# Responses to the Covid-19 pandemic

# Using the MPI

**Sabina Alkire & Monica Pinilla 28 May 2020**

# OBJECTIVES INGREDIENTS AND TOOLS

**Objectives:**

➢ to <u>protect</u> the most vulnerable from contracting COVID-19

➢ to <u>target</u> the poor and new-poor with emergency response

➢ to <u>anticipate</u> the number and location of additional new-poor for preparedness of different recession scenarios

➢ to complement cash transfers with other vital <u>services</u>

➢ to <u>monitor</u> MPI in real time, to inform policies

➢ to <u>plan</u> a pro-poorest recovery

    ➢ food needs are met

    ➢ the unemployed return to work

    ➢ social services are strengthened

    ➢ equity is introduced

# OBJECTIVES INGREDIENTS AND TOOLS

**Ingredients:**
- ➤ **Globally comparable data**
- ➤ **National Datasets**
- ➤ **Census & Registry data**
- ➤ **New data (Remote Rapid, Mkt)**
- ➤ **Administrative Records**

**Tools:**
- ➤ **Global MPI**
- ➤ **National MPIs; new MVIs**
- ➤ **Micro simulations - predictions**
- ➤ **Targeting methods**

**Key actors:**
- **Governments**
- **Internatl Agencies**
- **Private Sector**
- **NGOs Civil Society**

# CHALLENGES & INSIGHTS

## Challenge

- **Need information fast**
- **Information Overload**
- **Need more info than MPI; Need fast overview of remote rapid survey data**
- **Don't have new data to quantify current challenges**
- **Need specific sectoral work**

## Insight:

○ **Existing MPI may help**

○ **Package using counting**

○ **Make bespoke MVI analyses tuned to policy**

○

**Analyse existing and simulate new**

○ **Adjust dimensions, indicators, structures.**

# Some Example Strategies

**Global MPI**
- High risk groups
- Microsimulations

**National MVIs**
- See the poor & new poor
- Microsimulations

**Bespoke Remote/Rapid surveys**
- Particular sectors

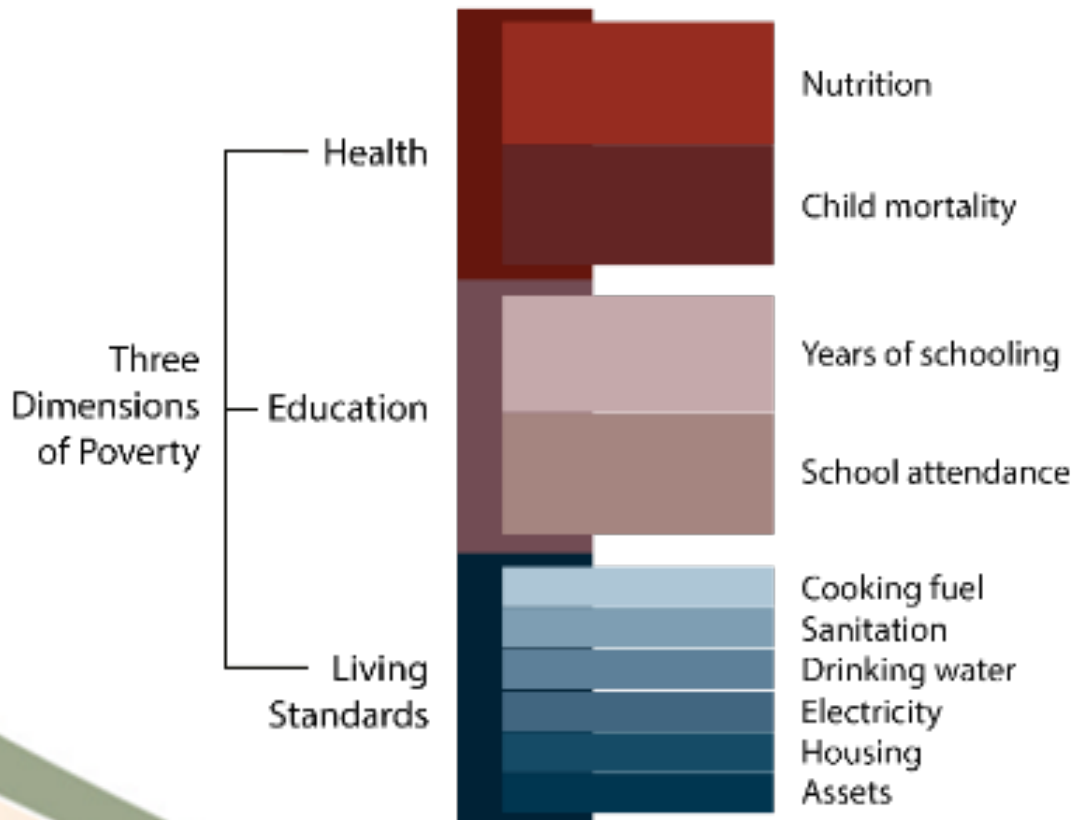**Colombia:**

**Targeting**
**Census/Registry data**
**OverlayAdmin Data**

# DATABASE: THE GLOBAL MPI 2019

We use harmonised data for 101 countries and 5.7 billion people, that match as much as data permit, definitions for 10 indicators.

Data Source: DHS and MICS surveys launched before April 2019 for most countries; national surveys for a few.
Next global MPI update: July 2020

OPHI
Oxford Poverty & Human
Development Initiative

**Three Dimensions of Poverty**

- **Health**
  - Nutrition
  - Child mortality
- **Education**
  - Years of schooling
  - School attendance
- **Living Standards**
  - Cooking fuel
  - Sanitation
  - Drinking water
  - Electricity
  - Housing
  - Assets

The global MPI is built directly on data covering deprivations that are directly 'interlinked' in the lives of people who are sharing the same household

Joint work with Jakob Dirksen, Christian Oldiges, & Ricardo Nogales

# Poverty is Multidimensional
## ~ the interlinkages are already incredible ~

- **98.8% of the 1.3 billion people who are poor by the global MPI are carry <u>three or more</u> deprivations.**

- **83.5% have <u>five or more</u> at the same time.**

- **Across all ten indicators, between 81% and 99% of the people who are deprived that indicator experience one or more additional deprivations.**
- **E.g. 99% of those deprived in electricity have 1+ other deprivation.**

- **REMINDING PEOPLE OF THIS INFORMATION FROM THE MPI IS KEY DURING COVID -**

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# Enter Covid-19



- For many of us, Covid-19 is a shocking exposure to a new threat

- For the MPI poor, it is another addition to their already extensive deprivation load.
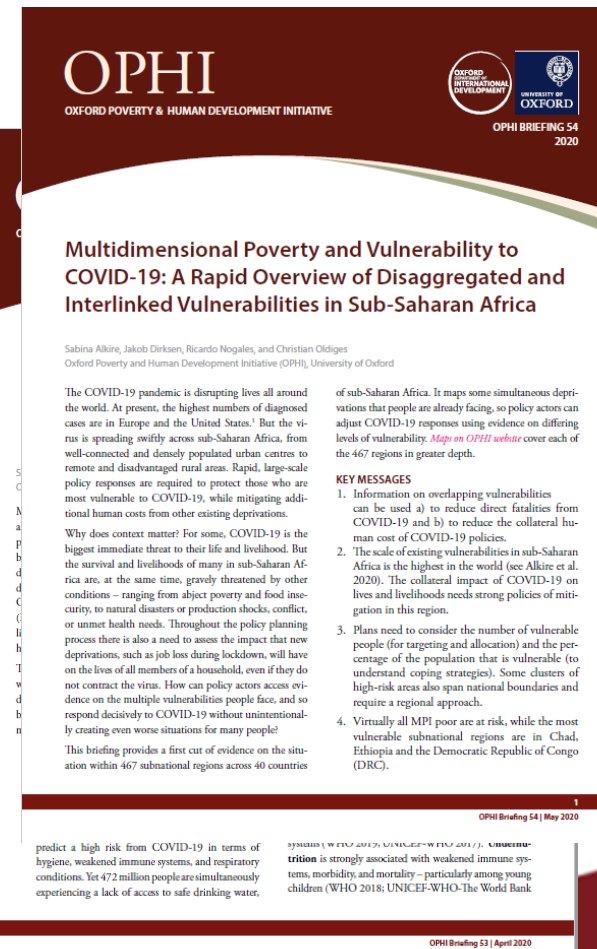
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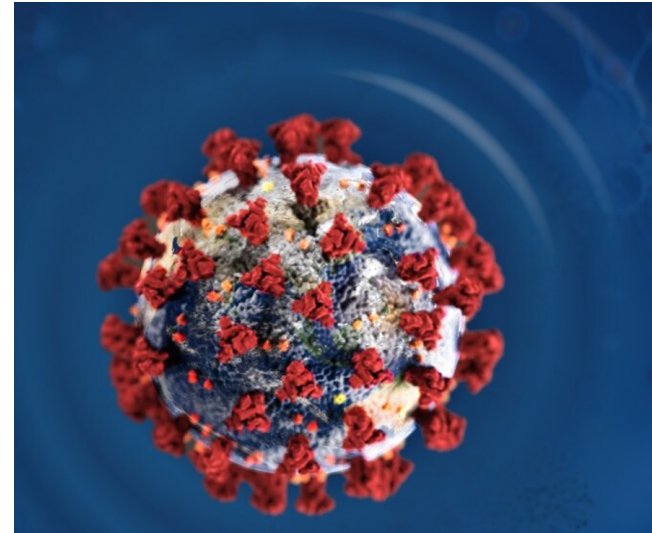
# The global MPI:
## How can rises in poverty be prevented?

Information from the global MPI is being used

1. to identify those at higher risk of fatalities from COVID-19 thus
2. to reduce the collateral human cost of the pandemic and recession.
3. to predict how poverty may increase

# Who is at high risk in our dataset?

**In part, those deprived in:**

- **Nutrition**
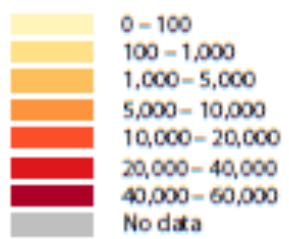- **Clean Water**
- **Clean Cooking Fuel**

Population in the developing world

- **3.6 billion** people, or 62.6% of the 5.7 billion people living in the 101 countries of developing regions covered by the 2019 global MPI, are affected by at least one COVID-19-related deprivation. They are '**at risk**'.

- Fully **472 million** people are deprived all three COVID-19 risk factors **at the same time**. They are at '**high risk**'.
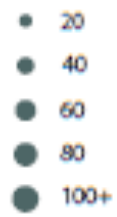
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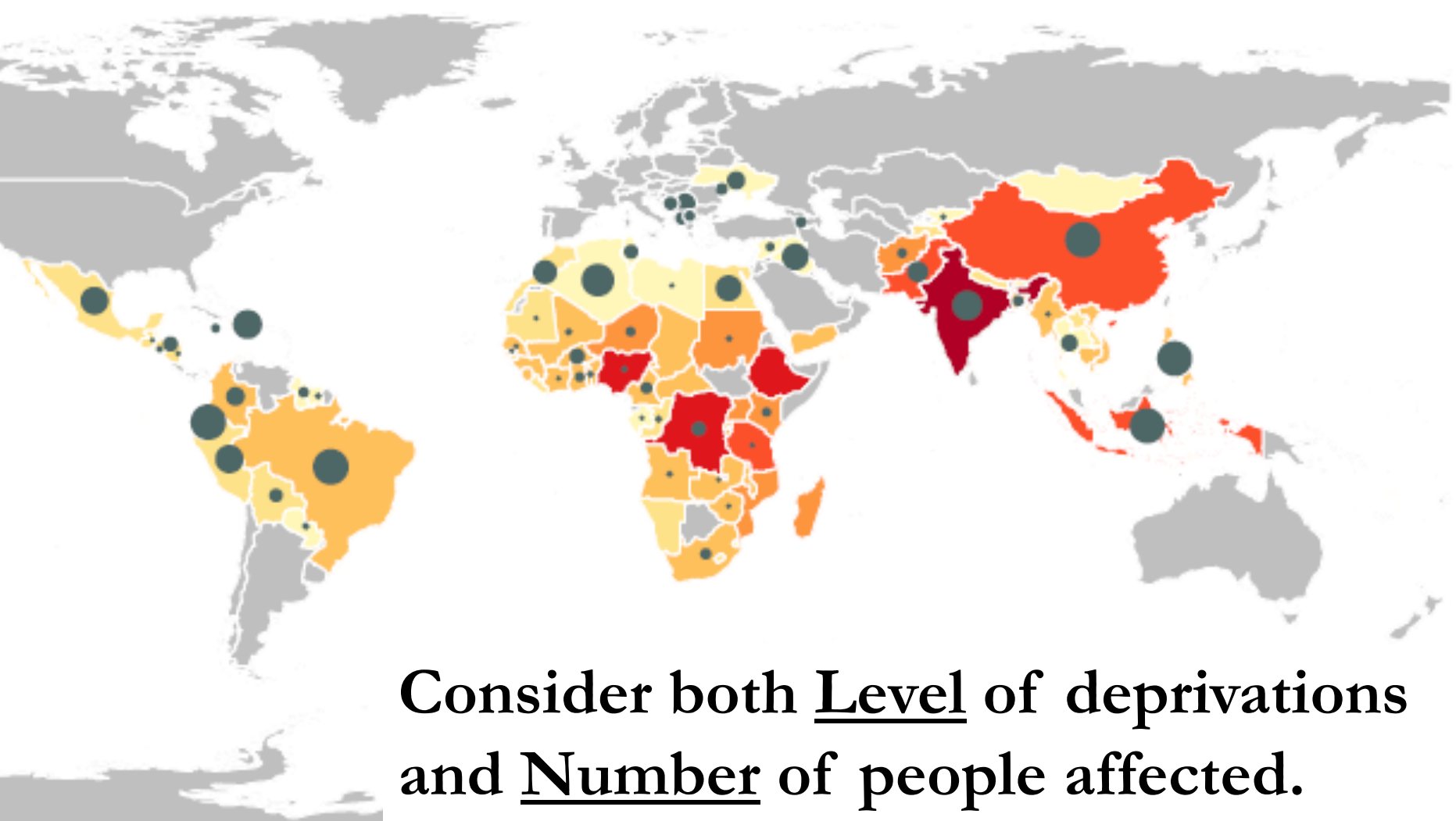
**Consider both <u>Level</u> of deprivations and <u>Number</u> of people affected.**

Number of MPI Poor at High Risk (in thousands)

- 0 – 100
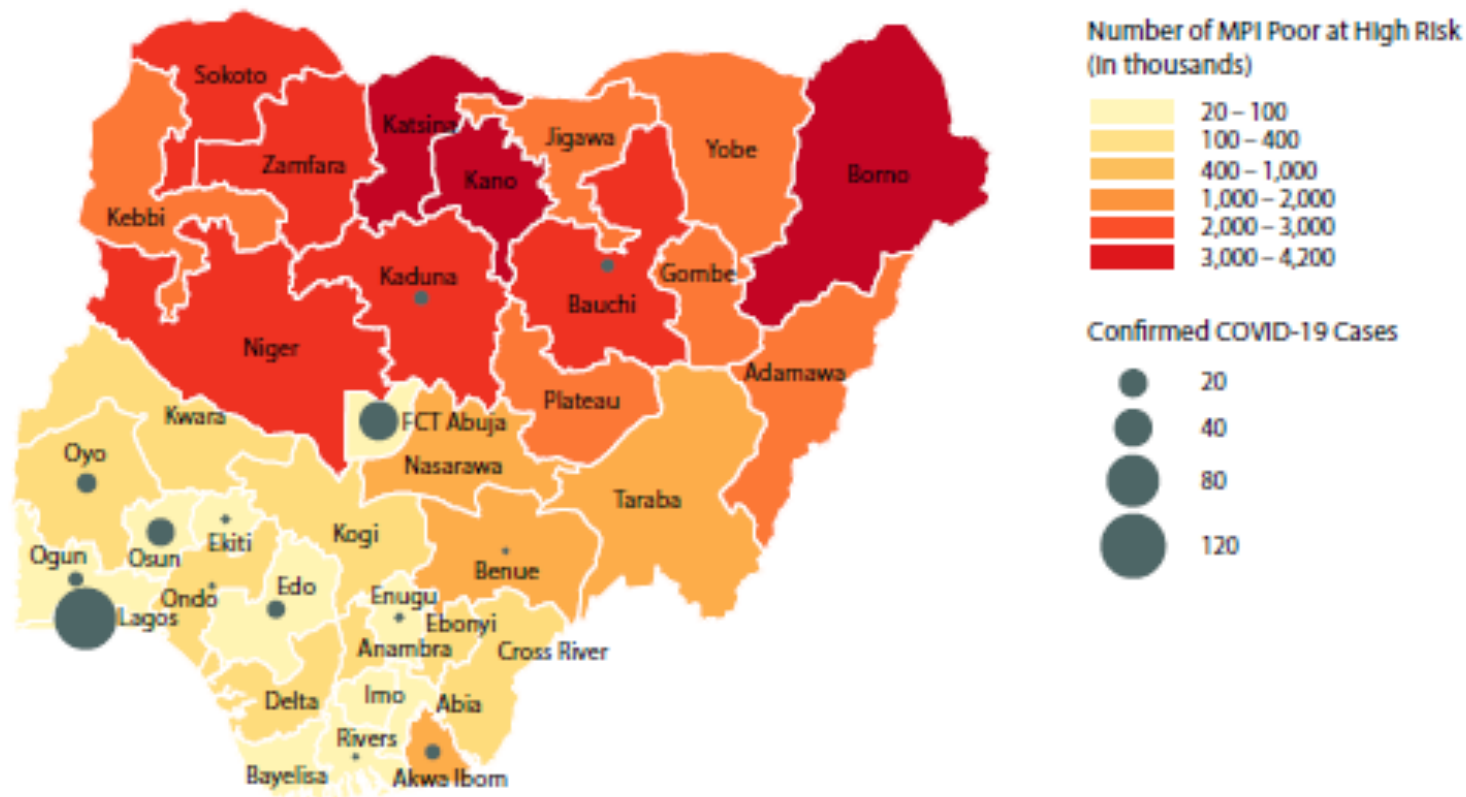- 100 – 1,000
- 1,000 – 5,000
- 5,000 – 10,000
- 10,000 – 20,000
- 20,000 – 40,000
- 40,000 – 60,000
- No data

Confirmed COVID-19 Deaths

- • 20
- • 40
- • 60
- • 80
- • 100+

Figure 4. Nigerian states: Number of people who are MPI poor and are at high risk from COVID-19 with COVID-19 cases (confirmed infections)



© Christian Oldiges.
Sources: COVID-19 data, Nigeria Center for Disease Control (NCDC), 4th April 2020, www. covid19.ncdc.gov.ng.
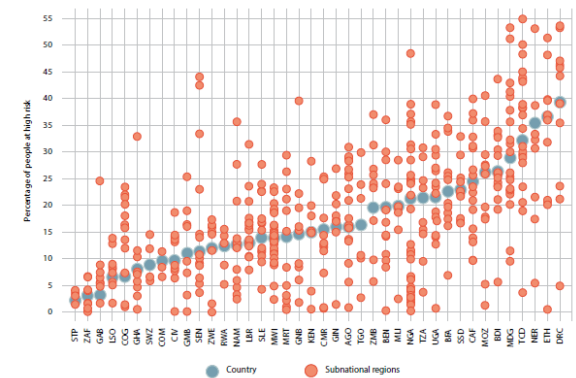MPI data computed by Alkire, Kanagaratnam, and Suppa (2019).

High Risk varies subnationally a great deal – in terms of level, and number. Both are important for targeting

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Figure 1a.  Proportion of people at high risk
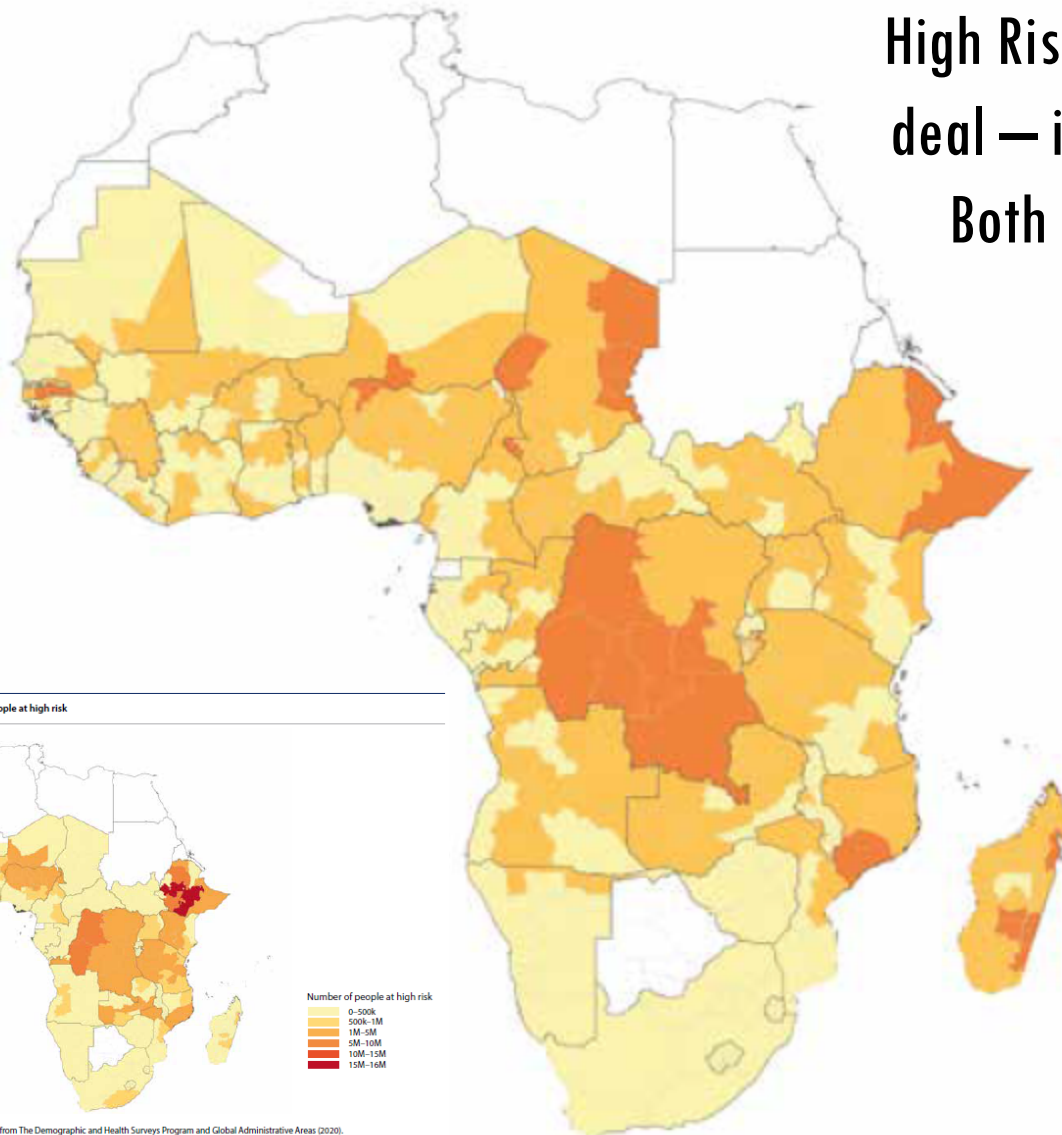
High Risk varies subnationally a great deal — in terms of level, and number. Both are important for targeting

Figure 1b.  Number of people at high risk

Figure 2.  Percentage of people at high risk, country level and subnational level

Note:  Population figures are computed based on 2017 UN DESA population estimates.
Source:  Authors' computations based on global MPI data computed by Alkire, Kanagaratnam and Suppa (2019).
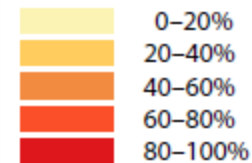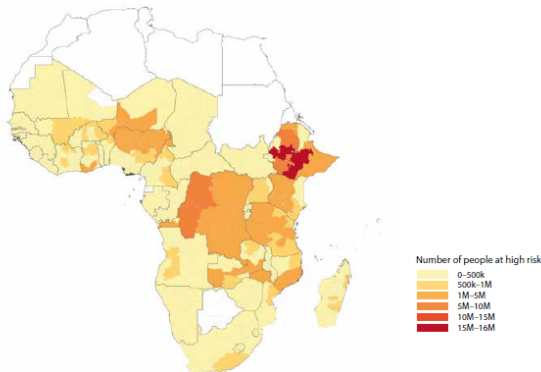
Proportion of people at high risk

| | |
|---|---|
| | 0–20% |
| | 20–40% |
| | 40–60% |
| | 60–80% |
| | 80–100% |

Number of people at high risk
- 0–500k
- 500k–1M
- 1M–5M
- 5M–10M
- 10M–15M
- 15M–16M

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# New Indicators, Microsimulations and Projections

- **Increase in Nutrition**
  - EG WFP increases 135 million increase in severe food insecurity.
- **Increase in Out of School Children**
  - At present 1.6 billion are out of school. Will they go back?
- **Increases from urban-rural migration / covariant shocks.**
- **Handwashing, Informal work, intergenerational households**

*How will the global MPI poor and vulnerable fare?*
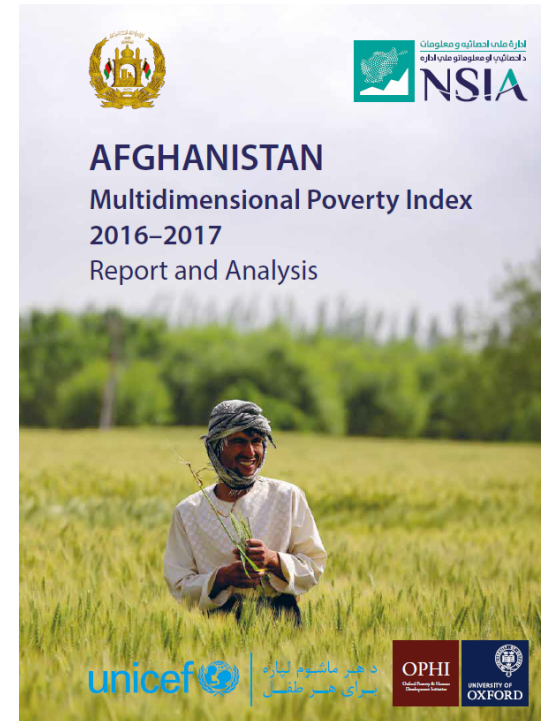*Quantify plausible scenarios to see increase in MPI globally.*

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# National MPIs are, at country level, being innovated to MVIs – Multidimensional Vulnerability Indices and Analyses for Emergency response



- Informal employment
- Intergenerational Households
- Overcrowding
- Handwashing Facilities
- Ownership of mobile phone for emergency response
- Sharing and Caring roles within household
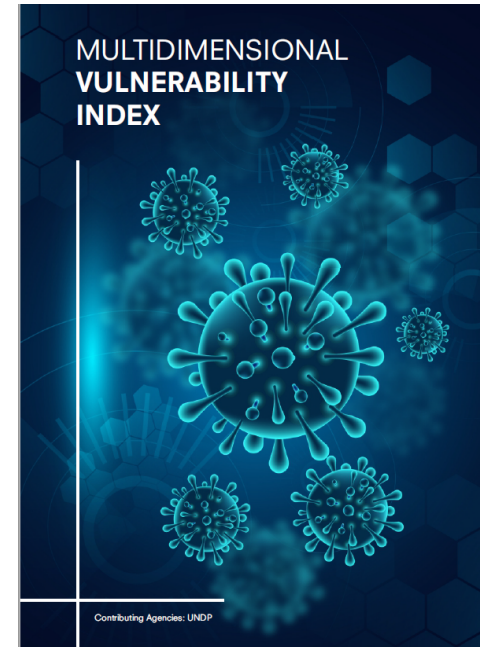
# Example: Afghanistan

- **5 dimensions: health, education, living standards, work, and shocks.**

- **Reminded of MPI results – 51.7% poor, disaggregations**

- **Focused on four indicators: food security, water, sanitation, cooking fuel.**

- **Microsimulations for rise in hunger**

- **Microsimulations for loss of employment**

- **Microsimulations children out of school**

AFGHANISTAN
Multidimensional Poverty Index
2016–2017
Report and Analysis

unicef

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# Example: Pakistan Ehsaas strategy

- **Needed a fast emergency response**
- **Did not have up to date census/registry data nor survey data for MPI.**
- **After analysing 'old' data on MVI indicators to observe patterns**
- **Opened a demand response call by SMS**
- **Used a <u>counting-based</u> short list of exclusion criteria' available by hh id.**
- **Used administrative data**
- **Reached ~ 80 million people (12.7 M families)**



**Multidimensional Poverty in Pakistan**
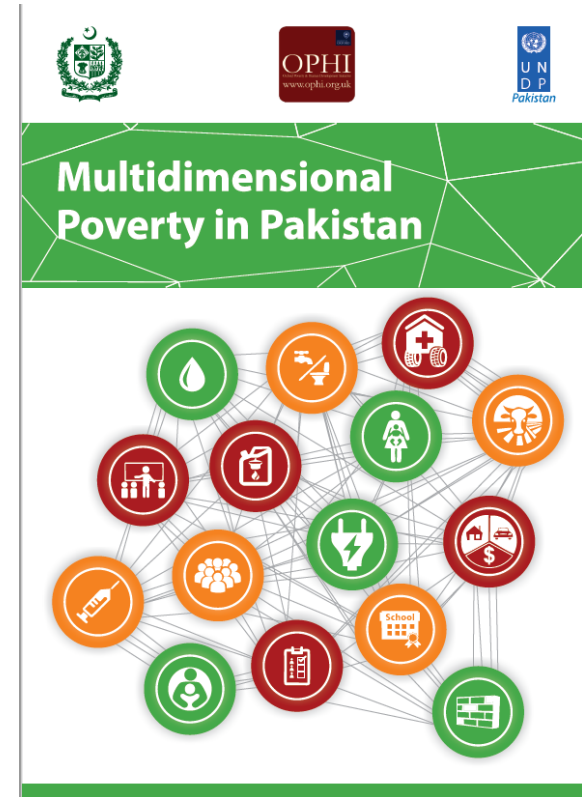
# Bhutan Rapid Remote Socio Economic Impact Assessment of COVID-19 on Tourism & Allied Sectors

- Across 8 indicators, 80% of workers in the sector faced deprivations in at least 3 core vulnerabilities.  Analysed these by gender, age, type of job.

- Probed coping strategies, profiling those who were for example, returning to rural areas.

- Probed interest in re-training for other profession by gender — some surprises (plumbing popular)!



**BHUTAN**
Multidimensional
Poverty Index
2017

National Statistics Bureau
Royal Government of Bhutan

**And Post-Emergency?**

There was a sharp reduction of the incidence of undernourishment in Britain in the difficult years of food shortages during the second world war. Facing a big reduction of total food availability, Britain arranged more equal food sharing, through rationing and social support. …. The results were astounding. During the war decade of the 1940s, life expectancy at birth in England and Wales went up by 6.5 years for men, compared with 1.2 years in the preceding decade, and for women it rose 7 years, far exceeding the 1.5 year gain of the decade before…

Can something similarly positive happen due to the experience of the present crisis? The lessons to emerge from a crisis surely depend on how it is dealt with, and <u>what concerns come to the fore</u>.

**Amartya Sen,**

*Financial Times* 15 April 2020

# What MPPN friends can do

- **Extend Bespoke Multidimensional Analyses**
  - To include COVID Vulnerability
  - To engage the existing and new poor
- **Innovate on Data Collection**
  - Include core MPI indicators in Rapid Remote surveys
  - Integrate MPIs into 2020 census round post-COVID
- **Cross-Learn and articulate your own insights.**
- **Escalate Poverty as post-emergency goal.**

# How can OPHI support partners?

# Some Important points

- **Rapid Assessment of Vulnerability**: a COVID related Multidimensional Vulnerability Index
  - Construction of a multidimensional vulnerability index (MVI)to identify vulnerable persons
  - Disaggregation of the MVI by vulnerable populations
  - Comparisons with monetary poverty to identify interlinkages and mismatches
  - Trial simulations of effects of different assumptions on social deprivations
- **Use of Census or Registry Data** to target using a bespoke Vulnerability Index
- **Rapid Data Collection Methods**

# Contact us…

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