

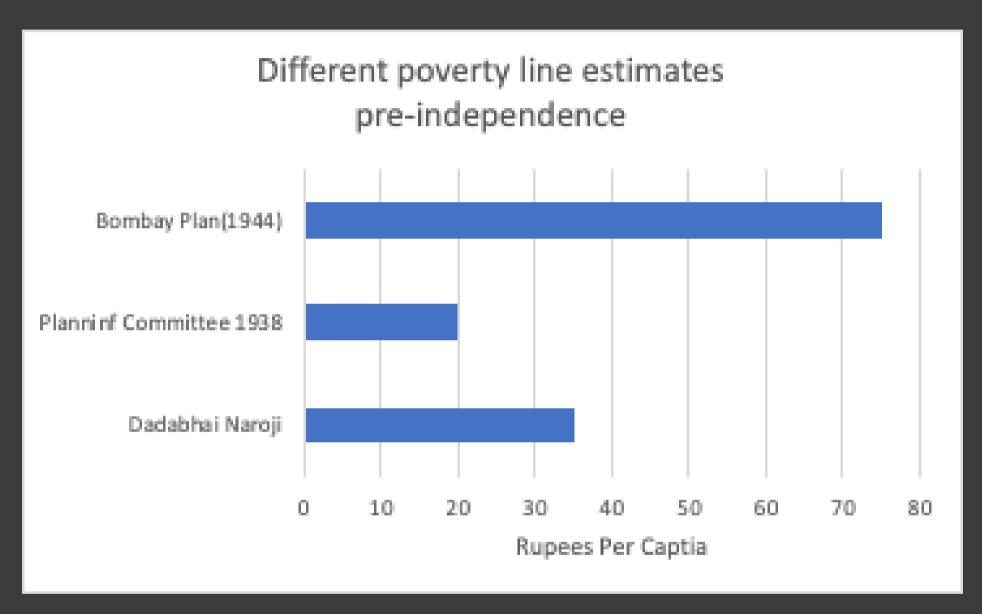
THE POVERTY DEBATE PART - 1

Aditi Desai, Amisha Mittal, Amisha Singh, Jishaant, Nishit Patil, Yuvaraj Mandal

What Has Happened With Poverty Since 2012?

Pre-Independence Poverty Estimation

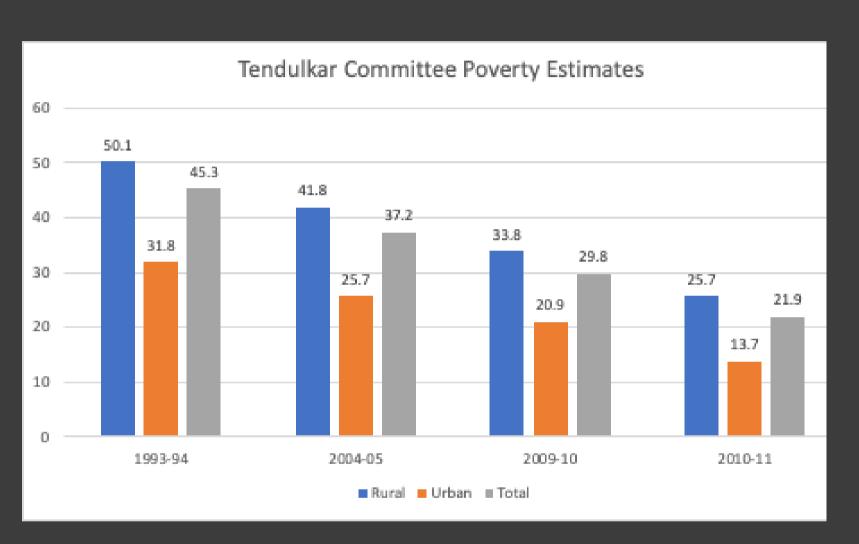
- Dadabhai Naoroji's book, "Poverty and Unbritish Rule in India" made the earliest estimation of the poverty line (₹16 to ₹35 per capita per year). It was based on the cost of a minimum basic diet (rice or flour, dal, mutton, vegetables, ghee, vegetable oil, and salt).
- National Planning Committee's (1938) poverty line (ranging from ₹15 to ₹20 per capita per month) was also based on a minimum standard of living (nutritional requirements were implicit).
- The Bombay Plan (1944) proponents had suggested a poverty line of ₹75 per capita per year. (The Bombay Plan was a set of proposals given by a small group of influential business leaders in Bombay for the development of the post-independence economy of India.)



Post-Independence Poverty Estimation

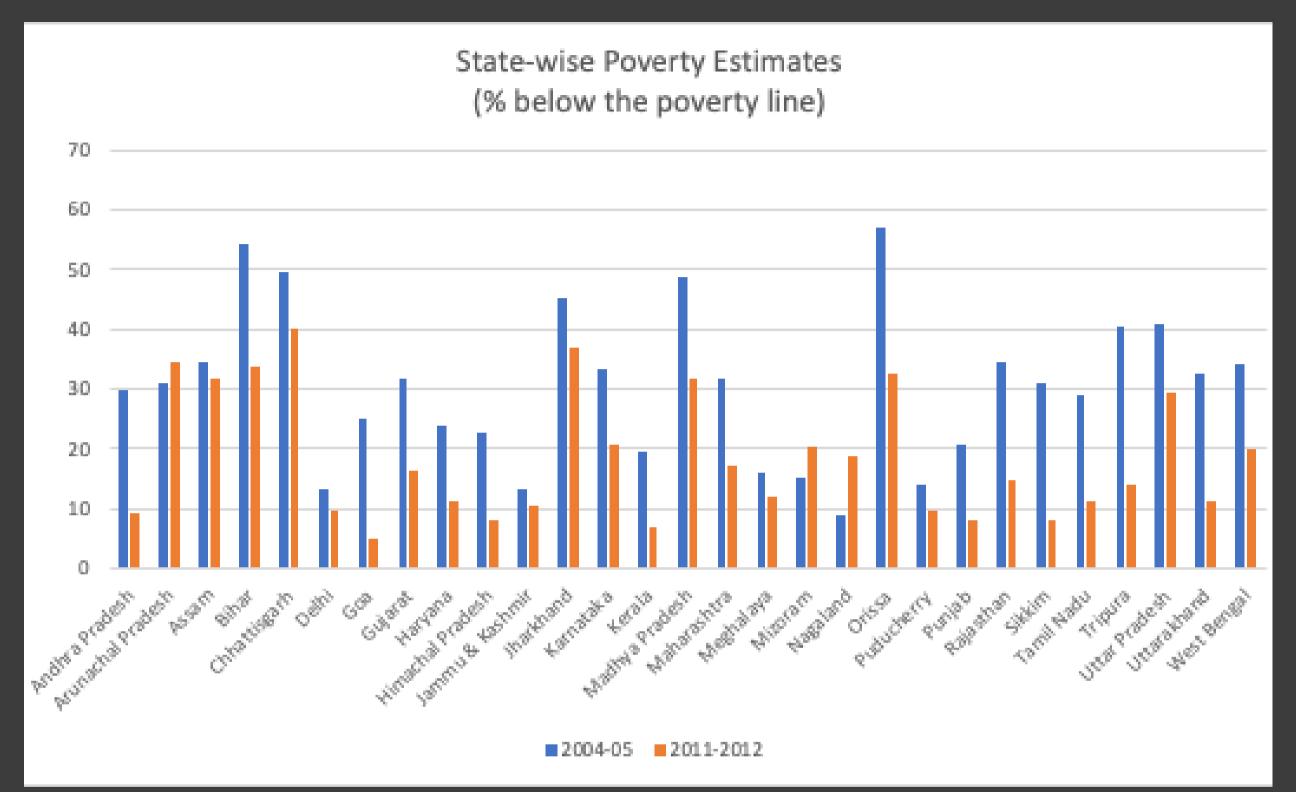
- Planning Commission Expert Group (1962) formulated separate poverty lines for rural and urban areas (₹20 and ₹25 per capita per year respectively).
- VM Dandekar and N Rath (1971), made the first systematic assessment of poverty in India, based on National Sample Survey (NSS) data. It stated that the poverty line must be derived from the expenditure that was adequate to provide 2250 calories per day in both rural and urban areas.
- Alagh Committee (1979): Official poverty counts began for the first time in India based on this committee. The poverty line was estimated as the per capita consumption expenditure needed to meet the average per capita daily calorie requirement of 2400 kcal and 2100 kcal in rural areas and urban areas respectively. The estimates for subsequent years were adjusted for inflation.
- Lakdawala Committee (1993): It was 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. It made the following suggestions:
 - Poverty lines for rural and urban areas (as per the Alagh committee) should take into account inter-state price differentials.
 - The scaling of poverty estimates based on National Accounts Statistics should be discontinued.

Poverty Estimation until 2012



(In 2011-12, as per the Tendulkar methodology, the poverty line stood at 816 rupees in rural areas and at 1000 rupees in urban areas.)

- The Planning Commission used to estimate levels of poverty in the country on the basis of Consumer Expenditure Surveys conducted by the National Sample Survey Office (NSSO) of the Ministry of Statistics and Programme Implementation.
- Tendulkar Committee estimates that poverty declined at an average rate of 0.74 percentage points per year between 1993-94 and 2004-05, and at 2.18 percentage points per year between 2004-05 and 2011-12.
- In 2011-12, India had 270 million persons below the Tendulkar Poverty Line as compared to 407 million in 2004-05, which is a reduction of 137 million people over the seven-year period.



- The percentage of persons below the Poverty Line in 2011-12 has been estimated as 25.7% in rural areas, 13.7% in urban areas and 21.9% for the country as a whole.
- State-wise poverty data for 2011-12 shows that while there is a decrease in poverty for almost all states, there are wide inter-state disparities in the percentage of the poor and the rate at which poverty levels have declined.

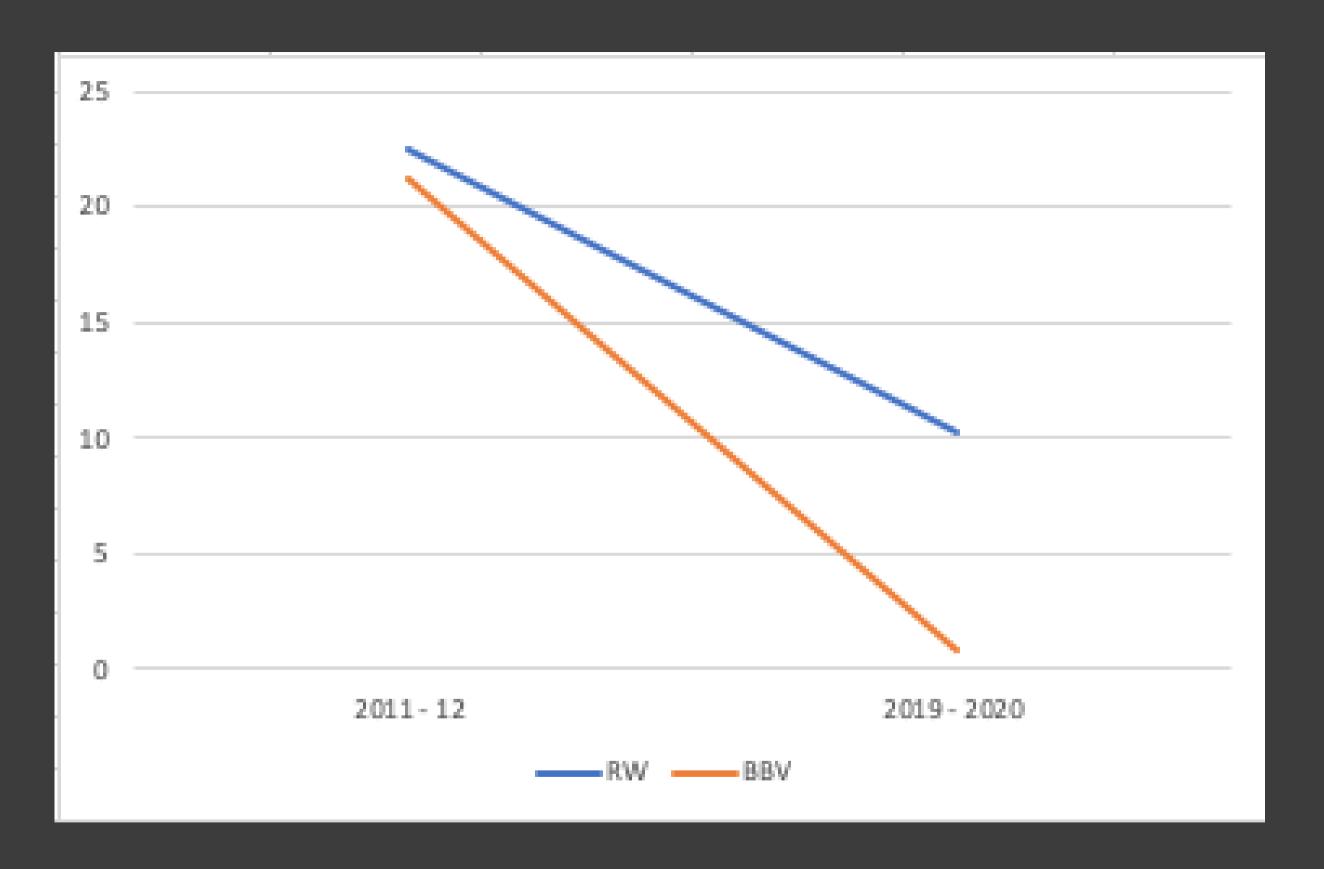
Studies on Poverty since 2012

Study	Data & Method	Duration	Estimates
1. Bhalla, Bhasin and Virmani,2022	Household Consumption Expenditure Survey 2011- 12	2011 – 12 to 2020	0.8 percent in 2019- 20
2. Roy and Weide, 2022	Consumer Pyramids Household Survey (CPHS) and other surveys	2014 - 2019	12.3 percentage points lower in 2019 than in 2011
3. Newhouse & Vyas, 2020	72 Round NSSO Survey : survey to survey imputation exercise	2014 - 15	12.7 percent in 2014 – 15
4. Edochie et al,2022	Health SCS 2017/18: survey to survey methodology	2017 - 18	10.4 percent in 2017
5. Shared Prosperity report, World Bank	Health SCS 2017/18: survey to survey methodology	2017 - 18	9.9 percent in 2017
6. World Development Indicators	Pass through estimate to per capita HFCE growth	2017 - 18	10.4 percent in 2017
7. Azim Premji University, 2021	Monthly household income data from the CMIE-CPHS	2019 – 20	5 percent increase in rural poverty and 20 percent increase in urban poverty post pandemic
8. Arvind Panagariya & Vishal More, 2023	Periodic Labour Force Survey	2019 - 21	37.5 percent in July 2019 to 24.3 percent in June 2021

Understanding poverty trends since 2012

- In 2012, a task force led by economist Arvind Panagariya, former head of NITI Aayog, recommended shifting the National Survey Scheme Employment Unemployment Survey (EUS) to the Periodic Labour Force Survey (PLFS).
- Maitreesh Ghatak in *Ideas for India* introduced an e-Symposium on "Estimation of Poverty in India". It consists of six important papers contributing to the recent poverty debate in India, including BBV and RW papers as mentioned below.
- The debate on poverty in India gained attention due to the circulation of two papers published in the working paper series of the International Monetary Fund (IMF) and the World Bank.
- The first paper, authored by Surjit Bhalla, Karan Bhasin, and Arvind Virmani in April 2022, is referred to as BBV.
- The second paper, authored by Sutirtha Sinha Roy and Roy van der Weide in April 2022, is referred to as RW.

Note-Both studies use alternative data sources, methods, and assumptions to derive estimates of the poverty head count ratio for India in recent years, having contrasting conclusions.



Poverty (%) in India as per RW and BBV

BVV: Pandemic, Poverty & Inequality

Methodology followed -

Private Final Consumption Expenditure (PFCE) growth and forecast/backcast CES-2011-12 data to obtain the 2004-05 to 2020-21 series, which is estimated by:

- Obtaining NSO GDP data. Also, gathering state-level GDP data/estimates.
- Calculating the PFCE growth by comparing consumption expenditure between consecutive years. Also, using state-level growth estimates to distribute PFCE growth across states.
- Applying PFCE growth rates to forecast/backcast CES-2011-12 data.
- Calculating per capita nominal consumption by dividing estimated PFCE by population to obtain poverty lines for urban and rural.
- Adding cash equivalent of food subsidies (inclusive of *leakages*) to eligible households' expenditure. This is determined by multiplying subsidized food quantity by market prices and adjusting for leakage if applicable.

Important Concepts-

The URP (Uniform Recall Period) technique entails asking respondents about their consumption spending across a 30-day recall period, i.e. the information is based on the recall of consumption expenditure during the previous 30 days. Poverty is normally evaluated by comparing individual or household income to a predetermined poverty line or threshold.

According to the MMRP (Modified Mixed Reference term),

- 365-day recall time is utilised for apparel, footwear, education, institutional medical care, and durable products.
- 7-day recall time for edible oil, egg, fish and meat, vegetable, fruits, spices, refreshment and intoxicants, and
- 30-day recall time for remaining food items, fuel and light, miscellaneous goods and services, including non-institutional medical, rents, and taxes.

SDP (State Domestic Product) can have an indirect impact on poverty levels because it reflects overall economic activity and income generation within a state or region.

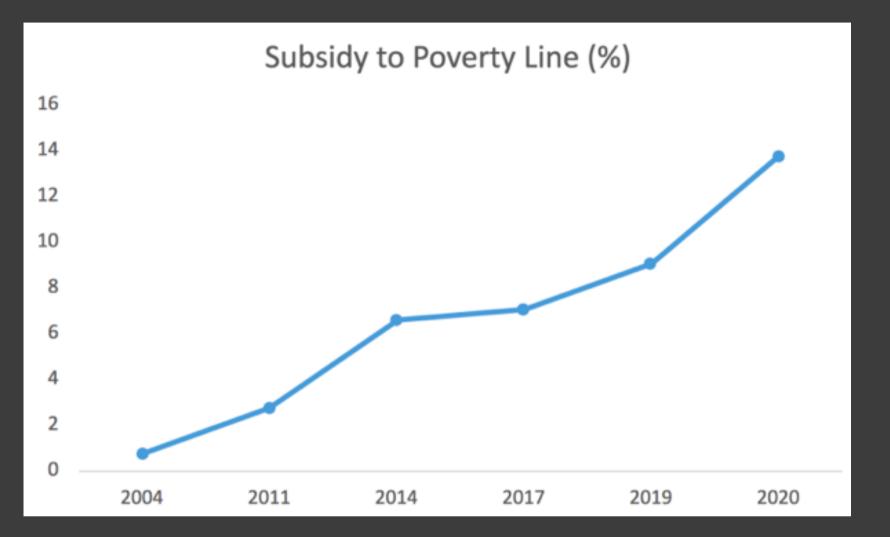
	2004	2011	2014	2017	2019	2020
1.9\$ PPP						
Based on PFCE						
MMRP	32.7	12.2	7.4	2.9	1.4	2.5
URP	45.5	21.8	14.6	7.2	3.4	6.1
Based on SDP						
MMRP	37.1	12.2	9.4	4.2	2.2	4.1
URP	49.7	21.8	17.8	9.4	5.4	8.8

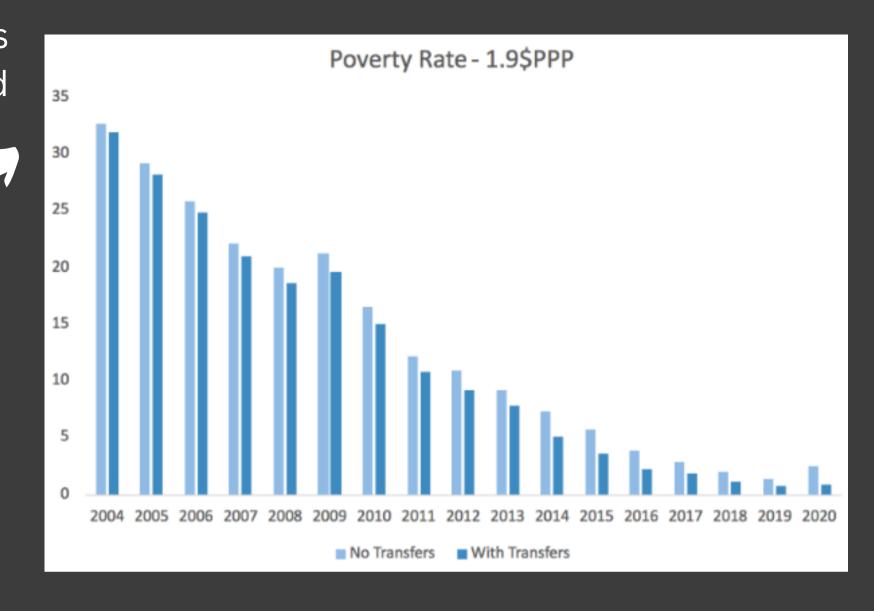
- The poverty line of \$1.9 PPP (Purchasing Power Parity) is used as an international poverty line to compare poverty levels across different countries.
- On the other hand, the poverty line of \$3.2 PPP is commonly used as a poverty threshold specifically for lower-middle-income countries.

- In the year before the pandemic (2019), extreme poverty in India varied between 1.4% (according to MMRP method with PFCE growth) and 5.4% (URP method with SDP growth), considering 1.9\$ PPP threshold.
- According to the MMRP method, poverty in 2019 had decreased *significantly* by 10.8 percentage points since 2011-12.

	2004	2011	2014	2017	2019	2020
3.2\$ PPP						
Based on PFCE						
MMRP	73.8	53.6	43.3	29	18.5	26.5
URP	80.8	64	55.4	41.7	30.4	38.9
Based on SDP						
MMRP	76.8	53.6	47.6	33.1	23.3	31.0
URP	82.5	64	58.9	45.3	34.6	43

Poverty in India has been gradually decreasing but it was relatively higher when food transfer wasn't considered and the URP method is used.





- The term "subsidy to poverty line" refers to government subsidies or financial assistance programs aimed at supporting individuals or households who fall below the poverty line.
- There was a rise in subsidy to poverty line due to population growth, urbanization, and an increase in the assistance provided by the government.
- As a result, since 2019 the proportion of the population living in extreme poverty, defined as below the international poverty line of PPP\$ 1.9, has remained at or below 1.1%.

Limitations of BBV

- Assessment of poverty is impacted by the variations between the PFCE and CES measurement methodologies. *Some* of them are listed below:
 - CES may not sufficiently cover wealthy households, and underrepresentation of their expenditures in survey data may result in inaccurate conclusions
 - The CES's exclusion of individuals living in institutions and those without permanent housing may lead to an incomplete picture of poverty. Individuals living in orphanages, prisons, hospitals, or experiencing homelessness are not explicitly accounted for in the survey data due to the CES's focus on household surveys.
 - PFCE includes imputed rentals of owner-occupied dwellings, whereas the CES includes only the rent on dwellings actually paid.

RW : Poverty in India Has Declined over the Last Decade But Not As Much As Previously Thought

Methodology followed -

To align the Consumer Pyramids Household Survey (CPHS) with the National Sample Survey (NSS) Consumer Expenditure Survey (CES) 2011-12, and impute NSS consumption expenditure into CPHS, there are two approaches:

Approach A: NSS consumption as a function of household characteristics

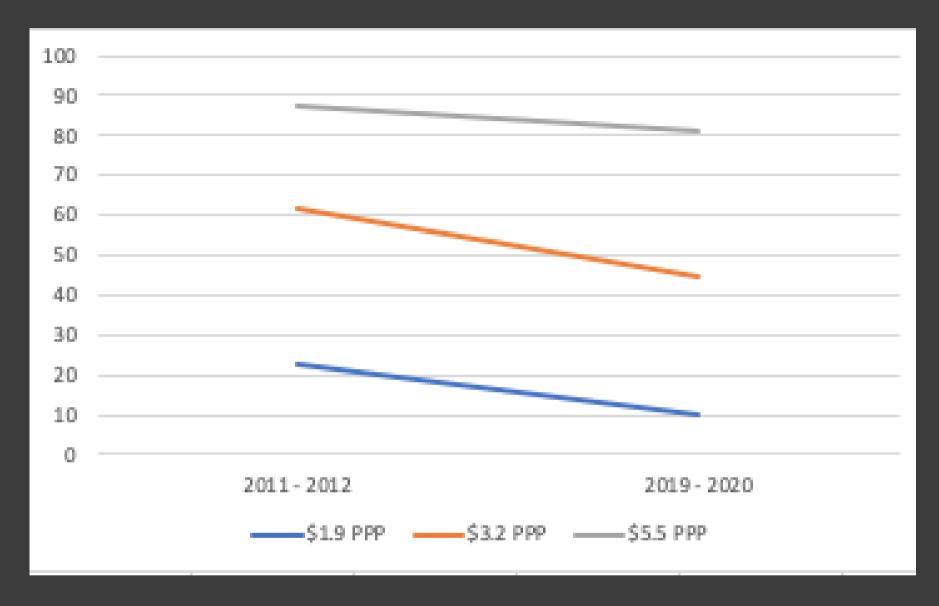
- Identifying common household characteristics in both surveys, such as income, education level, household size, etc.
- Estimating the relationship between NSS consumption expenditure and these common household characteristics
- Applying the estimated relationship to the corresponding household characteristics in CPHS to impute NSS consumption expenditure.

Approach B: NSS consumption as a function of CPHS consumption

- Identifying households that are present in both the NSS CES and CPHS datasets.
- Calculate the ratio of NSS consumption expenditure to CPHS consumption expenditure for these overlapping households.
- Calculate the average ratio for various categories of households based on characteristics like income, education level, etc.
- Applying the average ratio to the CPHS consumption expenditure for similar households to impute NSS consumption expenditure.

Key Findings:

- <u>Poverty at \$1.9 PPP</u>: declined to 10.2% in 2019 from 22.5% in 2011, with a greater reduction in rural areas.
- Poverty at \$3.2 PPP: declined to 44.9% in 2019 from 61.7% in 2011
- Poverty at \$5.5 PPP: declined to 80.9% in 2019 from 87.4% in 2011



Poverty % from 2011 - 12 to 2019 - 20 according to Roy and Weide

In the absence of a more suitable alternative, the World Bank has incorporated the findings as its official estimate of poverty in India.

Some Limitations of CPHS Survey data

- The CPHS samples are primarily taken from main streets, leading to a systematic bias that cannot be easily corrected.
- Mean consumption per person in the CPHS is much lower (33-35%) than the official national accounts data which suggests that the CPHS may not accurately represent the true consumption levels in the country.
- The CPHS under-represents both the poorest as well as the richest households

Comparative study between BBV and RW

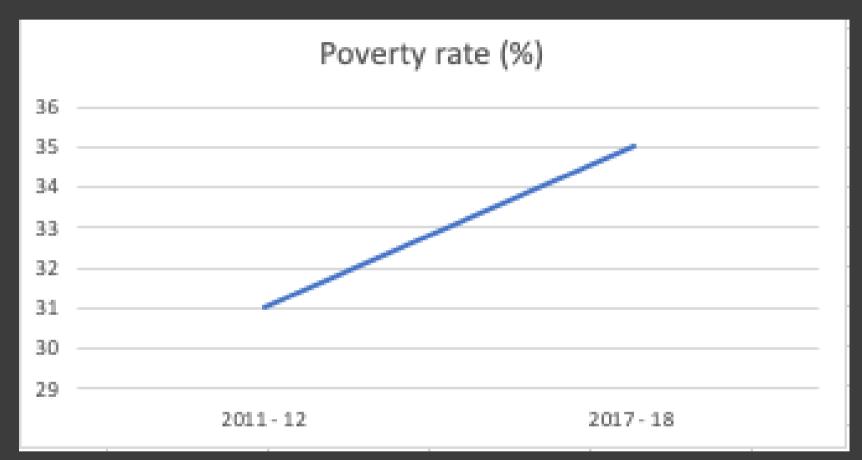
	IMF Paper by Bhalla et al, 2022	WB paper by Roy and Weide, 2022
Main data sources	1.NSO Household Consumption Expenditure Survey (CES) 2011-12 2. National GDP data 3. State GDP data 4. State-level Consumer Price Index (CPI)- rural and urban	Consumer Pyramids Household Survey (CPHS) by CMIE Pvt. Ltd.
Poverty line (PPP 2011, per person, per day)	\$1.9, \$ 3.2	\$1.9, \$ 3.2, \$5.5
Reference period	2004-05 to 2020-21	2011-12 to 2019-20

Demonetization and Poverty

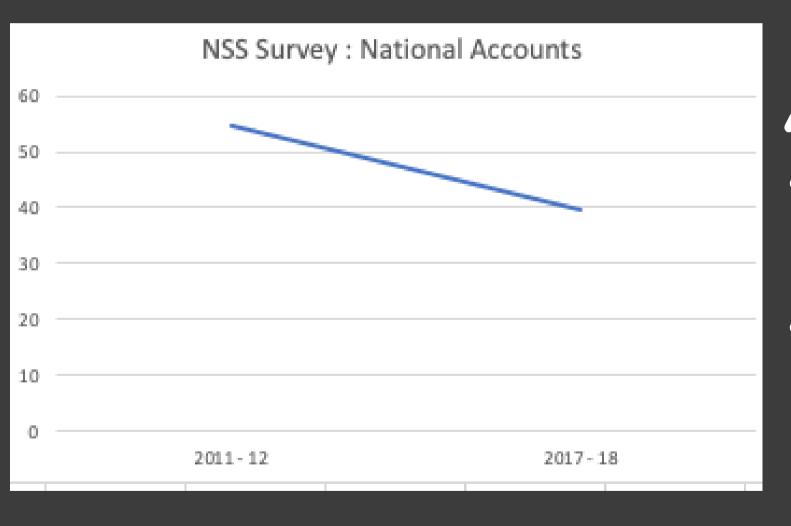
- Following demonetisation, the country's GDP growth declined from 8.0 per cent in 2015-16 (prior to demonetisation) to 6.8 per cent in 2018-19.
- However, the <u>impact on urban poverty in 2016 was followed by a subsequent "rapid rise in consumption"</u> the following year as the economy was remonetised.
- The available data indicated that poverty in 2017 was lower than in 2011. The most significant reduction in poverty rates occurred in 2017 and 2018, while the year 2019 saw slightly lower rates of poverty reduction.
- During the period from 2011 to 2017, casual wages in India experienced an annual growth rate of 4.1 per cent, coinciding with a decline in poverty by 1.5 percentage points.
- The highest growth in casual wages was observed in 2017-2018, corresponding to a poverty reduction rate of 2.8 percentage points.
- In summary, the demonetisation policy in India led to a temporary decline in GDP growth, but it was followed by a subsequent recovery in consumption and a reduction in poverty rates.

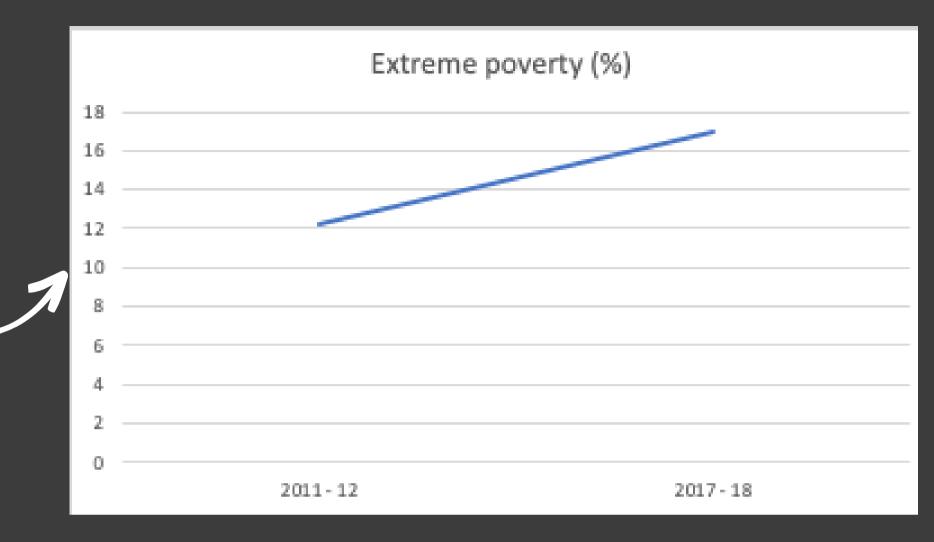
NSSO leaked data 2017-18

- A leaked draft version of the NSS for 2017-18 was used by Subramanian to estimate poverty levels in India.
- Subramanian utilized the poverty line recommended by the Rangarajan Committee, which is about 25% higher than the poverty line established by the Tendulkar Committee.
- The poverty rate increased from 31% in 2011-12 to 35% in 2017-18 based on the Rangarajan Committee's poverty line.
- Average real rural consumption experienced an 8.8% decline between 2011-12 and 2017-18, while real urban consumption increased by 2%. Considering the urbanization ratio of approximately 33%, the average decline in real consumption over six years was estimated to be 5.2%



• The distinction between poverty and extreme poverty lies in the severity of deprivation and the level of vulnerability experienced by individuals or households. Extreme poverty showed an increase from 12.2% in the NSS 2011-12 estimate to around 17% in 2017-18.





- National accounts are a system of economic measurements that track and analyze a country's economic activity.
- The NSS survey to national accounts ratio is a comparison between estimates from the NSS survey data and official national accounts data. It indicates the consistency or divergence between these sources of economic information.

The NSS survey to national accounts ratio was 39.8% for India in 2017-18, the <u>lowest level recorded in Indian</u> <u>history</u>, compared to 54.8% in the 2011-12 NSS survey and national accounts data

Global MPI Report

- Multidimensional Poverty Index is used to measure acute poverty across over 100 developing countries.
- The Global MPI is released annually by UNDP and OPHI and the results are published along with the Human Development Index (HDI) in the Human Development Report. <u>It replaced the Human Poverty Index</u>.
- The MPI looks beyond income to understand how people experience poverty in multiple and simultaneous ways.
 It identifies how people are being left behind across three key dimensions: health, education and living standards, and 10 indicators nutrition, child mortality, years of schooling, school attendance, sanitation, cooking fuel, drinking water, electricity, housing and assets.

MPI Report 2018

- The incidence of multidimensional poverty in India was almost halved between 2005/06 and 2015/16, climbing down to 27.5%. India lifted <u>271 million</u> citizens out of poverty.
- India's rank was 43rd (rank and poverty level is inversely related, more the rank – lower the poverty) out of 105 countries with the MPI value of 0.121.

MPI Report 2020

- India is 62nd among 107 countries with an MPI score of 0.123.
- 27.9% population identified as multi-dimensionally poor; the number was 36.8% for rural and 9.2% for urban India.

Three dimensions of poverty

- Nutrition and child mortality
- Years of schooling, School attendance.
- Cooking fuel, sanitation, drinking water, electricity, housing, assets.

Health

Education

Standard of living

To understand the impact of Covid-19 Pandemic on poverty in India and India's progress on accomplishing SDG-1, kindly check out our 'THE POVERTY DEBATE PART-2'

References

```
https://prsindia.org/theprsblog/more-privatisation-on-the-cards?page=27&per-page=1 https://rural.nic.in/sites/default/files/WorkingPaper_Poverty_DoRD_Sept_2020.pdf https://niti.gov.in/sites/default/files/2020-05/press-note-poverty-2011-12-23-08-16.pdf https://www.ies.gov.in/pdfs/Note_on_Studies_on_Poverty_estimates-1_June_2022.pdf https://theprint.in/economy/urban-poverty-rose-sharply-after-demonetisation-in-2016-world-bank-study-shows/922584/ https://www.undp.org/india/271-million-fewer-poor-people-india Center for global development Ideas for india
```



For any inputs, suggestions or clarifications, please contact us at cnesinfosphere@gmail.com



Thank you!