitable policies. By capturing the overlapping deprivations that people experience, MPIs and MVIs identify who is worse off or particularly vulnerable by integrating information

on the many dimensions of human development and poverty. In line with the WHO Priority Public Health Conditions Equity Analysis Framework, they can thus help to identify population subgroups that are particularly exposed, susceptible or vulnerable to diseases and the socio-economic implications of health emergencies.

> **MVIs helped to identify some of those most vulnerable during the pandemic as well as the main deprivations contributing to their increased multidimensional vulnerability.**

The results of this first study into the uses of MPIs and MVIs in health emergency contexts identified at least four ways in which they have been or could be used to inform equitable health emergency preparedness, response, and recovery. All four of these applications have been implemented by at least one MPPN participant.

Multidimensional Vulnerability Indices

Based on the same method used to build national MPIs (the Alkire-Foster method), several countries constructed multidimensional vulnerability indices (MVIs) whose main objective was to capture

overlapping vulnerabilities in the context of COVID-19. Such MVIs helped to identify some of those most vulnerable during the pandemic as well as the main deprivations contributing to their increased multidimensional vulnerability. To highlight just some of the many MVIs that were constructed during the COVID-19 pandemic, consider the cases of Iraq and Honduras, as well as the example for South Africa (see The South African COVID-19 Vulnerability Index (SACVI) in this issue).

In Iraq, the Ministry of Planning devised an MVI in order to produce a rapid assessment of multidimensional vulnerability to risks posed by the COVID-19 pandemic and its socioeconomic implications. Results showed that more than 4 out of 10 Iraqis exceeded a multidimensional vulnerability threshold of experiencing at least one quarter of the weighted vulnerabilities included in the MVI.

> MPIs or MVIs can also be directly linked to, or merged with, additionally interesting, aggregate-level data to associate multidimensional measures with other indicators relevant in the context of health emergencies.

In Honduras, the Government, in collaboration with the United Nations Development Programme (UNDP) and OPHI, created an MVI that was directly used to identify and target beneficiaries for the COVID-19 emergency social protection programme *Bono Único*. Honduras' COVID-19 MVI included indicators on populations who are vulnerable to disease as well as indicators related to employment, economic resilience, health, food security and housing. The MVI was computed using the National Register of Beneficiaries and additional data from a self-registration platform to ensure that individuals and households not included in the national register were not left out in the selection of beneficiaries. The results of the MVI were then used to distribute food, medicine, and personal protective equipment vouchers worth 2000 Lempiras (circa US$60).

MVIs were also constructed to inform policies during COVID-19 in Bhutan (also one specific to the tourism sector), the Maldives, South Africa and Pakistan.

Re-analysing existing MPIs

Apart from the construction of new measures, such as MVIs, existing measures, too, can and have been used. In many cases, existing MPIs include indicators that can shed light on the (joint) distribution of deprivations that are of particular interest during a health emergency context and can thus help to identify priority subgroups that may require special policy attention. For example, OPHI performed an interlinked analysis of multidimensional poverty and vulnerability to disease using the global MPI. Results showed that 3.6 billion people around the world are affected by undernutrition, lack of a clean source of water, or likely exposure to indoor air pollution. These indicators are all associated with vulnerability to disease and a considerable share of the global disease and mortality burden. At least 435 million people were affected by all three of these factors at the same time, and 336 million of them were multidimensionally poor.

Furthermore, directly linked to the previous exercise, OPHI colleagues also explored deprivations in other contextually relevant indicators, such as, among others, access to internet and domestic violence

in South Asia. Across four South Asian countries in the analysis, the percentage of people deprived in additional indicators included was generally higher among the multidimensionally poor. Nepal's recent 2021 National MPI update, too, presented results based on the same analytical methods, confirming previous findings. A similar exercise was also conducted using El Salvador's National MPI.

Data Linking and Merging

MPIs or MVIs can also be directly linked to, or merged with, additionally interesting, aggregate-level data to associate multidimensional measures with other indicators relevant in the context of health emergencies. The National Statistics Office of Colombia (DANE), for example, merged different data sources to analyse the levels of multidimensional poverty and other relevant indicators during COVID-19 in 2020. Results were integrated into a geoportal that allowed for an integrated analysis of Colombia's National MPI results, a newly constructed MVI, and additionally relevant health indicators to inform the response to the COVID-19 pandemic and protect the most vulnerable.

Microsimulations

Finally, existing MPIs (or MVIs, for that matter) can be (and have been) analysed using microsimulation techniques. These simulate how people's vulnerabilities or deprivations might be impacted by shocks, such as those associated with a health emergency, and thus lead to additional deprivations and new or exacerbated multidimensional poverty. During COVID-19 such a microsimulation exercise has been carried out, for example, in Afghanistan by the National Statistics and Information Authority (NSIA) of Afghanistan, the United Nations Children's Fund (UNICEF) and

OPHI. The exercise used data from the Afghanistan Living Conditions Survey (ALCS) 2016/17 and simulated several scenarios of how COVID-19 pandemic-induced shocks might affect MPI indicators and thus overall multidimensional poverty in Afghanistan. The findings showed that, given the scenarios simulated, multidimensional poverty levels based on Afghanistan's official MPI could increase between as much as 9 and 20 percentage points. Similar exercises have been carried out in the Dominican Republic, Saint Lucia, and Colombia.

An Emerging Field of Study, Exploration, and Application

The usage of MPIs and MVIs for health emergency preparedness, response, and recovery are an emerging field that opens many new questions and possibilities for novel applications. The collaboration between the WHO and OPHI highlighted the flexibility and adaptability of the underlying Alkire-Foster method and the fact that, if data allows, measurement and analysis possibilities go beyond what could be profiled based on existing applications. These areas of particular interest were highlighted:

» Computing MVIs and MPIs using data collected during or immediately after health emergencies;

» Incorporating more health indicators and others relevant in health emergency contexts;

» Linking results and analyses from MPIs and MVIs with other assessment tools traditionally in health and social humanitarian emergency contexts.

The hope is that this research brief can inspire inclusive approaches to using Multidimensional measures for equitable public health policies and interventions.

Access here the full WHO Research Brief by OPHI colleagues Jakob Dirksen and Monica Pinilla-Roncancio. Recordings of related webinars can be accessed here for 13 April and here for 24 May, 2021. ∎

bMPI supporting the private sector to achieve the eradication of multidimensional poverty in Costa Rica

Andrés Fernández

In October 2015, Costa Rica took a transcendental step in its attempt to better identify and attend to the country's most vulnerable population by establishing the Multidimensional Poverty Index. This led the Central American country to consider the use of five dimensions that encompass what would be known as the multidimensionality of poverty.

These five dimensions address areas such as education, health, labour, social protection, housing conditions, and internet use. In its first years of implementation, the former Vice-President of the Republic of Costa Rica mentioned the strengthening of "[…] public-private partnerships and the contributions of academia in this effort to promote the use of comprehensive quantitative-qualitative methodologies" as key factors for stepping up the fight against poverty.

Into this context, two years later in August 2017, the *Asociación Horizonte Positivo*, with technical support from the Oxford Poverty and Human Development Initiative (OPHI), launched the Business Multidimensional Poverty Index (bMPI) as a private-sector initiative.

The Business MPI is an adaptation of the Multidimensional Poverty Index (MPI) for the corporate sector. It measures the living conditions of employees and their families in various areas considered as priorities for the country. Costa Rica is the first country in the world to use the MPI in the business sector, and the model was so successful that it was replicated by the OPHI, through the creation of SOPHIA Oxford, which currently focuses on the private sector in Latin America and the Caribbean.

To date, 32,905 Costa Rican households have participated in the programme, representing 2% of the total number of households[1], which comprises 112,785 people[2]. The multidimensional poverty level of the workers from the 68 companies that have participated in the bMPI has been around 14% during the 2017-2021 period, which is close to the official poverty rate for urban areas (between 12% and 14.5% in the same period).

In addition, more than 4,800 employees have taken the survey twice, in order to analyse the changes experienced by their family groups after formally joining the projects and activities implemented by the companies to improve the conditions of their staff.

> The family groups of employees working in companies affiliated to the bMPI programme succeed in improving their poverty status after approximately two years of participation in the programme.

For the group of households (collaborators) that have completed the survey twice (to be referred to as the bMPI Panel), Table 1 shows the times at which the initial and the final measurements were conducted.

TABLE 1 Monitoring panels for households in bMPI

Measured years	Households	Surveys
2017–2019	3,468	6,936
2018–2019	177	354
2018–2020	570	1,140
2018–2021	88	176
2019–2020	263	526
2019–2021	265	530
TOTAL	4,831	9,662

The core group consists of the 3,468 households that took the survey for the first time in 2017 and then 2019. This group comprises 72% of the bMPI Panel and is the largest because it involves the first households that participated in the programme.

By establishing this identification strategy in the bMPI Panel, it is possible to observe the following in relation to the evolution of multidimensional poverty: Figure 1 shows that, in general terms, overall poverty among employees has decreased since they joined the bMPI programme, which at the aggregated level would reflect a decrease from 12.6% to 8.4% within the bMPI Panel.

FIGURE 1 Changes in poverty for households included in the bMPI Panel (in percentages)
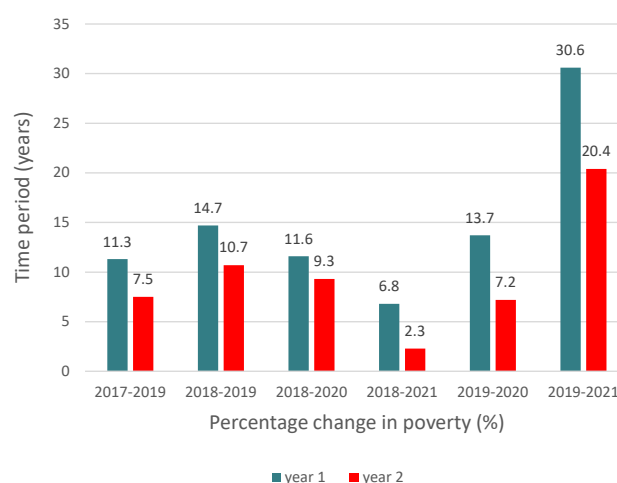
These results consistently show that the family groups of employees working in companies affiliated to the bMPI programme succeed in improving their poverty status after approximately two years of participation in the programme.

A detailed analysis of the factors that led to the reduction of multidimensional poverty highlights the implementation of strategies aimed at improving the education and training of employees, such as

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1 According to estimates by INEC [Costa Rica's Institute of Statistics and Censuses], there were 1.6 million households in the country in 2019.

2 This represents 2.2% of the estimated 5 million inhabitants in 2019.

scholarships, courses, or the donation of technological equipment. This has substantially compensated for the lack of a good level of education among the adult population and has made it possible to eliminate this gap in 43% of the households.

> The Business MPI is an adaptation of the Multidimensional Poverty Index (MPI) for the corporate sector.

Secondly, there are strategies linked to the labour dimension, such as communication campaigns on labour rights focused on the recognition of the rights of the employees' family members. There have also been workshops on employability skills for the family members of the employees, workshops on entrepreneurship and finance, training on female empowerment in business, among other actions that have helped to reduce some of the shortcomings linked to the labour dimension in around 40% of poor households.

Finally, the overcrowding indicator has been tackled through actions that seek to build bridges, and facilitate access for employees to housing solutions through different institutions that provide advice and support for a range of services including obtaining mortgages or credit for housing construction, refurbishing, enlarging and improving their homes. This has made it possible to decrease overcrowding by 20% in the households that were poor at the beginning of the programme.

This programme could be one of the most important schemes implemented in terms of social policy as an exclusively private initiative, without the direct participation of public sector institutions. Since the strategies developed by the member companies have benefited the family groups of 9,000 participants, its expansion might yield even greater benefits for achieving the wider goals of poverty reduction in Costa Rica. ■

Breakthrough: The power to break the poverty cycle

John Hammock

Electricity is a crucial proxy for multidimensional poverty, and one of its best predictors. Tackling energy poverty is of pivotal importance in the fight against multidimensional poverty[1].

These are some of the findings of the OPHI study *Interlinkages Between Multidimensional Poverty and Electricity'. A study using the 2020 global MPI.*

According to the OPHI-UNDP global MPI in 2020, of the total of 5.9 billion people covered in 107 countries, 922 million people couldn't turn on a light when it got dark. They lacked access to electricity.

Of these 922 million people, who were electricity-deprived, three-quarters of them (687 million) were multidimensionally poor. This means that of the 1.3 billion who were multidimensionally poor in the 107 countries covered by the global MPI, 53% lacked electricity. In other words, 53% of multidimensionally poor people lack electricity.

And most surprisingly, 99% of the people who were deprived in electricity were also deprived in at least one other indicator of poverty simultaneously, emphasising the breadth of interlinkages observed among those lacking access to electricity.

> This study has put a spotlight on the fact that electricity is a key way to deal with the many aspects of multidimensional poverty for so many of the poor globally.

Of those deprived in electricity, 96% were also deprived in another indicator related to energy use – cooking fuel – emphasising the acute overlapping deprivations in energy access and consumption.

In addition, 86% of those deprived in electricity also live in precarious housing, built using non-improved materials. 83% of those who do not have access to electricity either lack a sanitation facility, are forced to share toilets with other households, or use unimproved toilets.

If you think of the poverty cycle and the lives of poor men, women and children, often it is not characterised by a lack of just one thing, be it money, nutrition, housing, education, water, or sanitation. Their experience is a nexus of overlapping or clustered disadvantages that strike them at the same time.

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1 The findings shared in this article come from a Report prepared by OPHI for the Rockefeller Foundation. OPHI was grateful for the opportunity to look in depth at a key indicator of multidimensional poverty.

To break the poverty cycle, the MPI offers a way out by putting some structure into the data and by recognising the actual situation of poor people whose lives are, as stated by economist Amartya Sen, "battered and diminished in many ways simultaneously".

This study has put a spotlight on the fact that electricity is a key way to deal with the many aspects of multidimensional poverty for so many of the poor globally. More research is needed – both quantitative and qualitative – to drive effective programming and public policy. Research is also needed to track the changes brought about over time by electrification programme interventions, paying particular attention to sequencing, interlinkages and the different pathways to tackle multidimensional poverty.

JUAN MANUEL SANTOS
Former President of Colombia and Nobel Peace Laureate
Board of Trustees, The Rockefeller Foundation

Comments by Juan Manuel Santos, Former President of Colombia at the launch of the report

'It is common sense. People who have electricity just take it for granted. Imagine what you would do without it. So, it really is something that changes the lives of many people. This report shows the effect it has on the living standards of people, especially poor people who want to leave poverty…Here you have the opportunity to address poverty through the Multidimensional Poverty Index and because of the interlinkages concentrating on energy poverty, but at the same time producing that energy in a clean, sustainable way.'

DR. RAJIV J. SHAH
President
The Rockefeller Foundation

Comments by Raj Shah, President, The Rockefeller Foundation at the launch of the report

'The data and the insights from this Oxford analysis are really extremely important in part because in a modern economy a person without access to electricity effectively lacks the capacity to significantly improve his/her labour productivity and move themselves and other members of their community out of poverty.

Electricity access seems to cut across quite a large number of those elements of deprivation that trap people in a poverty trap and make it very difficult for them to improve their basic living conditions. For us at The Rockefeller Foundation, making investments to address energy poverty and doing that in a manner that embraces renewable energy technology is such a huge priority. We really do believe that that it is one of the critical ways to unlock the improvement of living standards broadly – in part because just electricity improves living standards and in part because of the multidimensional aspect of poverty.

The world needs more such studies and analyses and tools so that decision-makers and leaders can make informed decisions about how to set priorities. Addressing energy poverty ought to be a very, very high priority for those trying to build a more equitable future for their people.

At the end of the day this is what we have to deal with right now: we have to find the very best, the most effective, the most efficient ways to invest in a recovery that truly lifts up everybody and in particular focuses on the poor and the near-poor that are most vulnerable.

I am hopeful that the leaders of the IMF and domestic finance ministers and decision-makers throughout the world will see this Multidimensional Poverty Index and see the opportunity and say "okay, this is the moment we have to recover with equity." We at The Foundation believe the best way to do that is through large-scale immediate investments in building out energy infrastructure that makes a difference.' ■

Simulations and multidimensional poverty: reflections on a COVID-19 evaluation study

Nicolai Suppa and Ricardo Nogales

The current COVID-19 pandemic, which took hold in early 2020, put policymakers in a vexing situation. First, there is a high degree of uncertainty associated with both the effectiveness and potential side-effects of most policy measures aiming to curtail the spread of the virus, including the virus' precise epidemiological characteristics. Secondly, much is at stake, including a significant number of premature deaths, extraordinary economic contractions, and the education of several young generations.

Meanwhile, policy-oriented research encounters a data scarcity, impeding grounded recommendations and advice as conventional impact evaluations are not yet feasible. Notwithstanding, situations like these require decisions even under such adverse circumstances.

In a recent study, we apply simulation techniques for a forecasted assessment of the pandemic and related policy responses on global multidimensional poverty. In this article we provide a non-technical discussion of this paper, highlighting both the usefulness and challenges of simulations for multidimensional poverty analyses.

Data and scenarios

In our study, we use micro datasets for 70 countries of the 2020 global Multidimensional Poverty Index (MPI) release and related changes over time, which is carefully documented in OPHI Methodological notes 49 and 50[1]. The global MPI builds on 10 indicators organized in three dimensions (health, education, and living standards) and relies on the dual cutoff counting approach, sometimes called the Alkire-Foster method. While being estimated since 2010, the global MPI was revised in 2018 to better align with the Sustainable Development Goals. The global MPI is estimated based on comprehensive household survey datasets, such as the Demographic Health Survey (DHS) and the Multiple Indicator Cluster Survey (MICS).

In our simulations we implement scenarios for two indicators, deprivation in nutrition and school attendance because (i) they capture relevant short-term effects, (ii) there is enough reliable information to inform how they can be affected by the pandemic, and (iii) they have a large weight in the global MPI.

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1 More precisely we rely on 70 countries for arriving at the results reported at the global level, whereas we make use of 97 countries during the simulation exercise itself.

For this reason, we first nowcast multidimensional poverty to 2020, and then develop and apply a model which translates the simulated shocks to 2020, allowing us to compute potential increases in different outcomes due to the shocks. Table 1 shows, for instance, that according to our upper-bound scenario, the global MPI would increase to 0.164, whereas the number of poor people would increase by 547 million, which is considerable.

COVID-19 scenario		Aggregate Adjusted Simulation for 2020		
Selection probabilities		MPI (M)	Δ # poor	Setback
Nutrition	School attendance	$M^*s(2020)$	$\Delta^* Q_S(2020)$	$(2020-t^*)$
(%)		value	(million)	(years)
12	–	0.114	152	3.6
20	–	0.122	213	4.8
50	–	0.134	310	6.4
12	50	0.146	426	8.0
20	50	0.153	469	8.8
50	50	0.164	547	9.9

Notes: Authors' calculations; MPI values are population-weighted aggregates across the 70 countries, while the increases in number of poor are totals across the same countries. All calculations based on UN-DESA medium-fertility population projections.

Source: Alkire, Nogales, Quinn, Suppa (2021)

Nutrition deprivation scenarios are informed by World Food Programme (WFP) data on food security risks. The WFP provides pre-pandemic numbers of food-insecure people in many countries. We assume that food insecurity materialises in actual malnutrition among the poor and vulnerable people who have managed to avoid nutrition deprivations before the pandemic. Accounting for specific features of WFP data, we derive three plausible risk rates of increased nutrition deprivations: 12%, 20% and 50%.

Risks of school nonattendance are informed by UNESCO data on daily school closures around the world. We derive a risk of 50% for children in school age to experience significant loss of schooling, and thus deprivation in school attendance due to school closures during the first year of the pandemic.

Translation model and results

In early 2020, even many of the most recent country-level micro datasets were collected several years before the pandemic. As a consequence, taking simulation results at face value would be misleading, as countries' recent poverty reductions would be ignored. Moreover, the simulated shocks themselves would not reflect 2020 conditions.[2]

Additionally, we also compute the setback in terms of poverty reduction. We find that, depending on the underlying scenario, the pandemic may result in up to an entire decade of global multidimensional poverty reduction becoming undone.

Discussion

One implication we emphasize in the paper is that appropriate policy measures are needed to prevent these new deprivations from becoming entrenched. Previous research documents several measures to

2 Indeed, our analysis suggests a non-linear relationship between level of multidimensional poverty and the simulated shock.

attenuate the effect of temporary school closures on school dropout rates ([World Bank, 2020](#)).

Methodologically, simulations emerge as one promising tool to better understand multidimensional poverty. First, simulations may be applied even when key information on certain aspects is unavailable. Moreover, if correctly devised, simulations may implicitly account for various aspects of the micro data, including the joint distribution of deprivations (e.g. of specific deprivation profiles) and various socio-demographic aspects (e.g. age structure of the population).

Simulations, however, also pose important challenges. First, outdated micro data may not accurately reflect the current situation in a particular country and thus support misleading conclusions. A translation model, as proposed in our paper, may address this issue in some instances, but simply having more recent micro data at hand may suffice.

Another shortcoming of simulations is that their plausibility and accuracy are not easy to assess. Therefore, a very clear and detailed documentation of the underlying assumptions and the data used to inform the different scenarios is vital for a transparent analysis. Otherwise, a simulation study is inevitably tainted by an unacceptable degree of arbitrariness.

A third challenge is related to the actual implementation of the scenarios: Which individuals or households are selected to experience a new deprivation? How exactly is this implemented, and why is it justified? In our schooling scenario, for instance, we implement a uniform risk for all school-age children. This is supported by an unprecedentedly widespread school closure around the globe. Other exercises, such as the simulation of a specific policy measure, undeniably require much more elaborated and fine-tuned implementations to obtain truly informative results.

> Appropriate policy measures are needed to prevent these new deprivations from becoming entrenched.

The full potential of simulation techniques for analysing multidimensional poverty is certainly not yet fully developed. Addressing these and other challenges first would clearly be the next step forward.

OPHI Executive Education: a new journey to support leaders and policymakers in their effort to confront poverty

Michelle Muschett

Over a decade ago, Sabina Alkire and James Foster developed the Alkire-Foster (AF) method, a flexible technique for measuring multidimensional poverty, inequality, and wellbeing that goes beyond one-dimensional approaches to measure poverty such as income or consumption. Since then, the AF method has been widely used by governments, development agencies, NGOs, and even the private sector to build multidimensional measures grounded in people's experiences and values, tailored to specific contexts. These multidimensional measures have been proven to be powerful tools to design and coordinate policies, allocate resources, and target beneficiaries.

The Multidimensional Poverty Index (MPI) is one of the best known applications of the Alkire-Foster method. The number of countries adopting national MPIs as official measures of poverty and interested in using them for policy is on the rise. However, to connect measurement with policy action, leadership and political commitment at the highest levels are essential.

OPHI Executive Education (ExEd) has been established to complement OPHI's measurement work by focusing on the education of leaders and policymakers about the potential policy uses of the MPI and other Alkire-Foster-based measures.

OPHI builds upon OPHI's trajectory as a global referent in multidimensional measurements, and the rich experience of a growing network of global champions committed to poverty reduction to inspire today's leaders while also equipping them with resources to implement high-impact strategies.

OPHI ExEd's inaugural course was carried out online from August 23-27 2021, under the title 'Leaders Programme: Using the MPI as a policy tool'. The programme was carefully crafted to provide senior government officials and policymakers with practical knowledge and direct access to the world's leading experts on multidimensional poverty reduction, to deepen their understanding of the policy uses of the MPI.

The first cohort of OPHI ExEd brought together 33 public leaders and policymakers from 20 countries across the world, including secretaries of state, deputy ministers, presidential advisors, directors from planning, social protection, and statistics departments, as well as high-level representatives from development agencies and the private sector. Through 15 hours of interactive lectures, workshops, conversations with global leaders, and practitioners' panels based on real-world cases, this five-day programme leveraged open discussions and networking with fellow policymakers.

> During 2022, in addition to the second edition of the Leaders Programme, OPHI ExEd will offer an executive programme in Spanish.

A special feature of the inaugural Leaders Programme was that all lecturers, facilitators, and special guests have vast experience leading multidimensional poverty reduction efforts at international, national, and institutional levels. This list included Juan Manuel Santos (Nobel Peace Prize and former President of Colombia), Tshering Tobgay (former Prime Minister of Bhutan), Achim Steiner (UNDP Administrator), Ana Helena Chacón (former Vice President of Costa Rica), Margarita Cedeño (former Vice President of Dominican Republic), among other top-level practitioners and experts.

During 2022, in addition to the second edition of the Leaders Programme, OPHI ExEd will offer an executive programme in Spanish, and several executive trainings tailored to countries' needs and demands. This is the first step of a wonderful new journey for OPHI with the hope of supporting leaders and policymakers to advocate for the policies today's world needs to leave none behind.

For additional information about OPHI ExEd programmes and trainings: ophi-exed@qeh.ox.ac.uk

Photo: Supriya Biswas

Sign up to receive Dimensions magazine from the MPPN to learn more about multidimensional poverty around the world.

www.mppn.org

Data of the Month

Across 109 countries 1.3 billion people – 21.7 percent – live in acute multidimensional poverty. Who are these people? Where do they live? What deprivations do they face?

Who are the **1.3 billion multidimensionally poor people**, and where do they live?

About half (**644 million**) are children under age 18.

One in three children is multidimensionally poor compared with **one in six** adults.

About **8.2%** of multidimensionally poor people (**105 million**) are age 60 or older.

More than **67%** live in middle-income countries, where the incidence ranges from **0.1% to 66.8%** nationally and from **0.0 % to 89.5%** subnationally.

Nearly **85%** live in Sub-Saharan Africa (**556 million**) or South Asia (**532 million**).

Roughly, **84%** (**1.1 billion**) live in rural areas, and **16%** (**about 209 million**) live in urban areas.

What deprivations do the **1.3 billion multidimensionally poor** people face?

481 million
live with an out-of-school child.

550 million
lack at least seven of eight assets (radio, television, telephone, computer, animal cart, bicycle, motorbike or refrigerator) and do not have a car.

568 million
lack improved drinking water within a 30-minute roundtrip walk.

635 million
live in households in which no member has completed at least six years of schooling.

678 million
lack electricity.

788 million
live in a household with at least one undernourished person.

1 billion each are exposed to solid cooking fuels, inadequate sanitation and substandard housing.

DESIGNING A MULTIDIMENSIONAL POVERTY INDEX
2022 EDITION

Massive Open Online Course
14 March 2022 - 29 April 2022

**Register for UNDP and OPHI MOOC:
Designing a Multidimensional Poverty Index (2022)**

UNDP and OPHI are pleased to offer a free Massive Open Online Course (MOOC) on Designing a Multidimensional Poverty Index (MPI) in English, French, Spanish, Russian and Arabic (thanks to our partners, ESCWA). The MOOC will take place between **14 March and 29 April 2022**.

The course draws on the handbook, How to Build a National Multidimensional Poverty Index (MPI): Using the MPI to inform the SDGs, launched by UNDP and OPHI in July 2019. Using country and sub-national examples, the course offers detailed practical guidance for policymakers, technical experts, and other stakeholders on how to design an MPI at the national and local levels.

This is the third iteration of the MOOC, which began in 2020, and includes Russian for the first time. The 2022 edition provides an expanded library of case studies outlining the uses of the MPI for policy interventions in the context of COVID-19 recovery efforts.

Register now!
bit.ly/mpimooc2022

8th MPPN Annual High-Level Meeting, Chile 2021

The government of Chile and its Ministry of Social Development and Family Affairs hosted the 8th Annual Meeting in Santiago on the 4th and 5th of October online, with support from the MPPN Secretariat and the Oxford Poverty and Human Development Initiative (OPHI).

35 countries and 8 international agencies gave insightful presentations on their progress with multidimensional poverty measurement and reduction. President Piñera gave a special address in the opening session of the meeting highlighting the important role of the MPPN in advancing the fight against poverty.

The meeting provided a space of exchange and discussion for countries and organisations from around the world.

'We no longer have to make policy blindly', leaders reflect on poverty reduction at UNGA 76

The Multidimensional Poverty Peer Network (MPPN) and the United Nations Economic and Social Commission for Western Asia (ESCWA) co-hosted an online side event at the 76th UN General Assembly on 23 September 2021 for 19 world leaders and policymakers. Speakers discussed how to envision a more equitable future using Multidimensional Poverty Indices (MPIs) as policy tools. As Samheng Boros, the Secretary of State for Cambodia put it, 'we no longer have to make policy blindly'.

Two heads of state and government, and 17 high-level representatives from countries and international agencies spoke at the event sharing how their governments had been using, or were planning to use, MPIs and multidimensional poverty analyses to guide effective interventions that curb rising multidimensional poverty.

New Multidimensional Poverty Indices
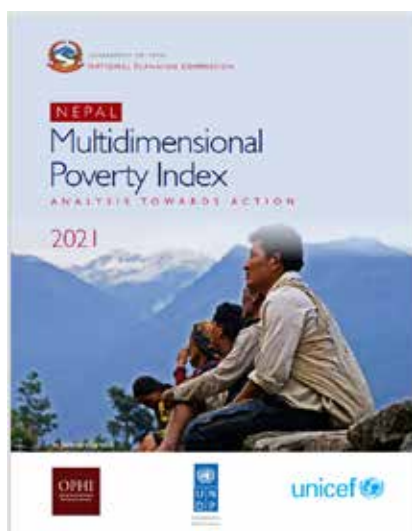
Nepal

On August 2021, the National Planning Commission of Nepal launched the first update to Nepal's official national Multidimensional Poverty Index (MPI-NP). The incidence of multidimensional poverty nationally fell from 30.1% in 2014 to 17.4%, and MPI dropped from 0.133 to 0.074, being cut by nearly half in a mere five years. This is a remarkable result, given that the SDG aim is to cut multidimensional poverty by half in 15 years. It means that 3.1 million people left poverty in a mere five years, with only 5 million left to exit.

The intensity of multidimensional poverty also decreased from 44.2% to 42.5%. Nepal's results are striking on the international stage in comparison to other countries; according to the 2020 global MPI trend data, no country with a similar starting level of multidimensional poverty reduced its MPI or its incidence faster than Nepal.

Malawi

The Malawi Multidimensional Poverty Index Report presents the results of the first national Multidimensional Poverty Index for Malawi. This report was produced by the National Statistical Office (NSO) in collaboration with the United Nations Development Programme (UNDP), the University of Malawi (Economics Department), the Centre for Social Research, the National Planning Commission and the Ministry of Economic Planning and Development and Public Sector Reforms, with technical support from the Oxford Poverty and Human Development Initiative (OPHI).

61.7% of Malawi's population are multidimensionally poor. The indicators that contribute most to multidimensional poverty in Malawi nationally are literacy and schooling (14.9%), electricity (11.4%), job diversity (11.3%) and asset ownership (10.2%).

Sri Lanka

Multidimensional Poverty in Sri Lanka presents findings from the first official permanent National MPI, and also presents a linked individual Child MPI for Sri Lanka. Sri Lanka is the first country in the world to directly and fully include all indicators of their National MPI in their individual child MPI. This strategy, also known as the 'drawer approach' powerfully aligns policy implications as every child who is poor by the national MPI is also poor by the Child MPI.

Approximately one out of every six (16.0%) people in Sri Lanka are multidimensionally poor.
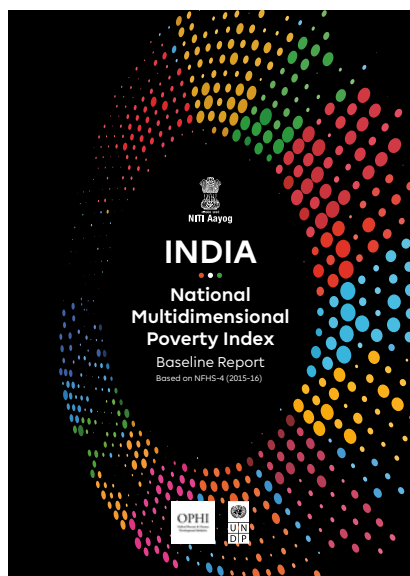
India

The National Multidimensional Poverty Index: Baseline Report based on NFHS-4 (2015–16) presents National, State/Union Territories and district results using data from the 2015/16 National Family Health Survey (NFHS-4). The Report has been developed by NITI Aayog in consultation with 12 Line Ministries and in partnership with State governments, OPHI and the United Nations Development Programme (UNDP). As the nodal Ministry for MPI, NITI Aayog ranks States and Union Territories based on their performance and has also constituted an inter-ministerial MPI Coordination Committee (MPICC) to consult twelve Line Ministries mapped to each National MPI indicator.

The India National MPI builds on the 10 indicators of the global MPI to add metrics on maternal health and bank account under the dimensions of health and standard of living, respectively.

MPPN

The Multidimensional Poverty Peer Network (MPPN) is a South-South initiative that supports policymakers in developing multidimensional poverty measures.

It promotes the use of such measures for more effective poverty eradication efforts at the global, national, and local levels.
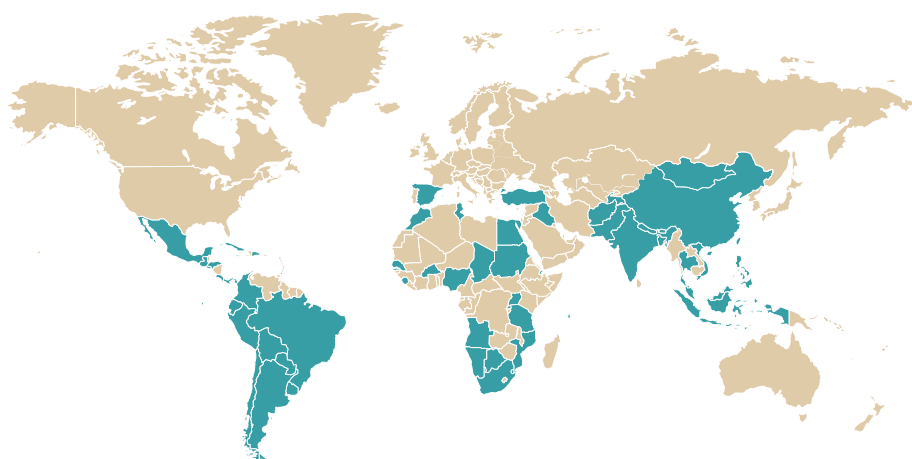
Participants in the network are Ministers and senior officials from:

- Afghanistan
- Angola
- Antigua and Barbuda
- Argentina
- Bangladesh
- Bhutan
- Bolivia
- Botswana
- Brazil
- Burkina Faso
- Chad
- Chile
- China
- Colombia
- Costa Rica
- Cuba
- Djibouti
- Dominican Republic
- Ecuador
- Egypt
- El Salvador
- eSwatini
- Gambia
- Grenada
- Guatemala
- Honduras
- India
- Indonesia
- Iraq
- Jamaica
- Malaysia
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- Mexico
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- Morocco
- Mozambique
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- Paraguay
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- Senegal
- Seychelles
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- South Africa
- Spain
- Sudan
- Tajikistan
- Tanzania
- Thailand
- Tunisia
- Turkey
- Uganda
- Uruguay
- Viet Nam

Institutions

- African Development Bank
- Commonwealth of Nations
- Economic Commission for Latin America (ECLAC)
- Federal Ministry of International Cooperation and Development (BMZ), Government of Germany
- Inter-American Development Bank (IDB)
- Islamic Development Bank (IDB)
- Organization of American States (OAS)
- Organisation for Economic Cooperation and Development (OECD)
- Organisation of Eastern Caribbean States (OECS)
- Oxford Poverty and Human Development Initiative (OPHI)
- SELA – Latin American and the Caribbean Economic System
- Swedish International Development Cooperation Agency – Sida
- Southern Africa Development Community (SADC)
- Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)
- United Nations Development Programme
- United Nations Economic and Social Commission for Western Asia (ESCWA)
- Unicef
- World Bank
- World Food Programme

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