

Multidimensional Poverty in India: A Study on the Effectiveness of Policies Targeting Multidimensional Poverty Reduction across Kerala, Sikkim, Haryana, Gujarat, Chhattisgarh, and Bihar

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ABSTRACT

This paper highlights advances in multidimensional poverty rates across Kerala, Sikkim, Haryana, Gujarat, Chhattisgarh, and Bihar from 2015-16 to 2019-21, based on data from the National Family Health Survey-4 (NFHS-4) and the National Family Health Survey-5 (NFHS-5). Much of the data collected and research conducted was based on NITI Aayog's Multidimensional Poverty Report 2023, as the original Demographics and Health Surveys Program (DHS) data is inaccessible due to recent US-AID funding cuts. National policies targeting specific multidimensional poverty indicators are analysed, as well as regional trends through data and spatial analysis, particularly utilising regression. Whilst progress has been seen, it is important to note that there are concerns over the validity of the data collected. Key issues include underestimation of required funds for specific policies, bureaucracy leading to inefficient allocation of resources, and weak quality of provisions, which often barely meet basic human requirements, not enough to lift households out of multifaceted poverty. Still, much research is focused on reforming policy to increase efficiency, which undoubtedly provides hope for development that can improve the socioeconomic circumstances of the poorest and raise India from its position near the bottom of global rankings for inequality between extremes.

INTRODUCTION

Absolute poverty (defined by the World Bank as living under \$3.00 a day per 2021 Purchasing Power Parities) in India has fallen from 47.5% in 1993, just after India underwent significant political and economic reform, to 5.3% in 2022 (World Bank, 2025). At the same time, the population has grown by 46% from 922,000,000 to 1.45 billion (World Bank, 2025). Figures seem to suggest that both significant development and progress have occurred, but is this true?

Regional variations, by state and geographically, are large in India. Southern states are placed better socioeconomically, with high education and healthcare levels, leading to lower poverty rates. Kerala has the lowest rate of poverty in the country, regardless of how it is measured, but even in the 1970s and 1980s, when income-poor, Kerala ranked highly in the Human Development Index (HDI). (Roy and Raman, 2025). Currently, Kerala's rate of poverty is

0.55%. In contrast, Bihar has remained the most impoverished state for over 2 decades, with a poverty rate of 33.76% (NITI Aayog, 2023). These issues highlight the importance of differentiating policy for different regions of the country, according to the level of development that is required.

But why is reducing poverty such an important government objective in the first place? Moral arguments exist pertaining to the notion that inequality and poverty fundamentally violate human rights and erode human dignity, yet free-market economists like Milton Friedman and Simon Kuznets view inequality as a natural part of economic progress and a necessary consequence of individual liberty. Such economists are of the view that a hierarchical income structure ensures incentives to work that drive progress for the economy, whilst if everyone received equal reward for their work, innovation and progress would be stifled.

Instead, when academics and governments seek reductions in income inequality and falling poverty rates, it is important to note that this does not mean complete equality. If a spectrum exists, policy should intend to set a basic social foundation, below which living cannot be sustained. Inequality wrecks fulfilment and self-worth, which can breed crime and ecological destruction too. Poverty increases political and social tensions, undermining social cohesion that can materialise in regional conflict. In turn, both poverty and inequality can have detrimental effects on the real economy in the short and long run (UN, 2015).

Poverty can be measured both unidimensionally and multidimensionally. The former, though simple to collect and collate

data on, only includes income levels by household or individual. Sen (1980) argued that access to necessities is an essential measurement ignored in the unidimensional method. An example would be comparing two individuals of the same income, one with a disability living in an area with poor healthcare access and quality, whilst the other lives in an urban centre. The income measure would classify both individuals as equally rich or impoverished, whereas the first individual is more disadvantaged and has a lower standard of living as a result. As such, deprivations in education, standard of living, and health, though harder to collect and quantify, are more reflective of poverty and essential to collect for more informed and effective policy. As such, this paper focuses on multidimensional measures.

Alkire and Foster (2007) developed a methodology alongside the Oxford Poverty and Human Development Initiative (OPHI) and United Nations Development Programme (UNDP) for calculating and counting poverty, which is a comprehensive measure of poverty, whilst ensuring that there are no overlapping deprivations by category (Pacífico and Poegge, 2017). As such, this paper follows a similar methodology, though indicators included within the multidimensional measurement vary slightly according to India's unique context and circumstances.

The data used for this study are from the NFHS-4 and NFHS-5 surveys of 2015-16 and 2019-21, respectively. Non-governmental organisations and public policy think tanks use this data to help inform government policymakers, though criticisms of the methodology have been highlighted by academic research.

Key terms: Multidimensional poverty, Inequality, Human Development Index, Socioeconomic circumstances

REVIEW OF KEY LITERATURE

Using data from secondary sources like the Press Information Bureau and Planning Commission Reports and Press Releases, Mehta (2003) analysed chronic poverty at the district level between 1991 and 2001 through 5 main indicators: female literacy rate, proportion of 11-13 year olds attending school, infant mortality rate, agricultural productivity, and infrastructure development. Geographically, 379 districts from 15 states (Punjab, Andhra Pradesh, Gujarat, Haryana, Kerala, Rajasthan, Karnataka, Tamil Nadu, West Bengal, Maharashtra, Uttar Pradesh, Assam, Madhya Pradesh, Odisha, Bihar) were examined. Mehta found that regions in Madhya Pradesh, Rajasthan, Uttar Pradesh, Bihar, and Odisha had the highest levels of multidimensional poverty, whereas Assam, West Bengal, Kerala, and Maharashtra were well-placed, with low levels of multidimensional poverty. Of all the regions, Kalahandi in Odisha was the most deprived region regardless of which indicator was used. Commenting on the reliability of this source as a piece of research, author Aasha Kapur Mehta is a renowned professor at the Institute for Human Development in India, regarded as an expert in the field. Still, the journal SSRN is not peer-reviewed, and this could induce errors in the data compiled and conclusions drawn. Additionally, the article is from 2003 and is not widely applicable to the period under analysis in this paper. However, it was useful in gauging an academically accurate methodology for a multidimensional (MPI) index.

Vasishtha and Mohanty (2021) studied data from the National Family Health Survey-4 (NFHS-4) 2015-16 to examine spatial clustering of multidimensional poverty, from a statistical perspective, 'using cluster maps and regression models...to understand the predictors of multidimensional poverty' (pg. 1). Using school attendance, nutrition, electricity, sanitation, drinking water, cooking fuel, housing, assets, child mortality, and years of schooling as indicators within the MPI index. Vasishtha and Mohanty found that Kerala had the lowest level of poverty, whilst Bihar had the highest. Of the indicators contributing the most to the MPI, the authors found that undernutrition and years of schooling contributed the most, whilst asset ownership and sanitation contributed the least. Critical evaluation revealed that spatial regression may not apply to the analysis of human populations, for the data is not uniformly distributed, a key requirement of spatial demographic testing. Both authors are fellows at the International Institute for Political Sciences, Mumbai, under the direct administration of the Ministry of Health and Family Welfare, which could suggest political bias in trying to portray the BJP government in a positive light. Finally, the authors mention that the tests used to determine whether the spatial regression and LISA cluster maps were accurate ended up being statistically significant, suggesting that there were errors in the data. As such, this resource has limited validity for this research paper.

Tripathi and Yenneti (2020) examined data on consumption expenditure from the National

Sample Survey (NSS) data of 2004-05 and 2011-12 using the Alkire-Foster methodology for MPI. The indicators were categorised into 3 broad areas: standard of living, education, and income. Employment, agricultural land, irrigated land, source of lighting and cooking fuels were under standards of living; the highest education attainment in the household under education; and monthly per capita consumption expenditure (MPCE) under income. The study found that the rate of multidimensional poverty fell from 62.2% of India's population to 38.4% from 2004-05 to 2011-12. Additionally, the rural level of multidimensional poverty fell from 60.2% in 2004-05 to 16.7% in 2011-12, as compared to 33.4% to 20.0% for urban multidimensional poverty in the same time period. State-wise, Rajasthan experienced the largest decline in both urban and rural poverty, whilst Odisha experienced the largest increase in urban poverty, and Mizoram in rural poverty. Commenting on the validity of this source, author Tripathi has an h-index of 33, and the Indian Journal of Human Development is peer-reviewed and well respected by experts for the quality of research provided. However, the data from the NSS were criticised in 2011-12 for overrepresenting rural populations, Scheduled Castes (SCs), and working-class populations, which could limit the validity of the source.

Calculating an MPI based upon the BIMARU states (Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, and Uttar Pradesh) that have historically had higher levels of poverty, Srivastava, Kumar, and Srivastava (2023) analysed data from 2022-23 to determine which socioeconomic factors impacted MPI the most in these states, and which states suffered the most. The study

examined 6 indicators: infant mortality rate, birth rate, educational dropout rates at both primary and upper primary levels, household percentage's share to clean cooking fuel, household percentage's share to improved sanitation, household percentage's share to safe drinking water. Srivastava et al. concluded that Madhya Pradesh has the lowest MPI score, meaning it had the lowest level of multidimensional poverty, whilst Jharkhand had the highest level. Regardless, Madhya Pradesh still suffered from high infant mortality and birth rates. Critical evaluation of the source revealed that the data was collected from several sources, including NFHS-5 and other public records, which increases data consistency and comparability. However, some the authors do not justify their reasoning for the indicators used, apart from stating that 'indicators are selected based on relevance, reliability and policy implications' and 'weights of different dimensions and indicators are assigned based on their relative importance in determining MPI and respective rankings of selected states under study' (p. 403) which are not referenced again. Hence, the validity of the source is to be questioned.

The NITI Aayog report on the National Multidimensional Poverty Index 2023 includes elements of setting a nationwide MPI, including 10 of the indicators used in the global framework (nutrition, child and adolescent mortality, years of schooling, school attendance, cooking fuel, sanitation, drinking water, housing, electricity, assets) and 2 defined 'in line with national priorities' (p.xii), which are maternal health and bank accounts. The data used were from the NFHS-5 survey, and all 3 categories (health, education, and standard of living) were

equally weighted for their contribution to the MPI. The report found that the headcount MPI fell from 0.117 to 0.066 nationally, with most of the decrease being attributed to rural development. As an institution, NITI Aayog is widely regarded as being thorough in its research project, with several international experts also working on the report (like Alkire). This limits the inconsistencies and makes this source incredibly useful in setting frameworks that this research paper can utilise. However, there is a lack of mathematical or logical justification for each indicator section being weighted equally (as the report only states it is in line with 'the global MPI' (p. xii)). This leaves room for further study for this research paper to judge the optimal weightage for each indicator, and each broader section that the indicators are categorised into.

MPI INDICATORS AND THEIR WEIGHTAGES

Indicators selected for my MPI were loosely based upon academic research and the existing global MPI, but with slight changes for the 'Indian context' (NITI Aayog, 2023, p. 3). As such, indicators were drafted into 3 separate sections: healthcare, education, and standards of living. Due to time constraint limitations, 8 indicators were selected to represent multidimensional poverty, which are nutrition, child and adolescent mortality rates, years of schooling, school attendance, cooking fuels, housing, sanitation, and bank accounts. These indicators are all amongst the NITI Aayog's indicators, but this is coincidental, as corroboration of evidence from several sources, including Vasishtha and Mohanty (2021), Tripath and Yenneti (2020), and Alkire and Foster (2007), indicates that

these indicators are most reflective of the facets of multidimensional poverty.

From the NITI Aayog report and Vasishtha and Mohanty (2021), the largest contributors to MPI were selected from each of healthcare, education, and standards of living. These are nutrition, years of schooling, and access to clean fuel. Years of schooling are defined differently in the global MPI. This paper refers to years of schooling as the median education level of attainment of a household, whereas the global MPI is measured based upon the highest education level within a household. This is done due to the fact that the highest education level of attainment is not reflective of the remaining demographics of the household, particularly if the highest level is marginally above the deprivation cut-off for the indicator, whilst the rest of the family has received little to no education. Bank accounts were selected from the Indian context, due to the fact that financial inclusion particularly impacts India's poverty situation. The recent drive within Indian politics to increase accessibility of bank accounts under Aadhar (and allowing for more financial inclusion and policies to be able to get to the intended beneficiaries more often than not) is a base requirement for further policy to have positive impacts on poverty alleviation, hence having significant importance on multidimensional poverty despite not being in the global framework for measuring MPI. Child and adolescent mortality rates and housing were selected as there is a greater range of data that has been collected on them, where there has not been historical criticism of the method of data collection (Mishra, 2025). Sanitation and school attendance were both selected even though they were not the largest determinants

Indicator	Deprivation Cut-Off
Nutrition	If a single member of the household is classified as undernourished ¹
Child and Adolescent Mortality Rates	If a child under 18 has died in the household
Years of Schooling	If the median level of educational attainment is below 6 years of schooling for all 11+ aged individuals in the household
School Attendance	If any child in the house is not attending school with 95+% attendance until class 8
Clean Fuels	If cooking is done with solid fuels ²
Sanitation	If sanitation facilities are not classified as improved ³ , or if 2 or more households share sanitation facilities
Housing	If the floor is made of natural materials, or roofs or walls are made of rudimentary materials ⁴
Bank Accounts	If no household member has a bank account or a post office account

¹ A woman or man is considered undernourished if their Body Mass Index (BMI) is under 18.5 kg/m². A child is undernourished if their height-for-age or weight-for-age deviates by more than 2 standard deviations from the median of the reference population (NITI Aayog, 2023)

² Includes coal/lignite, charcoal, wood, straw/shrubs/grass, agricultural crop waste, dung cakes (NFHS-4, 2016)

³ Includes flush/pour toilets to piped sewer systems, septic tanks, pit latrines, twin pit/composting toilets (NFHS-4, 2016)

⁴ Made from mud, thatch, or other low-quality materials (NFHS-4, 2016)

Table 1: Indicator and Deprivation Cut-Offs, compiled from Alkire et. al, 2015, p.32

of the MPI in their section, but still had large contributions to it.

Household deprivation cut-offs for each indicator are summarised in the table below, as per the Alkire-Foster Methodology. It is important to note that this cut-off considers entire households, and if data is unavailable in any single indicator, the household is ignored in all measurements.

Weightages of each indicator were roughly based upon the NITI Aayog report's observations of the greatest contributors to the national MPI of 2019-21, as well as Tripathi and Yenneti, 2020. Hence, nutrition is weighed as 20% of MPI, years of schooling is 16%, school attendance rate is 15%, cooking fuel is 14%, housing is 11%, sanitation is 9%, child

and adolescent mortality rates are 8%, and bank accounts are 5%. Overall, healthcare contributes 30%, education 31%, and standards of living 39%. Whilst the global MPI and most other measures place equal weightage on each section, this does not directly reflect the relative significance of the impacts of each indicator upon MPI. The author also recognises that these weightages are based upon current levels of deprivation in each indicator, with greater levels of deprivation corresponding to greater weightage in the MPI, which is important so that the MPI reflects most accurately which facets are causing poverty. Still, the weightages of each indicator will need to be adjusted and changed as the dimensions of

multidimensional poverty shift over time within a country like India.

Overall, this paper defines an individual as multidimensionally poor if greater than 1/3 of all weighted indicators are deprived, as per the global MPI. Each individual then matching this criteria counts towards the headcount, H. Dividing H by the total population gives the headcount ratio, which is the multidimensional poverty rate if treated as a proportion of the total population, where 1 represents 100% poverty, and 0 represents 0% poverty (Oxford Poverty and Human Development Initiative (OPHI), 2012). Some research may also calculate the intensity of deprivations, and adjust the headcount ratio, but this study does not incorporate this, as the breadth of deprivations is not relevant to the objectives of the study.

Tables containing all raw data can also be observed at the end of this paper.

PROCESS OF SELECTING POLICIES

In general, national policies were selected based on the level of coverage and expenditure under the scheme. This paper intends to analyse government efficiency in policymaking, to which end the largest policies are likely to be reflective of the greatest government intent and intervention to improve socioeconomic circumstances. In addition, policies were chosen that had been enacted before or slightly after the NFHS-4 survey, as this would allow for a more accurate conclusion to be drawn on progress from the current government, which could not be mistaken for success from prior policies that are just showing belated signs of fruition. However, it is important to note that schemes

usually have a time lag, and, as such, attributing any changes in indicator statistics between NFHS-4 and NFHS-5 to one specific indicator is inappropriate. Yet, this allows for the identification of general strengths and shortcomings.

For the nutrition indicator, the POSHAN Abhiyan scheme was selected. Launched in 2018, the scheme focuses on the 'nutritional status of adolescent girls, pregnant women, lactating mothers and children from 0-6 years [of] age' (PIB, 2025). Particular objectives include preventing stunting, Low Birth Weight (LBW), anaemia in women and children, and under-nutrition in children. This is India's largest nutrition scheme, but the shortcoming is that males are not incorporated in this scheme, who also suffer from nutrition deprivation.

For child mortality rates, the National Health Policy (NHP) 2017 was selected. In the case of India, NHP is not specifically targeted at reducing child mortality rates in its entirety, but the only policy targeting child mortality specifically was the Reproductive and Child Health (RCH) programme, which has now been subsumed in NHP. Hence, in this case, NHP acts as a proxy for child mortality, but where statistics are mentioned on changes in fund allocation to NHP, if expenditure rises, it does not necessarily mean a rise in expenditure to child mortality prevention policies, particularly.

For years of schooling, Samagra Shiksha Abhiyan was selected. Launched in 2018, the policy is an integrated scheme covering all school students. It aims to ensure 'inclusive and equitable quality education at all levels', and is in line with UN SDG-4 (PIB, 2022). In encouraging access to education, the policy

acts as a proxy for increasing both the proportion of students accessing education and the time spent in education, thus succeeding in representing the years of schooling indicator.

For the school attendance indicator, similar to child mortality rates, no specific policy targeting it exists nationally. States have their schemes in place to incentivise coming to school, like Mid-Way Meals, but not the central government. As such, National Education Policy (NEP) 2020 has been selected as a proxy for a school attendance policy. An additional issue is the fact that NEP only started to be implemented during NFHS-5, so part of the changing results for the indicator of school attendance could not be represented through NFHS-5.

For cooking fuels, India's flagship Pradhan Mantri Ujjwala Yojana (PMUY) scheme was selected. Launched in 2016, it intends to distribute Liquefied Petroleum Gas connections (LPGs) to Below Poverty Line households. It is important to note that this poverty line is defined in absolute terms by income; hence, certain multidimensionally impoverished families may be excluded by the policy, but not in the NITI Aayog report for deprivation under cooking fuels. Therefore, figures for PMUY may differ slightly from the overall number of LPGs provided to multidimensionally poor families.

For housing, Pradhan Mantri Awas Yojana (PMAY), launched in 2015, was selected. This policy is split into 2 sections, rural and urban, with provisions for each being slightly different. Both seek to construct houses that meet the same standard, but PMAY-U provides financial assistance to Economically Weaker Sections (EWS), including SCs, STs,

women, people with disabilities, and OBCs, whilst PMAY-G beneficiaries are based solely on socio-economic and caste-data from the 2011 Census (Tate Capital, 2025). This policy is a very accurate proxy for the changes in housing deprivation in India since 2015.

For sanitation, the Swachh Bharat Mission (SBM) 2014 was selected, which constructs Individual Household Latrines (IHHLs). This policy directly deals with an aspect of sanitation deficiency in India, but the sanitation indicator also takes into account the location of toilets and conditions of sewer systems (Ministry of Health and Family Welfare, 2021), which is not addressed under SBM.

For bank accounts, the Pradhan Mantri Jan Dhan Yojana (PMJDY) scheme was selected. Launched in 2014, the scheme was a major driver of India's journey to digitalisation. PMJDY aims at achieving comprehensive financial inclusion for all households in the country, to ensure that beneficiary payments reach intended beneficiaries more often. PMJDY directly helps beneficiaries to open bank accounts, thus accurately representing the indicator.

PROCESS OF SELECTING STATES

6 states were selected out of India's 28 states and 8 Union Territories. The states used in this paper needed to be reflective of the Indian population in as many ways as possible. Firstly, the population covered needed to be a large enough proportion of India's. Geographically, states needed to be selected from each of India's larger regions. Socioeconomically, states needed to be selected from each level of development and

poverty within the nation. Finally, states were selected that had experienced different levels of progress since India's reform in 1991 by HDI, to suggest changing trends in development and thus inform more successful policies for different state governments.

In terms of population, Kerala has c.33,406,000 people, Sikkim has c.611,000 people, Haryana has c.25,351,000 people, Gujarat has c.60,440,000 people, Chhattisgarh has c.25,545,000 people, and Bihar has c.104,099,000 people (World Population Review, 2025). Of India's 1.45 billion people, these states account for c.17.2% of India's population. This is more than the required 10% considered sufficient for sample sizes. It is important to note that having a smaller population state like Sikkim is important, since different factors influence larger and smaller states' abilities to divide resources for development (both by population and area).

Geographically, India can be split up into 6 regions: North, North-East, Central, East, West, and South. Haryana is located in the North, Sikkim is in the North-East, Chhattisgarh is a Central State, Bihar is in the East, Gujarat is in the West, and Kerala is in the South. Research supports the belief that the southern states have higher levels of development and lower instances of poverty than states in the rest of the country.

Socioeconomically, using data from the NITI Aayog report, each state was ranked in terms of its MPI in 2019-21. From most impoverished

to least, Bihar ranked 1st, Chhattisgarh 7th, Gujarat 14th, Haryana 20th, Sikkim 30th, and Kerala 36th. If the country were split into sextiles, each of these states fits into a different group (NITI Aayog, 2023).

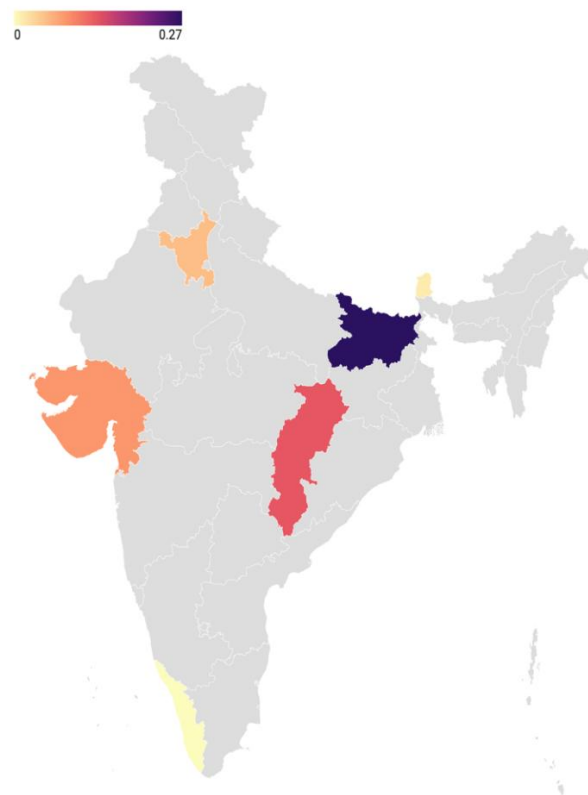
Using HDI measures from 1991 (since MPI was only recently established in 2007, and only in 2023 in India, hence the extent of available data would have been limited), Bihar was and remained the state with the lowest development, Chhattisgarh has relatively fallen by 21 places in its ranking, meaning it experienced less development than other states. Gujarat fell by 3 places, Haryana rose by 10 places, Sikkim rose by 2 places, and Kerala rose by 9 (Global Data Lab Indicators, 1991, 2025).

SPATIAL ANALYSIS

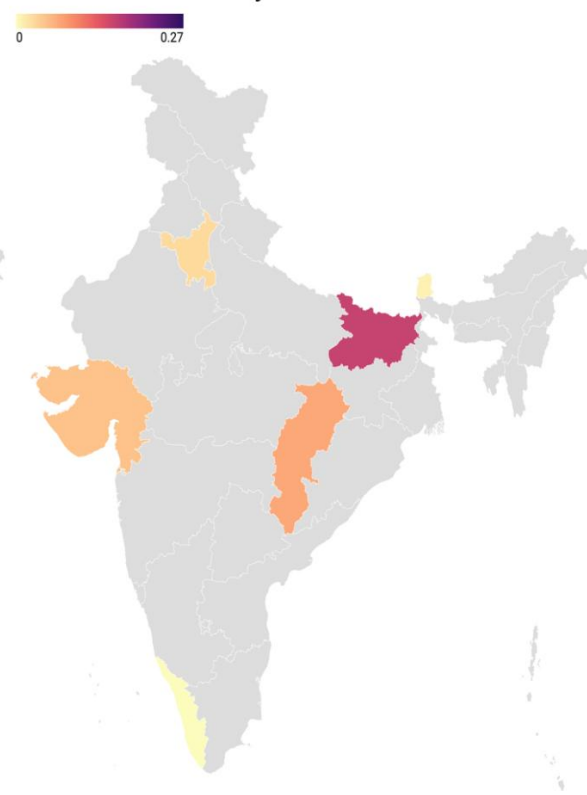
Using spatial tools for data collated on the multidimensional poverty rates for each state, and by indicator, we can see the relative levels of improvement by each state in each indicator. It is important to bear in mind that darker colours on the choropleth maps correlate to worse levels of deprivation, and that the periods of 2015-16 and 2019-21 are visualised such that progress can be observed.

At the same time, the scheme intensity for each of the selected 8 national policies is assessed. Data is collected from relevant departments.

Multidimensional Poverty 2015-16

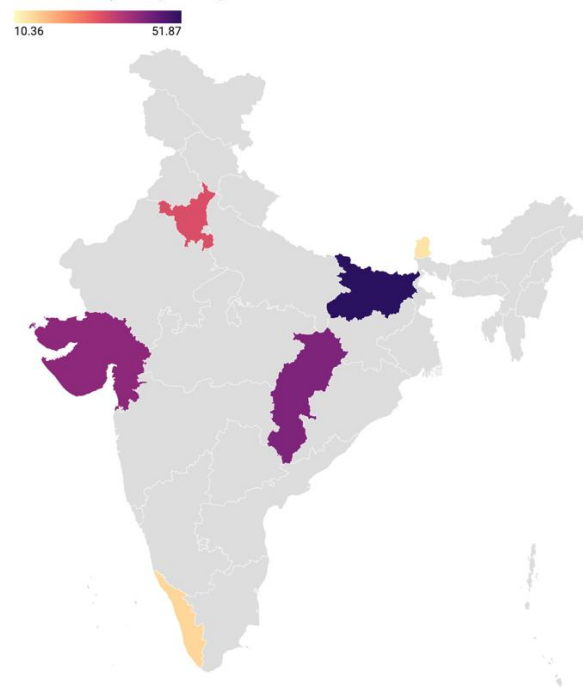


Multidimensional Poverty 2019-21



INDICATOR-WISE TRENDS

Nutrition (% deprived) 2015-16



Nutrition (% deprived) 2019-21

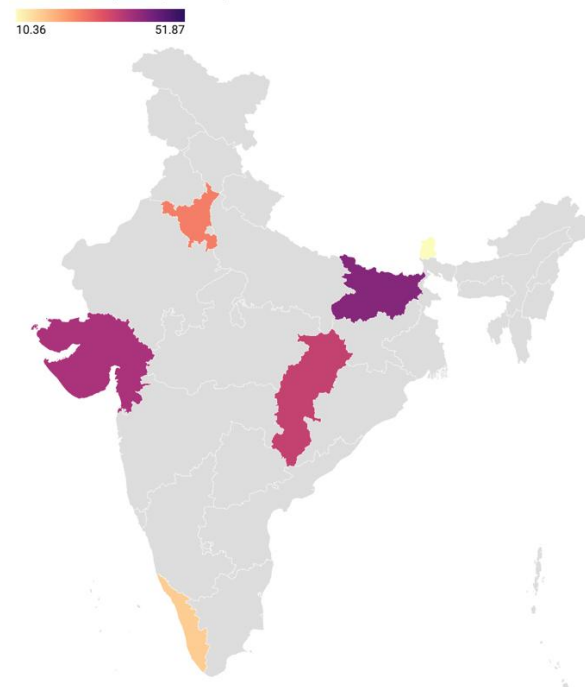


Figure 1

Figure 2

Child & Adolescent Mortality Rate (% deprived) 2015-16

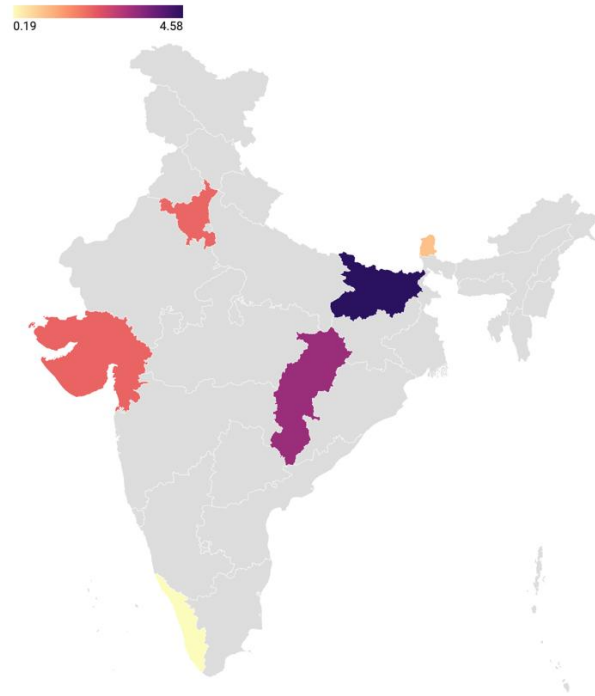


Figure 3

Child & Adolescent Mortality Rate (% deprived) 2019-21

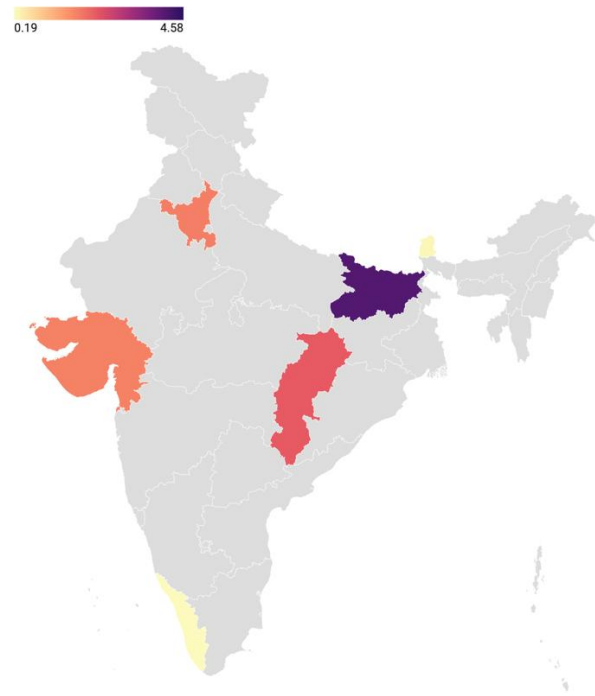


Figure 4

Median Level of Education Attained (% deprived) 2015-16

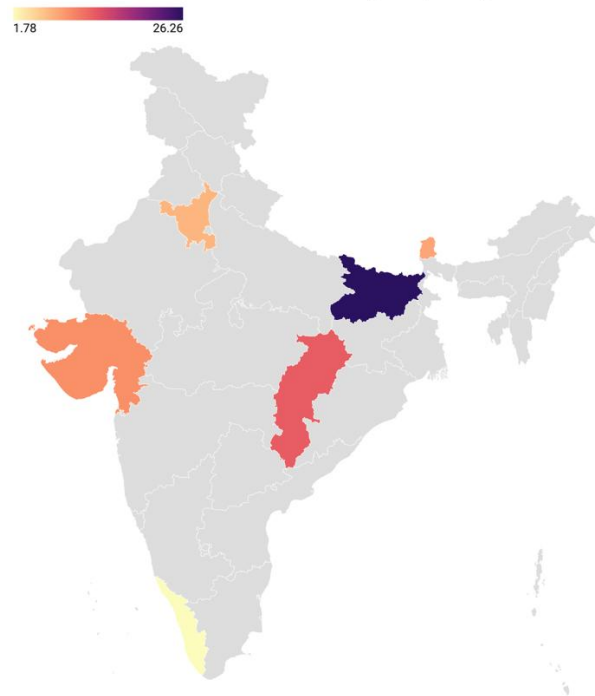


Figure 5

Median Level of Education Attained (% deprived) 2019-21

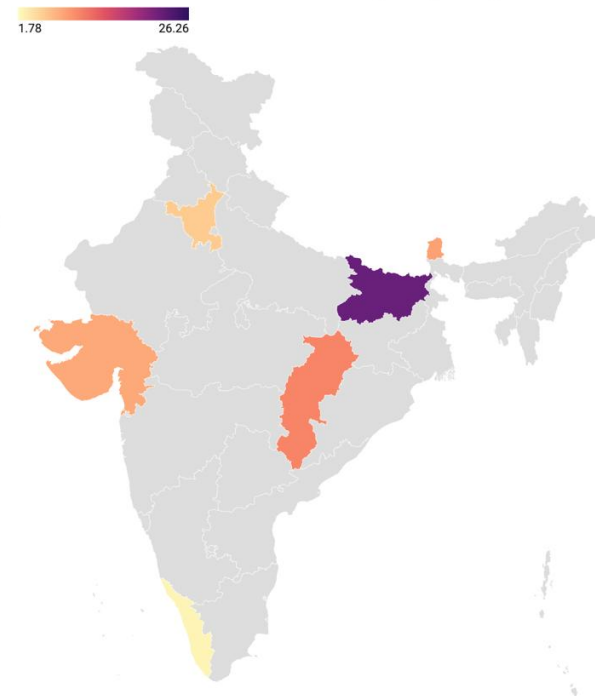
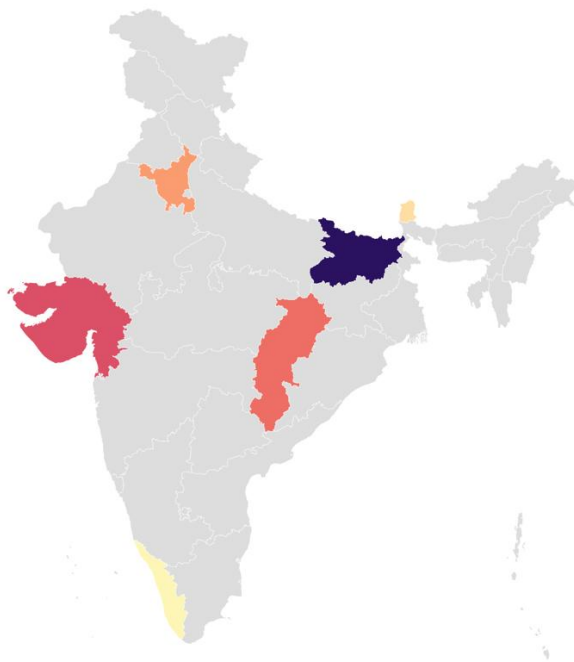


Figure 6

School Attendance (% deprived) 2015-16



School Attendance (% deprived) 2019-21

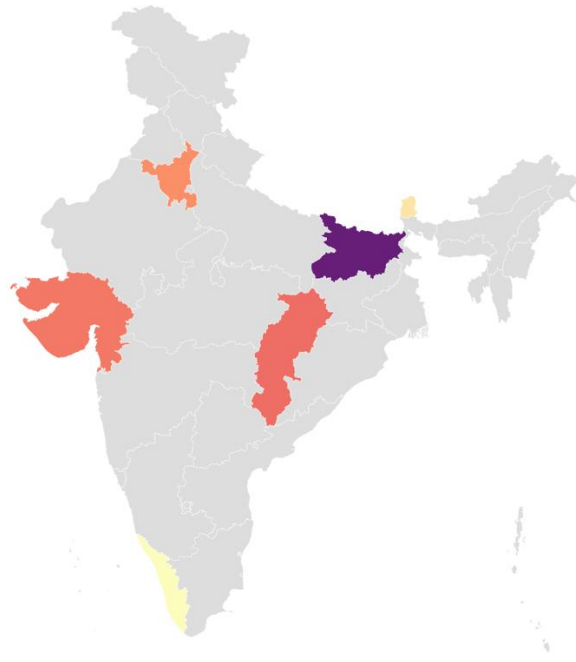


Figure 7

Cooking Fuels (% deprived) 2015-16

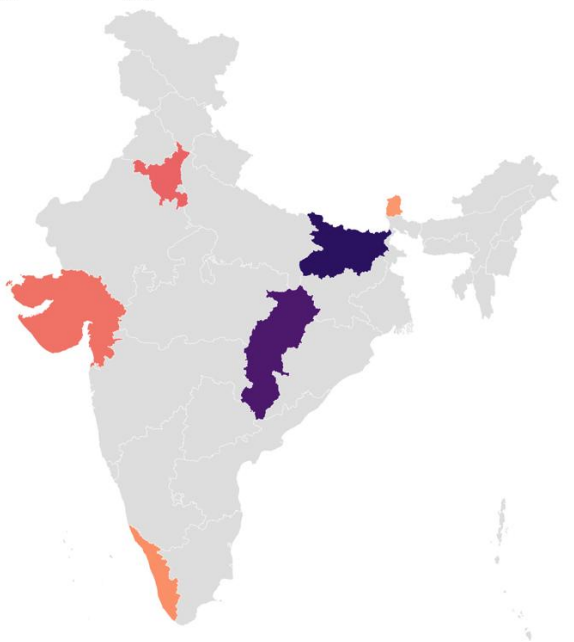


Figure 8

Cooking Fuel (% deprived) 2019-21

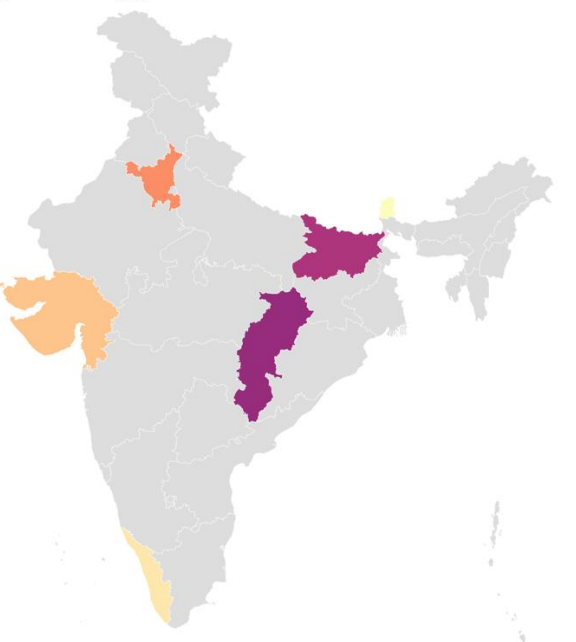


Figure 9

Figure 10

Sanitation (% deprived) 2015-16

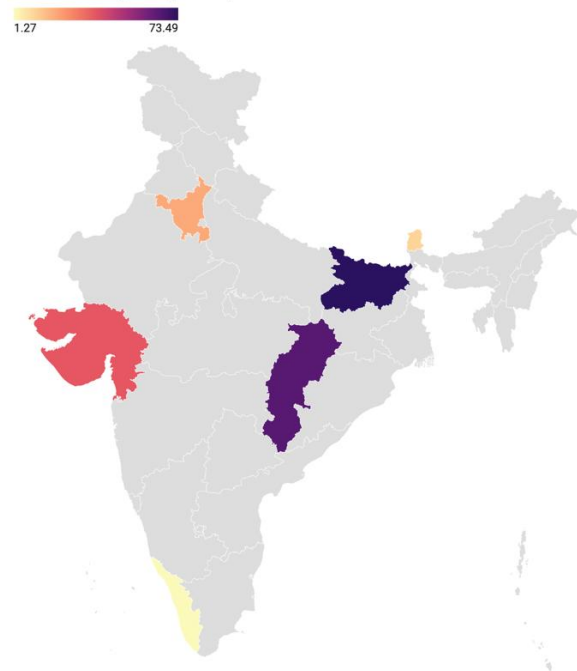


Figure 11

Sanitation (% deprived) 2019-21

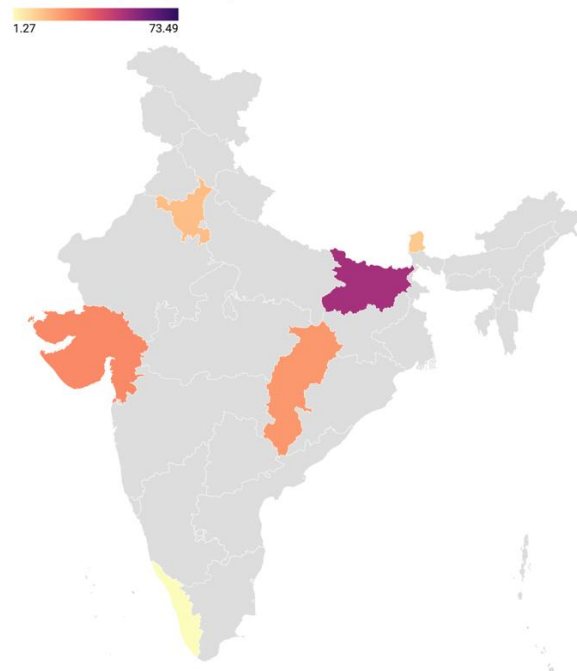


Figure 12

Housing (% deprived) 2015-16

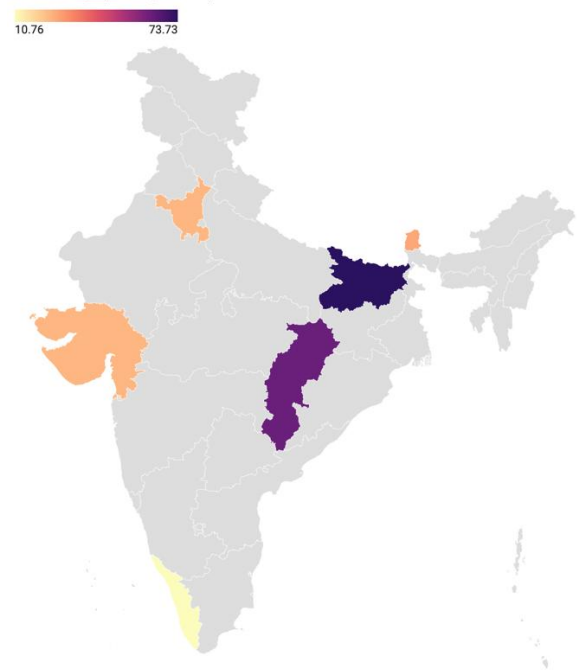


Figure 13

Housing (% deprived) 2019-21

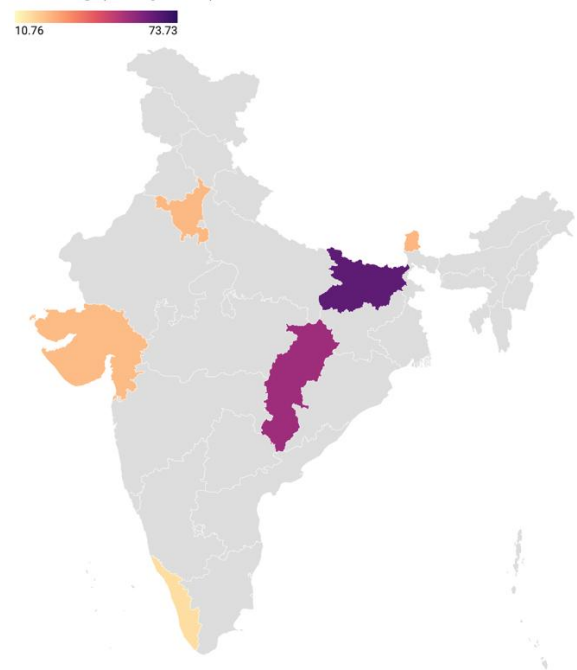


Figure 14

Bank Accounts (% deprived) 2015-16

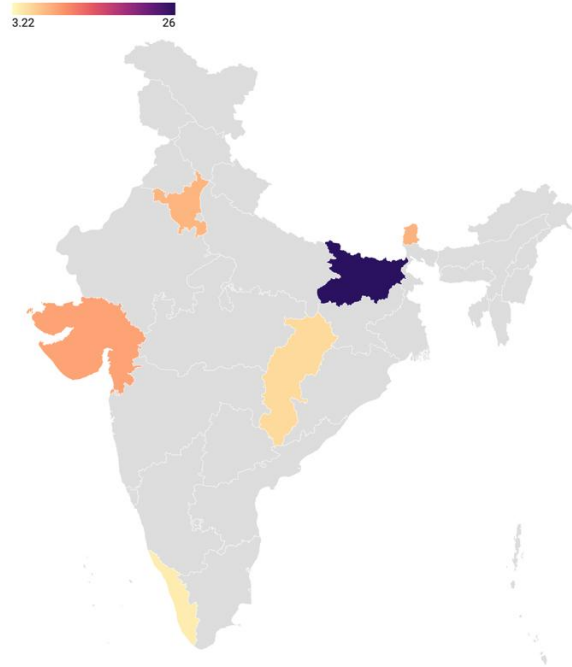


Figure 15

Bank Accounts (% deprived) 2019-21

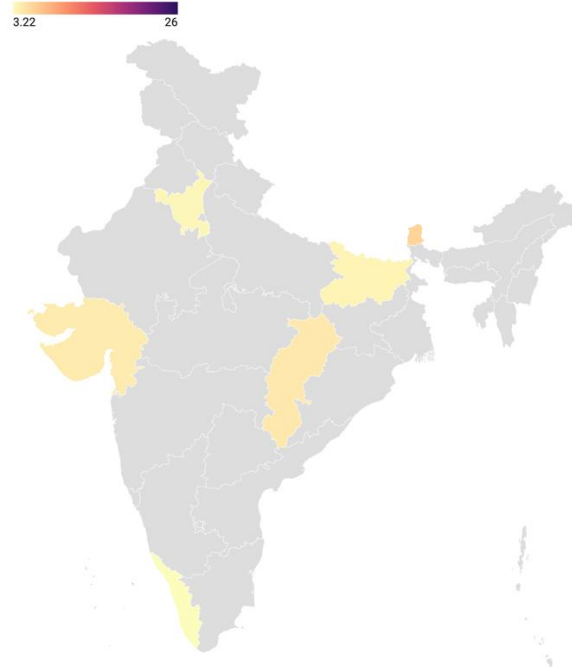


Figure 16

DATA ANALYSIS

Figures 1-16 showcase the changes in poverty rates by indicator. As can be observed, the progress in each indicator varies, and data analysis was carried out to show which indicators improved the most.

By the number of multidimensionally poor people per state (calculated by multiplying the headcount ratio by the population of the state), a calculation of the number of deprived in each indicator before and after was considered. Then the percentage change in the proportion that was deprived before and after was calculated. Where the choropleth maps provide visual comparisons, they can be slightly misleading, as if any single state differs largely in one indicator from the other

states, then the variations in figures for the other states do not appear profound in the map.

Calculation showed that bank accounts saw a 72.53% decrease in deprivation, sanitation a 33.77% decrease in deprivation, cooking fuels a 23.01% decrease in deprivation, years of schooling a 16.57% decrease, school attendance a 15.80% decrease, child and adolescent mortality rates a 15.09% decrease, nutrition a 11.65% decrease, and housing a 9.87% decrease.

The two policies that had indicators experiencing the least development were analysed in further detail. These were POSHAN Abhiyan and PMAY.

POSHAN ABHIYAN SHORTCOMINGS

The 5 objectives of POSHAN Abhiyan were initially targeted to be achieved by 2024. However, by early 2024, only '3 of the 5 objectives had seen even a small decrease in malnutrition in [women and] children' (Agarwal and Bisht, 2024, p.120). The lofty goals of preventing stunting, under-nutrition, and anaemia in their entirety were far from being achieved, and instances of anaemia have, in fact, risen from 2015-16 in women and children (Agarwal and Bisht). NFHS-5 data still suggest that '35.5% of under-five children are stunted, and 32.1% are underweight'. George et al. attribute this to gaps in coverage for the scheme and a lack of capacity building. The lack of awareness being spread is a significant determinant of the limited progress seen by the policy, causing inefficient resource allocation, increased vulnerability to challenges, and limiting the policy's adaptability to change.

A NITI Aayog report reinforces these issues, adding that 'low fund utilization, insufficient human resources, and gaps in training ... of the staff' (p.95) exist, in part attributable to the lack of monitoring of the policy.

PMAY SHORTCOMINGS

Affordable housing is a significant requirement of basic human necessities, and the very limited progress of PMAY is concerning as a result, particularly given that several states have experienced significant deterioration in it as well.

For PMAY-U, the housing built, though fulfilling the bare minimum condition for the scheme, is inadequate to enable the other

requirements of poor individuals. Houses were often constructed on the outskirts of the city, meaning that it led to extremely long travel times for the beneficiaries to any work that they otherwise would have been situated near, thus in some ways setting back beneficiaries (Singh, 2023). Admittedly, building housing near the city centre would be far more expensive, but that is what seems to be required for the intended benefit of housing to accrue to beneficiaries.

Furthermore, the process of building houses has been inefficient, seeing many delays in implementation, causing long waiting times to persist. The plan also 'concentrates its efforts [almost] exclusively on metropolitan areas', so rural housing is sometimes neglected (Singh et al., 2024, p.132). As a result, '6.5% of houses are in decaying condition' across the country (Alam and Satpathi, 2022), a situation that has remained practically constant since 2001. The PMAY-G dashboard reveals that low levels of house completion in rural regions are also occurring despite them being sanctioned at a greater rate. With significant portions (> 90%) of EWS and Low-Income Groups (LIG) individuals facing shortage and quality issues in urban areas, where the policy is highly concentrated, the condition of rural housing is likely to be even worse (Alam and Satpathi, 2022).

Kumar et al., 2016, concluded that an unorganised identification process of beneficiaries at the grassroots level occurred in the initial stages of the policy's implementation, thus the benefits have not accrued to the targeted sections of society. Projects have also been criticised based on safety standards not being met, the bureaucracy and approval methods being too time-consuming, and lax monitoring and

evaluation of the policy, halting the appropriate distribution of resources (Singh et al., 2024), to which end the policy is still suffering a few years on.

STATE PROFILES

This section drafts state profiles that focus on areas of policy where the state is lagging, either in comparison to the standard for the state in other policies' effectiveness, or in terms of other states in that indicator. This is determined by the progress seen between 2015-16 and 2019-21, of which all data is from the NITI Aayog, 2023, report.

KERALA

Kerala is the least deprived state. With an MPI of 0.003 in 2015-16, which fell to 0.002 in 2019-21 (NITI Aayog, 2023), many of the indicators showed little development between both periods, as the instance of poverty was low, generally suggesting that those left in impoverished situations are deeply multidimensionally poor, with limited access to infrastructure, often living in extremely rural areas as well. Regardless, the fact that some indicators (nutrition, years of schooling, and housing) deteriorated is slightly concerning. This is suggestive of the fact that certain policies have been negligent in keeping up high standards after previous rapid poverty alleviation occurred, which is another aspect of poverty alleviation policies that must be ensured.

In terms of POSHAN Abhiyan, on top of the issues already touched upon, it was observed that Anganwadi centres (child care service institutions) and workers had faced software

freezes and incomplete deployment of the Beneficiary Management System, a designated tracker with real-time monitoring, automated alerts, and facial recognition systems (NITI Aayog, 2020). For Samagra Shiksha Abhiyan, the Kerala government has also been held back by the fact that funds amounting to 1,466 Crore Rs. have been withheld by the central government. Though not a fault of the Kerala government, this has inevitably led to a lack of textbooks, uniforms, meals, and even provisions for children with disabilities (Kumar, 2025). For PMAY, the rate of deprivation rose from 10.76% to 16.67% from 2015-16 to 2019-21. The Kerala State Planning Board noted that a major shortcoming was 'the tardy provision in the rehabilitation of landless homeless families' (p.30), and that limited progress has been made in linking household policy objectives with other policies like employment and training of beneficiary households. Perhaps most significant is the observation that departmental officers who carried out the scheme have not been from a local body, thus misunderstanding the factors distinguishing the housing circumstances in Kerala from the rest of India.

SIKKIM

Sikkim is a northeastern state, but unlike the general narrative of the northeast of India being relatively impoverished, Sikkim has a low incidence of poverty. With a population of around 611,000 (World Population Review, 2025), Sikkim makes up only around 0.004% of the Indian population. MPI fell from 0.016 in 2015-16 to 0.011 in 2019-21 (NITI Aayog, 2023). Being a small state, state policy is relatively well targeted to the poor population,

but that is not to say that the state has not faced issues in certain indicators.

Whilst cooking fuels and child and adolescent mortality rates saw large decreases in deprivation, sanitation and years of schooling saw increases in deprivation, from 10.36% to 12.71% and 8.20% to 8.59% respectively. The issues with Samagra Shiksha Abhiyan (targeting increasing median years of schooling for households) largely pertain to inadequate training for teachers, from the SSA's Inclusive Education Models to special needs instruction, not keeping pace with advancements seen in other areas of the nation (Sharma, 2022). However, a trend seen throughout the country has been chronic teacher shortages, in which case Sikkim is no different. A report by the Green Tribunal unveiled that the Swachh Bharat Mission (SBM) has had particular issues in Sikkim due to the terrain of Sikkim being unsuited to the wider policy. Where Sikkim has villages that demand decentralised waste management systems, the focus of SBM on IHHLs renders such an investment almost useless, and instead puts the region back. This, alongside the underfunding of waste management activities outside of IHHL construction, has led to the issues in sanitation seen in Sikkim.

HARYANA

Haryana saw an improvement in its MPI from 2015-16 to 2019-21, from 0.053 to 0.031 (NITI Aayog, 2023). Rising by 10 places in rankings of HDI from 1991 to 2021, Haryana has also seen significant relative progress, which means that even though it is behind in many of the indicators, it is amongst the most developed northern states.

Still, issues persist in the education sector, specifically with school attendance. Malhotra (2014) observed the case that when teacher absenteeism is high, which is the case in Haryana, even though enrolment levels are high for Haryana, in excess of 97%, then children did not attend lessons. The issue here seems to lie on a similar line to Samagra Shiksha Abhiyan in Sikkim. Low rural awareness was another significant issue facing the state (Singh, 2025).

GUJARAT

From 2015-16 to 2019-21, Gujarat saw its MPI from 0.083 to 0.050 (NITI Aayog, 2023). Whilst none of the indicators experienced increasing deprivation, housing and nutrition saw the least development. This is in line with the trend seen across all of India, yet there were still issues facing Gujarat uniquely.

For POSHAN Abhiyan, NITI Aayog, 2020 observed uneven stakeholder coordination, undermining the delivery of nutritional supplements. Bureaucracy was another issue for POSHAN Abhiyan, with a 'lack of timely reimbursement affect[ing] the functioning as well as personal finances [of beneficiaries]. Funds t[ook] a long time to get approved, and inter-departmental dynamics g[ot] in the way of smooth, quick transfer of funds' (NITI Aayog, 2020, p.51). For PMAY, issues arose from PMAY-G specifically. A 'lack of transparency in the selection process' led to several instances of corruption (Vats, 2024, p.3050), and even despite houses being sanctioned, quality and completion rates fell short of local requirements, even if meeting scheme objectives. This points towards a lack of accurate objectives for the policy to reduce instances of significant housing deprivation.

CHHATTISGARH

Overall MPI approximately halved, from 0.133 in 2015-16 to 0.070 in 2019-21 (NITI Aayog, 2023). Chhattisgarh is an interesting case for a state, for it had seen deterioration in HDI data from 1991 to 2011 (Global Data Lab, 1991, 2011), but has since seen improvements in HDI and the more recent MPI. Each of the indicators for Chhattisgarh improved by a significant portion, but the allocation of expenditure by policy per capita was consistently either the lowest or second lowest. In 2019-21, in each of the indicators, barring years of schooling and sanitation, Chhattisgarh had an above-average instance of deprivation, particularly for cooking fuel, which Chhattisgarh experienced the lowest decrease in deprivation of all of the states.

The shortcomings of PMUY in Chhattisgarh pertained to high LPG refill prices, the policy's inability to overcome cultural resistance to abandoning traditional solid fuels upon which they cook, and long distances to dealers (Giri and Aadil, 2018). A Comptroller and Auditor General (CAG) report also found that there was incomplete documentation in instances for LPG distributors, leading to some ineligible households receiving the connections, whereas some eligible, intended households did not (CAG, 2019).

BIHAR

Overall, Bihar's MPI fell from 0.265 to 0.160, the biggest nominal decrease of any state in the country (NITI Aayog, 2023). Yet, this MPI is still well more than double that of the all-India's 0.066 value, and each indicator is

significantly above the national average. The number of multidimensionally poor in 2015-16 was a massive 55,989,000. The greatest progress occurred for Bihar in most indicators as well, with PMJDY bringing about a fall in bank account deprivation from 26.00% to 3.90%, and cooking fuels from 82.92% to 63.30%. Regardless, expenditure on each policy was practically the lowest of the 6 states in study, barring cooking fuels.

Housing saw the smallest improvement, in line with national issues with PMAY once again. Socio-economic and Caste Census (SECC) lists were found to be misused by those carrying out the policy, caused by corruption, and leading to intended beneficiaries being excluded from the policy. On top of that, below-standard construction and poor infrastructure networks that other research noticed for PMAY in India in general were no exception in Bihar (Joshi, 2024).

CONSIDERATIONS & EVALUATION

The author carried out a test of regression to attempt to analyse which of the indicators was most directly correlated with multidimensional poverty, and as a result, that may need to be reflected in the MPI. Observations suggest that the global MPI and NITI Aayog's measurements of MPI, alongside that which is used in this article, may be misguided.

Regression analysis to calculate the Pearson Correlation Coefficient, measuring how one indicator correlates with the overall MPI, was undertaken. On a scale from -1 to 1, an r value of -1 indicates a perfect negative correlation, 0 suggests there is no correlation at all, and +1 suggests perfect positive correlation.

This follows the formula:

$$r = \frac{\sum(x_1 - x)(y_1 - y)}{\sqrt{\sum(x_1 - x)^2 \sum(y_1 - y)^2}}$$

r is the correlation coefficient, x_1 takes on all of the values in the x-variable (the indicator in this case) in the sample, $\bar{x}$ is the mean of the x-variable, y_1 takes on all of the values in the y-variable (MPI in this case), and $\bar{y}$ is the mean of the y-variable.

Calculation showed that nutrition and MPI have an r-value of 0.08, child and adolescent mortality rates and MPI an r-value of 0.11, years of schooling and MPI an r-value of 0.47, school attendance and MPI an r-value of 0.77, cooking fuels and MPI an r-value of 0.38, sanitation and MPI an r-value of -0.02, bank accounts and MPI an r-value of 0.46, housing and MPI an r-value of 0.98. This can be used to suggest that the weightings of indicators should be different from suggested prior (for example housing could carry a greater weight in the overall measure than 11% suggested earlier, whilst sanitation could have a lower weightage than 15%), but this is simply correlation, not causation, and there is incomplete sample data from which the correlation coefficients have been calculated based upon.

Additionally, there are some analyses and observations that need to be made before conclusions can be drawn about the effectiveness of policies or otherwise.

Since some of the policies selected do not access every aspect of the indicator it represents (like POSHAN Abhiyan, which does not include men's nutrition), this may mean the policy is carried out very efficiently. Alternatively, impacts several wider

objectives than the indicator (like NEP 2020, which impacts school education, but also higher education holistically), even if high programme intensity does not yield significant positive results, this may mean that the policy is carried out largely very effectively, but a slight lack of focus on the specific indicator targeted. Similarly, if there is high programme intensity by expenditure but weak results, this may suggest that expenditure and positive outcomes are uncorrelated, because there may be unintended consequences of the policy, though well-designed, in a separate area that negatively impacts the indicator. A study by Hoxby (2000) on American public schools showed that the drive to hire more certified teachers by increasing expenditure and pay for teachers led to greater instances of corruption, causing fraudulent inflation of teacher credentials and qualifications, thus making it harder to find and retain quality teachers.

States may also have in place their schemes that they implement independently of the central government, for example, in Kerala, where funding for Samagra Shiksha Abhiyan has come to a standstill, it may be required to fund its secondary education policy. These policies may also have positive impacts on reducing deprivations in indicators, thus breaking down the ideal *ceteris paribus* assumption held earlier of nationwide policy being the sole determiner of relevant MPI indicators.

Comparing development between 2 time periods in states with significant variations in initial poverty levels may also be misleading in the indication of policy effectiveness. For example, Kerala's MPI of 0.003 in 2015-16 differs significantly from Bihar's 0.265, and thus there is significantly more room for

improvement for Bihar. Since Kerala has already experienced large levels of development in the 1970s and 1980s (Roy and Raman, 2025), whereas Bihar is comparatively underdeveloped, policy would need to be significantly higher intensity in Kerala to generate even remotely similar percentage reductions in deprivation to Bihar, which was so in certain cases, but the level to which the intensity would need to be higher for a level playing field is not ascertained.

As touched upon earlier, time lags impact policies as well, so conclusions drawn about policies such as SBM and PMJDY are likely to be more accurate and guided than conclusions drawn on NEP 2020, which may even have started to yield benefits only after NFHS-5 was concluded, as many policies take 6-9 months to take effect in the real economy (Aziz, 2010).

Finally, there may be a case for Omitted Variable Bias (OVB), as many states have varying levels of improvement in Gross State Domestic Product (GSDP) and other indicators that improve over time independent of policy implementations, as they may be impacted by the private sector, industrialisation, or other income-generating activities.

RECOMMENDATIONS

Largely, the recommendations for policy improvements have been discussed earlier in this paper. Most significantly is the idea is that most of the national policies covered in this research have been plagued by the fact that they are carried out by individuals unfamiliar with the socioeconomic conditions of the state. As such, the first recommendation

pertains to employing local experts to manage, organise, and run the schemes in line with government objectives.

Secondly, there is a need to distinguish aims by state, such that they are made more realistic and attainable. Aiming to ‘prevent stunting’ in its entirety within 6 years of POSHAN Abhiyan is an example of a goal that is likely unattainable; thus, it would be incredibly difficult to see the policy as effective in achieving the objectives it has set out to achieve. Whilst such a goal may have been tangible in Kerala, where 15.29% of the population was nutrition-deprived in the NFHS-4 report, Bihar’s 51.87% nutrition-deprivation could not feasibly be eradicated within 6 years. Thirdly, there is a need to reduce unnecessary bureaucracy in many of the policies. To this end, the grassroots organisation should be more in-depth to avoid running into bureaucratic delays.

Other policy-specific improvements and recommendations are required, but what this looks like directly cannot be commented on in this paper, for the risk of suggesting possible misinformed, erroneous recommendations due to in-depth policy analysis not being completed in this paper is high.

CONCLUSION

In conclusion, analysis of the overall improvement in multidimensional poverty targeting policies implemented and their effectiveness has been split into 2 groups in this paper to define success: quantitative impact on reducing deprivation, and how successfully initial objectives of the scheme have been achieved. Overall, none of the individual schemes managed to achieve their

overarching goals, but progress has been made.

For POSHAN Abhiyan, only three out of five of the initial objectives saw some progress in indicators. For NHP 2017, the 2 relevant objectives about child mortality rates were the under-five mortality rate and infant mortality rate, which were targeted at 23 out of 1000 by 2025 and 28 per 1000 in 2019 (Government of India, 2017). World Bank data shows that the 2023 under-five mortality rate is 28, and a PIB report shows that the 2019 infant mortality rate was 30 out of 1000. In this case, neither objective was met, but significant progress has been made, since India saw a 75% improvement in child mortality rates from 1990-2020, as compared to the global average of 58% (PIB, 2025). For the education sector, Samagra Shiksha Abhiyan and National Education Policy 2020 do not have specific quantifiable objectives related to minimum years of schooling and school attendance percentages, respectively, by 2025 that can be measured. NEP does mention that India's GER (Gross Enrolment Ratio) for preschool to secondary level education should be 100% by 2030 (PIB, 2022), to which end India's GER was at 79 as of 2023, a marginal increase from 78 in 2020 (World Bank Open Data, 2025). At this rate, the objective will not be achieved. As per standard of living indicators, SBM's objective was to achieve an 'Open Defecation Free' status in all areas by 2019, of which 564,096 villages of 586,788 villages in India had satisfied this objective (PIB, 2025), which, though imperfect, was a significant level of progress. As per housing, PMAY failed to meet any of its objectives by 2022, thus requiring extension under Housing for All 2.0. PMJDY has been the most effective, causing bank accounts to increase threefold from March

2015 to August 2022 (PIB, 2022). Of all the policies, PMJDY has been the closest to achieving its goal (in this case, financial inclusion for all). PMUY has also seen significant progress, with more than 70,000,000 of the 80,000,000 LPG connections that were intended to be released by 2021 being met (PIB, 2023).

Of all the schemes, the mean development seen by the indicators was 24.78%, whilst the median was 16.19%. In such a study, the median level is probably more accurate, as the result for bank accounts was significantly higher than the other schemes' success rates, skewing the mean. This rate of development also coincided with the fall in India's MPI from 0.117 to 0.066 (NITI Aayog, 2023). Overall, this suggests a rate of development is similar to the global MPI fall, from 0.122 in 2015-16 to 0.069 in 2019-21 (OPHI, 2024).

As such, India's rate of development has been moderate, near the average of the world. India as a nation is currently in its stage of industrialisation and rapid economic growth, which other European, Western countries, alongside China, have already gone through. A comparison of China's HDI growth in its peak growth years (since MPI was not a measure in the 20th century) and India's MPI could provide scope for a better understanding of how successfully India is eradicating multidimensional poverty.

There is certainly scope for improvement within India, as certain states are not growing at the same rate as other states, and there are shortcomings in policy, as highlighted in this study. To this end, it is essential for dynamic policy, rooted in stringent monitoring and efficient resource and fund allocation, to be implemented, alongside maintenance of

successful policies to ensure that those lifted out of poverty and just living sustainably to

avoid deprivation do not fall back into the vicious cycle of multidimensional policy.

DATA TABLES

Table 1: Indicator and Deprivation Cut-Offs

Indicator	Deprivation Cut-Off
Nutrition	If a single member of the household is classified as undernourished ¹
Child and Adolescent Mortality Rates	If a child under 18 has died in the household
Years of Schooling	If the median level of education attainment is below 6 years of schooling for all 11+ aged individuals in the household
School Attendance	If any child in the house is not attending school with 95+% attendance until class 8
Clean Fuels	If cooking is done with solid fuels ²
Sanitation	If sanitation facilities are not classified as improved ³ or any 2 or more households share sanitation facilities
Housing	If floor is made of natural materials, or roofs or walls made of rudimentary materials ⁴
Bank Accounts	If no household member has a bank account or post office account

Table 2: MPI by state – 2015-16

State	MPI
All-India	0.117
Bihar	0.265
Chhattisgarh	0.133
Gujarat	0.083
Haryana	0.053
Kerala	0.003
Sikkim	0.016

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 3: MPI by state - 2019-21

State	MPI
All-India	0.066
Bihar	0.160
Chhattisgarh	0.070
Gujarat	0.050
Haryana	0.031
Kerala	0.002
Sikkim	0.011

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 4: Nutrition by state (% deprived) - 2015-16

State	Deprivation %
All-India	37.60
Bihar	51.87
Chhattisgarh	43.02
Gujarat	41.37
Haryana	32.34
Kerala	15.29
Sikkim	13.32

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 5: Nutrition by state (% deprived) - 2019-21

State	Deprivation %
All-India	31.52
Bihar	42.20
Chhattisgarh	35.12

Gujarat	38.09
Haryana	26.19
Kerala	16.44
Sikkim	10.36

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 6: Child and adolescent mortality rates (% deprived) by state - 2015-16

State	Deprivation %
All-India	2.69
Bihar	4.58
Chhattisgarh	3.32
Gujarat	2.21
Haryana	2.17
Kerala	0.19
Sikkim	1.00

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 7: Child and adolescent mortality rates (% deprived) by state - 2019-21

State	Deprivation %
All-India	2.06
Bihar	4.14
Chhattisgarh	2.33
Gujarat	1.81
Haryana	1.85
Kerala	0.20
Sikkim	0.26

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 8: Years of schooling (% deprived) by state - 2015-16

State	Deprivation %
All-India	13.86
Bihar	26.26
Chhattisgarh	13.47
Gujarat	9.82
Haryana	7.09
Kerala	1.78
Sikkim	8.20

Table 9: Years of schooling (% deprived) by state - 2019-21

State	Deprivation %
All-India	11.40
Bihar	22.29
Chhattisgarh	10.57
Gujarat	7.94
Haryana	5.51
Kerala	2.49
Sikkim	8.59

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 10: School Attendance (% deprived) by state - 2015-16

State	Deprivation %
All-India	6.40
Bihar	12.53
Chhattisgarh	5.38
Gujarat	6.68

Haryana	3.82
Kerala	0.54
Sikkim	1.42

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 11: School Attendance (% deprived) by state - 2019-21

State	Deprivation %
All-India	5.27
Bihar	10.61
Chhattisgarh	5.50
Gujarat	5.06
Haryana	4.31
Kerala	0.25
Sikkim	1.15

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 12: Cooking fuels (% deprived) by state - 2015-16

State	Deprivation %
All-India	58.47
Bihar	82.92
Chhattisgarh	78.04
Gujarat	48.79
Haryana	51.24
Kerala	43.89
Sikkim	42.20

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 13: Cooking fuels (% deprived) by state - 2019-21

State	Deprivation %
All-India	43.90
Bihar	63.30
Chhattisgarh	66.85
Gujarat	34.74
Haryana	43.93
Kerala	28.12
Sikkim	24.50

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 14: Sanitation (% deprived) by state - 2015-16

State	Deprivation %
All-India	51.88
Bihar	73.49
Chhattisgarh	65.37
Gujarat	37.09
Haryana	19.19
Kerala	1.83
Sikkim	10.36

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 15: Sanitation (% deprived) by state - 2019-21

State	Deprivation %
All-India	30.13
Bihar	50.78
Chhattisgarh	23.16

Gujarat	26.05
Haryana	15.11
Kerala	1.27
Sikkim	12.71

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 16: Housing (% deprived) by state - 2015-16

State	Deprivation %
All-India	45.65
Bihar	73.73
Chhattisgarh	63.31
Gujarat	24.24
Haryana	24.26
Kerala	10.76
Sikkim	26.71

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 17: Housing (% deprived) by state - 2019-21

State	Deprivation %
All-India	41.37
Bihar	65.37
Chhattisgarh	55.06
Gujarat	23.30
Haryana	23.95
Kerala	16.67
Sikkim	24.15

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 18: Bank accounts (% deprived) by state - 2015-16

State	Deprivation %
All-India	9.66
Bihar	26.00
Chhattisgarh	5.74
Gujarat	9.42
Haryana	8.17
Kerala	4.32
Sikkim	8.38

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 19: Bank accounts (% deprived) by state - 2019-21

State	Deprivation %
All-India	3.69
Bihar	3.90
Chhattisgarh	4.55
Gujarat	4.40
Haryana	3.56
Kerala	3.22
Sikkim	5.99

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 20: Multidimensionally poor population by state in 2015

State	Population
All-India	169,650,000
Bihar	55,989,310
Chhattisgarh	8,163,000

Gujarat	11,163,210
Haryana	3,011,750
Kerala	233,840
Sikkim	24,150

From NITI Aayog (2023): 'National Multidimensional Poverty Index'

Table 21: POSHAN Abhiyan Expenditure per impoverished capita by state in Rs. by 2019-21

State	Expenditure Per Capita
Bihar	49.70
Chhattisgarh	79.69
Gujarat	195.01
Haryana	143.64
Kerala	2863.71
Sikkim	5287.08

From PIB (2022): 'Budgetary Allocation on POSHAN Abhiyaan'

Table 22: National Health Policy Expenditure per impoverished capita by state in Rs. by 2019-21

State	Expenditure Per Capita
Bihar	5993.29
Chhattisgarh	24405.24
Gujarat	60611.59
Haryana	52122.52
Kerala	1142918.24
Sikkim	817805.38

From Ministry of Health and Family Welfare (2024): 'Status of Expenditure of Healthcare Infrastructure'

Table 23: Samagra Shiksha Abhiyan Expenditure per impoverished capita by state in Rs. by 2019-21

State	Expenditure Per Capita
Bihar	1634.87
Chhattisgarh	2833.87
Gujarat	2537.58
Haryana	4955.92
Kerala	30304.91
Sikkim	99863.35

From Ministry of Education (2024): 'Allocation and Utilization of Funds under SSA'

Table 24: National Education Policy Expenditure per impoverished capita by state in Rs. by 2019-21

State	Expenditure Per Capita
Bihar	54110.33
Chhattisgarh	188803.14
Gujarat	264404.21
Haryana	603768.57
Kerala	9495809.10
Sikkim	5561076.00

From Ministry of Education (2024): 'Analysis of Budgeted Expenditure on Education 2019-20 to 2021-22'

Table 25: Pradhan Mantri Ujjawala Yojana LPGs per impoverished capita built by state by 2019-21

State	LPGs Built Per Capita
Bihar	2.081
Chhattisgarh	0.466
Gujarat	0.386
Haryana	0.037
Kerala	1.659

Sikkim	0.823
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From Ministry of Petroleum and Natural Gas (2025): 'Beneficiaries under Pradhan Mantri Ujjwala Yojana'

Table 26: Swachh Bharat Mission IHHLs constructed per impoverished capita by state by 2019-21

State	IHHLs Constructed Per Capita
Bihar	0.217
Chhattisgarh	0.416
Gujarat	0.377
Haryana	0.229
Kerala	1.026
Sikkim	0.488

From Ministry of Jal Shakti (2022): 'Swachh Bharat Mission'

Table 27: Pradhan Mantri Awas Yojana Houses built per impoverished capita by state by 2019-21

State	Houses Build Per Capita
Bihar	0.001
Chhattisgarh	0.017
Gujarat	0.051
Haryana	0.014
Kerala	0.252
Sikkim	0.007

From Ministry of Housing and Urban Affairs (2021): '4,48,955 Houses Constructed Under PMAY (URBAN) with Rs 6,654.35 crore Central Assistance'

Table 28: Pradhan Mantri Jan Dhan Yojana accounts opened per impoverished capita by state by 2019-21

State	Bank Accounts Opened Per Capita
Bihar	0.857

Chhattisgarh	1.869
Gujarat	1.424
Haryana	2.605
Kerala	20.11
Sikkim	3.604

From Ministry of Finance (2021): 'PMJDY Accounts'

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