DATA, INSTITUTIONS, AND MEASUREMENT

**Ministry of National Development Planning/
National Development Planning Agency
(Bappenas)**

May 6th – 8th , 2014

Schedule for this Session

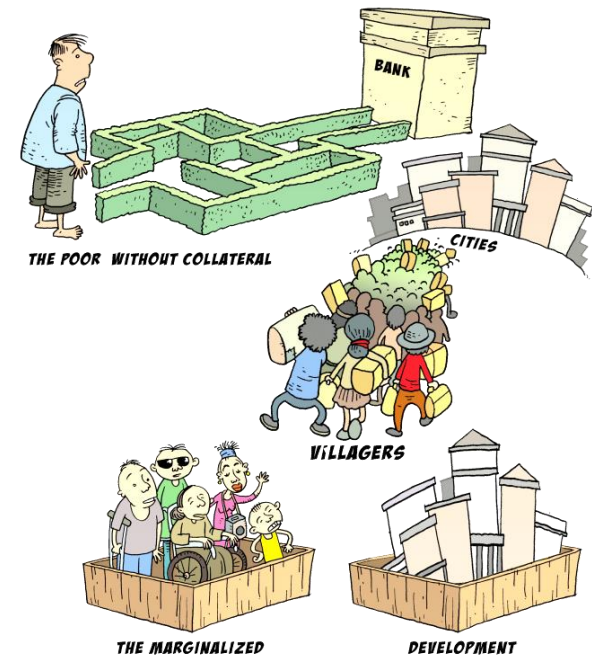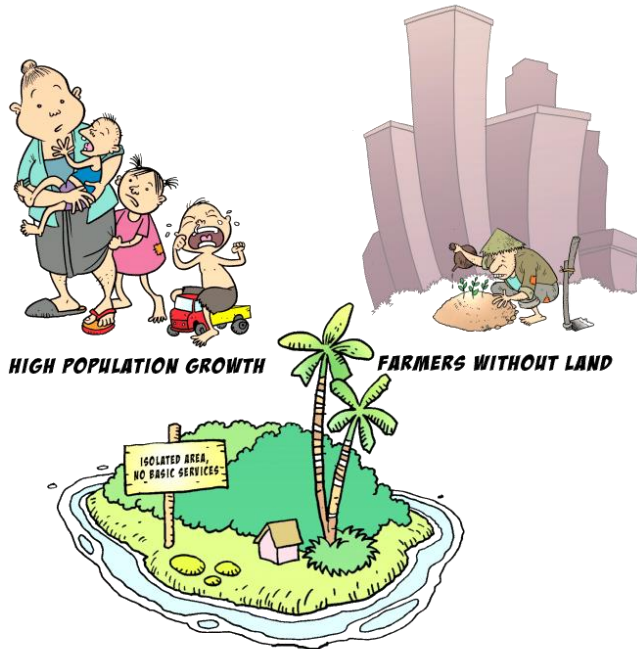| TIME	TOPICS
13.00 – 14.00	Identification of the Poor
14.00 – 15.00	Measurement of Poverty
15.30 – 15.45	Video on SLA
15.45 – 16.45	Sustainable Livelihood Approach
16.45 – 17.00	Toward the Gate of Change

TO WARD THE GATE OF CHANGE

Stories From The Field

Identification of the Poor

We can identify the poor (measurement of poverty) if we know what are the causes of poverty

Characteristics of Poor People *(observed)*

- Low education

- Female headed household

- Unemployment

- Working in agricultural sector

- No access to safe drinking water

- No access to electricity

What is Poverty ?

- Poverty is a situation in which a decent standard of living is not achieved
    - Inadequate food, inadequate housing and clothing, inability to access medical treatment when sick, and low access to education.
- Three important aspects:
    - ✓ lack of income and assets,
    - ✓ voiceless & powerlessness, and
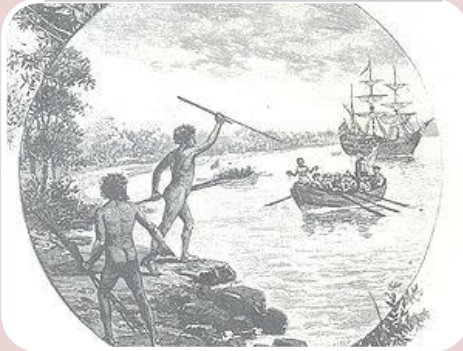   - ✓ vulnerability.

Causes of Poverty

From Consultations with the Poor: Rural-Urban

Rural	Urban
• **Powerlessness:** Causes: God's will/divine decree; lack of employment opportunities; low prices of agriculture produce • **Exclusion:** Causes: lack of education; lack of skills; lack of transportation infrastructure • **Material poverty:** Causes: lack of capital; landlessness; low level of income • **Vulnerability:** Causes: production/harvest failures; employment uncertainty; natural disasters • **Attitudes:** Causes: lack of motivation	• **Powerlessness:** Causes: lack of employment opportunities; high cost of living; God's will • **Exclusion:** Causes: lack of education; lack of skills • **Material poverty:** Causes: lack of capital; low level of income; extended family • **Vulnerability:** Causes: Layoffs/business closure; employment uncertainty • **Attitudes:** Causes: lack of motivation

Sources: Participatory Poverty Assessment Consolidation Work. SMERU 2004

Poverty is Multi Dimentional Problems

Quality of People

Lack of awareness on the importance of education (parents to their children education)

Unhealthy life style

Quality of Infrastructures

Inadequate source of water (drinking and others)

Bad roads or no irrigation network

No electricity

Inadequate housing

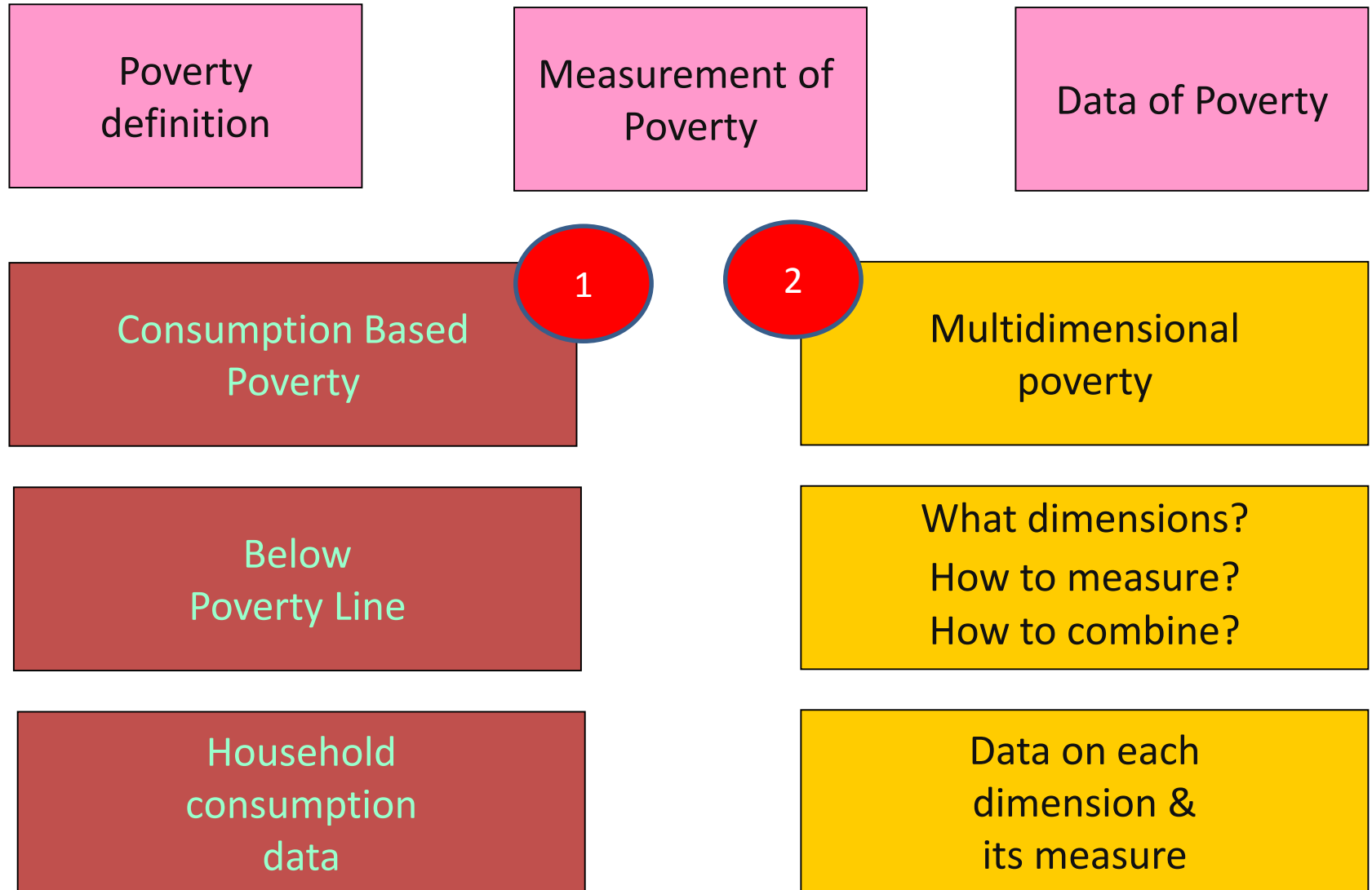## Inadequate Access to Economy Activities

Low skills

Incomplete Logistics system

Less entrepreunerships

Arrangement of Measurement

Poverty definition	Measurement of Poverty	Data of Poverty

1

2

Consumption Based Poverty	Multidimensional poverty
Below Poverty Line	What dimensions? How to measure? How to combine?
Household consumption data	Data on each dimension & its measure

Two Approaches of Poverty Measurement

Quantitative (Monetary)	Qualitative (Non-Monetary)

Quantitative (Monetary)

- Income per capita
- Expenditure/consumption per capita

Qualitative (Non-Monetary)

- Capability approach? (Sen; HRD)
- Social exclusion? (unemployment, lack of social insurance, lack of housing, low monetary income)
- Participatory approaches? (Chambers)
- Health indicators
- Education Indicators

How to combine the two approaches?

Measuring One-dimensional Poverty: Monetary Approach

- Based on the idea of poverty line – a constructed line that separates the poor and the non-poor

- Poverty lines can be set at any level appropriate for the purpose at hand.

- **Absolute Poverty** – linked to basic welfare
  - Income or expenditure
  - Issues: bundle of goods & services in consumption basket, per capita or adult equivalent unit, economies of scale

- **Relative Poverty**
  - Interprets poverty in relation to living standard of a given society
  - Stresses economic inequality as the primary indicator of poverty.
    - Cut-off point arbitrary
    - Not useful for monitoring

- Headcount ratio - a measure of proportion of population below an established poverty line
  - national or global (PPP US$1/day)
- Depth of poverty (poverty gap index)
- Poverty severity index (squared poverty gap index)
- Formula (FGT Index):

$$P_\alpha = \frac{1}{n} \sum_{i=1}^{q} \left[\frac{z - y_i}{z} \right]^\alpha$$
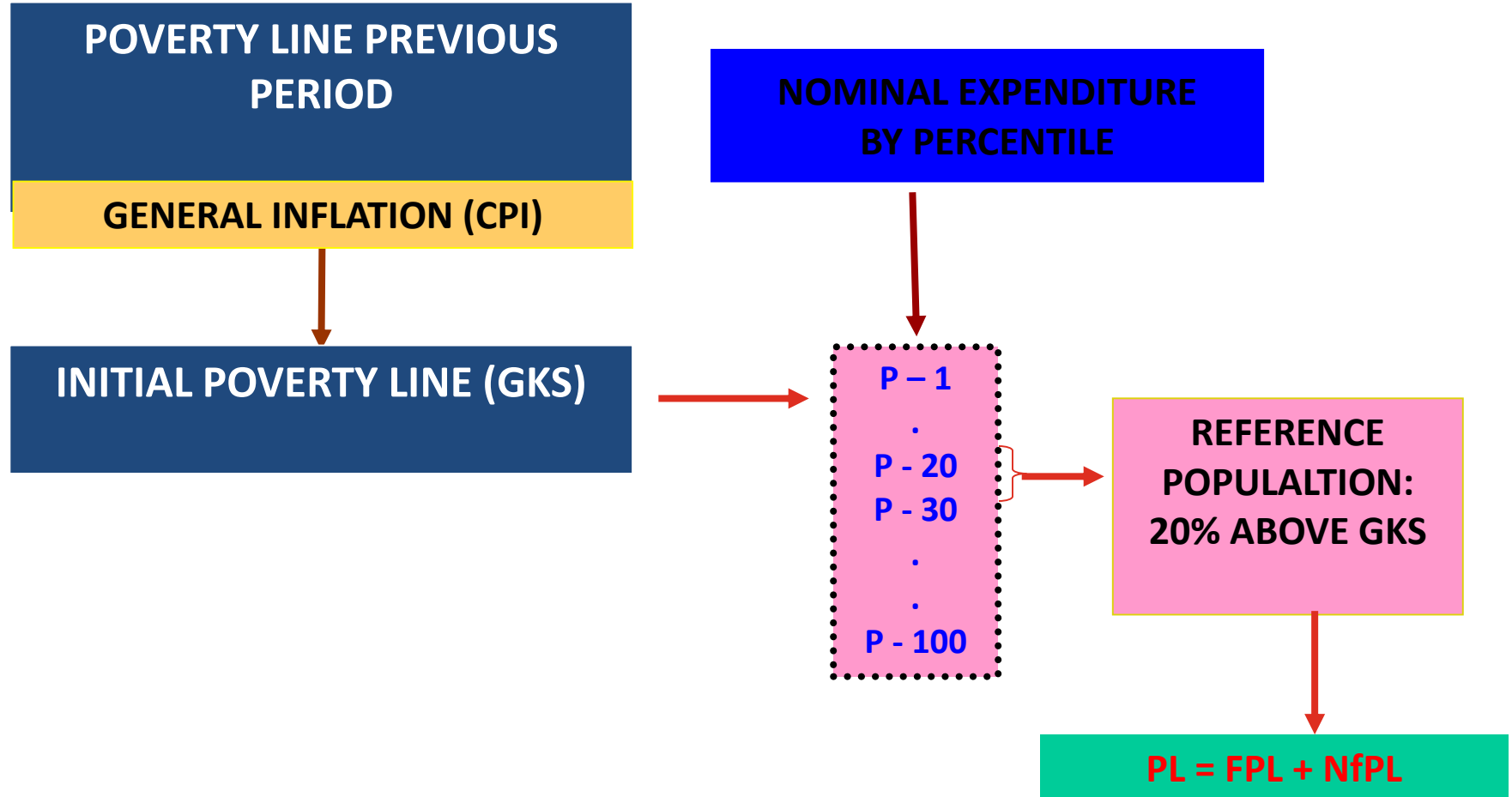
Limitations of Monetary Approach

- Do not capture access to public goods and non-market commodities

- Do not capture social exclusion

- Assume equal distribution of resources at household level

- Having enough income does not guarantee acquiring the attributes required for minimum well-being
  - Income above the poverty line but decide to spent it on drugs — low health, shorter life

Monetary Approach in Indonesia

- **Distribution of household income/expenditure**
  - Data from household survey
  - Consumption module of Socio-economic survey (*SUSENAS*) is used to measure poverty in Indonesia
- **Reference group of population to see consumption pattern**
- **Poverty Line (about to be revised)**
  - Food Poverty Line (FPL) ⇨ 2,100 k/c/capita/day
  - Non-food Poverty Line (NfPL) ⇨ basic needs
  - Poverty Line (total) = FPL + NfPL
  - Consumption less than Poverty Line (PL) ⇨ Poor

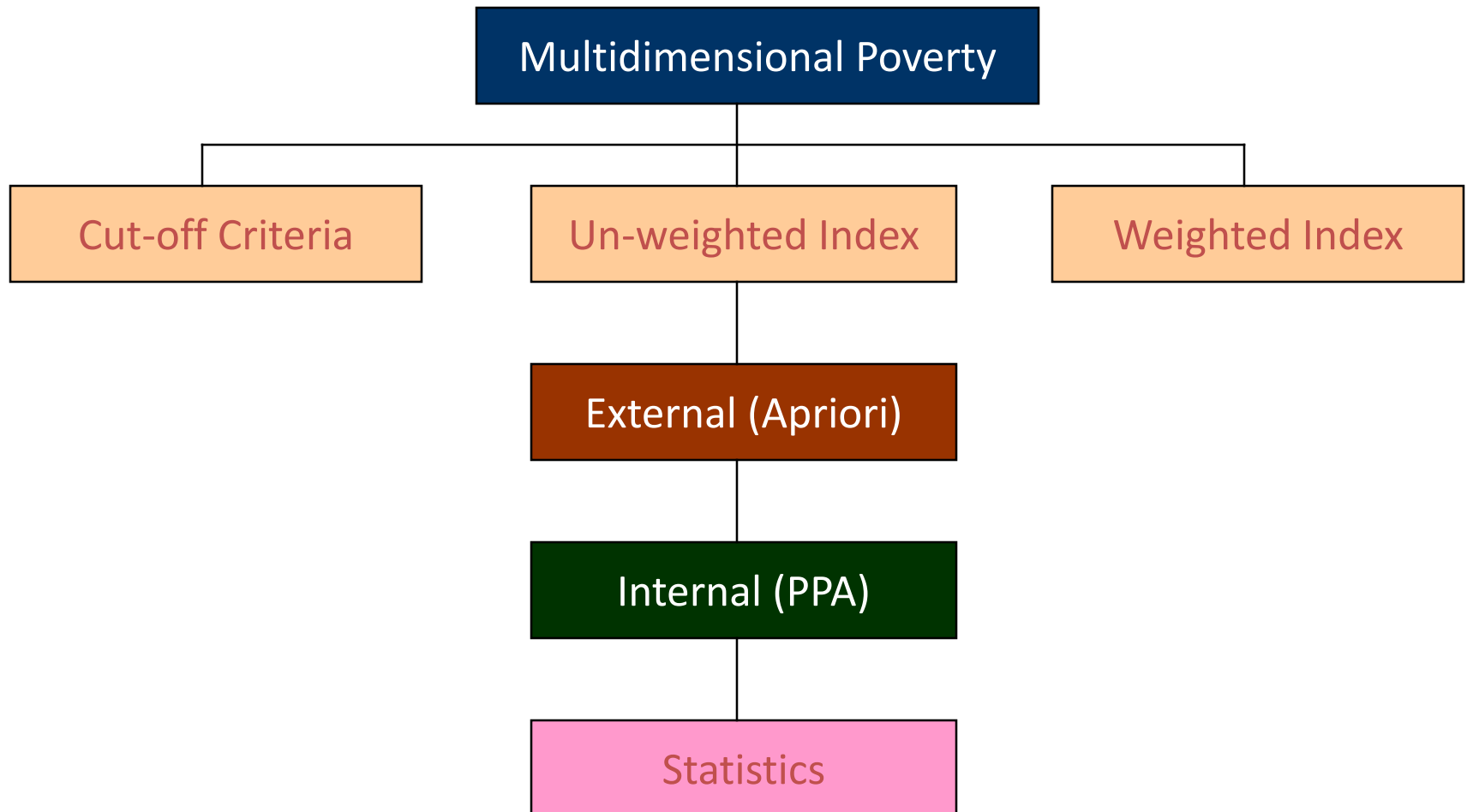# Steps of Measuring One-Dimensional Poverty Measurement in Indonesia

POVERTY LINE PREVIOUS PERIOD

GENERAL INFLATION (CPI)

NOMINAL EXPENDITURE BY PERCENTILE

INITIAL POVERTY LINE (GKS)

P – 1

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P - 20

P - 30

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.

P - 100

REFERENCE POPULALTION: 20% ABOVE GKS

PL = FPL + NfPL

Measuring Multidimensional Poverty

- what dimensions should be included?
- how should each dimension be measured?
- how to define poverty?
  - all dimensions
  - any dimension
  - indexation
  - utility function

Measuring Multidimensional Poverty

An Example: UNDP MPI (1)

Dimension	Indicator/Variable	Poverty Cutoff	Weight
1. Standard of Living	TV, radio, telephone, fridge, motorcycle Car, truck	Poor: can own 1 of TV/radio/telephone/fridge/motor-cycle but not more. If owns car/truck is not poor.	1/6
	Floor	Poor: dirt/natural floor.	1/6
	Electricity	Poor: no electricity.	1/6
	Cooking fuel	Poor: wood, dung, charcoal.	1/6
	Toilet	Poor: no improved private toilet.	1/6
	Water	Poor: no drinking water.	1/6
2. Education	Years Schooling	Poor: no person in the household has finished primary school.	1/2
	School Enrolment	Poor: any school-aged child up to 14 is not enrolled in school.	1/2
3. Health	U5 Child Mortality	Poor: If a child under 5 has died of a woman living in the house.	1/2
	Nutrition	If any adult or child in the household is malnourished.	1/2

Multidimentional in Indonesia : A Proposal

- To be multidimensionally poor, a household has to be poor in at least one dimension, or a number of weighted indicators that add up to one dimension overall

- The UNDP launched the MPI in 2010 for 108 countries to encourage governments to explore multidimensional poverty indicators

- In Indonesia, using data from the Demographic and Health Survey (DHS), 22% of people are poor in multidimensional sense

- The poor are, on average, deprived in 47% of the dimensions considered

- Education

- Health

- Sanitation

- Housing

- Electricity

THANK YOU