

POVERTY MEASUREMENT IN INDONESIA



BPS-Statistics Indonesia

Poverty Definition in Indonesia

- Poverty is condition where a person or a group of persons is not able to fulfill his/their basic rights according to socially acceptable life.
- Basic rights is fulfillment of basic need for:
 - Food consumption: Rice, noodle, sugar, etc
 - Non-food consumption: clothing, health, education, housing, clean water, transportation (including fuel), etc
 - Secure from crime
 - Freedom to participate in social and political activities.

Poverty Measurement in Indonesia

1. Concept:

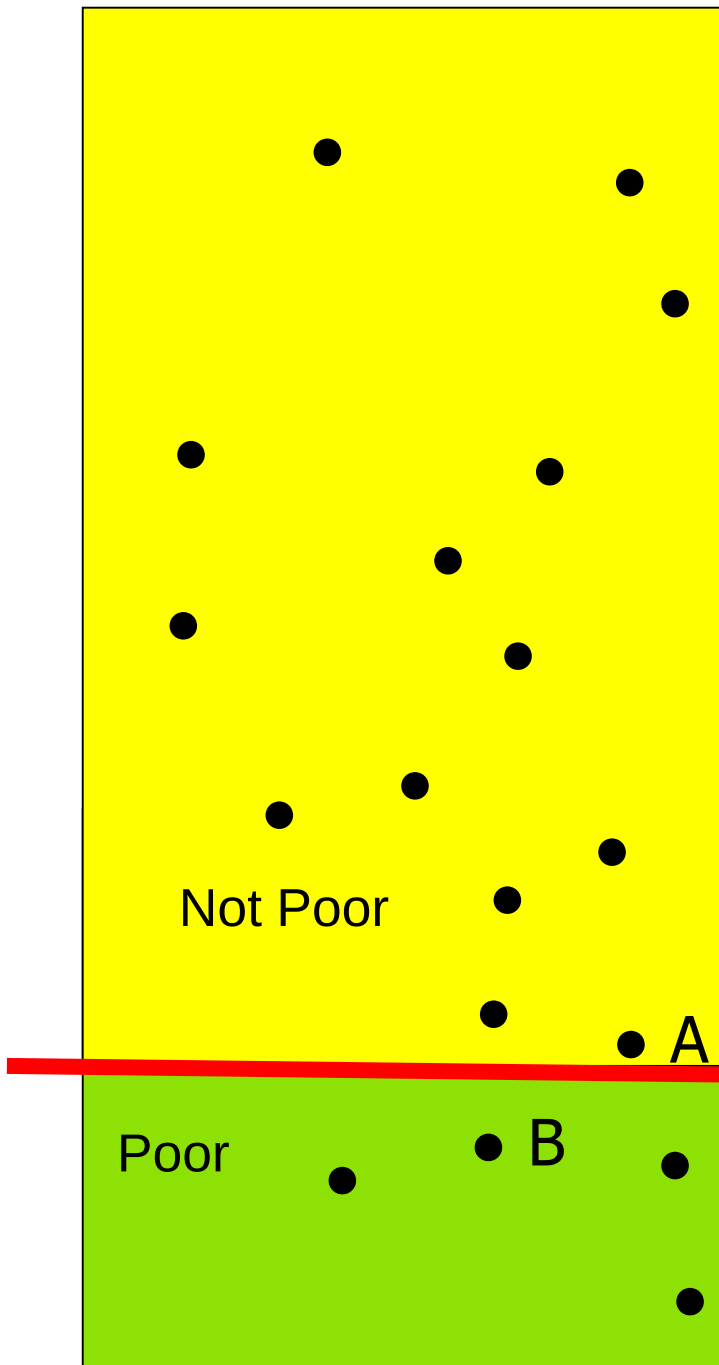
- Basic Needs Approach: based on per capita consumption
- Poor is a condition of living when someone is not having or not being able to afford certain minimum necessities
- Poverty line is based on minimum nutritional requirement of 2100 kcal per capita per day (National Congress of nutritionists, 1978) and consumption of essential non-food. Person who has expenditure less than poverty line is considered poor.

2. Dissemination:

- Level of estimation: national, province and district/municipality
- Period of dissemination: Annually

COMPONENT OF POVERTY LINE (PL):

1. **Food PL** => the value of money (in rupiah) for minimum nutritional requirement of 2100 kkal per capita a-day. Calculation is based on **average price of calorie of 52 selected commodities** consumed by reference population
2. **Non-Food Poverty Line** => **Average expenditures of 27 essential non-food commodities of reference population** (51 items for urban and 47 for rural), based on Survey of Non-Food Basket Commodities



Poverty Line (PL) :
Different for every province.

This method has been applied since 1998.

Selected Commodities for Calculating Food Poverty Line

Domestic rice	Beef	Onion	Brown sugar
Glutinous rice	Broiler chicken meat	Chilies	Tea
Dry-shelled corn	Local chicken meat	Cayenne pepper	Powder coffee
Wheat flour	Trimnings	Peanut without shell	Salt
Cassava	Broiler egg	Tofu, Soybean card	Candle nut
Sweet potato	Duck egg	Fermented soybean cake	Fish paste
Dried cassava	Sweet canned liquid milk	Rambutan (fruit)	Crisps
Tuna	Canned powder milk	Zalacca (fruit)	Instant noodle
Indian Mackerel	Spinach	Ambon Banana	Other bread
Dried small fish	Swamp cabbage	Papaya	Cookies
Milk fish	String beans	Coconut/Cooking oil	Boil or steam cake
Anchovies	Tomato	Coconut	Cigarettes
Pork	Cassava leaf	Cane sugar	Prime rice

Selected Commodities for Calculating Non-Food Poverty Line

Housing	Photo	Kitchen utensils
Electricity	Ready men clothes	Bag, luggage
Kerosene	Transportation	Taxes
Firewood	Ready women clothes	Religious festivals & others
Water	Ready child clothes	Watch/Clock
Mosquito revelent, matches, etc	Footwear for men	
Bathing soaps	Footwear for women	
Cosmetic articles	Footwear for children	
Care of skin/face	Headgear	
Health	Towel, belt, etc	
School fee	Landry soap	
Post, telegram, etc	Household utensils	

Poverty Indicators

- Poverty headcount index (or poverty rate)
 - the headcount index estimates the percentage of the population living in households with per capita consumption expenditure (*or per equivalent adult*) below the poverty line.
 - it measures the incidence of poverty
- Poverty gap
 - The Poverty Gap Index expresses the total amount of money which would be needed to raise the poor from their present incomes (c) to the poverty line (z), as a proportion of the poverty line, and averaged over the total population, which measures the **depth of poverty**
 - The **aggregate poverty gap** shows the cost of eliminating poverty by making perfectly targeted transfers to the poor. This total cost can be related to GDP.
 - The **squared poverty gap** measures the severity of poverty as the poorest households are given a greater weight in the equation.

Poverty Indicators

➔ Poverty rates, poverty gap and squared poverty gap formulae can be represented as follows:

$$FGT = 1/n * \sum_{c < z}^q \left[\frac{z - c}{z} \right]^\alpha$$

where

- **n** represents the total population,
- **q** the poor
- **z** the poverty line and
- **c** consumption expenditure

Poverty rate = Q/N

With Q = total number of poor

Poverty gap index =

$$1/n * \sum_{c < z}^q [(z-c)/z]$$

Squared Poverty gap =

$$1/n * \sum_{c < z}^q [(z-c)/z]^2$$

- If the parameter $\alpha = 0$, then the equation is simply the headcount index.
- With $\alpha = 1$, the equation measures the poverty gap, which is the average income / expenditure shortfall of the poor with respect to the poverty line.
- When $\alpha = 2$, the equation represents a measure for the **severity of poverty**



Thank You

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