DEVELOPMENT RESEARCH METHODS

Week 7, Lesson 2: Poverty Measurements and Analysis

Development Research Methods
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What we will cover in today's lecture

1. Different approaches to Poverty
2. Different Poverty measures
3. Multi-dimensional Deprivation and Multi-dimensional Poverty Index

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Different approaches to poverty

- Many ways of defining and measuring poverty as it is a complex phenomenon
- Based on the type of base information used- Objective and Subjective poverty
- Based on the scale or reference used- Absolute and Relative Poverty.
- Static studies and Dynamic studies. Dynamic studies include the length of duration of poverty
- Analyses based mainly on the impossibility of access to certain basic consumption elements: Multi-Dimensional Deprivation

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Objective Poverty

- Information collected via variables whose measurement comes from a researcher's direct observation is used.

Absolute Poverty

- Defined as a situation in which the individual's basic needs are not covered
- Strongly linked to destitution and can be applied to all countries or societies.

Relative Poverty

- A person is considered poor when they are in a clearly disadvantaged situation, either financially or socially, with regards other people in their environment
- Closely linked to the notion of inequality

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Subjective Poverty

- Based on the perception that the individuals or households themselves have of their situation.
- Information on the opinion of the individuals or households and their situation is used.

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Measurement of Poverty

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Absolute Poverty Lines

- These lines reflect the value of the resources needed to maintain a minimum level of welfare.
- Measure the cost involved in purchasing a basket of essential products (goods and services), which allow a person to reach minimum levels of satisfaction in terms of basic needs.
- Results that are sensitive to economic development can be obtained from these lines even when changes are homogenously shared out among the population.
- One of these absolute lines that is widely used fixes a dollar per capita a day as the value of minimum resources needed for a person to not be considered in poverty. This line can be used in a world context with the implication therefore that any person who lives on less than a dollar a day is poor.
- Absolute lines are of limited interest in developed countries. In underdeveloped or developing countries they are better accepted and are used to a greater extent.

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Relative Poverty Lines

- Relative poverty lines classify people in the society under study into two groups; those that are most disadvantaged, who are called poor, and the rest.
- If there is a homogenous increase of income in a society, the relative poverty lines provide the same poverty rates before and after this rise.
- The poverty threshold will be greater, but the proportion of poor people will remain the same.
- In order for the percentages of poor people calculated with this type of line to diminish, it is necessary for there to be changes in income distribution.

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Subjective Poverty Lines

- Subjective poverty lines are based on the opinion held by individuals on themselves in relation to society as a whole.
- It is assumed that "each individual is the best judge of their own situation" (Van Praag et al, 1980) and we avoid to a certain extent the opinions of value implicit in the relative poverty measures, choice of threshold, use of equivalence scales, etc.
- The best-known subjective poverty lines are,
  - The Kapteyn Line
  - Leyden Lines
  - The Deleeck Line

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Incidence, Distribution and Intensity of Poverty

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Incidence of Poverty

- The incidence poverty measures provide information on the extent of the problem, in other words they provide data on the quantity of people or households that are affected.
- The indicator that measures the incidence of poverty will be the percentage of poor people (under the relative poverty threshold) within the total population. It is calculated in the following way:

$$Poverty_rate(PR) = p/n$$

- Where **p** is the number of poor people and **n** is the total number of people, poor or not, in the group within which the poverty rate is being calculated.
- Very often, the poverty rate is called headcount ratio.
- Poverty rates can be calculated for different population groups according to demographic or socio-economic variables: sex and age, level of education, professional situation, etc.

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Poverty Distribution

- The poverty distribution measures indicate how poor people are distributed and the characteristics that they share. These are measures that provide the analyst with descriptive information on a group of poor people.
- It is particularly interesting to carry out a study of poor people, their characteristics and their living conditions.
- To do this, we study the distribution of poor people by age and sex, by level of education, by their dwelling tenancy regime, etc.
- The distribution of poor people by ages, for example, would provide information on the percentage of people over 65 years among those that are poor, calculated as: the number of poor people over 65 years among the number of poor people.
- The distribution study according to different variables allows us to understand the characteristics of poor people and therefore facilitates the design of more efficient measures in the fight against poverty.

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Intensity of Poverty

- This type of measure allows us to understand up to what point poverty affects the population. Therefore, it focuses on the degree of poverty suffered by people, more than the number of individuals considered to be poor.
- Poverty gaps are measures that usually measure the intensity of poverty. It is a measure of the distance of individual poor people from the poverty threshold.
- There are another two measures related to the intensity of poverty that use this measure as a base element. The first measure is usually called the income gap and is calculated by dividing the poverty gap among the minimum income poor people would have to have in order to stop being poor.
- The second measure is called the relative poverty gap. It is calculated as the coefficient between the poverty gap and the number of people in the poverty threshold.

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Other Measures of Poverty

- The Sen Index- This is a weighted total of individuals' poverty gaps. The weightings depend on the relative position of each poor person.
- TIP poverty curves- These are curves that reflect the three dimensions of poverty, its incidence, its intensity and the inequality between poor people.
- The Thon Index
- Family of Poverty Indices by Foster, Greer and Thorbecke
- The Hagenaars Index

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Persistent or Long-term Poverty

- Without leaving behind the context of relative poverty and in order to incorporate the time dimension into the analysis, measures of persistent of long-term poverty are calculated.
- Persistent or long-term poverty measures deal with information over a number of years in order to calculate the number of poor people. Information is obtained from people over consecutive years. People are classified as poor or not in each of these years following relative poverty criteria.
- Persistent poverty indicators aim to reflect structural poverty situations and they therefore do not consider people as poor who have circumstantially or momentarily fallen into poverty.

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Use and Analysis of Poverty Measures

- Each of these different ways of perceiving and measuring poverty offers a different perspective on the same phenomenon.
- For example, even though the isolated use of relative poverty measures provides data on the percentage of people who are in worse monetary conditions than other citizens, it doesn't explain whether the most basic needs of these people considered to be poor are met or whether they feel excluded.
- Via the joint use of incidence and intensity poverty measures, it is possible to have a large variety of situations, from a society with a high percentage of poor people where all those who are poor are located very close to the threshold, to another society where there is a small percentage of poor people, but who are located far from the poverty threshold.
- Another of the key factors for analyzing poverty is to have available measures that take into consideration the inequality between poor people themselves.
- All of these measures are essential for obtaining a comprehensive view of the phenomenon and their complementary use is fundamental in the carrying out of in-depth analyses on poverty

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Multi-Dimensional deprivation and Multi-dimensional poverty index

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Multi-Dimensional deprivation

- Closely linked to social exclusion and is related to deprivation or the lack of access to certain goods and services considered necessary for society, whether basic or not.
- Poverty is measured with non-monetary variables and deprivation indicators, using breakdowns of these indicators to construct poverty measures.
- This type of multi-dimensional deprivation has also been called severe poverty.

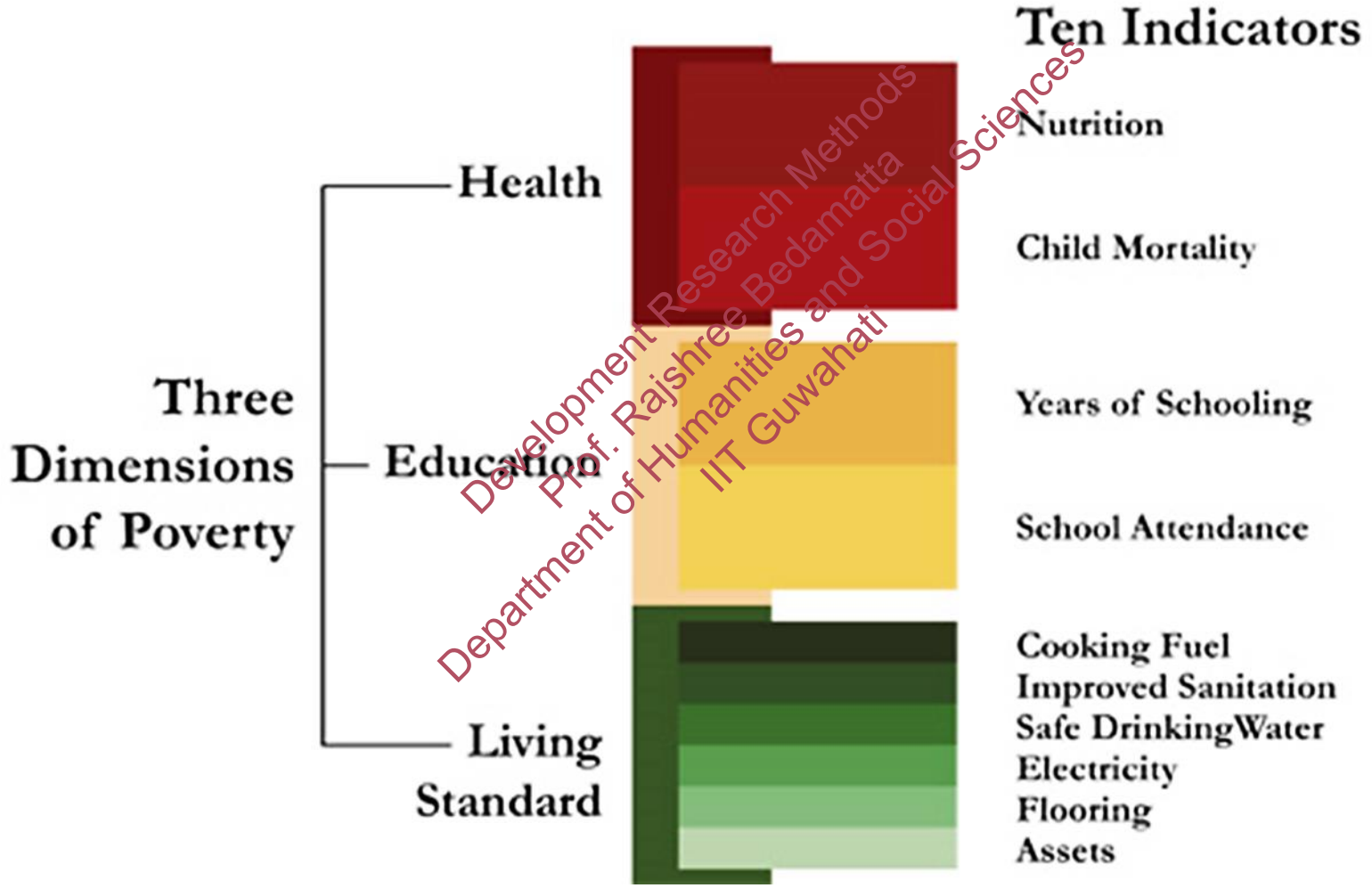
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Need for a Multi-Dimensional Deprivation Measure

- Monetary poverty only shows a part of the phenomenon and assumes that households with the same income have similar standards of living.
- On the other hand, individuals have other kinds of resources that are not reflected in monetary poverty measures and which could be used to avoid poverty and to achieve an acceptable standard of living.
- Studies that analyse the link between material deprivation and monetary poverty show two groups of poor people obtained through monetary poverty measures and multi-dimensional deprivation measures were different.
- Therefore, the need to obtain and use other analysis measures of deprivation and social exclusion that are different from monetary measures in order to complete the analysis and to give the most complete general view of the phenomenon possible.

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Multi-Dimensional Poverty Index



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For a comprehensive literature on the topics covered in this lecture it is also suggested that students go through the reference list of the above cited papers.

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