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# Poverty Analysis:

Poverty

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# 01

# Introduction

Challenges and Opportunities

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# Challenges and Opportunities!

Overview of poverty issues, challenges in measurement, and the significance of accurate poverty determination.



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02

# BPL Card Distribution

BPL Card Distribution Discrepancies

# BPL Card Distribution **Discrepancies**

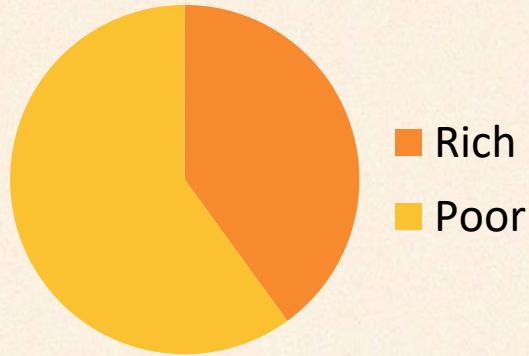
- BPL (Below Poverty Line) Cards
- 2007 NCAER Study: 40% of BPL cards issued to people above the poverty line.
- This leads to misuse of funds allocated to these welfare schemes and hence is a major issue.



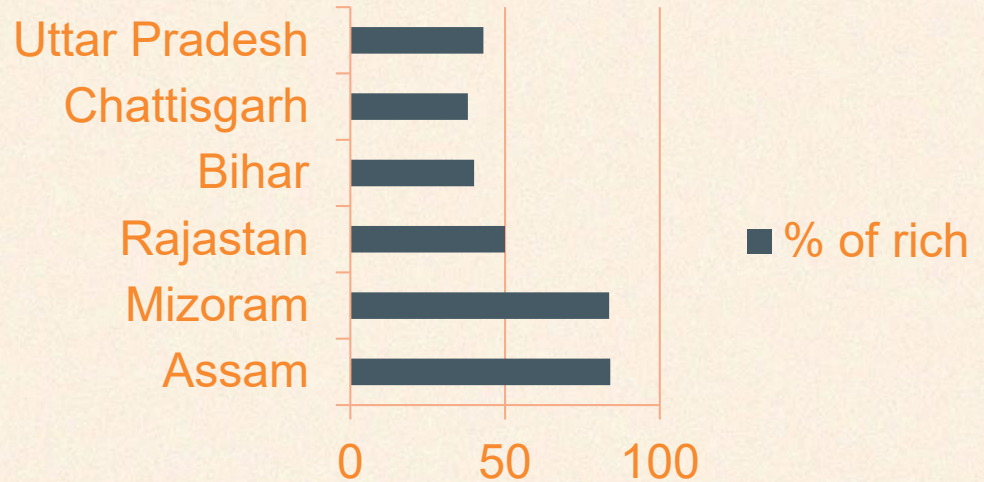


# BPL Card Distribution Charts

Overall distribution



% of rich who own BPL cards





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# 03

# Challenges

Challenges in Measuring Economic Indicators in India



# Challenges in Poverty Measurement



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# Poverty Measurement Challenges

- Lack of consensus on defining and identifying the poor.
- Difficulty in determining the exact number of poor individuals.
- **Challenges in conducting periodic censuses for accurate measurements.**
- Issues in assessing the incomes of self-employed individuals and daily wage laborers.
- Large income fluctuations due to seasonal factors.



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# Growth Measurement Challenges

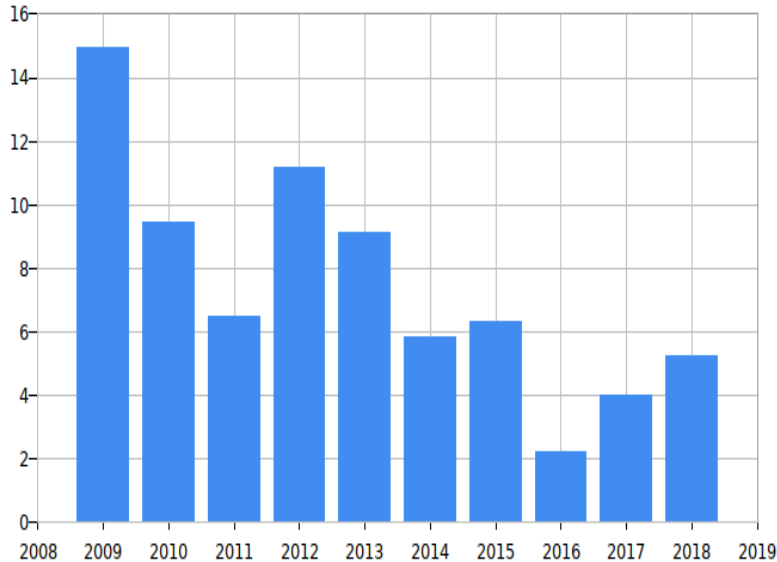
- Complexity in accurately measuring economic growth in India.
- Ongoing efforts by economists to find alternative methods to gauge growth.

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# Relative Measures **Limitations**

- Relative measures assess a household's income in relation to others.
- Material well-being may improve even if relative poverty rates remain constant.





Last 10 Years Inflation Rate by Year, India, %  
www.statbureau.org

Source: <https://www.statbureau.org>

# 04 Results analysis

Inflation Analysis

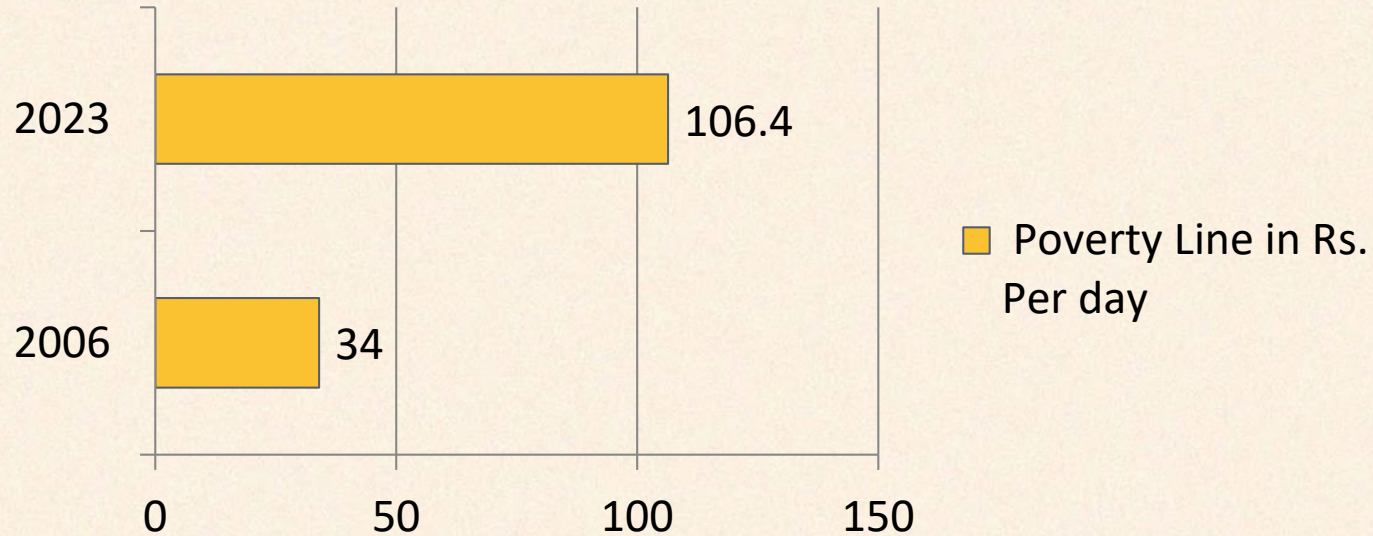
# Inflation Analysis

- Inflation-adjusted Purchasing Power (Beginning of 2023):
  - Initial purchasing power: 29.05 rupees.
  - Increase in prices over 17 years: 213.12%.
  - Decrease in value over 17 years: 70.95%.
- Price Increase Example:
  - If an item cost 100 rupees in 2006.
  - It would cost 313.12 rupees at the beginning of 2023 due to inflation.
- Annual Depreciation:
  - Average depreciation per year: 12.54 rupees.
  - The amount of price increase corresponds to the overall inflation over this period.



# Inflation Graph

Poverty Line in Rs. Per day





05

# Conclusions

Suggested Solutions



# Suggested Solutions

1

Using Machine Learning models to predict the poverty line based on multiple different factors to make the system robust, more responsive to the dynamic economy and minimize requirement of surveys to calculate them.

2

Use Machine Learning models to determine patterns in applicants to recognize those not eligible to prevent misuse of the system.

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# Thanks!

- *Suspanda*