Multidimensional poverty index

Pilot estimation

Presenter: Ariunzaya Ayush, Chairperson, National Statistics Office of Mongolia

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What is the Multidimensional Poverty Index (MPI)?

- Poverty is often defined by one-dimensional measures, such as income. But no one indicator alone can capture the multiple aspects that constitute poverty.

- MPI identifies multiple deprivations (deficiencies) at the household and individual level as poor health, lack of education and inadequate standard of living, lack of income, poor quality of work and threat from violence.

- It uses micro data from household surveys.

- Each person in a given household is classified as poor or non-poor depending on the weighted number of deprivations his or her household experiences.

- These data are then aggregated into the national measure of poverty.

- The MPI reflects both the prevalence of multidimensional deprivation and its intensity.

- The MPI offers a valuable complement to traditional income-based poverty measures.

Why use a multidimensional approach?

- Income alone can miss a lot. Focusing on one factor alone, such as income, is not enough to capture the true reality of poverty

- Multidimensional poverty measures can be used to create a more comprehensive picture. They reveal who is poor and how they are poor – the range of different disadvantages they experience.

Pilot estimation of MPI

- In 2017, NSO of Mongolia conducted pilot survey covered by 3 soums (county) and estimated MPI pilot result.

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PILOT SURVEY SAMPLE

➢ Within the framework of the World Bank Trust Fund for Statistical Capacity Building project(TFSCB), Population and Social Statistics Department, National Statistics Office of Mongolia, conducted pilot survey and collected the MPI for 3 soums, rural areas, to estimate the standard of living.

№	Aimag (Province)	Soum (County)	Households in survey, total	Sample size after database building
1	Tuv	Arkhust	420	412
2	Sukhbaatar	Naran	410	398
3	Bulgan	Bayannuur	510	487
	Total		1 340	**1297**

Survey Questionnaires- 4 sections 93 indicators

- 1ST SECTION. GENARAL INFORMATION
- 2ND SECTION. HOUSEHOLD INDICATORS
- 3RD SECTION. HOUSEHOLD MEMBERS INFORMATION
- 4TH SECTION. OCCUPATION INFORMATION

✓ Updated questionnaire based on experts' comments and suggestions.

✓ Questionnaire includes possible indicators that can be estimated by PMT-Proxy means testing.

✓22 MPI indicators are included in the questionnaire.

Multidimensional poverty indicators

We selected 4 dimensions, 13 indicators

Dimensions	Indicators
Education (1 indicator)	Adult education
Health (4 indicators)	Health insurance
	Health care
	Nutrition
	Drinking water
Housing condition (5 indicators)	Roof
	Wall
	Floor
	Electricity
	Sanitation
Standard of living (3 indicators)	Vehicle (mobility)
	Electronic devices (assets)
	Main source of income

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Multidimensional poverty indicators

Dimensions	Indicators	Deprivation cutoffs
Education	Adult education	- Adults having no education - Adults having 3 and less years of schooling and less
Health	Health insurance	-Persons of working age having no medical insurance
	Health care	-Not having access to immediate medical services
	Nutrition	- Not having access to safe storage of foods - Not having access to sufficient food components,
	Drinking water	- Not having access to clean drinking water and sources (unsecure well, unsecure river water, and other unsecure water sources etc.)
Housing condition	Roof	- Ger (traditional Mongolian house) has single layer of cover - Roof is made from wood and other wooden materials
	Wall	- Ger (traditional Mongolian house) has single layer of cover - Walls are made from rocks
	Floor	- Not having floor - Floor is made from other materials
	Electricity	- Not having access to electricity, having candles
	Sanitation	- Not having access to sanitation facilities
Standard of living	Vehicle	- Not having access to asset related to mobility (motorbikes, cars, trucks or tractors)
	Electronic device	- Not having any electronic devices
	Source of income	- Herders not having livestock (having livestock, but not have fences) and no farming - Herders not having work and not having any social welfares and insurances.

Multidimensional poverty measures

Dimensions	Indicators	Weight	Deprivation score /Indicators/	Deprivation score /Dimensions/
Education	Adult education	1/4	**3.7**	**3.7**
Health	Health insurance	1/16	**7.9**	**42.7**
	Health care	1/16	**2.8**	
	Nutrition	1/16	**25.7**	
	Drinking water	1/16	**17.5**	
Housing conditions	Roof	1/20	**24.8**	**59.4**
	Wall	1/20	**22.4**	
	Floor	1/20	**50.6**	
	Electricity	1/20	**0.7**	
	Sanitation	1/20	**21.0**	
Standard of living	Vehicle	1/12	**27.3**	**40.3**
	Electronic device	1/12	**4.1**	
	Source of income	1/12	**19.6**	

Multidimensional poverty index

Poverty cutoff k=30

If it lacks over 30 percent of all indicators meaning poor in MPI. In our case, we consider the poor that lacks over 4 indicators of 13 indicators.

	Poverty headcount ratio (censored) (H)	Poverty intensity (A)	MPI (M0)
Average	0.49	0.58	0.28
By Soum			
Naran	0.59	0.59	0.35
Arkhust	0.40	0.58	0.23
Bayannuur	0.46	0.57	0.27

Remarks

- The some of the selected indicators cannot express Mongolian conditions, thus, there is high MPI.

- Therefore, we understood that we need to organize discussion on selecting indicators between multi-stakeholder group at the policy level.

FURTHER WORK

- Include step-by-step discussions involving wide range of stakeholders and select indicators at the policy level

- Test the selected indicators based on the result of "Household socio-economic survey"

Thank you for your attention