Challenges in designing a multidimensional poverty measurement in ECA region

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Multidimensional Poverty Regional Scoping Study

The purpose of the study is to provide practical recommendations for the development of a national MPI (N-MPI) in countries of the ECA region

Review of multidimensional poverty measurement in 52 countries

- MICs (middle income per capita according to the World Bank classification)

- Latin America, Asia-Pacific, Eastern Europe and Central Asia

25 official N-MPI methodologies were analyzed

Multidimensional poverty measure in EECCA countries at national level

Countries	Methodology
Armenia (2012), Kyrgyzstan (2020) pilot projects 2022-23: Kazakhstan, Moldova, Uzbekistan 2022-23 Türkiye: project 2014-15, experimental calculation	AF-method based MPI
Albania, Montenegro, North Macedonia, Serbia, Türkiye	AROPE
Azerbaijan, Belarus*, Bosnia and Herzegovina, Georgia, Tajikistan (?), Turkmenistan, Ukraine	No multidimensional poverty measurement

* Discussion on MPI has begun

Key challenges

➭ MICs countries need an updated approach to measure multidimensional poverty

➭ Representation of indicator 1.2.2 on the national SDG platform

➭ MPI composition for EECA countries

➭ How is the MPI used? Monitoring and policy issues

➭ Metadata for many N-MPIs is missing

MICs countries needs an updated approach to measure multidimensional poverty

- for MICs countries, a different approach to defining indicators and deprivation cut-offs is needed:

    Many countries still maintains high level of education and healthcare

- G-MPI measures acute multidimensional poverty:

    Tajikistan: poorest country in region – 7.4% (Incidence),

    Kyrgyzstan: second poorest – 0.4% (Incidence)

- There is a tendency to introduce a moderate MPIs

    G-MPI – increasing deprivation cutoffs or new conditions added to reflect higher levels of ambition

    Mexico, Ecuador, Honduras, India , Bhutan, others measure the moderately poor along with the poor

Representation of indicator 1.2.2 on the National SDG Platform

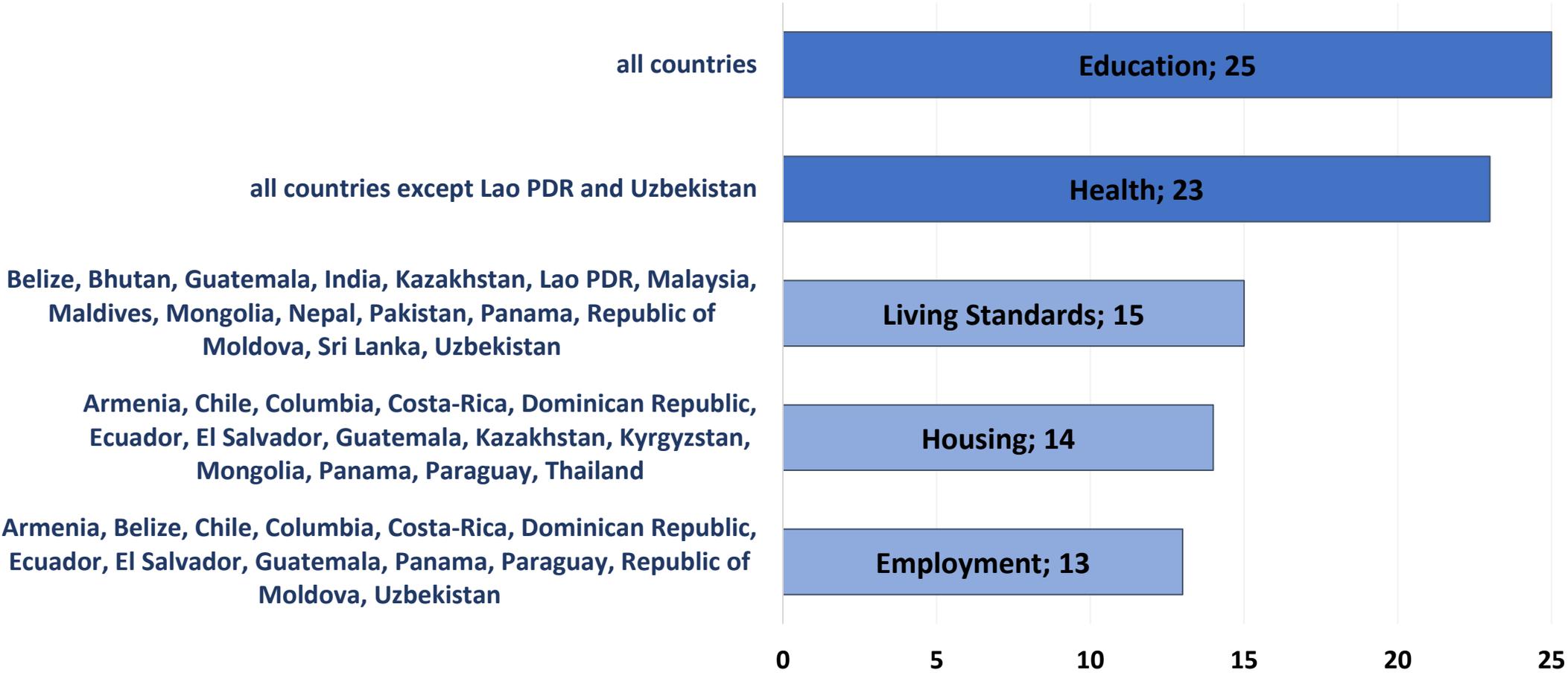| Indicator 1.2.2. Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	
✓	✗
Armenia, Kyrgyzstan Tajikistan*	Azerbaijan (data collection is planned), Georgia (not adjusted), Kazakhstan (not applicable (?) -> planned), No indicator mentioned: Belarus, Moldova, Turkmenistan, Uzbekistan, Ukraine
AROPE data: Montenegro, North Macedonia, Serbia, Türkiye	Albania, Bosnia and Herzegovina (exploring data sources)

* 2014-2015 data but no metadata was found

Possible features of N-MPI for EECCA countries

➡ **Dimensions:** relying on common dimensions or searching for missing dimensions

➡ **Indicators:** relying on common indicators or new phenomena. Including new conditions

➡ **Poverty cut-off:** definition of several lines: poor, moderately poor, vulnerable

➡ Poverty monitoring VS policy coordination

MPI composition: common dimensions

all countries — **Education; 25**

all countries except Lao PDR and Uzbekistan — **Health; 23**

Belize, Bhutan, Guatemala, India, Kazakhstan, Lao PDR, Malaysia, Maldives, Mongolia, Nepal, Pakistan, Panama, Republic of Moldova, Sri Lanka, Uzbekistan — **Living Standards; 15**

Armenia, Chile, Columbia, Costa-Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Kazakhstan, Kyrgyzstan, Mongolia, Panama, Paraguay, Thailand — **Housing; 14**

Armenia, Belize, Chile, Columbia, Costa-Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Panama, Paraguay, Republic of Moldova, Uzbekistan — **Employment; 13**

0   5   10   15   20   25

Number of MICS countries studied with official AF-based N-MPI = 25

Dimensions of national MPIs: missing dimensions

Country	Number of dimensions	Most common MPI dimensions					Other
		EDUCATION	HEALTH	EMPLOYMENT	HOUSING	LS / BS	
Armenia	5	X	X	X	X		Basic needs
Belize	4	X	X	X		X	
Bhutan	3	X	X			X	
Chile	5	X	X	X + Social Security	X + Environment		Networks and Social Cohesion
Colombia	5	X	X	X	X + Access to Public Services		Conditions of childhood and youth
Costa-Rica	5	X	X	X	X		Social Protection
Dominican Republic	5	X + Child Care	X	X + Livelihood	X + local Environment		Digital Gap and Social Relationship
Ecuador	4	X	X + Water and Food	X + Social Security	X + Healthy Environment		
El Salvador	5	X	X + Basic Services and Food Security	X + Social Security	X		Habitat quality
Guatemala	5	X	Food and Nutritional Health and Safety	Decent employment	X	X	
India	3	X	X			X	
Kazakhstan	4	X	X + Environment		X	X + Affordability	

Dimensions of national MPIs

Country	Number of dimensions	Most common MPI dimensions					Other
		EDUCATION	HEALTH	EMPLOYMENT	HOUSING	LS / BS	
Kyrgyzstan	5	X	X		X		Food security Monetary poverty
Lao PDR	3	X				X	Consumption
Malaysia	4	X	X			X	Income
Maldives	3	X + Information	X			X	
Mongolia	4	X	X		X	X	
Nepal	3	X	X			X	
Pakistan	3	X	X			X	
Panama	5	X	X	X	X + Basic services and Asses to internet	Environment and Sanitation	
Paraguay	4	X	X + Environment	X + Social Security	X + Public Services		
Republic of Moldova	4	X	X	X		X	
Sri Lanka	3	X	X			X	
Thailand	4	X	Healthy living		X		Financial security
Uzbekistan	3	X		X		X	

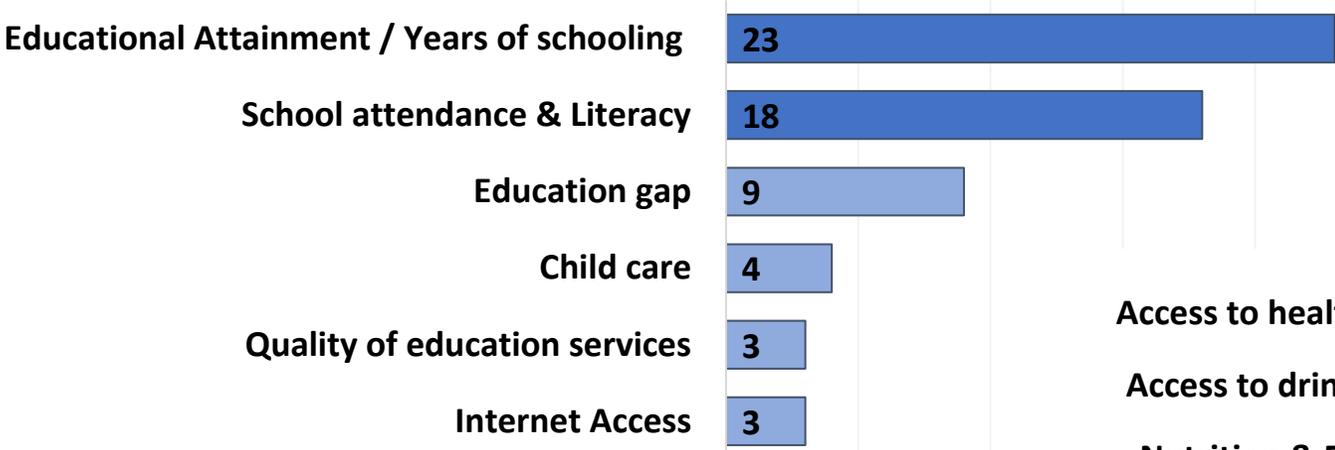# Dimension: some considerations

Top-down approach. In many countries, dimensions as a rule, came from those strategic areas that the country intends to develop (Constitution, National Development Plans)

Limitations from household surveys. Maybe we can not measure dimensions because they are not included in HHS?

Down-top approach or capturing human needs. Some countries conduct separate surveys or studies that allow them to understand "missing dimensions"
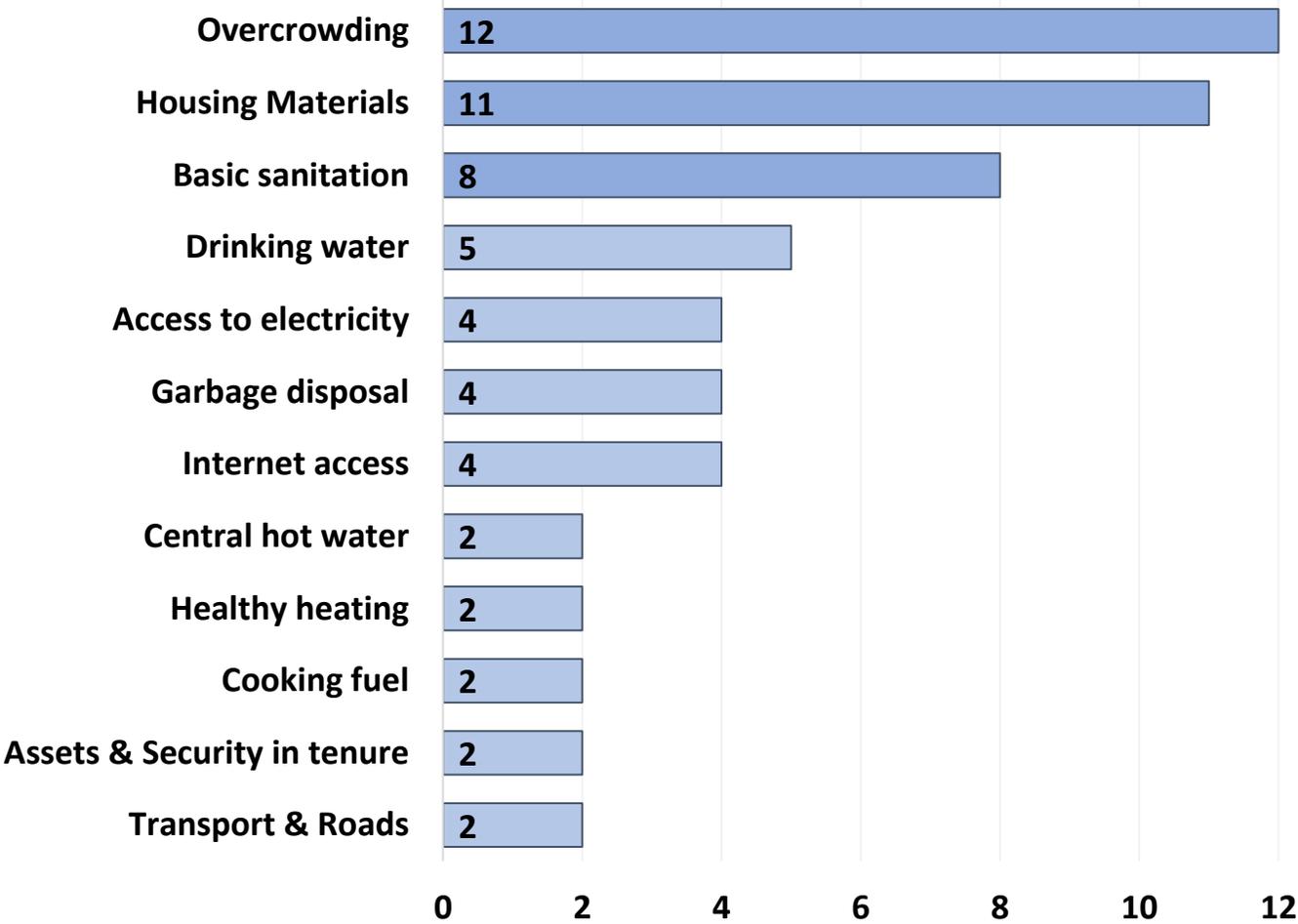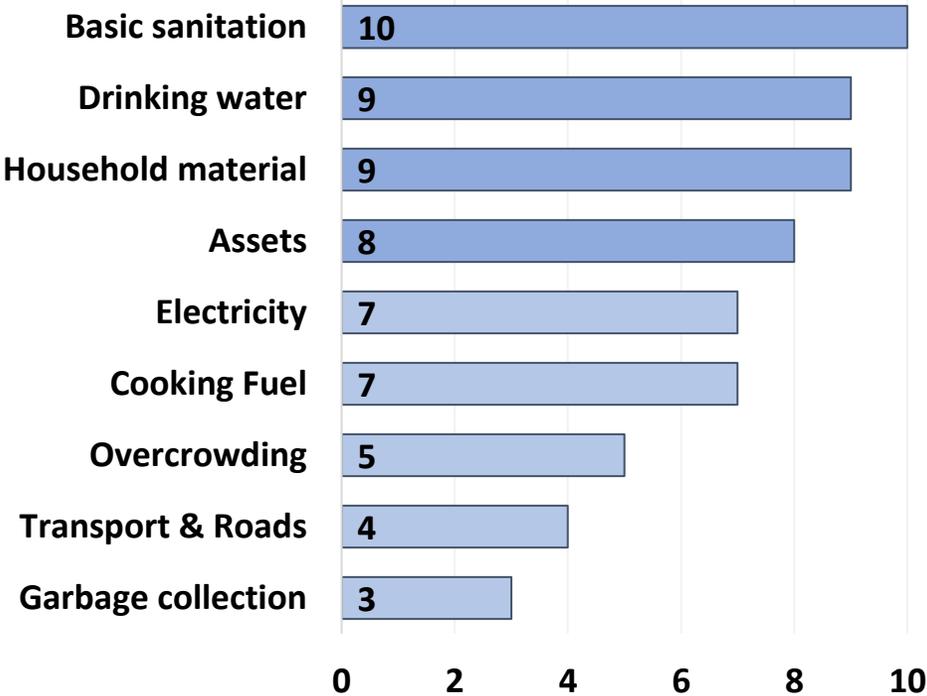
MPI composition: common indicators

EDUCATION

Indicator	Value
Educational Attainment / Years of schooling	23
School attendance & Literacy	18
Education gap	9
Child care	4
Quality of education services	3
Internet Access	3

HEALTH

Indicator	Value
Access to health facilities	17
Access to drinking water	11
Nutrition & Food safety	10
Health insurance	6
Access to basic sanitation	5
Health housing	5
Women's health	4
Child mortality	3
Disability	3
Affordability of health services	2

MPI composition: common indicators

HOUSING

Indicator	Value
Overcrowding	12
Housing Materials	11
Basic sanitation	8
Drinking water	5
Access to electricity	4
Garbage disposal	4
Internet access	4
Central hot water	2
Healthy heating	2
Cooking fuel	2
Assets & Security in tenure	2
Transport & Roads	2

LIVING STANDARDS

Indicator	Value
Basic sanitation	10
Drinking water	9
Household material	9
Assets	8
Electricity	7
Cooking Fuel	7
Overcrowding	5
Transport & Roads	4
Garbage collection	3

MPI composition: common indicators

EMPLOYMENT

Unemployment — 11
Social Security & Pension coverage lack — 7
Underemployment — 6
Child labor — 5
Other indicators — 5
Job insecurity & Employment without a contract — 4
Informal self-employment — 4
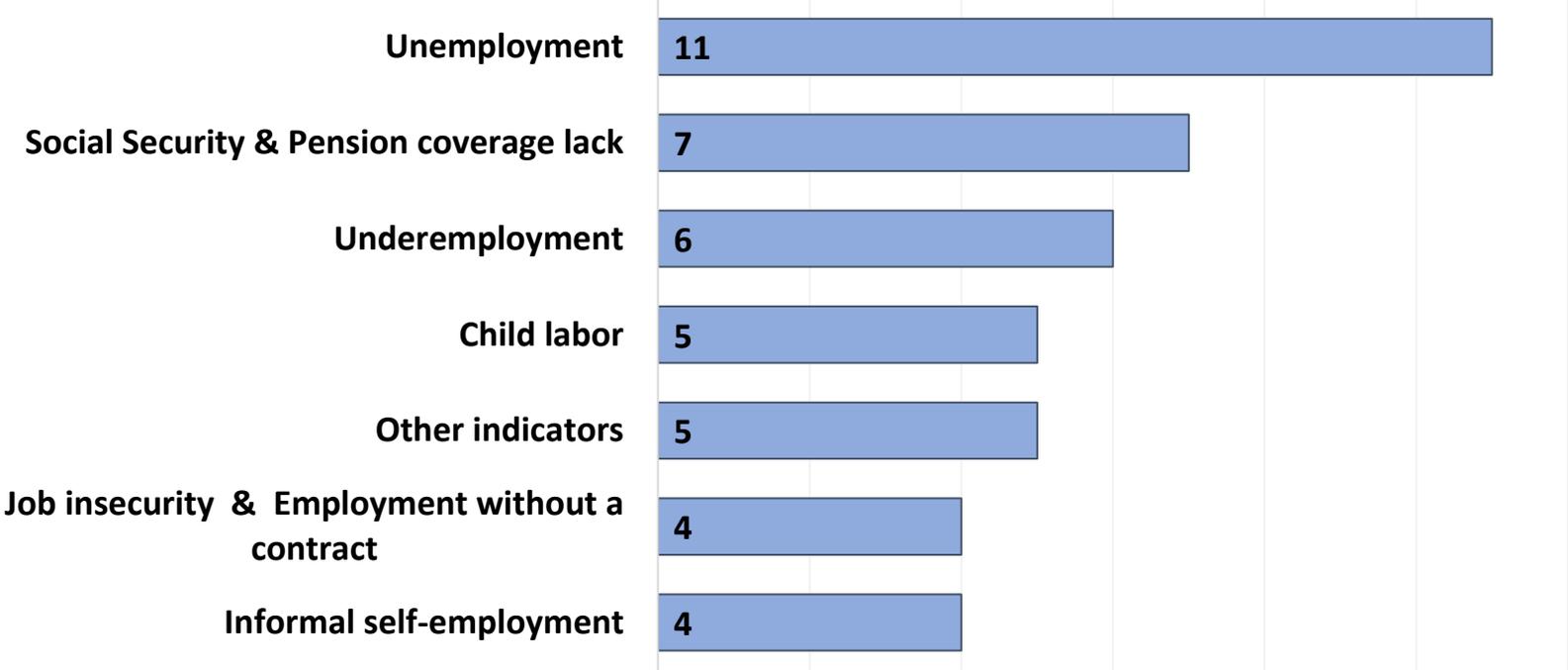
HHS, LFS

Distribution of countries by number of MPI indicators

	8	9		
			4	4
	8 - 11	12 - 15	16 - 19	20 - 25
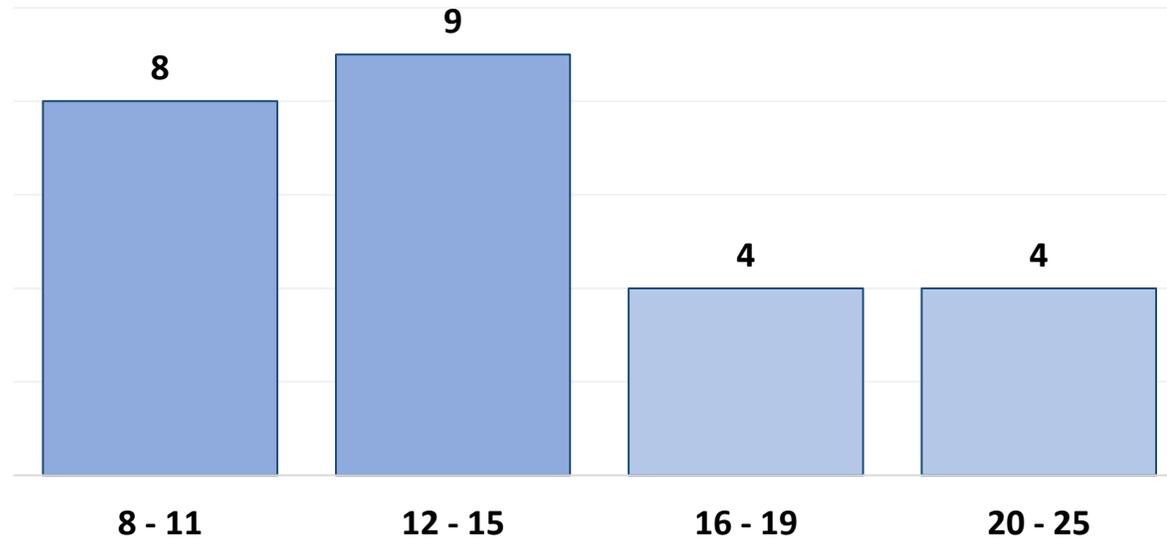
8-11 indicators: Lao PDR, Maldives, **Uzbekistan**, Nepal, Sri Lanka, **Kyrgyzstan**, Malaysia, **Republic of Moldova**

12-15 indicators: Ecuador, India, Thailand, Mongolia, Bhutan, Chile, Colombia, Pakistan, Paraguay

16-19 indicators: **Kazakhstan**, Belize, Guatemala, Panama

20-25 indicators: Costa-Rica, El Salvador, Dominican Republic, **Armenia**

More considerations

➡ Special attention should be paid to the justification of indicators. Those countries that have made significant progress in justifying indicators have relied either on indicators for monitoring the national or sectoral strategies, or, in some cases, on legal acts

➡ More indicators, dimensions and disaggregation variables allow for more informed policies, but of course there is a certain ceiling for their numbers

How is the MPI used: Monitoring and policy issues

➡ Using N-MPI for multidimensional poverty monitoring is a prerequisite, but the N-MPI is more powerful when:

  it based on ensuring policy relevance and coordination;

  used for policy development;

  implements Leaving No One Behind: Targeting and Resource allocation, and

  assesses the impact of policy measures and monitors multidimensional poverty.

➡ Ensuring policy relevance : Missing in many country cases or arguments are weak

Best practice: ensuring policy relevance

Justification of the MPI: Some countries justify based on the rights of people established in the Constitution, other on the long-term national development plans

Justification of dimensions: Some countries justify based on the relevant articles of the country's Constitution, other on sectoral sections of the long-term national development plans

Justifications of indicators: they are based on legislative norms or indicators set to track sectoral programs

Metadata for many N-MPIs is missing

Issues of data openness intersect with issues of consistency in the presentation of metadata

The complete set of documents in most cases is not publicly available:

- ➧ (i) a legal document introducing N-MPI

- ➧ (ii) the methodology itself

- ➧ (iii) latest N-MPI reports

MPI Universe: Country page

COUNTRY
A. Data: MPI, A, H values, Data source and link
B. Structure of index: – Dimensions – Indicators – Deprivation cut-off – Weight (fraction or percent) – Comment (if any)
C. Links to Normative Resources (Legislation and National Developments Plans)
D. Other Metadata Website page: – Method – Source (Survey) – Unit of identification & analysis – Poverty cut-off – Subgroup Disaggregation – Supporting partner
E. Other Comments

MPI Universe: Country page

	KYRGYZSTAN		Alkire-Foster based method
A	MPI Data		
	National Multidimensional Poverty Index		National Multidimensional Poverty Index in the Kyrgyz Republic
	2020	0,225	
	2021	0,259	
	2022	0,250	
	Headcount ratio (H)		
	2020	42,2	
	2021	48,5	
	2022	47,4	
	Intensity of poverty (A)		
	2020	53,2	
	2021	53,5	
	2022	52,8	
	Official / unofficial measure:	official	
B	MPI design: Structure of index		

N	Dimension	Indicator	Deprivation cut-off	Weight
	5 dimensions	11 indicators		fraction or percent
1	Education (1/5)	Level of education	Living in a household in which at least one person did not receive an age-appropriate education	1/5
2	Health(1/5)	Handwashing practices	Living in a household that does not have a place for handwashing with soap and water	1/10
		Indoor air pollution	Living in a household where the main cooking appliance is a stove (kerosene or oil stove) or oven/fireplace	1/10
3	Housing conditions(1/5)	Availability of hot water	Living in a household that does not have a functioning hot water supply	1/25
		Premises overcrowding	Living in a household with a living area of less than 18 square meters per person	1/25
		Reliability of power supply	Living in a household that experienced a power outage at least once a month in the past year	1/25
		Drinking water	Living in a household without access to an improved source of drinking water indoors or in the yard	1/25
		Sanitation	Living in a household not connected to an existing sewerage system	1/25
4	Monetary poverty(1/5)	Living in absolute poverty	Living in a household where annual average per capita consumption is below the national annual absolute poverty line per capita	1/5
5	Food security(1/5)	Calorie consumption	Living in a household with less than 2,100 kcal per capita per day	1/10
		Dietary diversity at home	Living in a household that consumes less than 7 food groups out of 10	1/10

C	MPI design: Links to policies		NDS 2040 - National development strategy until 2040

N	Dimension	Indicator	Rationale	Overall comment
1	Education	Level of education	NDS 2040: Every citizen has access to quality education aimed at fostering harmonious personality, revealing potential of each person	NDS 2040: The transition to the measurement of multidimensional poverty must be ensured (page 95).
2	Health	Handwashing practices	In 2040, the healthcare system is accessible, quality, safe, using innovative approaches, oriented to human needs, and the population of the Kyrgyz Republic has the most improved health indicators	
		Indoor air pollution		

D	Metadata	
	Method	Alkire-Foster based method
	Source of N-MPI data	Integrated Household Budget and Labour Force Sample Survey
	Metadata source	Methodological guidance for calculating the SDG indicator 1.2.2. "Proportion of men, women and children of all ag...
		National MPI of the Kyrgyz Republic
	Website page	https://sustainabledevelopment-kyrgyzstan.github.io/en/1-2-2/
	Unit of identification	Household
	Unit of analysis	Person
	Poverty cut-off	K = 33.3% and more
	Subgroup Decomposition	Territory, sex, age, degree of urbanization

E	Comments		
	SDG indbcator 1.2.2	data on the national SDG platform	Kyrgyzstan data for Sustainable Development Goal indicators
	Legal basis	NDS 2040	
	VNR 2020	The improvement of people's well-being and the sustainable development of society are at the center of the discu... However, challenges remain in further addressing the causes of multidimensional poverty and overcoming povert...	
	VNR 2020	Significant gaps in development levels between regions of the country, indicating the existence of "hot spots" of m... Republic, where there are infrastructural gaps and limited provision of public services. The mapping assessed the... adequate transport infrastructure, remittances, lack of access to adequate basic services (such as safe drinking w... rural areas of the Kyrgyz Republic with the highest poverty rate and the lowest per capita income (p. 31)	
	Supporting partner	UNICEF	

< > ··· Ecuador | El Salvador | Guatemala | Honduras | India | Kazakhstan | **Kyrgyzstan** | Lao PDR | Malaysi ··· + ⋮

Thank you!