



Measuring Multidimensional Poverty: A Rigorously Documented Global Data Gap

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Abstract

This paper presents a three-stage in-depth review of multi-topic household surveys to assess whether existing data could be used to estimate a truly global moderate Multidimensional Poverty Index (MPI) that is frequently updated and extensively disaggregated. Drawing on previous studies it first summarises data sources presently used for international or national MPIs, setting out some advantages and drawbacks. The review then sets out criteria used for selection and assessment of reviewed datasets, and schematically presents survey contents and their cross-national comparability. It then assesses potential indicators for comparable multidimensional poverty indices, and identifies data gaps according to reviewed datasets. Additionally, the paper highlights some common shortcomings and comparability issues found in multi-topic household surveys, and proposes feasible adjustments. While this paper covers 152 suitable household surveys and 3 cross-country datasets, it cannot be an exhaustive review. Nor does it claim to assess the suitability of the reviewed surveys for any other purposes. It assesses data availability for a set of concrete structures of internationally comparable, frequently updated, and subnationally disaggregated moderate MPIs, in the hope of closing the gap towards global coverage. It uncovers a large data gap and sets out recommendations to address it.

Keywords Multidimensional Poverty · Household Survey Data · Poverty Measurement · Data Gaps · Sustainable Development Goals

1 Introduction

Timely, comparable and disaggregated data on multidimensional poverty are essential for effective policy-making within and across countries. Figures on acute multidimensional poverty comparing over 100 developing countries and 6.3 billion people are published regularly using the internationally comparable global MPI (Alkire, Kanagaratnam

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and Suppa, 2024), but shed weak light on low poverty contexts. As of July 2024, 43 countries home to 2.97 billion people have reported bespoke national Multidimensional Poverty Indices (MPIs) to the global Sustainable Development Goal (SDG) database against Indicator 1.2.2 (Alkire & Dirksen, 2024). However, as national MPIs are tailored to each country context, they cannot be compared. Complementing the current global MPI and learning from national MPIs, this paper assesses the feasibility of estimating a new global measure of poverty that would go beyond the existing global MPI that measures *acute* poverty and would assess *moderate* (less acute forms of) poverty across all countries and 8 billion people.

Fundamentally, comparable poverty measures can only be built if data for salient indicators are collected in ways that can be compared. Building on preliminary work on the ‘moderate MPI’ (Alkire et al., 2023), this paper asks what MPIs could be built using existing data. To do so it scrutinises national household surveys covering two-thirds (5.2 billion) of the world’s population (2021) and including 13 of the 20 most populous countries. The study extends further to cover three cross-national datasets which, together, cover 97% of the global population (7.7 billion people). All surveys were assessed in a three-stage process according to predefined criteria, aiming to ensure nationally representative results, subnational analysis, cross-country comparability, and frequent updates. The paper also explores the possibility of building a moderate MPI using the datasets that underlie the global MPI and adding new comparable surveys for countries not covered by the current global MPI.

Based on a rigorous and detailed review of selected national and cross-national surveys, we find that data do not permit the generation of a truly global moderate MPI. An MPI with indicators on education, employment, living standards, financial situation, and health might be feasible for about half the global population, including multiple OECD countries, but it would be severely limited in terms of its comparability due to differing definitions of indicators, frequency of updates, and disaggregation possibilities. If we seek increased comparability, the indicator possibilities reduce sharply. The most feasible option seems to be a moderate MPI from the global MPI surveys across developing countries – but this still has challenges in terms of the health indicators and overlooks high-income countries. Thus, despite many complaints of information explosion, when it comes to poverty, sufficient data do not yet exist to build a truly global-comparable measure of ‘moderate’ multidimensional poverty. This is a serious gap.

2 Background and Motivation

2.1 Global MPI: A Measure that Shows What is Possible and What is Missing

Multidimensional poverty indices based on the Alkire-Foster method¹ have been widely used alongside monetary metrics at the national and international levels. A prominent application of the method is the global Multidimensional Poverty Index (MPI), developed jointly by OPHI and UNDP’s Human Development Report Office in 2010, to capture acute deprivations in health, education, and living standards using 10 indicators

¹A dual-cutoff counting approach developed to measure multidimensional poverty (see Alkire and Foster, 2011).

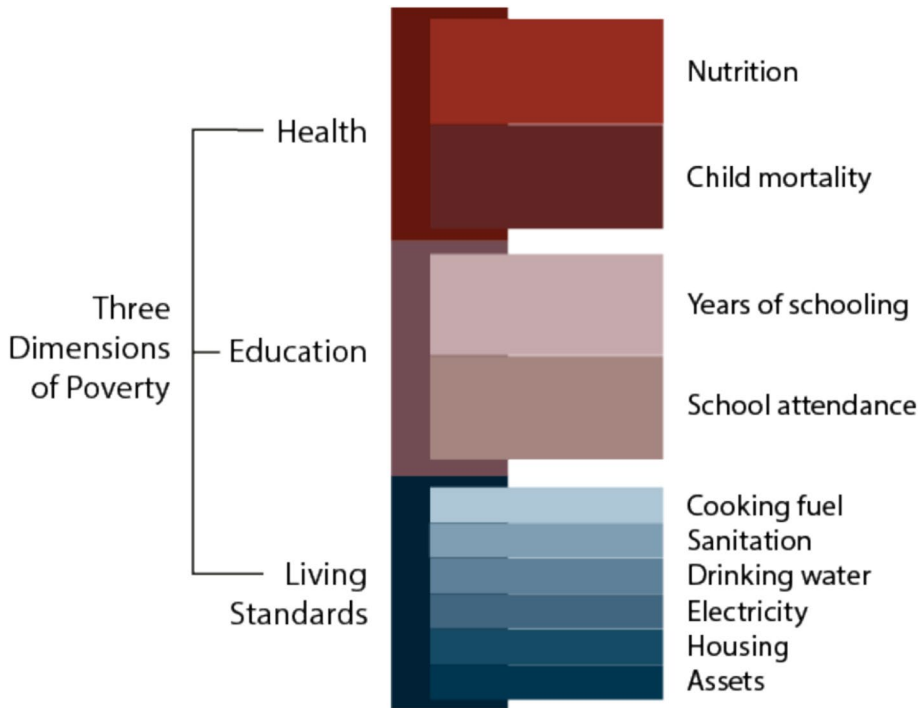


Fig. 1 Dimensions, indicators and weights of the global MPI. © All Rights Reserved (OPHI). Source: OPHI, 2018

(Fig. 1). Updated annually, the latest global MPI estimates cover 112 countries and 6.3 billion people, with the data disaggregated by urban–rural area, age groups, gender of the household head, and 1,359 subnational regions. Data on poverty trends are available for 86 countries and 6 billion people. The global MPI complements the \$2.15 (now \$3) per day measure of extreme monetary poverty.

The global MPI remains highly relevant in poverty hotspots like Sub-Saharan Africa and South Asia, where poverty rates can exceed 90%. Yet such acute deprivations are very low in many other regions. In 58 countries, less than 10% of the population is multidimensionally poor by the global MPI, and in 28 of these, the headcount ratio is under 2% (Alkire, Kanagaratnam and Suppa, 2024). Subnational results also show stark contrasts even in poorer countries: in Ethiopia 68.7% are MPI poor but only 11.4% in the capital, Addis Ababa; in Mozambique 73.1% are MPI poor but in the capital, Maputo City, only 3.9%. These numbers represent years of progress to eliminate the most acute deprivations. Yet, as countries advance to higher human development, poverty persists in more moderate forms—forms not yet captured by existing multidimensional indices.

To track poverty and human development, the global MPI relies on comparable data from Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS). Both provide rigorous, comparable, and open-access microdata repositories, mostly covering low- and middle-income countries (LMICs).² Due to this, the global

²Country coverage and survey details are available at <https://dhsprogram.com> and <https://mics.unicef.org>

MPI does not cover important dimensions like employment, education quality, health-care, security, and empowerment (Alkire & Kanagaratnam, 2020) or extend to countries beyond the developing world. DHS and MICS surveys are typically updated every five years, but some of the poorest or conflict-affected countries have much older data. In the 2024 release of the global MPI, only 56 countries had data from 2019 or later, while 17 had data over a decade old (Alkire, Kanagaratnam and Suppa, 2024). While frequency has been rising – a positive development – these datasets are not updated with sufficient periodicity to show timely progress, limiting their usefulness for real-time poverty monitoring and policy evaluation. The recent disruption to the DHS programme following the withdrawal of USAID funding raises uncertainties about the continued availability of comparable household survey data across the developing world.

2.2 Alternative Metrics

Given these limitations, there has been continued interest and efforts to develop comparable MPIs that capture less acute notions of poverty and include additional dimensions such as employment.

A collaboration between OPHI and the UNDP Regional Bureau for Latin America and Caribbean proposed a set of ideal dimensions and indicators for a *middle-income country MPI*. It included employment as a fourth dimension and additional indicators like waste disposal, overcrowding, access to internet and technology, and social protection. Even though the study only covered six countries³ with suitable national surveys, comparability was still a challenge.

Building on that study, OPHI and the Swedish International Development Cooperation Agency (Sida) piloted a *moderate MPI* linked to the existing acute global MPI, using DHS and MICS data from six countries – one per developing region (Alkire et al., 2023). While retaining the global MPI's three dimensions and 10 indicators, the pilot applied stricter thresholds such as piped water into the dwelling, flush toilets, school attendance to class 10, and having an educated man and woman in the household. It also introduced new deprivations like obesity, or requiring internet access alongside electricity. This approach identified both the acutely poor population (by the global MPI), and a new layer of “moderately” poor populations using the *superset* approach (Alkire & Seth, 2016). However, cross-country comparability remained a challenge, and while the stricter thresholds led to higher poverty rates in poorer countries, there was a negligible increase in poverty in less poor regions like Europe and Central Asia by the moderate MPI. Therefore, considering a three-tier system of measuring global poverty (acute, moderate, and social exclusion or some other term for advanced contexts) might be more precise.

Regional MPIs have also been developed to tailor poverty measurement to local contexts. In Latin America, the UN Economic Commission for Latin America and the Caribbean's MPI covers 17 countries and includes dimensions such as housing, services, education, and employment (ECLAC, 2016; Santos & Villatoro, 2018; CEPAL, 2025). While the Arab MPI, launched by the UN Economic and Social Commission for Western Asia spans 10 countries, focusing on health, education, and living standards (UN

³Brazil (PNAD 2015), Chile (CASEN 2017), Colombia (ECV 2018), Costa Rica (ENAH0 2019), Ecuador (ECV 2013/14) and Mexico (ENIGH 2018).

ESCWA, 2017; 2023). In Europe, papers under Eurostat's NetSILC2 and NetSILC3 projects tested MPI configurations using harmonised cross-sectional and panel data covering all EU member states and the dimensions of income, quasi-joblessness, material deprivation, education, environment/housing, and health, though comparability issues persist, especially in health and education (Alkire & Apablaza, 2017; Alkire, Apablaza and Guio, 2021). The U.S. has alternative poverty measures – called a Multiple Deprivation Index – which is implemented by the Census Bureau, based on the American Community Survey. Despite data limitations, it represents the first national MPI in an advanced economy and is therefore of particular interest (Glassman, 2021, 2024).

2.3 A Brief Note on MPI Data

To this day, most MPIs rely on household survey data, sometimes supplemented by census data. While administrative datasets could, in theory, support MPI analysis through individual-level matching, this is often challenging (Alkire & Samman, 2014). Household surveys are preferable since they register all members on a roster, collect questions at the household level, and often administer individual questionnaires to all or selected household members. They normally collect information on a set of different topics and tend to include basic demographic and socio-economic information (e.g. housing conditions, years of education, and school attendance). They are also less costly than population and housing censuses that enumerate each individual in the population. As a result, most household surveys are collected at regular intervals (e.g. quarterly, annually or every two or three or five years), while most countries field a census every 10 years.

2.4 Our Motivation

Following on from these studies, we set out to determine the feasibility for a new multidimensional poverty index with more ambitious indicators, more extensive or at least complementary country coverage, granular disaggregation, and frequently updated data. Building on previous academic work and international reports cataloguing comparable data sources (Alkire, 2007; Alkire & Robson, 2022; Alkire & Samman, 2014), we assessed data availability across national and cross-national household surveys. Our starting point for an *ideal MPI* (and its data needs) builds on the recommendations of Sir Tony Atkinson's Commission on Global Poverty, who proposed that a global multidimensional poverty index should capture deprivations in six domains: nutrition, health, education, housing, work, and personal security (World Bank, 2017, p.158).

3 Literature

3.1 Reviews of Household Survey Data

Published, large-scale reviews of multi-topic household surveys are scarce. Reviews of subject- or indicator-specific analysis, or particular countries are more common. The Education Policy and Data Center (2009) examined education modules in 30 household

surveys from 1996–2005 in developing countries, comparing them with DHS and MICS. They highlighted variation in questionnaire structure, filtering, and variable naming as barriers to comparability, along with language issues and lack of documentation. When analysing response errors, they found that certain question formats yielded higher response rates. On health, Sadana et al. (2001) assessed the availability and quality of data on health status across 50 household surveys in different countries, looking to establish cross-country comparability. Hasanov and Hasanova (2016) compared Household Budget Surveys in 11 countries in Eastern Europe, the Caucasus, and Central Asia, focusing on poverty and Eurostat’s material deprivation questions. They found partial harmonisation possible for some variables (e.g. expenditure, durable goods, and housing), but overall standardisation was lacking. Cook and Keeley (2007) mapped China’s socio-economic microdata, noting challenges like limited English documentation and access restrictions, but identified key datasets such as the Population Census, the 1% Population Sample Survey, the Labour Survey, and the Rural and Urban Household Survey. In addition, the International Household Survey Network (IHSN) and World Bank microdata library also catalogue relevant surveys (e.g. consumption and expenditure, labour force, household socio-economic) and censuses in LMICs.⁴

3.2 Standardization and Harmonization of Survey Data

Several previous studies aimed to improve the availability of internationally comparable indicators for multidimensional poverty. On employment, Lugo (2007) proposed seven internationally comparable indicators to assess job quality and employment conditions. On measurement, the Alkire-Foster method has been used to propose indicators around decent work (Ortega Diaz, 2013) and job quality (Brummund et al., 2018; González et al., 2021; Sehnbruch et al., 2020, 2024) in Latin America. Hovhannisyanyan et al. (2022) developed a multidimensional job quality index using harmonised labour force and household survey data from 40 developing countries, covering employment benefits, job stability, working conditions, and income. However, differences in employment classifications across surveys limit comparability and coverage.

On energy, the global and many national MPIs assess deprivation via cooking fuel type – a proxy for indoor air pollution (Alkire, Kanagaratnam and Vollmer, 2021). While relevant in low-income settings, this indicator is less useful in advanced economies, where solid fuel use is rare. Studies using the AF method have explored broader fuel poverty measures (Chesser et al., 2022; Nawaz, 2021). In Europe, Thomson et al. (2017) highlight the lack of harmonised indicators, also noting differences in approaches (e.g. consensual, expenditure) that prevents cross-country comparisons and effective monitoring. They propose an annual EU-wide survey covering access, affordability, efficiency, and needs. Focusing on methodological issues, Herrero (2017) critiques single-indicator approaches for missing vulnerable groups and limiting policy relevance. On health and nutrition, Russell et al. (2018) reviewed 20 studies across 14 LMICs and found that most household consumption and expenditure surveys (HCES) include questions suitable for measuring food security, though standardisation is needed for

⁴World Bank Microdata Library contains 6005 datasets starting from the 1950s, while the IHSN has 11,806 datasets as of June 2025.

cross-country and temporal comparability. Diprose (2007) proposed indicators for violence, safety, and security.

Beyond standardising survey instruments, harmonising outputs from national surveys can also enhance comparability. The World Bank has made significant investments in this area, publishing harmonised aggregate level data through the *World Development Indicators*. Its Global Monitoring Database (GMD) provides harmonised microdata from income and expenditure surveys for monetary poverty estimates, while the Global Labor Database standardises labour-related variables from surveys with substantial employment content. The International Labour Organization (ILO) has also made considerable progress in supporting countries to standardise their labour force surveys and introduced standardised questionnaire modules on employment which are extensively used. In Europe, the Luxembourg Income Study (LIS) offers the largest harmonised cross-national microdata collection on income and wealth, spanning five decades and up to 50 countries. Eurostat's EU-SILC provides annual harmonised socio-economic data for all EU members and selected non-members, collected via national surveys or registries. In Latin America and the Caribbean, the SEDLAC datasets includes harmonised socio-economic variables from national household surveys. In the USA, IPUMS hosts the world's largest international census microdata library, covering over 100 countries and all U.S. censuses since 1790, along with harmonised health, time use, and core American survey data (e.g. American Community Survey, Current Population Survey, National Health Interview Survey). Focusing on panel data, the Comparative Panel File (CPF) project offers open-source tools to harmonise long-running panel surveys from seven countries from 1968 to 2019 (Turek, Kalmijn and Leopold, 2021).

Achieving global comparability in poverty measures requires trade-offs. Both standardising survey instruments and harmonising outputs are essential for building robust, internationally comparable metrics. And while much progress has been made, and there is certainly willingness to go further, it would require considerable time and resources to properly assess and evaluate existing survey instruments and develop and trial new modules.

4 Methodology

4.1 Criteria for Evaluation

Our review of the current data landscape focuses on national and cross-national multi-topic household surveys that fulfil a set of predefined criteria required of Alkire-Foster MPIs, namely:

Single Dataset Unlike dashboards that combine information from multiple data sources – often at different levels of analysis – Alkire-Foster indices are ordinarily computed using a single dataset containing data for all indicators and all units (individual or household) in order to capture the joint distribution of deprivations. This is coherent with Amartya Sen's capability approach which refers to sets of capabilities and assesses poverty with respect to overlapping disadvantages that batter and diminish poor people's

lives. While merging datasets is theoretically possible (e.g., via household ID or geolocation), in practice, this is not feasible at a global scale for poverty-related indicators.

Individual or Household Level Data MPIs typically use the household as the unit of identification, though some (e.g., child MPIs) use individual-level data. Analysis is almost always conducted at the individual level. Therefore, surveys must collect data from the household and all, or a subsample of its members. Merging with institutional data (e.g., on schools or clinics) is possible in theory but not at scale.

National Representativeness and Disaggregation Data must be nationally representative and ideally allow disaggregation by subnational units or population subgroups (e.g., age, region, gender of household head).

Sufficient Sample Size Analysis at the subnational level requires a sample size that permits arguably representative estimates of key groups. Naturally, all results and comparisons will be interpreted alongside standard errors.

Direct Measurement of Deprivations Unlike income and consumption measures, MPIs focus on deprivations related to key areas of human development: health, nutrition, education, housing and living standards, employment, physical security, and environmental conditions. Ideally, data should measure deprivations in outcomes; if not some proxy for these. They may cover other topics related to wellbeing such as social connections, governance, time use, culture, shocks, or subjective evaluations.

Timeliness Up-to-date data are essential for effective poverty monitoring. Ideally, surveys (and MPIs) should be updated every 1–2 years, though frequency varies widely across countries and data types (Alkire & Samman, 2014).

4.2 Evaluation Process

The evaluation was done using a three-stage review process, starting with a general scoping of possible datasets using web searches, advice from colleagues, experts and country partners,⁵ reviewing relevant literature, and publicly available national or international data repositories (e.g. IHSN). All surveys were assessed on the key criteria and marked for further review or eliminated. Some surveys' suitability has already been assessed in previous work on multidimensional poverty and wellbeing (Alkire, Apablaza and Guio, 2021; Glassman, 2021; Suppa, 2017; Alkire & Kovesdi, 2020), or by their use for an official national MPI, but the majority of the surveys had not previously been analysed.

At the second stage, shortlisted surveys were assessed for periodicity, latest data, sample size, disaggregation potential, questionnaire availability, and module coverage. For cross-national surveys, country coverage was also assessed. A survey advanced to the third stage if it included at least two of the following modules: demographics, health,

⁵ Survey selection incorporated advice from experts at national statistics offices (Canada, USA, UK), international organisations (OECD, UNECE), data providers (DHS, MICS, Gallup, LIS), academics, country partners, and OPHI colleagues.

education, living conditions, durable goods and assets, employment, finance, technology/media use, subjective wellbeing, time use, relationships, governance, security/violence, and environment.

In the third stage, detailed questionnaire reviews were conducted for surveys meeting the criteria. Due to time and resource constraints, we prioritised advanced economies, the 20 most populous countries, and developing countries not covered by MICS or DHS. Each survey was reviewed for exact questions on employment, household finances, assets, material deprivation, living conditions, education, health, and wellbeing (e.g., social connectedness, empowerment, life satisfaction). For all selected surveys, we logged question wording, response categories, recall periods, sequencing, subjectivity, and subsample use.

In most cases, the review was based on the latest available questionnaire at the time of the study (2022). However, for a small number of countries, these were not publicly available (e.g. Russia), or the recent questionnaire had no English translation (e.g. Indonesia). We sought expert support to obtain these questionnaires or an appropriate translation, but this was not always possible hence some interesting surveys in large population countries were not covered (e.g. Iran, Ethiopia). In a few cases, we reverted to an earlier round of the questionnaire since the latest was not publicly available (e.g. Indonesia, Mongolia), or used online codebooks instead (e.g. Australia, New Zealand). For the harmonised datasets, we relied on online methodological reports detailing the harmonised variables (e.g. EU-SILC, SEDLAC).

In parallel to the three-stage review, we conducted a detailed review of DHS and MICS surveys used for the global MPI, building on prior work for the 2018 update (Alkire & Kanagaratnam, 2020), and the first trial moderate MPI (Alkire et al., 2023).

5 Data

The first stage compiled 163 national and cross-national surveys, including harmonised datasets from all world regions. The second stage focused on 43 national surveys, 10 cross-national surveys, 2 harmonised datasets, 35 national MPI surveys, and the DHS and MICS surveys used in the global MPI. The third stage involved a question-by-question review of 28 national surveys from 25 countries (Table 1), along with 3 cross-national datasets.

The 25 countries selected for the third-stage national survey review cover 72% of the global population (5.2 billion) and 13 of the 20 most populous countries⁶ (see Table 6 in Appendix). Besides national datasets, the review included three cross-country datasets (see Table 7 in Appendix). The Gallup World Poll which collects data annually face-to-face or via phone interviews, with up to 160 countries in total covered since its launch (Gallup, 2022). The EU-SILC includes harmonised information on poverty, social exclusion, income, and living conditions from 27 member states and 10 other countries

⁶China, India, the USA, Indonesia, Pakistan, Brazil, Nigeria, Bangladesh, Mexico, Japan, the Philippines, Egypt and Vietnam – but not Russian Federation, Ethiopia, Democratic Republic of the Congo, Iran, Turkey, Germany or Thailand. However, Suppa (2017; 2018) used German panel data to construct an MPI and Thailand has its own national MPI using the Household Socio-Economic Survey (Techaploog & Lowhachai, 2022).

Table 1 Surveys checks carried out using three-stage method

Region	National surveys	Cross-national surveys	Harmonised datasets
Africa	6	4	-
Americas	74	1	1
Asia	28	2	-
Europe	18	9	-
Oceania	3	-	-
Across regions	-	10	7
Total surveys in Stage I	129	26	8
Total selected for Stage II	78	10	
	(43+35)		
Total selected for Stage III review	28	3 (1+2)	2

^aAustria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden

^bSee Gallup (2022) for the country dataset details

^cArgentina, Bahamas, Belize, Bolivia, Brazil, Colombia, Costa Rica, Chile, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay and Venezuela

Source: Authors

using national survey data (Eurostat, 2020). In Latin America and the Caribbean, SEDLAC includes harmonised information on socio-economic and living conditions for 24 countries using data from national household surveys (CEDLAS and World Bank). For all three sources, online codebooks and methodological reports were reviewed, focusing on core questions and modules. Lastly, to assess the feasibility of expanding the global MPI to include ‘moderate’ deprivations, we reviewed 124 DHS and MICS surveys across 103 countries (Table 8 in Appendix).

The database compiled includes 152 country surveys (28 national + 124 DHS/MICS) and 3 cross-country datasets and forms the basis of the following analysis. In total, the review covers 7.7 billion people across five continents, though significant data gaps remain. Sixty-five countries are not covered by DHS, MICS, or any cross-national datasets listed in Table 4.⁷ Encouragingly, five of these are currently fielding new MICS,⁸ and Seychelles has a comparable national survey used in both the global and pilot national MPI. However, the remaining 59 countries—home to 69 million people (UN DESA 2022)—lack coverage in cross-national datasets and do not have a suitable, publicly available household survey that could be analysed for MPI feasibility.

⁷ While Oman was covered by MICS in 2014, the data is restricted access. A number of other countries have MICS datasets that are over 15 years old. The analysis considers all of these countries as ‘not covered’.

⁸ The Federal States of Micronesia, Nauru, Qatar, Somalia, and Vanuatu.

6 Findings

6.1 Common Comparability Issues

The second stage of the review uncovered several limitations and trade-offs. Few surveys collect data across multiple domains—health, employment, education, and living standards—with most focusing on only a subset. High-income countries often run separate, frequent surveys on income, employment, health, or housing, but these are rarely merged. In the USA, for example, health data come from the National Health Interview Survey or the National Health and Nutrition Examination Survey, which exclude employment or living conditions. The American Housing Survey covers living standards but omits health. Canada and Western Europe show similar segmentation. This pattern is less common in developing countries, where national MPIs often rely on household budget surveys that include education, living standards, employment, and limited health data. Where gaps remain—especially in health—countries often add new MPI questions to existing surveys. Overall, few surveys in high- and middle-income countries adequately cover all dimensions needed to assess moderate poverty. The largest gaps are in health and employment: surveys that include living conditions and employment often lack health data or only measure subjective assessments or access to services, not outcomes or quality.

Even when surveys include relevant modules, small sample sizes hinder disaggregated analysis. The Gallup World Poll, for instance, collects relevant data on employment, health access, assets in over 100 countries each year (Gallup, 2022), but samples only about 1,000 individuals per country, limiting detailed analysis. Panel surveys also face attrition-related sample loss. The Russian Household Monitoring Survey, for example, is representative only of Moscow and St. Petersburg and suffers substantial attrition across waves, reducing its value for national or subnational MPI analysis.

Some surveys only support limited subnational disaggregation. For example, China's Family Panel is representative for just five provinces, which is less informative given the population size and diversity. In the EU-SILC disaggregation requirements vary⁹: Eurostat (2020) notes all countries can disaggregate to NUTS 2 if sample sizes permit.¹⁰ Our review confirmed NUTS 3 or lower disaggregation in 17 countries, though the actual number may be higher due to limited information.

Lastly, while many countries conduct core annual surveys, cross-country surveys are updated less often. Gallup and EU-SILC are annual, but MICS and DHS are conducted only every three to five years, limiting timely poverty assessments. The COVID-19 pandemic further disrupted data collection through reduced funding and delayed fieldwork, posing ongoing risks to new household survey data.

⁹ Nomenclature of Territorial Units for Statistics (NUTS). See Eurostat (2022) for the statistical regions as of 2021. For instance, at risk of poverty or social exclusion (AROPE) can only be disaggregated at NUTS 1 and NUTS 2 levels (Diaz Dapena et al., 2020).

¹⁰ 'The IESS Regulation states that reliable statistics should be provided at national and at regional level (NUTS 2). In the longer term, efforts should be made to achieve more detailed local data, based on the infrastructure set up under Directive 2007/2/EC of the European Parliament and of the Council.' (Eurostat, 2020, p.66).

6.2 Indicator Coverage

The following section along with Tables 2 and 3 summarises common indicators in the reviewed cross-national surveys. This is complemented by the national surveys to assess data availability, identify gaps and propose potential indicators for a new ‘moderate’ MPI.

6.2.1 Education

Education data are routinely collected in nearly all surveys, typically via the household roster or a dedicated module. All five cross-national and all reviewed national surveys include questions on highest qualification, and all except the Gallup World Poll ask about school attendance. This aligns with prior reviews and official national MPIs, which consistently include at least one of these indicators (Dirksen, 2020; UNDP and OPHI, 2019). However, data on education quality remain scarce in multi-topic household surveys.

6.2.2 Health

In addition, both insurance and one form of unmet medical need (limited to pregnancy care) are captured in an increasing number of both DHS and MICS, albeit providing a possible basis for a comparable indicator on barriers to healthcare. It is important to note that while unmet need is covered in EU-SILC, health insurance is not. Thus, any global measure would have to consider these differences, explore strategies that might be arguably comparable, and be transparent about limitations. Information on food insecurity is available in national surveys in developing countries through the standard Food Insecurity Experience Scale (FIES) module, albeit with some different recall periods, while Gallup asks a question on experience of lack of money for food. In this time of rising food prices these questions are likely to be apt.

No health-related variable is included in all four datasets, and only one—difficulty with daily activities due to health issues—is found in more than two datasets (EU-SILC and Gallup). EU-SILC also collects data on unmet medical and dental needs, while SEDLAC includes health insurance coverage—both common in national surveys. DHS and MICS increasingly capture health insurance and one form of unmet need (antenatal

Table 2 Data availability in cross-national surveys and harmonised datasets (dimensions)

Dimension/area	EU-SILC	Gallup World Poll	DHS/MICS	SED-LAC
Education	1	1	1	1
Employment	1	1	0	1
Financial situation and assets	1	1	1	1
Health	1	1	1	0
Living conditions	1	0	1	1

Source: Authors

Table 3 Data availability in cross-national surveys and harmonised datasets (indicators)

Variable/indicator	EU-SILC	Gallup World Poll	DHS/MICS	SED-LAC
(2) – Available in all 4 survey types				
Highest educational qualification	1	1	1	1
Phone (mobile or landline)	1	1	1	1
(7) – Available in 3 of the 4 types				
Currently enrolled in education	1	0	1	1
Sanitation facility	1	0	1	1
Internet connection at home	1	1	1*	0
Overcrowding	1	0	1*	1
Employment and unemployment	1	1	0	1
Working hours	1	1	0	1
Household income	1	1	0	1
(12) Available in 2 of the 4 types				
Home ownership	1	0	1 (MICS)	1
Duration of unemployment	1	0	0	1
Formal employment	1	0	0	1
Pension entitlement and enrolment	1	0	0	1
Labour income	1	0	0	1
Reported financial difficulty (food, housing)	1	1	0	0
Reported difficulty with daily activities due to health	1	1	0	0
Health insurance/ social security	0	0	1*	1
Electricity	0	0	1	1
Other assets (car, TV, computer)	1	0	1	0
Chronic illness	1	0	1*	0
Unmet medical need	1	0	1*	0

Source: Authors

Notes: * Indicates differences in module coverage between old and new rounds of the surveys, meaning the indicator might not be available in all countries/surveys. In addition, some modules are only optional and are not carried by all countries

care), offering a potential basis for a comparable indicator on barriers to healthcare. However, EU-SILC lacks insurance data, highlighting the need for any global measure to account for such differences, seek comparable proxies, and acknowledge limitations. Food insecurity data are available in many developing countries via FAO's Food Insecurity Experience Scale (FIES), though recall periods vary. Gallup includes a related question on lacking money for food—especially relevant amid rising food prices.

6.2.3 Living Conditions

Several comparable living standards indicators are available across surveys. All reviewed surveys include data on phone or mobile ownership, and two—plus some MICS and DHS—capture internet access at home. Indoor flushing toilets are recorded in three datasets, while overcrowding (based on rooms/bedrooms used for sleeping) is available in EU-SILC, SEDLAC, and many DHS and MICS surveys—though question wording varies.¹¹ Some surveys also include home ownership or electricity access. However, electricity data are typically absent in high-income country surveys, likely due to universal coverage. Similarly, data on TVs, phones, computers, internet, drinking water, and refuse collection are rarely collected in national surveys from high-income economies.

6.2.4 Employment

DHS and MICS do not consistently collect employment data, excluding this dimension from the global MPI. However, the other three datasets and most national surveys include labour force participation, unemployment (via the ILO module), and working hours, suggesting near-global coverage is possible. A key challenge is the variation in recall periods: seven days for paid work, two weeks for availability, and four weeks for job search. Short recall periods (e.g., seven days) can introduce volatility and seasonality, while longer periods (e.g., one month) improve stability but reduce comparability. EU-SILC and SEDLAC also provide data on unemployment duration, pension enrolment, contract security, and labour income—relevant across diverse contexts.

6.2.5 Financial Situation

Indicators in this dimension vary widely across datasets. All except the DHS and MICS collect data on labour and household income. EU-SILC and Gallup include questions on material deprivation and financial stress, which can be complemented by asset and durable goods data from DHS, MICS, and EU-SILC. National surveys also highlight living costs—housing, utilities, and services—as a key variable, especially in high-income countries like the USA and Japan, where the living cost-to-income ratio can be a good predictor of deprivation and inequality. While most MPIs exclude income and expenditure, these may be necessary to include in higher-income settings to accurately reflect poverty.

6.3 Indicators in MICS and DHS

To update indicator coverage for global MPI countries, we reviewed 58 DHS and 66 MICS surveys across 103 countries/territories, covering 4.3 billion people. In their 2018 major revision of the measure, Alkire and Kanagaratnam (2020) set a threshold

¹¹ In most national surveys, the question asks the number of rooms used for living, including bathrooms and kitchens, which are not captured in the EU-SILC variable. In some national surveys, information on total or usable floor area is collected instead – a challenge for comparability.

Household Questionnaire	Women Questionnaire	Child Questionnaire
<ul style="list-style-type: none"> • Computer • Cooking location • Overcrowding • Housing materials (roof, wall) • Drinking water treatment • Shared toilet • Bank account • Land for agriculture • Size of land • Livestock ownership • Number of livestock * • Presence of water and soap for handwashing • Home ownership • Boat with motor * • Animal-drawn cart • Separate room for cooking 	<ul style="list-style-type: none"> • Smoking • Literacy • Mass media: newspaper • Mass media: radio • Mass media: TV • Currently/recently pregnant • Unwanted pregnancy/birth • Contraception (use, method) • Antenatal care (use, provider, frequency) • Assisted delivery • Postnatal care (use, timing) • Breastfeeding practices • Attitudes to domestic violence • Marital status • Husband's age 	<ul style="list-style-type: none"> • Preschool attendance • Birth registration • Orphanhood • Vaccination card • Ever vaccinated • DPT vaccine

Fig. 2 DHS/MICS Questions meeting the criteria. Source: Authors. Notes: Bold denotes questions with the required country/population coverage both among all countries and among the subset of low-MPI countries. * indicates questions meeting country coverage, but lacking population coverage.

requiring indicators to be available in at least 75 of 104 countries (72%) and for 3.5 of 5.7 billion people (61%). We apply the same ratios to our dataset, setting thresholds at 74 of 103 countries and 2.65 billion people. Figure 2 presents the indicators meeting these criteria.

Although MICS and DHS lack full employment modules, some of the surveys include questions on informal work or a woman's and her husband's employment history. In 46 countries, women are asked about at least one hour of work in the past 7 days, and in 42, about the past 12 months. Of these, 29 also ask about the husband using both recall periods. However, these questions do not determine labour force status or pay, making it impossible to measure unemployment, as some who haven't worked in the past year may not be in the labour force. Still, they help identify households where the respondent (and sometimes her husband) is working.

6.4 Indicators in National Surveys

This section reviews indicator coverage and proposes some measures for selected advanced economies. We consider options covering the USA, Canada, Mexico, Japan, South Korea, Australia, New Zealand, and Europe – covering the 27 EU member states and 10 additional countries¹² in the region (Table 4).

Unlike DHS and MICS, all the national surveys include modules on employment, as well as education, finances and some aspects of living standards. For the USA, we reviewed two surveys – the ACS and the AHS – and propose new MPI structures considering both options.

¹²Albania, Iceland, Kosovo, Montenegro, North Macedonia, Norway, Serbia, Switzerland, Turkey and the UK.

Table 4 Indicator availability in selected national surveys

Country	USA ACS	USA AHS	EU*	Canada	Australia	New Zealand	Japan	Korea	Mexico
Population (thousands)	331,003		628,008	37,742	25,500	4,822	126,476	51,269	128,933
Home ownership	1	1	1	1	1	1	1	1	1
Total housing costs	1	1	1	1	1	0	1	1	1
Housing problems (e.g. leaks, damp, mould)	0	1	1	1	1	0	0	0	1
Running cold/hot water	1	1	0	0	0	0	0	0	0
Bath or shower	1	1	1	0	0	0	0	0	1
Indoor flushing toilet	0	1	1	0	0	0	0	0	1
Number of rooms	1	1	1	0	0	0	1	0	0
Cold home	0	1	1	0	1	1	0	0	0
Main heating source	1	1	0	0	0	0	0	0	0
Electricity	0	0	0	0	0	0	0	0	0
Vehicle	1	0	1	0	1	0	0	1	1
Washing machine	0	1	1	0	0	0	0	0	1
Phone	1	1	1	0	0	0	0	0	1
Computer	1	0	1	0	0	0	0	0	1
Internet	1	0	1	0	0	0	0	0	1
School attendance	1	1	1	1	1	0	1	1	1
School attainment	1	1	1	1	1	1	1	1	1
Self-reported chronic condition	0	0	1	0	1	0	1	1	0
Limited physical activity due to health issues	0	0	1	1	0	0	1	0	0
Unmet medical (or dental) need	0	0	1	1	1	0	0	0	1
Health insurance	1	0	0	0	0	0	1	0	1
Food insecurity	1	1	1	1	1	1	1	1	1
Employment (7 days)	1	0	1	1	1	1	0	1	0
Employment (4 weeks)	0	0	0	0	0	0	1	0	1
Employment (12 months)	0	1	0	0	0	0	0	0	0
Duration of (un)employment	1	0	1	1	0	0	1	0	0
Working hours	1	0	1	1	1	1	1	1	1
Permanent contract	0	0	1	1	0	1	1	1	0
Employer contributions	0	0	1	1	0	0	1	1	1
Wage	1	1	1	1	1	1	1	1	1
Debts	0	0	1	0	1	0	1	1	1

Table 4 (continued)

Country	USA	USA	EU*	Canada	Australia	New Zealand	Japan	Korea	Mexico
	ACS	AHS							
Arrears (housing or utility)	0	1	1	0	1	1	0	0	1
Disability (WG-SS)	1	1	0	1	1	1	1	1	

Source: Authors

Notes: Two surveys covering the USA are included for comparison: the ACS and the AHS. * EU refers to countries covered by EU-SILC (27 member states and 10 non-EU countries). Total population coverage for the countries in Table 9 is 1.33 billion people

7 Discussion

7.1 Evidence Synthesis

Section 6 showed that constructing a truly global moderate MPI using DHS, MICS, and national surveys is not possible due to inconsistent module coverage. Below we sketch an MPI that could be built for advanced economies using national or cross-national surveys, but indicators and comparability would vary depending on how the measure is constructed, and it is unlikely to be sufficiently detailed to meet policy demands.

7.1.1 Feasible MPI for (Selected) OECD Countries

An MPI based solely on the Gallup World Poll could be constructed, but would offer limited or no disaggregation due to small samples. Alternatively, an MPI using richer national datasets could generate interest. Using data from selected advanced economies¹³ covering 1.3 billion people, we present five possible trial measures (Fig. 3). Each covers at least 1 billion and includes 8–9 indicators, with only three indicators common to all: years of schooling, child school attendance, and food security. Comparability is limited mainly due to U.S. data sources. The detailed tables with deprivation cutoffs and country coverage are included in the Appendix.

Compared to Atkinson's six suggested dimensions, violence is clearly unfeasible based on the available data, and health indicators are limited. While most countries include data on health insurance, chronic illness, or unmet medical/dental needs, inconsistencies in definitions hinder comparability. Food security is the only widely available indicator, but variations in recall periods and question wording—especially in the U.S., which only tracks access to food stamps¹⁴—complicate cross-country comparisons. The U.S. SNAP program, though effective in targeting vulnerable households (Scherpf, Newman and Prell, 2015; Tiehen, Jolliffe and Smeeding, 2015), measures eligibility rather than reported food insecurity, affecting indicator reliability and comparability with questions such as FAO's Food Insecurity Experience Scale (FIES). Housing and living cost data

¹³EU-SILC 2021 (37 countries); American Community Survey (ACS) 2022; American Housing Survey (AHS) 2021; Canadian Income Survey (CIS) 2020 combined with Canadian Labour Force Survey (LFS) 2020; Japan Household Panel Survey (JHPS) 2020; [South] Korean Labour and Income Panel Survey (KLIPS) 2019; New Zealand General Social Survey 2018; Australia General Social Survey 2020; and Mexico ENIGH 2020.

¹⁴Other surveys continue to be explored, such as SIPP, which may include food security in the USA.

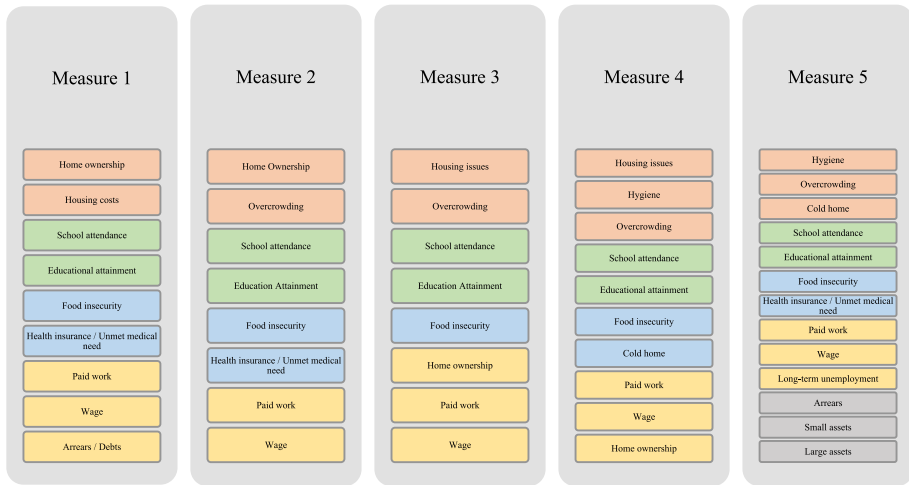


Fig. 3 Possible candidate measures for 44 advanced economies (OECD and EU) Source: Authors. Notes: * Food insecurity in the case of the USA is measured by enrolment in the Supplemental Nutrition Assistance Program (SNAP), a major food stamp program. We acknowledge this does not represent a direct experience, and might present issues for comparability.

are more widely available, such as in the AHS and EU-SILC. Given the importance of affordability, space, and quality, a “decent home” dimension—covering hygiene facilities, heating, and safe housing—could be pertinent if feasible from the available data. Employment data are also widely available, including labour force participation, hours, wages, contract type, and benefits, though definitions vary. Financial indicators like income, material deprivation, and debt or arrears are available, and although not usually included in MPIs, could be relevant in advanced economies.

7.1.2 MPI for Half the World

We also compared data from the 28 national surveys, and two cross-country datasets (EU-SILC, SEDLAC) covering 84 countries, with data from 35 existing national MPIs. This produced a longlist of indicators across six themes: education, employment, health, living conditions, finances, and assets. To prioritize population coverage, we focused on countries with populations over 200 million¹⁵ plus the 37 countries in EU-SILC and 24 in SEDLAC,¹⁶ ending with a total of 67 countries and 3.85 billion people, or 49.4% of the global population, for our second MPI option. We again found that education is the only universally available dimension, with all countries having data on attendance and attainment. Financial data (e.g., debt, pensions) are missing for India, Nigeria, and limited in U.S. surveys. Health data are inconsistent, with no single indicator available across all 67 countries—surveys vary in coverage of insurance or unmet medical needs, food insecurity, chronic conditions, and physical limitations. Based on this, we propose four candidate measures (Fig. 4) taking into account that some countries will have

¹⁵ China, India, Nigeria, USA, Brazil (also in the SEDLAC dataset), Indonesia, Pakistan.

¹⁶ These harmonised datasets represent a large number of countries whose combined population surpasses the required threshold.

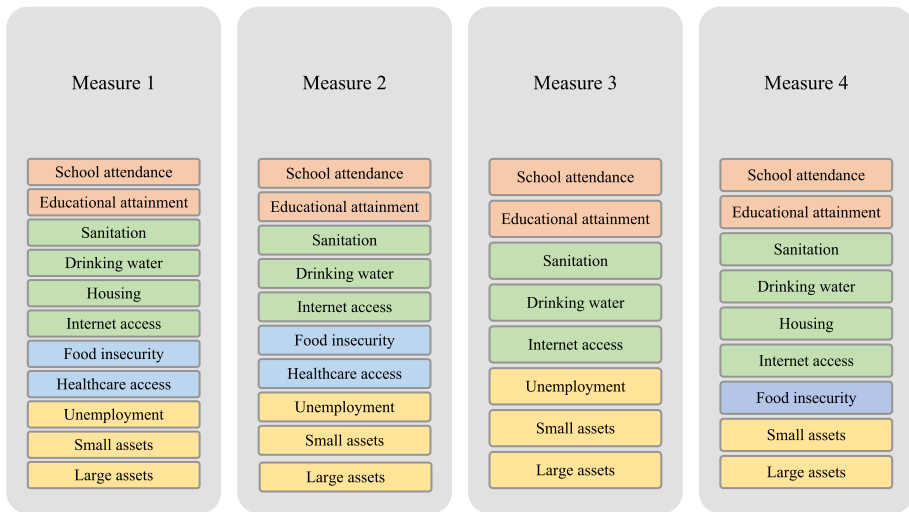


Fig. 4 Possible indicator options for 67 selected countries. Source: Authors

missing indicators. All four measures are based on surveys that also include monetary poverty data, enabling analysis of overlaps and mismatches between monetary and multidimensional poverty because both would be made from the same survey.¹⁷

7.1.3 Expanded Global MPI

For developing countries, DHS and MICS data could support a moderate MPI capturing higher ambitions in countries where acute poverty has been reduced. Together with the global MPI and destitution measures, this could form a three-tier structure—mirroring the World Bank’s monetary poverty thresholds.

Nutrition data are routinely collected in DHS and MICS, though anthropometric subsamples differ; however, food security is rarely included. Potential health indicators for a moderate MPI include pre/postnatal pregnancy care and assisted delivery, unmet need for contraception, and presence of health insurance which is now regularly collected in newer surveys.¹⁸ While this is a positive step, health insurance poses some conceptual and measurement challenges. First, it is a weak proxy for comparable access to healthcare because it does not accurately capture whether an insured person was able to use good quality health services to seek treatment, at what cost, with what delays, and whether their health issues are likely to be resolved within the permitted allowances. Second, it varies by context and would not be relevant in countries with free public healthcare or a large informal sector. Lastly, setting a deprivation cutoff is difficult, as data are often only collected for some household members (Table 5).

¹⁷The Atkinson report (World Bank, 2017) does not recommend the inclusion of monetary poverty in a multidimensional poverty indicator.

¹⁸Health insurance questions are in the DHS template questionnaire for Phase 6 (2008–13), Phase 7 (2013–18), and Phase 8 (2018–23), while MICS template questionnaires include it since Round 6 (2017–23).

Table 5 Health insurance question coverage in reviewed DHS/MICS countries

Health insurance question	Number of countries
Not asked	31
Asked of household only	5
Asked of household and women (15–49)	2
Asked of household and women (15–49) and men (15–59)	9
Asked of women only (15–49)	9
Asked of women (15–49) and men (15–59)	47
Total	103
Total with some form of health insurance question	72

Source: Authors

Possible living standards indicators for a moderate MPI cover access to improved toilets, handwashing facilities, piped drinking water, clean energy, internet connectivity, and assets like mobile phones, home ownership, land, and livestock. Employment data in newer MICS and DHS surveys include women's informal work and, in some countries, husbands' employment, but still lack detail for a global moderate MPI indicator on (un)employment or labour force participation. Violence modules have also improved, with questions on attitudes and experiences of domestic violence, and some experiences of victimisation (e.g., attacks, robbery), though coverage on the latter is limited to fewer than 30 countries.

7.2 Recommendations and Possible Next Steps

The 2017 Commission on Global Poverty report called for more regular, accessible and comprehensive data on poverty, citing gaps in global survey coverage, exclusion of vulnerable groups, lack of public access, and insufficient module coverage (World Bank, 2017). The UN's data revolution under the 2030 Agenda, echoed by the World Bank, reinforced this need,¹⁹ yet significant gaps remain.

Of the world's 237 countries (7.9 billion people),²⁰ 173 (7.8 billion people) are covered by at least one major survey listed in Table 4. The remaining 64 countries or territories (68.8 million people) lack coverage, including small island nations, independent territories, Gulf States (Bahrain, Kuwait, Oman and Qatar), and larger countries like North Korea (25.9 million) and Eritrea (3.6 million). But recent inclusion of additional small island nations (Samoa, Tuvalu, and Turks and Caicos Islands, Nauru) in MICS and forthcoming World Bank surveys are encouraging, and will allow coverage by the global MPI.

Frequency Our aim was to assess the feasibility of a frequently updated Multidimensional Poverty Index, preferably released annually or biannually, to support timely and cost-effective policy responses. Current data limitations make this unachievable. While some surveys in high-income countries are updated at least annually, data in many developing countries still lag. The COVID-19 pandemic exacerbated this, halting fieldwork and

¹⁹For instance, see the 2021 World Development Report (World Bank, 2021).

²⁰UN's World Population Prospects (2022).

diverting funds. DHS and MICS – the main sources for MPIs – are updated only every three to five years, and in some of the poorest countries data are over a decade old (OPHI & UNDP, 2022). Increasing their frequency is essential but challenging, as they are lengthy, costly, and slower to change. Since the global MPI uses less than 5% of their questions, a practical alternative would be annual SWIFT surveys²¹ in DHS/MICS countries, focused on MPI-relevant questions and basic demographics.

Missing Dimensions Many surveys lack data on key poverty dimensions such as health, environment, and physical security – areas highlighted by Atkinson in his recommendations for better poverty data (World Bank, 2017). Despite health's central role in wellbeing, multi-topic household surveys rarely include comparable data on health functionings or access to care. The surveys often operate in silos, collecting information on a single topic (e.g. employment or health). Without survey-to-survey linkage by individual or household ID, this limits analysis of simultaneous deprivations in the household. Adding a small set of multi-topic questions to existing surveys would enhance multidimensional poverty measurement and policy responses.

Combining surveys is one option, though it can increase non-response if households face multiple long questionnaires. Statistics Botswana combined its Labour Force Survey (LFS) and planned Botswana Core Welfare Indicators Survey (BCWIS) into a Multi-Topic Household Survey (BMTHS),²² and the Mongolia Household Socioeconomic Survey was created from combining the Household Income and Expenditure Survey and the Living Standards Measurement Survey. Another option is integrating surveys with administrative data, as Statistics Canada does by combining its annual Income Survey, Labour Force Survey, and tax data. Some countries like Nigeria fielded a new MPI survey, while others addressed gaps by adding MPI modules to existing ones.

Disaggregation Effective policy requires an understanding of how poverty varies across different regions and social groups. Disaggregating MPI data by geography and population subgroups is essential. However, limited survey design and small samples can prevent granular analysis beyond the national or broad regional level, which significantly reduces the policy relevance of MPI data.

Public Access Access to national data is often restricted—limited to in-country use, special licenses, or paywalls imposed by private data collectors. While commercial use may warrant costs, academic and public goods creation should be able to enjoy open access to most datasets. In addition, despite existing catalogues of household surveys (e.g. World Bank, IHSN), no single global data repository exists, making data reviews and comparisons time-consuming and incomplete. A regularly updated, searchable repository with metadata and questionnaires content would greatly streamline research of this kind. Existing platforms like IHSN are of great help, but often lack recent or complete survey listings, likely due to reliance on voluntary contributions and limited resources.

²¹ See World Bank (2024)

²² See Statistics Botswana (2018) for details.

Alternative Data Sources While this review focused exclusively on household surveys, other sources might help to address data gaps. One promising option is small area estimation, which combines survey and census data using statistical modelling to generate poverty estimates at finer geographic or subgroup levels (e.g., Elbers, Lanjouw and Lanjouw, 2003; Tarozzi & Deaton, 2009). However, these methods are mainly accurate only at subnational levels and currently fall short of capturing the joint distribution of deprivations that is crucial to MPI analysis. Beyond censuses, administrative data also offer potential: during the pandemic, Colombia merged census and health records, highlighting their value when privacy safeguards are in place. As administrative data are routinely collected, they offer a low-cost opportunity for research, though issues of merging (and rules when these fail), data quality, consistency over time, and population coverage remain (Alkire & Samman, 2014). Jolliffe et al. (2021) highlight barriers to wider use and propose a framework to improve its accuracy, comparability, and interoperability. Lastly, non-traditional sources (e.g. satellite imagery, mobile data, and crowdsourcing) could enrich MPI research, for example, by allowing the study of environmental risks alongside poverty.

8 Conclusions

This paper sought to address the feasibility of a new, frequently updated MPI with global coverage and subnational disaggregation. We presented a detailed overview of the data landscape for multidimensional poverty measurement, covering national and cross-national surveys and/or datasets across all regions of the world. The review showed that even more effort and collaboration is required by statistical offices and donor programmes to provide frequently updated household survey data on multidimensional poverty.

We reviewed multi-country and national surveys covering 7.7 billion of the world's population and proposed potential options for global or regional measures. A natural next step is to pilot trial measures, at least for a small set of countries, to test their value and policy relevance. While a limited global measure may be feasible, significant data gaps remain – notably in employment, health, violence and disaggregated data – which limits decision-makers' ability to fully understand the complexities of poverty and address it through evidence-based policies. Addressing these gaps will require stakeholder engagement to gather support for a set of harmonised MPI variables or the design and pilot of an MPI survey. Future work could also extend this analysis to multidimensional wellbeing alongside poverty, given that the relationship between them might be highly instructive.

Appendix

Table 6 List of national surveys reviewed

Survey/dataset	Latest year	Year reviewed	Population	Frequency of updates	Subnational disaggregation
1. Afghanistan Income, Expenditure and Labour Force Survey (IE&L)	2019–20	2019–20	39,618,000	Uncertain	Yes
2. American Community Survey (ACS)	2022	2022	336,496,000	Annual	Yes
3. American Housing Survey (AHS)	2021	2021		Biannual	Yes
4. Australia General Social Survey	2020	2020	25,796,000	Annual	
5. Bangladesh Household Income and Expenditure Survey (HIES)	2016	2016	168,415,000	Irregular	
6. Bhutan Living Standards Survey	2017	2017	775,000	Every five years	Yes
7. Botswana Multi-Topic Household Survey	2015/16	2015/16	2,569,000		Yes
8. Brazil PNAD	2020	2015; 2020	213,828,000	Annual	Yes
9. Canada Labour Force Survey (LFS)	2020	2020	38,019,000	Monthly	Yes
10. Canadian Income Survey (CIS)	2020	2020		Annual	Yes
11. Chinese Household Income Project (CHIP)	2019	2019	1,425,862,000	Every five years	
12. China Family Panel Study (CFPS)	2018	2014		Annual	Yes, regions
13. Egypt Household Income, Consumption and Expenditure Survey	2019/2020	2015	108,392,000	Biannual	Yes
14. India National Family Health Survey (NFHS)	2019–20	2019–20	1,402,808,000	Irregular	Yes
15. Indonesia National Socioeconomic Survey (SUSENAS)	2020	2020	272,890,000	Annual	Yes
16. Japan Household Panel Survey (JHPS)	2020	2020	124,947,000	Annual	Yes (but small sample)
17. Kenya Integrated Household Budget Survey (KIHBS)	2015/16	2015/16	52,511,000	Irregular	Yes
18. Korean Labour and Income Panel Survey (KLIPS)	2020 (W23)	2019 (W22)	51,813,000	Annual	No (only samples urban and metro areas)
19. Mexico ENIGH	2020	2020	126,386,000	Biannual	Yes
20. Mongolia Household Socioeconomic Survey	2019	2019, 2016	3,322,000	Annual	
21. New Zealand General Social Survey	2020	2018, 2016	5,096,000	Biannual	Yes
22. Nigeria MPI Survey	2021	2021	210,874,000	TBD	Yes

Table 6 (continued)

Survey/dataset	Latest year	Year reviewed	Population	Frequency of updates	Subnational disaggregation
23. Pakistan Social and Living Standards Measurement Survey (PSLSM)	2019–20	2019–20	229,281,000	Irregular	Yes, but alternates collection between provincial and district levels
24. Philippines Annual Population Indicator Survey (APIS)	2020	2020	113,094,000	Annual	Yes
25. South Africa General Household Survey	2020	2020	59,138,000	Annual	Yes
26. Tanzania Household Budget Survey	2019–20	2019–20	62,637,000	Every five years	Yes
27. Uzbekistan MPI Survey	Not yet fielded at time of review	Preliminary draft	33,810,000	One-off	Yes
28. Vietnam Household Living Standards Survey	2020	2018	97,094,000	Biannual	Yes
Total coverage: 5.2 billion people			5,205,488,000		

Source: Authors

Notes: * Latest update of the methodological notes at the time of writing

Table 7 List of cross-national surveys and harmonised datasets reviewed

Survey/dataset	Latest year	Latest update*	Country coverage	Population coverage
European Union Statistics on Income and Living Conditions (EU-SILC)	2021	2021	27 member states ^a and 10 non-EU states ^b	625,845,000
Gallup World Poll	2021	August 2019	80 countries (2021) 143 countries (2019) ^c	7,524,744,000 (2019 round)
Socio-Economic Database for Latin America and the Caribbean (SEDLAC)	2021	November 2021	24 countries ^d	635,431,000

Source: Authors

Notes: * Latest update of the methodological notes at the time of writing, describing the harmonised variables and/or questions. All EU-SILC and most SEDLAC countries are covered by the Gallup World Poll. The only exceptions are the Bahamas, Belize, Guyana, and Suriname, which were never covered, or their latest Gallup survey was more than five years ago. These four countries have a combined population of 2,217,000

^aAustria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden

^bAlbania, Iceland, Kosovo, Montenegro, North Macedonia, Norway, Serbia, Switzerland, Turkey and the UK

^cSee Gallup (2022) for the country dataset details

^dArgentina, Bahamas, Belize, Bolivia, Brazil, Colombia, Costa Rica, Chile, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay and Venezuela

Table 8 List of DHS and MICS datasets reviewed

Country/territory	Region	Survey	Year
Afghanistan	South Asia	DHS	2015–16
Albania	Europe and Central Asia	DHS	2017–18
Algeria	Arab States	MICS	2012–13
Algeria	Arab States	MICS	2018–19
Angola	Sub-Saharan Africa	DHS	2015–16
Argentina	Latin America and the Caribbean	MICS	2019–20
Armenia	Europe and Central Asia	DHS	2015–16
Bangladesh	South Asia	MICS	2019
Barbados	Latin America and the Caribbean	MICS	2012
Belize	Latin America and the Caribbean	MICS	2015–16
Benin	Sub-Saharan Africa	DHS	2017–18
Bhutan	South Asia	MICS	2010
Bolivia	Latin America and the Caribbean	DHS	2008
Bosnia and Herzegovina	Europe and Central Asia	MICS	2011–12
Burkina Faso	Sub-Saharan Africa	DHS	2010
Burundi	Sub-Saharan Africa	DHS	2016–17
Cambodia	East Asia and the Pacific	DHS	2014
Cameroon	Sub-Saharan Africa	MICS	2014
Cameroon	Sub-Saharan Africa	DHS	2018
Central African Republic	Sub-Saharan Africa	MICS	2010
Central African Republic	Sub-Saharan Africa	MICS	2018–19
Chad	Sub-Saharan Africa	DHS	2014–15
Chad	Sub-Saharan Africa	MICS	2019
Colombia	Latin America and the Caribbean	DHS	2015–16
Comoros	Sub-Saharan Africa	DHS	2012
Congo, Democratic Republic of the	Sub-Saharan Africa	MICS	2017–18
Congo, Republic of	Sub-Saharan Africa	MICS	2014–15
Costa Rica	Latin America and the Caribbean	MICS	2018
Côte d'Ivoire	Sub-Saharan Africa	MICS	2016
Cuba	Latin America and the Caribbean	MICS	2019
Dominican Republic	Latin America and the Caribbean	MICS	2014
Egypt	Arab States	DHS	2014
El Salvador	Latin America and the Caribbean	MICS	2014
eSwatini	Sub-Saharan Africa	MICS	2014
Ethiopia	Sub-Saharan Africa	DHS	2016
Ethiopia	Sub-Saharan Africa	DHS	2019
Gabon	Sub-Saharan Africa	DHS	2012
Gambia	Sub-Saharan Africa	MICS	2018
Gambia	Sub-Saharan Africa	DHS	2019–20
Georgia	Europe and Central Asia	MICS	2018
Ghana	Sub-Saharan Africa	DHS	2014
Ghana	Sub-Saharan Africa	MICS	2017–18
Guatemala	Latin America and the Caribbean	DHS	2014–15
Guinea	Sub-Saharan Africa	DHS	2018
Guinea-Bissau	Sub-Saharan Africa	MICS	2014
Guinea-Bissau	Sub-Saharan Africa	MICS	2018–19
Guyana	Latin America and the Caribbean	MICS	2014
Guyana	Latin America and the Caribbean	MICS	2019–20

Table 8 (continued)

Country/territory	Region	Survey	Year
Haiti	Latin America and the Caribbean	DHS	2016–17
Honduras	Latin America and the Caribbean	DHS	2011–12
India	South Asia	DHS	2015–16
India	South Asia	DHS	2019–21
Indonesia	East Asia and the Pacific	DHS	2017
Iraq	Arab States	MICS	2018
Jordan	Arab States	DHS	2017–18
Kazakhstan	Europe and Central Asia	MICS	2015
Kenya	Sub-Saharan Africa	DHS	2014
Kiribati	East Asia and the Pacific	MICS	2018–19
Kosovo	Europe and Central Asia	MICS	2019–20
Kyrgyzstan	Europe and Central Asia	MICS	2018
Lao PDR	East Asia and the Pacific	MICS	2017
Lesotho	Sub-Saharan Africa	MICS	2018
Liberia	Sub-Saharan Africa	DHS	2013
Liberia	Sub-Saharan Africa	DHS	2019–20
Madagascar	Sub-Saharan Africa	MICS	2018
Malawi	Sub-Saharan Africa	DHS	2015–16
Malawi	Sub-Saharan Africa	MICS	2019–20
Maldives	South Asia	DHS	2016–17
Mali	Sub-Saharan Africa	DHS	2018
Mauritania	Sub-Saharan Africa	MICS	2015
Mauritania	Sub-Saharan Africa	DHS	2019–21
Moldova, Republic of	Europe and Central Asia	MICS	2012
Mongolia	East Asia and the Pacific	MICS	2018
Montenegro	Europe and Central Asia	MICS	2018
Mozambique	Sub-Saharan Africa	DHS	2011
Myanmar	East Asia and the Pacific	DHS	2015–16
Namibia	Sub-Saharan Africa	DHS	2013
Nepal	South Asia	DHS	2016
Nepal	South Asia	MICS	2019
Nicaragua	Latin America and the Caribbean	DHS	2011–12
Niger	Sub-Saharan Africa	DHS	2012
Nigeria	Sub-Saharan Africa	DHS	2018
North Macedonia	Europe and Central Asia	MICS	2011
North Macedonia	Europe and Central Asia	MICS	2018–19
Pakistan	South Asia	DHS	2017–18
Palestine, State of	Arab States	MICS	2014
Palestine, State of	Arab States	MICS	2019–20
Papua New Guinea	East Asia and the Pacific	DHS	2016–18
Paraguay	Latin America and the Caribbean	MICS	2016
Philippines	East Asia and the Pacific	DHS	2017
Rwanda	Sub-Saharan Africa	DHS	2014–15
Rwanda	Sub-Saharan Africa	DHS	2019–20
Saint Lucia	Latin America and the Caribbean	MICS	2012
Samoa	East Asia and the Pacific	MICS	2019–20
São Tomé and Príncipe	Sub-Saharan Africa	MICS	2014

Table 8 (continued)

Country/territory	Region	Survey	Year
São Tomé and Príncipe	Sub-Saharan Africa	MICS	2019
Senegal	Sub-Saharan Africa	DHS	2017
Senegal	Sub-Saharan Africa	DHS	2019
Serbia	Europe and Central Asia	MICS	2014
Serbia	Europe and Central Asia	MICS	2019
Sierra Leone	Sub-Saharan Africa	MICS	2017
Sierra Leone	Sub-Saharan Africa	DHS	2019
South Africa	Sub-Saharan Africa	DHS	2016
South Sudan	Sub-Saharan Africa	MICS	2010
Sudan	Arab States	MICS	2014
Suriname	Latin America and the Caribbean	MICS	2010
Tajikistan	Europe and Central Asia	DHS	2017
Tanzania	Sub-Saharan Africa	DHS	2015–16
Thailand	East Asia and the Pacific	MICS	2015–16
Thailand	East Asia and the Pacific	MICS	2019
Timor-Leste	East Asia and the Pacific	DHS	2016
Togo	Sub-Saharan Africa	MICS	2017
Tonga	East Asia and the Pacific	MICS	2019
Trinidad and Tobago	Latin America and the Caribbean	MICS	2011
Tunisia	Arab States	MICS	2018
Turkey	Europe and Central Asia	DHS	2018
Turkmenistan	Europe and Central Asia	MICS	2015–16
Turkmenistan	Europe and Central Asia	MICS	2019
Turks and Caicos Islands	Latin America and the Caribbean	MICS	2019–20
Tuvalu	East Asia and the Pacific	MICS	2019–20
Uganda	Sub-Saharan Africa	DHS	2016
Ukraine	Europe and Central Asia	MICS	2012
Vietnam	East Asia and the Pacific	MICS	2013–14
Vietnam	East Asia and the Pacific	MICS	2020–21
Yemen	Arab States	DHS	2013
Zambia	Sub-Saharan Africa	DHS	2018
Zambia	Sub-Saharan Africa	DHS	2018
Zimbabwe	Sub-Saharan Africa	MICS	2019

Source: Authors

Table 9 Candidate measures for selected OECD countries

CM.1: USA, Mexico, Canada, New Zealand, Australia, Japan, South Korea & EU = 1.34billion

Dimension	Indicator	Deprivation cutoff
Housing	Home ownership	Does not own home
	Housing costs	Total housing costs is X% of income
Education	School attendance	Any child is not attending school (if under compulsory age)
	Educational Attainment	Anyone has below high school/secondary school qualification
Health	Food insecurity	There was a time over last year when couldn't afford food, skipped meal, didn't have enough food due to lack of money OR receives food stamps OR indicated food costs as burdensome, cannot afford nutritious meal
	Health insurance/Unmet medical need	Does not have health insurance OR had unmet need for medical/dental care
Employment	Paid work	Did no paid work in the last 12 months
	Wage	Did not have any income over last 12 months
	Arrears/Debts	Over last 12 months, fell behind on housing or utility costs at least once/more than once OR has debt

Source: Authors.

Table 10 Candidate measures for selected OECD countries

CM.2: USA, Mexico, EU, Australia & Canada = 1.15 billion (using American Community survey)		
Dimension	Indicator	Deprivation cutoff
Housing	Home ownership	Does not own their home
	Overcrowding	Ratio of rooms and household members is above X (excludes kitchen, bathroom, toilet, corridor, lobby) *Canada asks bedrooms only
Education	School attendance	Any child is not attending school (if under compulsory age)
	Educational Attainment	Anyone has below high school/secondary school qualification
Health	Food insecurity	Cannot afford meals with protein every other day OR receiving food stamps
	Health insurance/Unmet medical need	Does not have health insurance OR had unmet need for medical/dental care
Employment	Paid work	Did no paid work in the last 12 months
	Wage	Did not have any income over last 12 months

Source: Authors.

Table 11 Candidate measures for selected OECD countries

CM.3: USA, Mexico, EU, Australia & Canada = 1.15 billion
(using American Housing survey)

Dimension	Indicator	Deprivation cutoff
Decent home	Housing issues	Leaking roof, damp walls/floors/foundation, rot in window frames or floor, mold, cracks or uneven walls/roof/floor, or leaks from pipes
	Overcrowding	Ratio of rooms and household members is above X (excludes kitchen, bathroom, toilet, corridor, lobby) *Canada asks bedrooms only
Education	School attendance	Any child is not attending school (if under compulsory age)
	Educational Attainment	Anyone has below high school/secondary school qualification
Finances	Food insecurity	Cannot afford meals with protein every other day OR receiving food stamps
	Home ownership	Does not own home
Employment & finances	Paid work	Did no paid work in the last 12 months
	Wage	Did not have any income over last 12 months

Source: Authors.

Table 12 Candidate measures for selected OECD countries

CM.4: USA, Mexico, EU & Australia = 1.11bn
(using American Community survey, Mexico and Australia missing one indicator)

Dimension	Indicator	Deprivation cutoff
Decent home	Housing issues	Leaking roof, damp walls/floors/foundation, rot in window frames or floor, mold, cracks or uneven walls/roof/floor, or leaks from pipes
	Hygiene	No bath or shower OR no indoor flushing toilet
	Overcrowding	Ratio of rooms and household members is above X (excludes kitchen, bathroom, toilet, corridor, lobby)
Education	School attendance	Any child is not attending school (if under compulsory age)
	Educational Attainment	Anyone has below high school/secondary school qualification
Health	Food insecurity	Cannot afford meals with protein every other day OR receiving food stamps
	Cold home	Cannot heat home adequately (either due to finances or inadequate heating capacity/insulation)
Employment & finances	Paid work	Did no paid work in the last 12 months
	Wage	Did not have any income over last 12 months
	Home ownership	Does not own home

Source: Authors.

Table 13 Candidate measures for selected OECD countries

CM.5: USA, Mexico, EU & Australia = 1.09 billion
(using American Community survey, Mexico and Australia missing one indicator)

Dimension	Indicator	Deprivation cutoff
Decent home	Hygiene	No bath or shower OR no running water OR no indoor flush toilet
	Overcrowding	Ratio of rooms and household members is above X (excludes kitchen, bathroom, toilet, corridor, lobby)
	Cold home	Cannot heat home adequately (either due to finances or inadequate heating capacity/insulation)
Education	School attendance	Any child is not attending school (if under compulsory age)
	Educational Attainment	Anyone has below high school/secondary school qualification
Health	Food insecurity	Cannot afford meals with protein every other day OR receiving food stamps
	Health insurance/ Unmet medical need	Does not have health insurance OR had unmet need for medical/dental care
Employment	Paid work	Did no paid work in the last 12 months
	Wage	Did not have any income over last 12 months
	Long-term unemployment	Been unemployed for more than 1 year
Finances	Arrears	Over last 12 months, fell behind on housing or utility costs at least once/more than once
	Small assets	Does not own any of the following: phone, computer, internet
	Large assets	Does not own home or vehicle

Source: Authors.

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Declarations

Conflict of interests/competing interests The authors are both Guest Editors of the Special Issue on Multidimensional Poverty Indicators. To ensure that the evaluation of these articles is completely objective, the peer review process was handled confidentially by the journal's Editorial Board outside of the normal refereeing process of the special issue.

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