

# **Poverty Estimation in India**

According to recent reports, more than a quarter of the population living in rural areas of India is below the poverty line. Out of the total population living in the rural parts of India, **25.7%** is living below the poverty line whereas in the urban areas, the situation is a bit better with **13.7%** of the population living below the poverty line.

# **Poverty Estimation**

A common method used to estimate <u>poverty</u> in India is based on the **income or consumption** levels and if the income or consumption falls below a given minimum level, then the household is said to be **Below the Poverty Line (BPL).** 

- Poverty Line Calculation: Poverty estimation in India is now carried out by <u>NITI Aayog's</u> task force through the calculation of poverty line based on the data captured by the <u>National Sample Survey Office</u> under the <u>Ministry of Statistics and Programme Implementation (MOSPI)</u>.
  - **NITI Aayog** as a policy think tank has replaced Planning Commission, which was earlier responsible for calculating the poverty line in India.
- Consumption Versus Income Level: Poverty line estimation in India is based on the consumption expenditure and not on the income levels because of the following reasons:
  - Variation in Income: Income of self-employed people, daily wage laborers etc. is highly variable both temporally and spatially, while consumption pattern are comparatively much stable.
  - Additional Income: Even in the case of regular wage earners, there are additional side incomes in many cases, which is difficult to take into account.
  - Data Collection: In case of consumption based poverty line, sample based surveys use a
    reference period (say 30 days) in which households are asked about their consumption of
    last 30 days and is taken as the representative of general consumption.
    - Whereas tracing the general pattern of income is not possible.
    - **Reference Period:** It is the duration/period during which the survey is conducted by NSSO workers in which they ask certain questions to households.

### **Key Terms**

- Poverty: According to the <u>World Bank</u>, Poverty is pronounced deprivation in well-being and comprises many dimensions. It includes low incomes and the inability to acquire the basic goods and services necessary for survival with dignity.
- Poverty Line: The conventional approach to measuring poverty is to specify a minimum expenditure (or income) required to purchase a basket of goods and services necessary to satisfy basic human needs and this minimum expenditure is called the poverty line.
- **Poverty Line Basket:** The basket of goods and services necessary to satisfy basic human needs is the Poverty Line Basket (PLB).
- Poverty Ratio: The proportion of the population below the poverty line is called the poverty ratio or headcount ratio (HCR).

# **Need for Poverty Estimation**

- Impact of Welfare Schemes: Poverty estimates are not just important for academic purposes but are also crucial to track the impact and success of various government policies, especially social welfare schemes that are intended to eliminate poverty.
  - **BPL Census** is conducted by the **Ministry of Rural Development** (along with the partnership of state), in order to **identify the poor households.**
- **Poverty Elimination Plan:** The Poverty estimates in the form of poverty line are used to formulate poor centric poverty elimination plans.
- **Constitutional Requirement:** Poverty estimation paves the way for poverty elimination, that in turn prepares the ground for a **just and equitable society.**

### **Measurement of Poverty Line**

- Absolute Measurement of Poverty
  - Absolute Poverty: According to United Nations World Summit for Economic Development, absolute poverty is a condition characterized by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information.
    - It depends not only on income but also on access to social services.
  - Poverty Threshold: The poverty threshold in absolute measurement of poverty is set
    using the monetary value of the basket of essential products (required for basic
    needs) and every household whose income is less than this value will be classified as poor.
  - Limited Scope: Absolute measurements of poverty, used by the World Bank and developing countries like India, rely on a poverty line which remains constant across geographies and over time.
  - Criticism: Absolute measurement of poverty overlooks deprivation within countries or the higher cost of living in developed countries.
- Relative Measurement of Poverty
  - Relative Poverty: It is present when a household income is lower than the median income in a particular country and is used mainly by the developed countries.
    - Those who fall into the category of relative poverty are not necessarily deprived of all basic needs, but may not experience the same standard of living as the majority of society or in other words, they are **relatively deprived**.
  - Poverty Threshold: In this method certain percentage of economically bottom population is always considered below the poverty line.
  - Criticism: This approach, though, ignores the importance of the absolute standard of living and assumes that relative income is all that matters for welfare.

### **Data Collection Methods**

- Uniform Resource Period (URP): Up until 1993-94, the poverty line was based on URP data, which involved asking people about their consumption expenditure across a 30-day recall period that is the information was based on the recall of consumption expenditure in the previous 30 days.
- Mixed Reference Period (MRP): From 1999-2000 onwards, the NSSO switched to an MRP method which measures consumption of five low-frequency items (clothing, footwear, durables, education and institutional health expenditure) over the previous year, and all other items over the previous 30 days.
  - That is to say, for the five items, survey respondents are asked about consumption in the previous one year. For the remaining items, they are asked about consumption in the

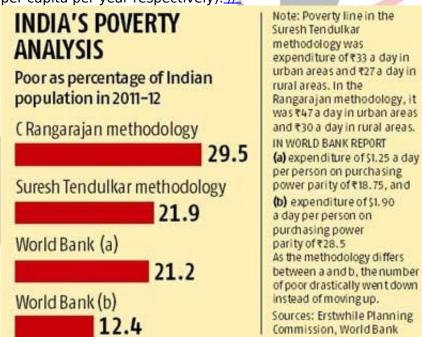
# **Pre-Independence Poverty Estimation**

- Dadabhai Naoroji through his book, "Poverty and Unbritish Rule in India" made the earliest estimation of poverty line (₹16 to ₹35 per capita per year).
  - The poverty line proposed by him was based on the cost of a subsistence or minimum basic diet (rice or flour, dal, mutton, vegetables, ghee, vegetable oil, and salt).
- National Planning Committee's (1938) poverty line (ranging from ₹15 to ₹20 per capita per month) was also based on a minimum standard of living perspective in which nutritional requirements were implicit.
  - In 1938, the National Planning Committee was set up by Subhash Chandra Bose under the chairmanship of Jawaharlal Nehru for the purpose of drawing up an economic plan with the fundamental aim to ensure an adequate standard of living for the masses.
- The Bombay Plan (1944) proponents had suggested a poverty line of ₹75 per capita per year.
  - **The Bombay Plan** was a set of a proposal of a small group of influential business leaders in Bombay for the development of the post-independence economy of India.

# **Post-Independence Poverty Estimation**

Planning Commission Expert Group (1962), working group constituted by the Planning Commission formulated the separate poverty lines for rural and urban areas (₹20 and ₹25 per capita per year respectively). //
INDIA'S POVERTY
ANALYSIS

Note: Poverty line in the Suresh Tendulkar methodology was



- VM Dandekar and N Rath (1971), made the first systematic assessment of poverty in India, based on National Sample Survey (NSS) data.
  - Unlike previous scholars who had considered subsistence living or basic minimum needs
    criteria as the measure of poverty line, VM Dandekar and N Rath were of the view that
    poverty line must be derived from the expenditure that was adequate to provide 2250
    calories per day in both rural and urban areas.
  - **Expenditure based Poverty line estimation,** generated a debate on minimum calorie consumption norms.
- Alagh Committee (1979): Task force constituted by the Planning Commission under the chairmanship of YK Alagh, constructed a poverty line for rural and urban areas on the basis of

### nutritional requirements and related consumption expenditure.

- Poverty estimates for subsequent years were to be calculated by **adjusting the price** level for inflation.
- Lakdawala Committee (1993): Task Force chaired by DT Lakdawala, based on the assumption that the basket of goods and services used to calculate Consumer Price Index-Industrial Workers (CPI-IW) and Consumer Price Index- Agricultural Labourers (CPI-AL) reflect the consumption patterns of the poor, made the following suggestions:
  - Consumption expenditure should be calculated based on calorie consumption as earlier.
  - **State specific poverty lines** should be constructed and these should be updated using the CPI-IW in urban areas and CPI-AL in rural areas.
  - **Discontinuation of scaling** of poverty estimates based on National Accounts Statistics.

# **Tendulkar Committee (2009)**

- Expert group constituted by the Planning Commission and, chaired by Suresh Tendulkar, was constituted to review methodology for poverty estimation and to address the following shortcomings of the previous methods:
  - Obsolete Consumption Pattern: Consumption patterns were linked to the 1973-74
    poverty line baskets (PLBs) of goods and services, whereas there were significant changes
    in the consumption patterns of the poor since that time, which were not reflected in the
    poverty estimates.
  - Inflation Adjustment: There were issues with the adjustment of prices for inflation, both spatially (across regions) and temporally (across time).
  - Health and Education Expenditure: Earlier poverty lines assumed that health and education would be provided by the state and formulated poverty lines accordingly.

#### Recommendations

- Shift from Calorie Consumption based Poverty Estimation: It based its calculations
  on the consumption of the items like cereal, pulses, milk, edible oil, non-vegetarian items,
  vegetables, fresh fruits, dry fruits, sugar, salt & spices, other food, intoxicants, fuel,
  clothing, footwear, education, medical (non-institutional and institutional), entertainment,
  personal & toilet goods.
- Uniform Poverty line Basket: Unlike Alagh committee (which relied on separate PLB for rural and urban areas), Tendulkar Committee computed new poverty lines for rural and urban areas of each state based on the uniform poverty line basket and found that all India poverty line (2004-05) was:
  - ₹446.68 per capita per month in rural areas
  - ₹578.80 per capita per month in urban areas
- Private Expenditure: Incorporation of private expenditure on health and education while estimating poverty.
- Price Adjustment Procedure: The Committee also recommended a new method of updating poverty lines, adjusting for changes in prices and patterns of consumption (to correct spatial and temporal issues with price adjustment), using the consumption basket of people close to the poverty line.
- Mixed Reference Period: The Committee recommended using Mixed Reference Period based estimates, as opposed to Uniform Reference Period based estimates that were used in earlier methods for estimating poverty.
- Tendulkar committee computed poverty lines for 2004-05 at a level that was equivalent, in Purchasing Power Parity (PPP) terms to Rs 33 per day.
  - **Purchasing Power Parity:** The PPP model refers to a method used to work out the money that would be needed to purchase the same goods and services in two countries.

### Rangarajan Committee

The committee was set up in the backdrop of national outrage over the Planning Commission's suggested poverty line of ₹22 a day for rural areas.

### Objectives

- To review **international poverty estimation methods** and indicate whether based on these, a particular method for empirical poverty estimation can be developed in India.
- To recommend how these estimates of poverty can be linked to eligibility and entitlements under the various schemes of the Government of India.

## Recommendations

- **Methodology Used:** The Rangarajan committee estimation is based on an independent large survey of households by **Center for Monitoring Indian Economy** (CMIE).
  - It has also used different methodology wherein a household is considered poor if it is unable to save.
- Normative and Behavioural level: Poverty line should be based on:
  - Normative level of adequate nutrition: Ideal and desirable level of nutrition.
  - Behavioral determination of **non-food expenses:** What people use or consume as per **general behavior.**
- Nutritional Requirement: For normative levels of adequate nutrition average requirements of calories, proteins and fats based on Indian Council of Medical Research (ICMR) norms, differentiated by age, gender and activity for all-India rural and urban regions is considered:
  - Calories: 2090 kcal in urban areas and 2155 Kcal in rural areas.
  - Protein: For rural areas 48 gm and for urban areas 50 gm.
  - Fat: For urban areas 28 gm and for rural areas 26 gm.
- Poverty Threshold: Persons spending below ₹47 a day in cities and ₹32 in villages be considered poor.
  - Based on this methodology, Rangarajan committee estimated that the number of poor were **19% higher in rural areas** and 41% more in urban areas than what was estimated using Tendulkar committee formula.
- Modified Mixed reference period: Instead of Mixed reference Period (MRP) it recommended Modified Mixed Reference Period (MMRP) in which reference periods for different items were taken as:
  - 365-days for clothing, footwear, education, institutional medical care, and durable goods.
  - **7-days** for edible oil, egg, fish and meat, vegetables, fruits, spices, beverages, refreshments, processed food, pan, tobacco and intoxicants
  - **30-days** for the remaining food items, fuel and light, miscellaneous goods and services including non-institutional medical; rents and taxes.
- **Criticism:** Rangarajan committee missed the opportunity to go beyond the expenditure-based poverty rates and examine the possibility of a wider multi-dimensional view of deprivation.

# Poverty Estimates by Different Committees

Year	Lakdawala Committee Estimates			Tendulkar Committee Estimates			Rangarajan Committee Estimates		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1993-94	37.3	32.4	36.0	50.1	31.8	45.3	-	-	-
2004-05	28.3	25.7	27.5	41.8	25.7	37.2	1-1	-	-
2009-10	-	-	-	33.8	20.9	29.8	39.6	35.1	38.2
2011-12	-	-	-	25.7	13.7	21.9	30.9	26.4	29.5

## **International Poverty Line**

- The World Bank defines a person as extremely poor if she is living on less than 1.90 international dollars a day, which are adjusted for inflation as well as price differences between
- Asian Development Bank too has its own poverty line which is currently at \$ 1.51 per person The Vision per day.

# **Challenges**

- Components of PLB: Determining components of Poverty Line Basket (PLB) is one of the challenges of poverty line estimation because of the price differentials (of constituents of basket) which vary from state to state and period to period.
- Demographic and Economic Dynamics: Further, consumption patterns, nutritional needs and prices of components keep on changing as per dynamics of macro economy and
- Lack of consensus among the states over the acceptance of Tendulkar and Rangrajan committee report.
  - Some states such as Odisha and West Bengal supported the Tendulkar Poverty Line while others such as Delhi, Iharkhand, Mizoram etc. supported Rangarajan report.
  - The current official measures of poverty are based on the Tendulkar poverty line, fixed at daily expenditure of ₹27.2 in rural areas and ₹33.3 in urban areas is criticised by many for being too low.

# **Way Forward**

- Redefining Poverty lines: Poverty lines have to be recalibrated depending on changes in income, consumption patterns and prices, as India is now a middle-income country, with an estimated per capita income of around \$9,000 in purchasing power parity.
  - According to economists poverty line of \$3.20 translates into ₹ 75 a day, or a 68% higher than the Tendulkar poverty line.
- Viable Poverty line: It makes sense to set the poverty line at a level that allows households to get two square meals a day and other basic necessities of life.
- Hybrid of Absolute and Relative Measurement of Poverty: The hybrid approach which would measure poverty from the perspective of a common global standard of living and relative

### poverty within countries.

- The poverty line in case of hybrid model would be equivalent to the income required to achieve a certain welfare status, which includes basic nutrition and social inclusion.
- Political Economic Equilibrium: Indian political, policy and administrative systems have to adjust to the new realities of the transition to a middle- income country, in which poverty does not mean living at the edge of hunger but, rather, lack of income to take advantage of the opportunities thrown up by a growing economy.
  - The focus of government spending should be on the **provision of public goods rather** than subsidies.

For Mind Map

