Measuring Multidimensional Poverty

A Global Assessment of Data Availability and Data Gaps

Fanni Kövesdi

Oxford Poverty and Human Development Initiative

University of Oxford

7 December 2022

UNECE Workshop on Harmonization of Poverty Statistics to Measure SDG 1 and 10
Our Motivation

Create a **truly global** Multidimensional Poverty Index, that

1. Covers most of the **world’s population** (incl. OECD/UNECE)
2. Is nationally representative and **disaggregated** at subnational level
3. Can be **frequently updated**
4. Covers **key dimensions** of human development (Atkinson report)

Nutrition  Housing conditions
Health status  Access to work
Education  Personal security

**Key to achieve SDG 1 and Leave No One Behind pledge**
Why is this important?

OPHI and UNDP’s **global MPI** launched in 2010

- Internationally comparable measure of **acute poverty**
- Covers 100+ **developing countries**
- Does not cover employment or personal security (data constraints)

13/56 UNECE countries are covered

In 53 countries, less than 10% of the population are MPI poor

**MPI is low** in urban areas of many higher MPI countries

→ Need for higher achievements
Our Goal: Assess feasibility for a new global measure

**MPIs rely on household surveys**

But no single survey covers MPI related modules across the world

**DHS and MICS**
- Comparable across countries – but not global
- Updates only every 3-5 years
- No employment module, and mostly focused on acute conditions

**National surveys**
- Tailored to countries – lack of comparability
- Often difficult to access
- Health data is limited

→ Earlier approaches to extend the global MPI were data constrained
Our Approach: detailed review of household surveys

1. Find and review new surveys
   - National surveys, especially of populous countries
   - Cross-national surveys
   - Harmonized cross-country datasets

2. Review existing global MPI surveys for new questions
   - Multiple Indicator Cluster Surveys (MICS)
   - Demographic and Health Surveys (DHS)

→ Synthesize findings to ‘scope’ new measures
MPI data requirements and selection criteria

1. Single dataset with data on all indicators
2. Individual or household level
3. Nationally representative and it can be disaggregated
4. Sufficient sample size
5. Regularly collected
6. Includes non-monetary modules

- Demographics
- Education
- Health
- Living conditions
- Durable goods / assets
- Employment
- Finance
- Technology/media

- Subjective wellbeing
- Time use
- Relationships
- Governance
- Environment
- Personal security
Review: three-step process

1. Survey searches and listing

Online searches – microdata libraries, NSO and survey websites, published papers and reports
Expert opinion – NSOs, international organisations, survey providers, academics
Existing knowledge – national MPIs, academic work on MPIs

→ 129 national, 26 cross-national, and 8 harmonised dataset

2. Survey Reviews

Basic checks – sample design and size, frequency, modules, disaggregations

→ 43 national and 10 cross-national surveys assessed
→ Also added surveys used for national MPIs
Review: three-step process

3. Questionnaire Reviews

Focus was on
- Advanced economies
- 20 most populous countries
- Surveys that were accessible – language, paywall, NSO restrictions

28 national surveys
- 25 countries (incl. 15 of the 20 most populous)
- Close to 5.2 billion people (72%)

1 cross-national survey
- Gallup World Poll: up to 160 countries

2 cross-national harmonised databases
- EU-SILC: 27 members + 10 non-member countries (628 million)
- SEDLAC: 24 countries (636 million)
Key observations: National household surveys

1. Rich in detail but often not comparable
   Differences in question wording and recall periods – e.g. employment
   Harmonisation required → labour intense and not always feasible

2. MPI modules not collected simultaneously
   Often in different surveys – e.g. health and employment

3. Some have irregular updates
   MPIs are used for policy → need frequent updating

4. Accessing questionnaires and data is often difficult
   Language barriers
   Restricted access by NSOs
   Data repositories often out of date
Key observations: Cross-national surveys / datasets

1. Essential for comparability and extensive coverage
   Harmonised variables make comparison more straightforward
   Sometime questions are also carried by other countries

2. Sample design and size can differ between countries
   Can pose limits for disaggregation or trends analysis

3. Harmonised datasets (e.g. EU-SILC, SEDLAC)
   + Makes comparison easy
   – Only a selected set of variables

65 countries and 67 million people are not covered by any of the four cross-country surveys or datasets reviewed (EU-SILC, SEDLAC, Gallup, DHS/MICS)
Key observations – Global indicator coverage

Education
Routinely collected in nearly all surveys
E.g. school attendance, educational attainment

Employment
Routinely collected in most surveys (except DHS and MICS)
But recall periods differ – 7 days, 4 weeks, 12 months

Finances
Some questions but little comparability
E.g. material deprivation, income, living costs, debts, assets/durable goods

Living conditions
Few comparable variables
E.g. phone, internet, sanitation, rooms, quality of housing

Health
No single variable is covered by all datasets
E.g. unmet need, limited activities, health insurance, nutrition, food insecurity
Key observations – Global indicator coverage

Difficult to set uniform indicators cutoffs

1. Lack of comparability in question wording and recalls
   e.g. overcrowding – questions on bedrooms / rooms / m2 + cultural variation
   e.g. food insecurity – FIES (12 months), EU material deprivation question

2. Different issues are relevant across contexts
   e.g. basic services are near universal in high-income countries (e.g. electricity, sanitation)
   e.g. health insurance in a key indicator in USA but not relevant in EU

Many key topics are not widely available
   e.g. nutrition, energy source and use, domestic violence
What is possible with existing data?

A truly global MPI with expanded indicator coverage, frequent updates and disaggregation is still not feasible with existing data.

**Data gaps** are evident despite data revolution and increase in coverage
- Health data is scarcely available
- Surveys often operate in silos
- Many are updated at irregular intervals
- Sample size is not always sufficient
- Limited data access
- Difficult to collate information

But local measures could be possible if comparable data exists → e.g. regional MPIs
What is needed?

Goal is to **use the same surveys for national and comparable MPIs**

Need for
1. **Coordination on core questions** of household surveys
2. **Improved access** to national data

**Without this, we cannot compare poverty trends globally!**

- Important for SDGs and LNOB
- Motivation to learn from success stories
Remaining questions

1. What other (cross-country) datasets are available or planned?
   e.g. in CIS, in EU
   How to access them – e.g. language, authorisation

2. Is there momentum for a cross-country MPI survey?
   e.g. including MPI modules in existing surveys

3. Innovative methodologies
   Linking surveys (e.g. Canada, Botswana, Colombia)
   Alternative data sources (e.g. administrative data, census)

4. Are phone/internet surveys reliable for a cross-country measure?
   Differences in sampling, response rates, accuracy
Thank you!

Questions, comments and suggestions are welcome

✉️ fanni.kovesdi@qeh.ox.ac.uk

🐦 @fnkovesdi | @ophi_oxford

Visit OPHI’s website for more details

www.ophi.org.uk