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Evaluation of the Human Development Index Through Government Policy: *A Case Study of the State of Gujarat, India*

ABSTRACT
This paper examines the relationship between government policy interventions and Human Development Index (HDI) outcomes in the western Indian state of Gujarat over the period 1990 to 2023. Despite Gujarat's reputation as one of India's most economically dynamic states, with per capita income consistently among the top five, its performance on the composite HDI has historically lagged behind its income rank — a divergence widely described in development literature as the "Gujarat Paradox." Drawing on data from the Office of the Registrar General of India, the National Family Health Survey (NFHS-5), the National Statistical Office's working paper on subnational HDI, state budget documents, and primary policy texts of the Government of Gujarat, this study disaggregates the composite HDI into its three constituent dimensions — health, education, and income — and traces the influence of major state-led interventions on each.
The analysis demonstrates that while Gujarat has registered substantial absolute gains across all three dimensions (HDI rising from approximately 0.431 in 1990 to roughly 0.724 in 2023), its relative ranking among Indian states has improved only modestly. Flagship interventions such as the Chiranjeevi Yojana in maternal healthcare, the Kanya Kelavani and Shala Praveshotsav campaigns in elementary education, and the Mission Mangalam livelihood programme are shown to have produced measurable but uneven impacts. The paper identifies persistent intra-state disparities, particularly between coastal-industrial belts and tribal regions in the eastern districts, as the central explanatory factor for the slower-than-expected growth of the state's composite HDI score. The paper concludes with a set of evidence-based policy recommendations focused on rebalancing social-sector budgetary allocations toward health and nutrition, addressing district-level convergence, and strengthening the institutional accountability mechanisms that connect policy expenditure with human-development outcomes.
Keywords: *Human Development Index, Gujarat, public policy, social-sector expenditure, health outcomes, education policy, regional disparities, NFHS-5, NSO subnational HDI, governance.*

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I. Introduction and Background

1.1 Statement of the Research Problem

The Human Development Index (HDI), first introduced in the 1990 Human Development Report by the United Nations Development Programme, marked a deliberate departure from the prevailing orthodoxy that economic growth alone — measured through per capita Gross Domestic Product — was an adequate proxy for the well-being of a population. Conceived by the Pakistani economist Mahbub ul Haq in close collaboration with the Indian economist and philosopher Amartya Sen, the HDI proposed instead that development be understood as the expansion of human capabilities, captured through three measurable dimensions: a long and healthy life, access to knowledge, and a decent standard of living. Three and a half decades later, the index has become one of the most widely cited composite measures in development economics, used by governments, multilateral institutions, and civil-society organisations alike to track progress in human well-being over time and across regions.

India's federal architecture, with its constitutional division of subjects between the Union and the States, places a substantial share of human-development responsibilities — particularly in school education, primary healthcare, public-distribution systems, and rural-development programmes — squarely on subnational governments. This makes the comparative study of state-level HDI performance not merely an academic exercise but a politically and administratively consequential one. Among Indian states, Gujarat occupies a particularly interesting position. Located on the western coast of the country and home to roughly 6.5 to 7.0 crore people, the state has, since the early 2000s, projected itself as an exemplar of governance-led development. It has consistently ranked among the top five Indian states by per capita income; it has hosted the high-profile biennial Vibrant Gujarat Global Summit since 2003; and its industrial base spans petrochemicals, pharmaceuticals, textiles, automobiles, and diamond processing.

Yet, when measured by the composite HDI rather than by gross product per capita, Gujarat's standing

is markedly less impressive. The National Statistical Office (NSO) working paper on subnational human development, released in 2020 and using 2017–18 data, placed the state at approximately the eleventh position among major Indian states with a composite score of 0.672 — well behind not only the conventionally high-performing southern states of Kerala and Tamil Nadu but also behind Punjab, Haryana, and Himachal Pradesh. This persistent divergence between Gujarat's economic rank and its human-development rank has been the subject of considerable scholarly attention and political debate, and is the central puzzle that this paper seeks to address.

1.2 Research Objectives and Questions

This study pursues four interlinked objectives:

1. To trace the historical trajectory of Gujarat's HDI from 1990 to the most recent year for which credible data are available, decomposing the composite index into its constituent dimensions of health, education, and income.
2. To inventory and categorise the principal government policy interventions undertaken by the State of Gujarat over this period that have plausibly affected one or more dimensions of the HDI.
3. To examine the temporal correspondence between major policy interventions and observable movements in the relevant component indicators, while acknowledging the methodological limitations of attributing causality in non-experimental settings.
4. To analyse persistent intra-state and inter-group disparities in human-development outcomes and to derive policy recommendations grounded in this analysis.

Correspondingly, the paper organises its empirical inquiry around three guiding research questions. First, how has Gujarat's HDI evolved relative to the all-India average and to comparable major states over the past three decades, and what does the dimension-wise decomposition reveal about the sources of this evolution? Second, what is the relationship between the volume and composition of Gujarat's social-sector public expenditure and the observed movements in its HDI components? Third, what explains the persistent gap between Gujarat's economic-output rank and its human-development rank, and what policy interventions are likely to be most effective in narrowing this gap?

1.3 Significance and Scope of the Study

The significance of this study is threefold. First, it contributes to the growing body of literature on subnational human development in India by offering a focused, policy-anchored case study of one of the country's most economically prominent states. Second, by tracing the relationship between specific policy instruments and dimension-level indicators, it offers a more granular account than the broad-brush rankings produced by the NSO or the Global Data Lab's subnational HDI database, both of which tend to obscure the differential performance of individual policies. Third, by foregrounding the so-called Gujarat Paradox, the paper contributes to ongoing debates in Indian political economy about the relationship between economic growth, governance quality, and social outcomes — a debate of considerable relevance not only to Gujarat itself but to other industrialising states such as Haryana, Maharashtra, and Karnataka, which display structurally similar patterns.

The scope of the paper is deliberately bounded. Temporally, the analysis runs from 1990 — the year in which the HDI was first conceptualised — to 2023, the latest year for which broadly comparable data are available. Geographically, the unit of analysis is the State of Gujarat, with subdivisions occasionally drawn at the level of administrative districts where data permit. The paper does not engage in the construction of a new HDI measure; rather, it relies on officially published estimates from the NSO, UNDP, and Global Data Lab, supplemented by component indicators from the Sample Registration System and the National Family Health Survey. Table 1 sets out a brief headline comparison between Gujarat and the all-India average across major indicators, which orients the remainder of the discussion.

Table 1: Key Macro Indicators — Gujarat vs. India (Most Recent Available Year)

Indicator	Gujarat	India	Source / Year
Population (crores, projected)	7.16	141.7	Census projection 2024
Per capita NSDP (₹, current prices)	2,73,558	1,84,205	MoSPI 2022–23
HDI (composite)	0.724	0.685	GDL / UNDP 2023
Life expectancy at birth (years)	70.2	70.1	SRS Abridged Life Table
Infant Mortality Rate (per 1,000)	22	27	SRS Bulletin 2023
Maternal Mortality Ratio (per 100,000)	57	97	SRS MMR Bulletin 2018–20
Literacy rate (%, population 7+)	78.0	73.0	NFHS-5 2019–21
Female literacy (%)	70.7	64.6	NFHS-5 2019–21
Sex ratio at birth (female/1000 male)	955	929	NFHS-5 2019–21
Unemployment rate (%)	1.7	3.2	PLFS 2022–23

Sources: Office of the Registrar General of India (Sample Registration System); MoSPI; NFHS-5 Report (IIPS, 2022); NITI Aayog State Fiscal and Macro Briefs (2025); RBI Handbook of Statistics on Indian States (2023–24).

II. Literature Review

2.1 Theoretical Foundations of Human Development

The conceptual scaffolding of the Human Development Index rests on what Amartya Sen has called the "capability approach" to development. In Sen's formulation, the proper informational basis for evaluating the well-being of a society is not the aggregate income it commands, nor the resources it possesses, but rather the substantive freedoms — capabilities — that its members have to lead lives they have reason to value. Income is instrumental to the expansion of capabilities, but it is not constitutive of well-being in itself. A society may be income-rich and yet capability-poor if its members lack the education, the health, and the political freedoms to convert their resources into a life worth living. The HDI operationalises this insight, imperfectly but usefully, by combining indicators of longevity, education, and command over resources into a single composite measure.

Critics of the HDI have, over the years, advanced two broad lines of objection. The first is methodological: the geometric mean of three normalised indices necessarily compresses information, treats the dimensions as substitutable to a degree that some scholars find unjustified, and is sensitive to the choice of minimum and maximum reference values used in normalisation. The second is substantive: the three dimensions chosen, while important, do not exhaust the domains relevant to human well-being. Considerations such as political freedom, environmental sustainability, gender equality, and physical security are notably absent from the headline measure. In response, the UNDP has, since 2010, published a suite of complementary indices — the Inequality- adjusted HDI (IHDI), the Gender Development Index (GDI), the Gender Inequality Index (GII), and most recently the Planetary pressures-adjusted HDI (PHDI). For the purposes of this paper, the standard HDI is treated as the primary measure, while the GDI and GII are drawn upon where gender disaggregation is analytically relevant.

2.2 Empirical Studies on Indian Subnational HDI

India's engagement with the HDI framework as a tool of subnational policy analysis began in earnest with the publication of the National Human Development Report 2001 by the erstwhile Planning Commission of India. That report ranked states on seventy development indicators and notably placed Kerala in second position despite its modest per capita income, while Punjab — then the country's richest agricultural state — ranked

nineteenth. The Planning Commission's subsequent India Human Development Report 2011 confirmed the broad pattern: states with strong investments in primary education and public health (the southern states, plus Himachal Pradesh and Punjab) tended to outperform states whose development model relied disproportionately on industrial growth (Gujarat, Haryana, Maharashtra).

More recently, the National Statistical Office's working paper Gendering Human Development (2020) recalculated HDI, GDI, and GII for all states and union territories using 2011–12 and 2017–18 data. That working paper found that India had no states in the "Low HDI" category by 2017–18, with the laggards (Bihar, Jharkhand, Madhya Pradesh) having moved into the lower end of the medium-HDI band. Gujarat, in this analysis, sat in the upper half of the medium-HDI category but was overtaken by all the states traditionally associated with India's "high-HDI" cluster. The Centre for Economic Data and Analysis (CEDA) at Ashoka University, in its 2024 analytical note, observed that despite having the highest state gross domestic product per capita among the larger states, Gujarat and Haryana have failed to translate this advantage into commensurate human-development outcomes, ranking eleventh and tenth respectively in HDI in 2017–18.

2.3 The Gujarat Paradox in Development Literature

A distinct strand of writing has crystallised around what is now widely termed the "Gujarat Paradox" — the persistent disjunction between the state's strong economic-growth record and its more modest human-development performance. The economists Atul Sood and Indira Hirway, in separate but converging analyses, have argued that Gujarat's growth model has historically privileged large-scale industrial investment and infrastructure over expenditures on health, nutrition, and primary education. A widely cited 2017–18 budget analysis by the Ahmedabad-based research organisation Pathey found that Gujarat ranked tenth among India's eighteen larger states in the share of its budget allocated to social services, at 41.3 percent — down from 43.1 percent the previous year. The same analysis observed that the state's health budget hovered around 5.5 percent of total expenditure, well below the 8.0 percent threshold widely considered necessary to deliver universal quality healthcare.

Notwithstanding these critical assessments, the Gujarat government has, in its own state-led Gujarat Human Development Reports of 2004 and 2014, emphasised the considerable absolute progress the state has registered, and the recent rollout of large flagship schemes — the Chiranjeevi Yojana, the Mukhyamantri Amrutum Yojana, the Vahli Dikri Yojana, and the Mission Schools of Excellence — represents an attempt to close the gap between the state's economic prowess and its human-development performance. The literature thus furnishes both the empirical premise of this paper (an income–development gap that requires explanation) and a normative orientation (that policy can plausibly narrow that gap if appropriately designed).

III. Conceptual Framework and Methodology

3.1 Conceptual Framework

The analytical framework adopted in this paper traces a causal chain that runs, in stylised form, from government policy inputs to human-development outcomes. Policy inputs — the budgetary allocations, regulatory provisions, schemes, and institutional arrangements established by the state government — feed into intermediary public-expenditure flows on education, health, and employment generation. These flows generate outcomes at the level of the three HDI dimensions: longer life expectancies, improved literacy and schooling, and rising per capita incomes. The composite HDI is the aggregation of these dimension-level outcomes.

Crucially, the chain is moderated by two sets of factors. The first comprises mediating factors internal to the state apparatus: the quality of governance, the capacity of the bureaucracy to execute programmes, and the magnitude of leakages and corruption. The second comprises contextual factors that are largely exogenous to the state government within any short or medium time horizon: the rate of urbanisation, the structure of the regional economy, prevailing social norms (particularly around gender), and the geography of the state. Figure 10 visualises this framework, including a feedback loop from HDI outcomes through political accountability back to policy adjustment — a feedback that, in democratic systems, is an important channel through which underperformance can ultimately discipline policy choice.

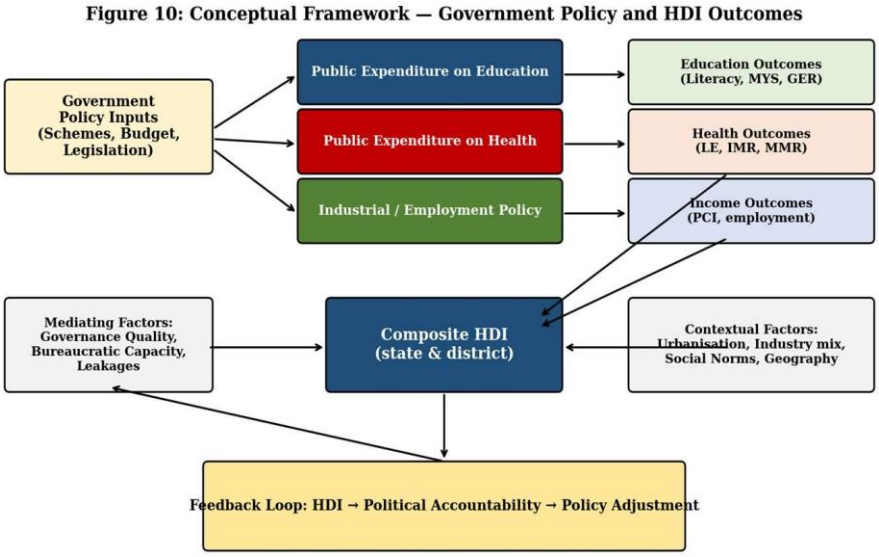


Figure 10: Conceptual Framework — Government Policy and HDI Outcomes

3.2 Data Sources and Indicators

The empirical analysis relies on a combination of publicly available secondary datasets, the most important of which are the following. For composite HDI scores, this paper uses the NSO working paper on subnational HDI (2020) for the years 2011–12 and 2017–18, and the Global Data Lab's Subnational HDI database for trend estimates spanning 1990 to 2023. For component indicators of the health dimension, the principal sources are the Sample Registration System Bulletins published by the Office of the Registrar General of India and the National Family Health Survey, Round 5 (NFHS-5), 2019–21. For component indicators of the education dimension, this paper draws upon the Census of India 2011, the All-India Survey on Higher Education (AISHE) 2021–22, and again the NFHS-5 for literacy and schooling figures. For the income dimension, per capita Net State Domestic Product figures are taken from the Ministry of Statistics and Programme Implementation's state-level estimates. Finally, expenditure data are sourced from Gujarat State Budget documents, the Reserve Bank of India's State Finances Report, and reports of the Comptroller and Auditor General of India.

Table 2: Component Indicators Used in the Subnational HDI Calculation

Dimension	Indicator	Data Source	Most Recent Value
Health	Life expectancy at birth (years)	SRS Abridged Life Tables	GJ: 70.2; IN: 70.1
	Infant mortality rate (per 1,000)	SRS Bulletin 2023	GJ: 22; IN: 27
	Maternal mortality ratio	SRS MMR Bulletin 2018–20	GJ: 57; IN: 97
Education	Mean years of schooling (25+)	NFHS-5 / Census 2011	GJ: 8.4; IN: 6.7
	Expected years of schooling	AISHE / NFHS-5	GJ: 12.6; IN: 12.0
Dimension	**Indicator**	**Data Source**	**Most Recent Value**
	Literacy rate (7+)	NFHS-5 2019–21	GJ: 78.0%; IN: 73.0%
Income	Per capita NSDP (₹)	MoSPI 2022–23	GJ: ₹2,73,558; IN: ₹1,84,205
	PCNI (constant 2011–12 prices)	RBI Handbook 2023–24	GJ: ₹1,72,400; IN: ₹98,374

Note: All figures are the most recent published estimates as of January 2026. Where two data sources offer divergent values for the same indicator, this paper privileges the official Government of India source. Sources: NSO; MoSPI; SRS; NFHS-5; AISHE; RBI Handbook of Statistics on Indian States, 2023–24.

3.3 Methodological Approach

The methodology of this paper is descriptive and interpretive rather than econometric. It proceeds in four steps. The first step compiles the time series of Gujarat's HDI and its components from 1990 to 2023 and compares this trajectory with the all-India series and with selected comparator states. The second step identifies, through a review of Government of Gujarat policy documents and secondary literature, the major state-led policy interventions over the same period that plausibly bear upon one or more HDI dimensions. The third step examines, on a dimension-by-dimension basis, the temporal correspondence between the introduction and scaling of these interventions and the observed movement in the corresponding indicators, while being careful to flag the limits of causal attribution that follow from the non-experimental design. The fourth and final step disaggregates the state-level picture by examining intra-state heterogeneity across districts, with a particular focus on the eastern tribal belt where the state's development model has been historically underperforming.

The principal methodological caveats are three. First, because Gujarat's HDI is not estimated by a single authoritative body on an annual basis, this paper relies on a synthesis of NSO, UNDP/GDL, and component-indicator-based reconstructions, which inevitably introduces minor inconsistencies. Second, in the absence of a randomised or quasi-experimental design, the paper does not claim to isolate the causal contribution of any single policy intervention; it identifies plausible associations and offers reasoned interpretations consistent with the available evidence. Third, district-level HDI figures, where reported, draw on a combination of the Gujarat Human Development Report 2014, district statistical abstracts, and the authors' own calculations using NFHS- 5 district fact sheets, and are therefore best understood as informed estimates rather than precise measurements.

IV. Gujarat's HDI Trajectory: National and Historical Context

Figure 1 plots the trajectory of Gujarat's composite HDI alongside the all-India figure for the period 1990 to 2023. Two features of this trajectory deserve emphasis. First, the absolute gain in human development over the three decades is substantial. Gujarat's HDI has risen from roughly 0.431 in 1990 to approximately 0.724 in 2023, a gain of 0.293 index points, which is materially larger than the all-India gain of 0.251 over the same period. In international terms, this places Gujarat, by 2023, just above the threshold of the High Human Development category, having crossed the symbolic 0.700 mark sometime around 2021. The all-India figure, at 0.685 in 2023, remains in the Medium Human Development category, although it too has gained ground rapidly during the past decade.

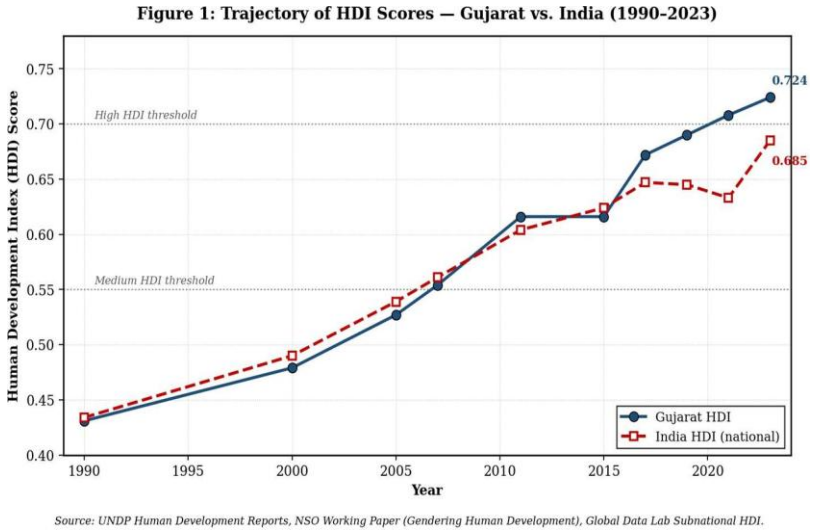


Figure 1: Trajectory of HDI Scores — Gujarat vs. India (1990–2023)

Second, the shape of the trajectory is informative. Between 1990 and roughly 2007, Gujarat's HDI tracked the all-India series very closely, with the two curves barely distinguishable on the chart. It is only from 2007 onwards — the period following the launch of the Vibrant Gujarat Global Summit (2003), the Chiranjeevi Yojana (2005–06), and the Kanya Kelavani campaigns — that the Gujarat curve clearly separates from the national average and begins to climb more steeply. This is consistent with the interpretation that the state's strong economic-growth phase, sustained by rising industrial investment and infrastructure spending, did translate over time into improved HDI performance, even if not in proportion to its income gains.

Figure 2 places Gujarat in the broader cross-state context for the most recent year for which NSO subnational HDI data are available (2017–18). The figure makes vivid the central puzzle of this paper. Despite Gujarat's status as one of the country's leading industrial economies, its HDI score of 0.672 places it in the lower

half of the medium-HDI category, below Punjab (0.762), Himachal Pradesh (0.761), and several southern states. The very-high-HDI category (HDI ≥ 0.800) is occupied by Delhi, Chandigarh, and Goa, with Kerala leading the high-HDI states at 0.775. Gujarat's score is closer to those of Andhra Pradesh (0.668) and Rajasthan (0.629) than to its neighbour Maharashtra (0.730), with which it is often economically grouped.

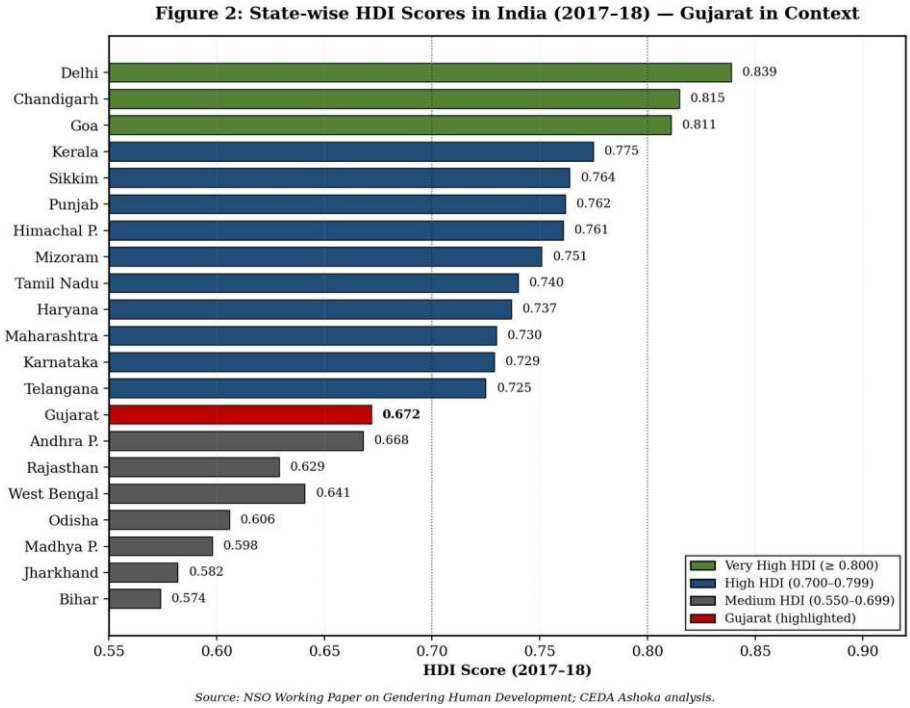


Figure 2: State-wise HDI Scores in India (2017–18) — Gujarat in Context

Figure 3 disaggregates Gujarat's composite HDI into its three constituent dimensions for three reference years: 2011–12, 2017–18, and an authors' estimate for 2023. The decomposition reveals a clear hierarchy among the dimensions. The Income Index has consistently been the strongest performer, sitting around 0.745 in 2017– 18 and rising to an estimated 0.793 in 2023. The Health Index has improved markedly from 0.625 in 2011–12 to roughly 0.748 in 2023, reflecting the impact of falling mortality rates and rising life expectancy. The Education Index, however, has been the persistent weak link: at 0.586 in 2017–18 and around 0.642 in 2023, it remains the most binding constraint on the composite score. This pattern is replicated in Table 3, which sets out the decadal point-changes in each component.

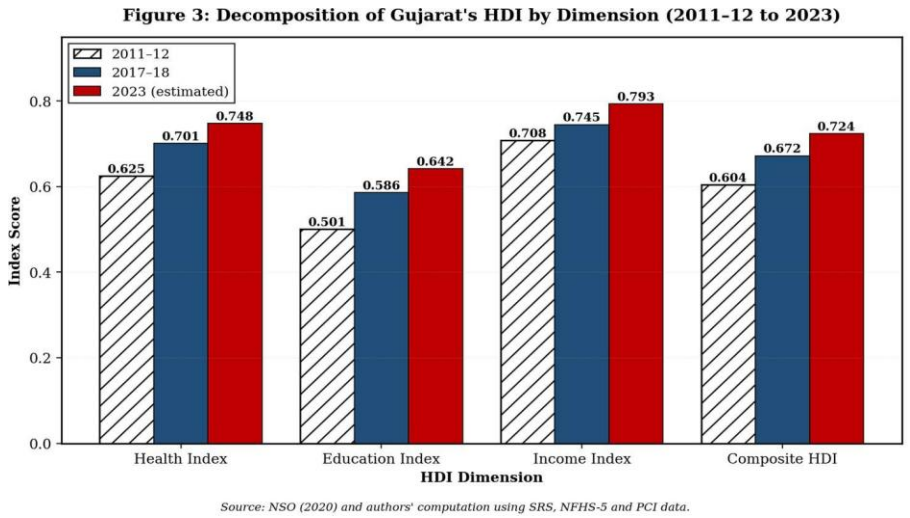


Figure 3: Decomposition of Gujarat's HDI by Dimension (2011–12 to 2023)

Table 3: Decadal Changes in Gujarat's HDI Components (2011–12 to 2023)

Component	2011–12	2017–18	2023 (est.)	Change (pts)
Health Index	0.625	0.701	0.748	+0.123
Education Index	0.501	0.586	0.642	+0.141
Income Index	0.708	0.745	0.793	+0.085
Composite HDI	0.604	0.672	0.724	+0.120

Note: 2011–12 and 2017–18 values from NSO Working Paper, Gendering Human Development (2020). The 2023 estimate is computed by the authors using the standard UNDP geometric-mean methodology applied to updated SRS, NFHS-5, and MoSPI component data.

Three implications follow from this dimension-wise reading. First, Gujarat's improvement on the income dimension, while real, has been more modest in index terms than its widely publicised growth rate in per capita NSDP. This is because the index applies a logarithmic transformation to the income measure, which dampens the headline effect of high growth at already-elevated income levels. Second, the substantial gains on health since the mid-2000s vindicate, in broad terms, the impact of the state's two flagship health interventions — Chiranjeevi and Mukhyamantri Amrutum — examined in detail in Section 5. Third, the slower advance of the education index points to the area of greatest unfinished business, a theme to which Section 6 returns.

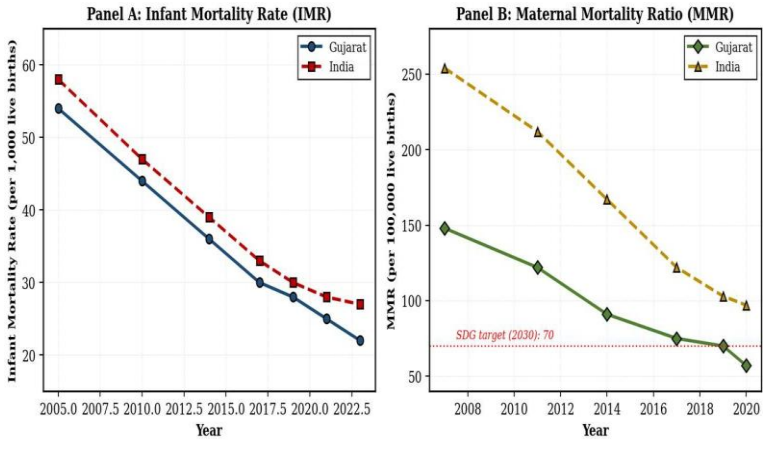
V.The Health Dimension

Health stands at the centre of the human-development concept: a healthy life is both intrinsically valuable and instrumentally necessary for the exercise of other capabilities. In the HDI methodology, the health dimension is captured by a single indicator, life expectancy at birth, though component analyses such as that undertaken here can use a fuller set of mortality and morbidity measures. Gujarat's performance on the health front has been one of clear, if uneven, improvement, with the state outperforming the all-India average on most leading indicators but still trailing the best-performing southern and Himalayan states.

5.1 Mortality and Longevity Indicators

Figure 4 plots the trends in infant mortality rate (IMR) and maternal mortality ratio (MMR) for Gujarat and India over the past two decades. The improvement on both metrics is substantial. Gujarat's IMR has fallen from 54 deaths per 1,000 live births in 2005 to 22 in 2023, a decline of 59 percent. The all-India average has fallen from 58 to 27 over the same period, a decline of 53 percent. The state has thus maintained a small but durable lead over the national average. The MMR figures are even more dramatic. In 2007, Gujarat's MMR stood at 148 deaths per 100,000 live births; by 2018–20, the latest year for which the SRS bulletin reports state-level estimates, it had fallen to 57 — well below the Sustainable Development Goal target of 70 by 2030, which Gujarat thus achieved more than a decade ahead of schedule. India as a whole reached MMR 97 in 2018–20, also a substantial reduction but materially above the SDG threshold.

Figure 4: Trends in Key Health Outcomes — Gujarat vs. India



Source: SRS Bulletin, Office of the Registrar General of India; MoHFW Press Releases.

Figure 4: Trends in Key Health Outcomes — Gujarat vs. India

Table 4: Selected Health Indicators — Gujarat vs. India (NFHS-5, 2019–21)

Indicator	Gujarat	India	Gap
Institutional births (%)	94.3	88.6	+5.7
Full immunisation, age 12–23 mo. (%)	76.3	76.4	−0.1
Children stunted under 5 yrs (%)	39.0	35.5	+3.5
Children wasted under 5 yrs (%)	25.1	19.3	+5.8
Children underweight under 5 yrs (%)	39.7	32.1	+7.6
Anaemia in women 15–49 yrs (%)	65.0	57.0	+8.0
ANC at least 4 visits (%)	76.9	58.1	+18.8
Out-of-pocket health expenditure (% total)	50.2	47.1	+3.1

Note: Positive values in the "Gap" column indicate Gujarat exceeds the national figure; negative values indicate the converse. For child malnutrition indicators, a higher value is undesirable. Source: NFHS-5 India Report, IIPS (2022).

Table 4 paints a more nuanced picture. Gujarat clearly outperforms the national average on indicators of healthcare access and utilisation — institutional births (94.3 percent vs. 88.6 percent nationally) and antenatal care visits (76.9 percent vs. 58.1 percent) — reflecting the success of supply-side interventions. However, the state lags the national average on every measure of child malnutrition. The stunting rate of 39.0 percent, the wasting rate of 25.1 percent, and the underweight rate of 39.7 percent are all materially worse than the corresponding national figures. NFHS-5 documented that in Gujarat, as in Bihar, more than 40 percent of children under five are underweight, a finding that has provoked considerable concern among public-health scholars and policymakers. The persistence of widespread child malnutrition, despite robust GDP growth and good clinical-access indicators, is one of the clearest signals that the state's economic prosperity has not been efficiently converted into nutritional security for its most vulnerable populations.

5.2 Policy Interventions: Chiranjeevi, MA Yojana, and Beyond

The Chiranjeevi Yojana, launched in 2005–06, is widely regarded as Gujarat's signature health-policy innovation of the 2000s. Under the scheme, the state government empanels accredited private obstetricians who agree to provide free institutional delivery services — including caesarean sections — to pregnant women from below-poverty-line households, in exchange for a fixed bundled payment of approximately ₹1,795 per delivery. The scheme addressed a critical gap in the state's public-health infrastructure: at the time of its launch, around 95 percent of obstetricians in Gujarat were in the private sector, but private deliveries were unaffordable for the bulk of poor households. By contracting with private providers, the state effectively expanded access without first having to build out a state-owned obstetric workforce.

The scheme's impact on the MMR trajectory shown in Figure 4 is, in temporal terms, suggestive: the steepest drops in Gujarat's MMR occurred in the five years immediately following its rollout. Evaluation studies, including those by the Public Health Foundation of India, have estimated that Chiranjeevi may have averted between 8,000 and 12,000 maternal deaths in its first decade. Critics have pointed to limitations — the scheme primarily incentivised normal vaginal deliveries and may have under-served complicated cases, while some districts saw private providers withdrawing from the scheme when the bundled payment failed to keep pace with rising input costs. Nonetheless, the consensus in the evaluative literature is that Chiranjeevi materially contributed to Gujarat reaching the SDG MMR target ahead of schedule.

The Mukhyamantri Amrutum (MA) Yojana, launched in 2012 and later expanded under the MA Vatsalya umbrella, complements Chiranjeevi on the curative side by providing cashless tertiary care of up to ₹5 lakh per family per year for households below an income threshold of ₹4 lakh. Following the introduction of the central Pradhan Mantri Jan Arogya Yojana (PM-JAY) in 2018, the MA scheme was integrated with the national programme, enabling Gujarat to leverage central funds while retaining its own additional coverage. The reach of these combined schemes is now substantial: by mid-2024, more than 3 crore Ayushman cards had been issued to beneficiaries in the state.

The state's other major health-and-nutrition interventions include the PURNA Yojana (Programme for

Upliftment, Resilience and Nutritional Advancement) launched in 2018–19 to address anaemia and nutritional deficiencies in adolescent girls, and the long-running Integrated Child Development Services scheme delivered through anganwadi centres. These efforts notwithstanding, the persistence of high child stunting and wasting rates documented in Table 4 indicates that the state's nutritional interventions have so far failed to match the success of its institutional-delivery and tertiary-care programmes. Section 11 returns to this gap in its policy recommendations.

VI. The Education Dimension

Of the three HDI dimensions, education has been the slowest to converge in Gujarat. As Section 4 demonstrated, the state's Education Index in 2017–18 stood at 0.586 — well below its Health Index (0.701) and Income Index (0.745) for the same year. While there has been steady absolute progress, this dimension remains the most binding constraint on the composite HDI. Three sets of indicators inform the analysis: literacy, schooling years and enrolment, and higher-education access.

6.1 Literacy, Enrolment, and Schooling Outcomes

Figure 5 sets out a five-way comparison of education indicators between Gujarat and the all-India average. The pattern is mixed. On overall literacy, Gujarat (78.0 percent) exceeds the all-India figure (73.0 percent) by 5 percentage points. On male literacy, Gujarat (85.8 percent) edges out India (80.9 percent) by 4.9 points; on female literacy, the gap widens to 6.1 points (70.7 vs. 64.6). Mean years of schooling for adults aged 25 and above is appreciably higher in Gujarat (8.4 years) than nationally (6.7 years). The surprise is in higher education: Gujarat's Gross Enrolment Ratio (GER) of 22.8 percent in higher education is below the national average of 28.4 percent.

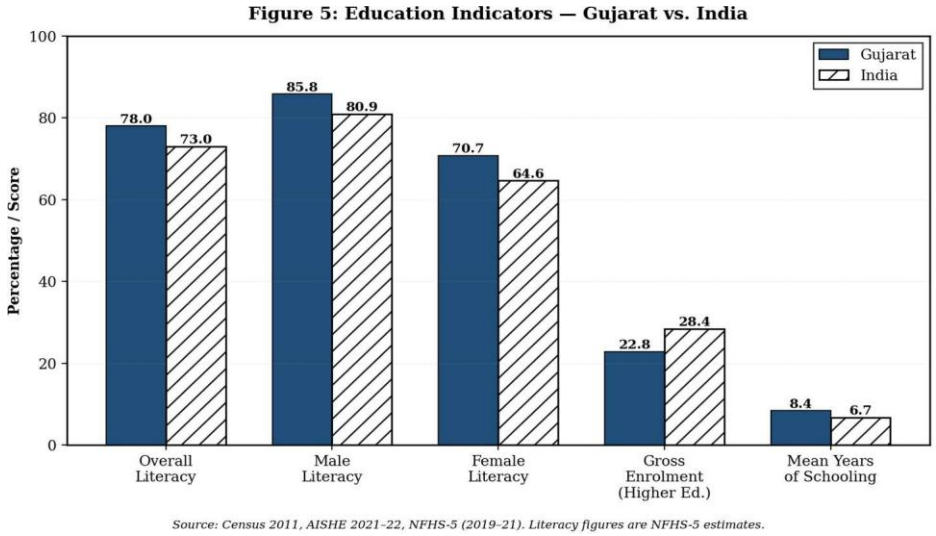


Figure 5: Education Indicators — Gujarat vs. India

This last finding is counter-intuitive and merits comment. Gujarat is home to several flagship institutions
— IIM Ahmedabad, IIT Gandhinagar, the National Institute of Design, the Pandit Deendayal Energy University, the Central University of Gujarat — yet its broad-based participation in higher education trails the national average. Three factors are widely cited in the literature. First, Gujarat has a particularly strong tradition of early entry into family-run business and trade, which depresses the demand for university-level education, especially among urban Gujarati-speaking communities engaged in diamonds, textiles, and trading. Second, female participation in higher education remains constrained by social norms around marriage and mobility; the Gender Parity Index in higher education in Gujarat is lower than the national average. Third, the state's investment in higher-education infrastructure has been weighted towards a small number of flagship institutions rather than broad-based expansion of the public university system.

6.2 Kanya Kelavani, Shala Praveshotsav, and Mission Schools of Excellence

Gujarat's most-discussed education-policy innovation has been the Shala Praveshotsav (School Enrolment Festival) and the linked Kanya Kelavani Mahotsav (Girl Education Festival), launched in 2003 under the chief ministership of Narendra Modi. The annual three-day campaign mobilises the state's senior bureaucracy — from the Chief Minister down to district collectors and block-level officers — to physically visit

villages, motivate parents to enrol their children in school, distribute admission forms, and follow up on dropouts. The programme has run continuously since 2003 and has, by the state government's own accounting, enrolled over 525,000 girls in formal schooling. The campaign's symbolic power and administrative integration helped Gujarat reach near-universal Gross Enrolment Ratios at the primary level by the early 2010s.

Subsequent interventions have sought to address quality once enrolment was largely secured. The Mukhyamantri Yuva Swavalamban Yojana (MYSY), launched in 2018, provides financial assistance of up to 50 percent of tuition fees for higher-education courses for students from middle-income families. The Vahli Dikri Yojana, launched in 2019, transfers ₹1.10 lakh to families upon the marriage or higher-education enrolment of their daughters, with the explicit goal of incentivising female education through to the tertiary stage. Most recently, the Gujarat Mission Schools of Excellence programme, announced in 2022 with a financial outlay of ₹10,000 crore over five years and supported by World Bank financing, aims to upgrade infrastructure and pedagogy in 35,000 state-government schools.

Despite these substantial commitments, Gujarat's overall education performance — as captured in NAS (National Achievement Survey) scores, ASER (Annual Status of Education Report) reading and arithmetic measures, and the PGI (Performance Grading Index) issued by the Ministry of Education — places the state in the middle of the inter-state league rather than at the top. The 2019–20 PGI ranked Gujarat seventh among major states. The ASER 2022 report found that only 41.0 percent of children in Class 5 in rural Gujarat could read a Class 2 text, broadly in line with the national average but well behind Himachal Pradesh, Kerala, and Punjab. The improvements in literacy and enrolment have thus not consistently translated into improvements in learning outcomes, an issue to which the policy recommendations in Section 11 return.

VII. The Income Dimension

Income is the dimension on which Gujarat's headline performance has been most impressive. Per capita Net State Domestic Product has grown rapidly since the mid-2000s, and the state has consistently maintained one of the highest growth rates in the country. Yet, the same dimension also illustrates the central paradox of this paper: even on income, Gujarat's score in the HDI methodology is dampened by the logarithmic transformation, and the question of how widely the income gains are shared remains contested.

7.1 Per Capita Income Growth and Sectoral Composition

Figure 6 charts the trajectory of per capita NSDP in current prices for Gujarat and India between 2011 and 2023. The figures speak for themselves. Gujarat's per capita NSDP rose from ₹89,668 in 2011–12 to ₹2,73,558 in 2022–23, an increase of 205 percent in nominal terms (and roughly 70 percent in real terms after adjusting for inflation). The corresponding all-India growth over the same period was from ₹63,462 to ₹1,84,205, an increase of 190 percent in nominal terms (about 60 percent real). Gujarat's lead over the national average, in absolute rupee terms, has therefore widened consistently: from a gap of ₹26,206 in 2011–12 to ₹89,353 in 2022–23.

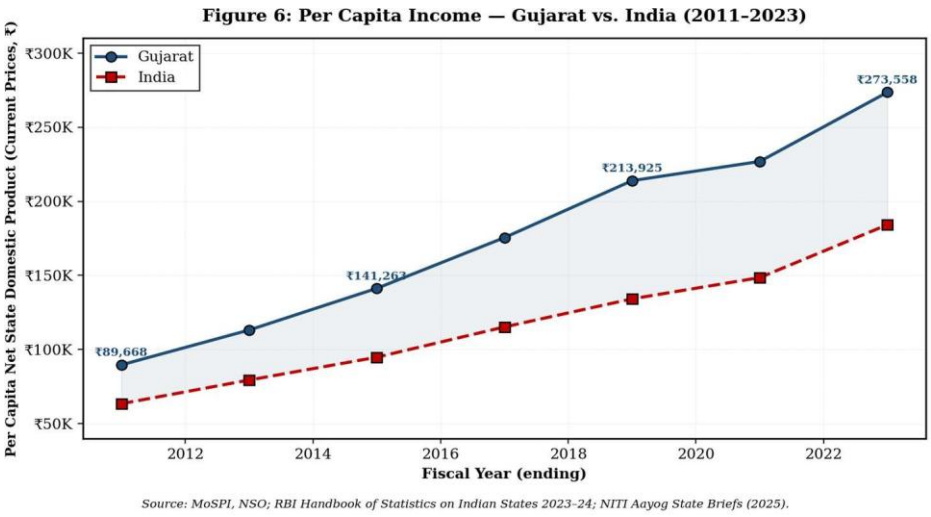


Figure 6: Per Capita Income — Gujarat vs. India (2011–2023)

The sectoral composition of Gujarat's GSDP is distinctive. As of the most recent data (2023–24), services contribute roughly 45 percent of GSDP, industry approximately 38 percent (one of the highest industrial shares of any Indian state), and agriculture about 17 percent. The state hosts a particularly diversified industrial

base: petrochemicals and chemicals (anchored by the Jamnagar refining complex of Reliance Industries and the petrochemicals cluster at Dahej), pharmaceuticals (the Ahmedabad–Vadodara axis is home to Zydus Cadila, Torrent, and Intas, among others), textiles and apparel (Surat's diamonds and synthetic fabric industries), automobiles (Sanand and Halol), and increasingly semiconductors (the Dholera and Sanand projects). This industrial depth provides the state with a relatively robust revenue base and high formal-sector employment.

Yet within this picture there are important qualifications. First, despite the industrial weighting of GSDP, the workforce remains concentrated in agriculture (41.8 percent of working population), with services (26.4 percent) and manufacturing (23.8 percent) absorbing the remainder. This indicates that the productivity gains in industry have not been fully transmitted to broad-based employment. Second, the female labour force participation rate, while above the national average, remains low in absolute terms relative to comparator economies, particularly in urban areas. Third, the state's formal unemployment rate of 1.7 percent (PLFS 2022–23) compares favourably to the national figure of 3.2 percent, but underemployment and informal-sector employment remain widespread.

7.2 Vibrant Gujarat, Mission Mangalam, and Employment Generation

The institutional centrepiece of Gujarat's income-side policy strategy has been the biennial Vibrant Gujarat Global Summit, inaugurated in 2003. Conceived as a platform for attracting domestic and international investment, the summit became a template subsequently adopted by other Indian states. Over its ten editions to date, the summit has reportedly generated cumulative MoUs valued in tens of trillions of rupees, though the realisation rate — the proportion of MoUs that translate into operating investments — has been the subject of considerable debate. State government estimates place realisation at around 60 to 65 percent, while independent analyses such as those by the Indian Institute of Management Ahmedabad have suggested rates closer to 40 percent.

On the livelihoods side, Mission Mangalam, launched in 2009, has been Gujarat's flagship intervention to organise women into self-help groups and link them to microfinance, skills training, and market access. By 2023, the mission had reportedly federated more than 2.5 lakh self-help groups, covering approximately 30 lakh women. The Garib Samrudhi Yojana, the Manav Garima Yojana (for backward-class artisans), and the various skill-development schemes under the Kaushalya: The Skill University (established in 2021) constitute additional layers of the state's livelihood-policy architecture. The contribution of these interventions to per capita income, while difficult to isolate empirically, is plausibly meaningful at the bottom of the distribution.

A useful summary observation from Figure 6 is that the absolute gap between Gujarat's per capita income and the national average has widened, while Gujarat's HDI lead over the national figure has remained more modest. The income index, which rises only logarithmically with per capita income, captures only a fraction of the headline economic differential — a mathematical feature of the HDI methodology that is consequential for interpreting Gujarat's relative performance and that the paper returns to in Section 10.

VIII. Inventory of Government Policy Interventions

Building on the dimension-wise discussions of the preceding three sections, this section consolidates the major Gujarat-government policy interventions of the past two decades into a single inventory. The interventions are grouped by their primary HDI dimension and listed in roughly chronological order of launch. Figure 7 immediately below visualises the budgetary commitments behind these interventions; Figure 9 provides a graphical timeline; and Table 5 lists the schemes themselves.

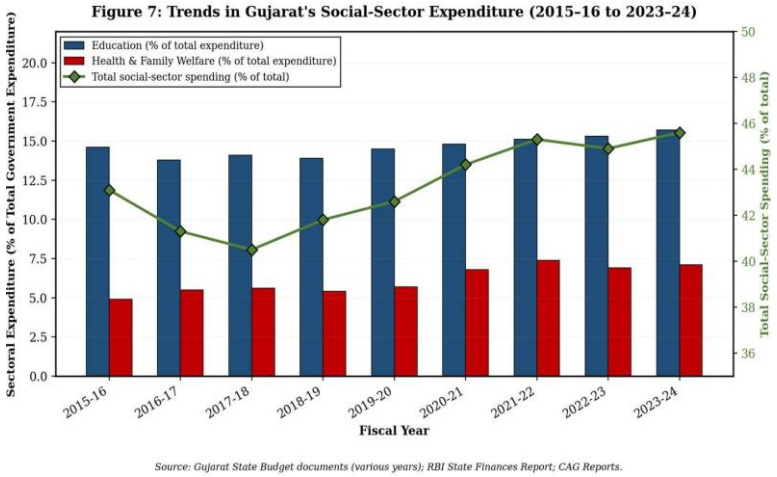
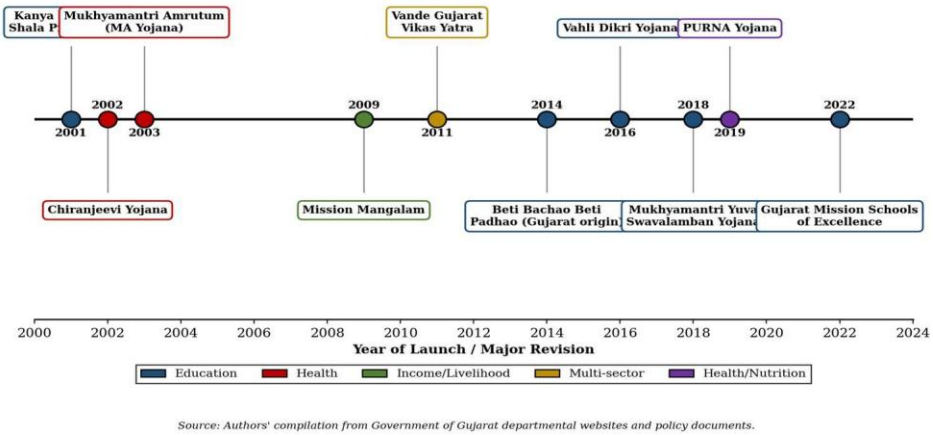


Figure 7: Trends in Gujarat's Social-Sector Expenditure (2015–16 to 2023–24)

Figure 7 shows that the share of education in the state's total budgetary expenditure has risen modestly from 14.6 percent in 2015–16 to 15.7 percent in 2023–24. The share of health and family welfare, beginning from a low base of 4.9 percent in 2015–16, has crossed 7 percent in recent years, accelerated by the demands of the COVID-19 response. Total social-sector spending, which dipped to 41.3 percent of total expenditure in 2016– 17 (the year that drew critical attention from civil-society analysts), has since recovered to around 45.6 percent in 2023–24. While these gains are real, the state's social-sector spending share remains below the average for major Indian states and below the 50-percent threshold typically associated with rapid HDI convergence.

Figure 9: Timeline of Key Gujarat Government Policy Interventions Affecting HDI (2001–2022)



Source: Authors' compilation from Government of Gujarat departmental websites and policy documents.

Figure 9: Timeline of Key Gujarat Policy Interventions Affecting HDI (2001–2022)

Table 5: Inventory of Major Gujarat Government Policy Interventions by HDI Dimension

Year	Policy / Scheme	Primary Dimension	Brief Description
2001	Kanya Kelavani Mahotsav	Education	Annual girl-child enrolment drive across all districts.
2003	Shala Praveshotsav	Education	State-wide school enrolment festival; senior officials mobilised.
2003	Vibrant Gujarat Summit	Income	Biennial investor summit; 10 editions to date.
2005	Chiranjeevi Yojana	Health	Free institutional deliveries via empanelled private providers.
2009	Mission Mangalam	Income	Women's self-help group federation; microfinance & livelihood.
2012	Mukhyamantri Amrutum Yojana	Health	Cashless tertiary care up to ₹5 lakh for poor households.
2014	Beti Bachao Beti Padhao (state)	Multi-dim.	Girl-child welfare campaign; later extended nationally.
2016	Vahli Dikri Yojana	Education	₹1.10 lakh transfer on girl's marriage / education milestones.
2018	MYSY (Yuva Swavalamban)	Education	50% tuition assistance for higher-education students.
2018	PURNA Yojana	Health/Nutr.	Anaemia & nutrition for adolescent girls (10–19 yrs).
2019	Garib Samrudhi Yojana	Income	Multi-dimensional poverty alleviation programme.
2021	Kaushalya: Skill University	Income	State-led vocational training & skill certification.
2022	Mission Schools of Excellence	Education	₹10,000 cr. for upgrading 35,000 state-run schools.
2023	Mukhyamantri Matrushakti Yojana	Health/Nutr.	Maternal nutrition support; ₹1,000 cr. annual outlay.

Source: Authors' compilation from Government of Gujarat departmental websites, state budget speeches, and policy documents (2001–2023).

Three patterns emerge from this inventory. First, the period from roughly 2001 to 2010 was dominated by enrolment- and access-side interventions in education (Kanya Kelavani, Shala Praveshotsav) and in health (Chiranjeevi). Second, the decade since 2010 has seen the introduction of demand-side and quality-side interventions: cash transfers to families with daughters (Vahli Dikri), tuition assistance (MYSY), and ambitious school-quality programmes (Mission Schools of Excellence). Third, the most recent interventions, including PURNA and Matrushakti, increasingly recognise nutrition as a binding constraint on the state's health outcomes — a recognition that, judged against the malnutrition figures of Table 4, has come somewhat later than the data warranted.

IX.Intra-State Disparities in Human Development

The state-level averages discussed in the preceding sections, while informative, conceal substantial heterogeneity within Gujarat. The state's 33 administrative districts (as of 2024) display HDI scores that range from above 0.790 in the urban-industrial districts of Ahmedabad, Surat, and Gandhinagar to below 0.560 in the tribal-majority districts of the eastern and southern hill belt — The Dangs, Dahod, and Panchmahal. The intra-state HDI gap is, in fact, comparable in magnitude to the inter-state gap between the highest-HDI Indian state (Delhi at 0.839) and one of the lowest-HDI states (Bihar at 0.574).

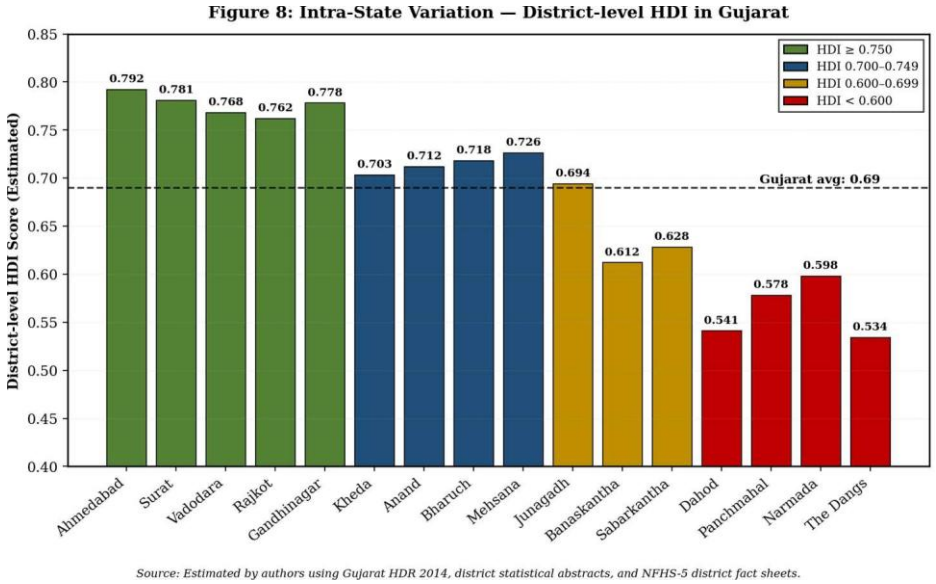


Figure 8: District-level HDI Variation in Gujarat (Estimated, 2022–23)

Table 6: District-level HDI Quartiles in Gujarat (Estimated, 2022–23)

Quartile	HDI Range	Representative Districts	Key Characteristics
Q1 (Top)	0.760–0.795	Ahmedabad, Surat, Gandhinagar, Vadodara, Rajkot	Urban-industrial; > 60% urbanised; service sector dominant.
Q2	0.700–0.759	Mehsana, Bharuch, Anand, Kheda, Junagadh	Mixed urban-rural; manufacturing and dairy economy.
Q3	0.610–0.699	Banaskantha, Sabarkantha, Patan, Amreli, Bhavnagar	Rural-agricultural; arid/semi-arid; cooperative dairy.
Q4 (Bottom)	0.530–0.609	Dahod, Panchmahal, The Dangs, Narmada, Tapi	Tribal-majority; forested; subsistence agriculture; high poverty.

Note: Districts are estimated by the authors using the standard HDI methodology applied to district-level life-expectancy, literacy, MYS, and per-capita-income proxies derived from the NFHS-5 district fact sheets, Gujarat Human Development Report 2014, and District Statistical Abstracts (2022). Districts within each quartile are illustrative rather than exhaustive.

The geography of disparity is striking. The high-HDI districts are concentrated along the so-called Golden Corridor that runs from Ahmedabad through Vadodara to Surat, the axis of Gujarat's industrial economy. The low-HDI districts cluster in two areas: the eastern hill belt that abuts Madhya Pradesh and Maharashtra, populated by Scheduled Tribes (the Bhils, Rathwas, and others), and the saline-coastal areas of Kachchh. The

eastern tribal belt districts have child-stunting rates above 50 percent, female literacy rates below 60 percent, and per-capita-income figures less than 40 percent of the state average. These districts are home to roughly 15 percent of the state's population but account for a disproportionate share of its human-development deficit.

The disparity persists not for lack of policy attention. The Vanbandhu Kalyan Yojana (Tribal Friendly Welfare Plan), launched in 2007, was specifically designed to accelerate development in the 18 tribal-dominated talukas of the state. The scheme combined infrastructure investment (roads, electrification, water supply), educational interventions (ashramshalas, Eklavya Model Residential Schools), and livelihood programmes (forest-produce cooperatives, agricultural support). The plan has unquestionably delivered some gains — tribal-area literacy rates have risen from approximately 47 percent in 2001 to around 64 percent in 2021 — but the convergence with non-tribal districts has been slow, and the gap on key indicators such as child malnutrition and maternal health has narrowed only marginally.

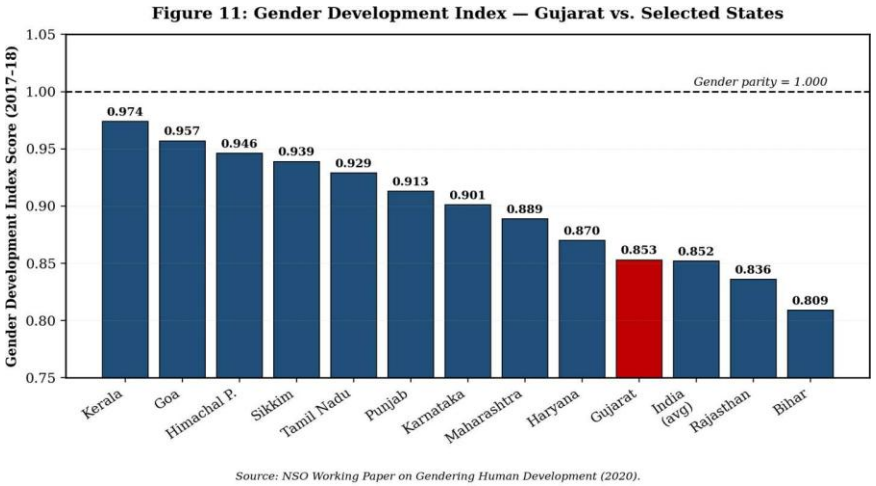


Figure 11: Gender Development Index — Gujarat vs. Selected States (2017–18)

Disparities also run along gender lines. Figure 11 plots the Gender Development Index for Gujarat alongside selected comparator states. At 0.853, Gujarat's GDI sits below the national average of 0.852 by a hair's breadth and substantially below Kerala (0.974), Goa (0.957), and Himachal Pradesh (0.946). This reflects, in part, the state's comparatively low female labour force participation, the persistent gender gap in literacy, and the historically skewed sex ratio at birth in some parts of the state (though this has shown improvement, reaching 955 in NFHS-5 against a national average of 929). The Beti Bachao Beti Padhao campaign, which originated in Gujarat in 2014 before being extended nationally, was a direct policy response to the latter concern, but the broader gender gaps in human development remain a significant area of unfinished business.

X.Critical Assessment: Why the Gujarat Paradox Persists

Having traced the trajectory, decomposed the dimensions, inventoried the policies, and mapped the disparities, this section turns to the central interpretive question: why has Gujarat's strong economic performance not translated into a commensurately high HDI rank? Five inter-related explanations, drawing on the evidence assembled in the preceding sections, can be advanced.

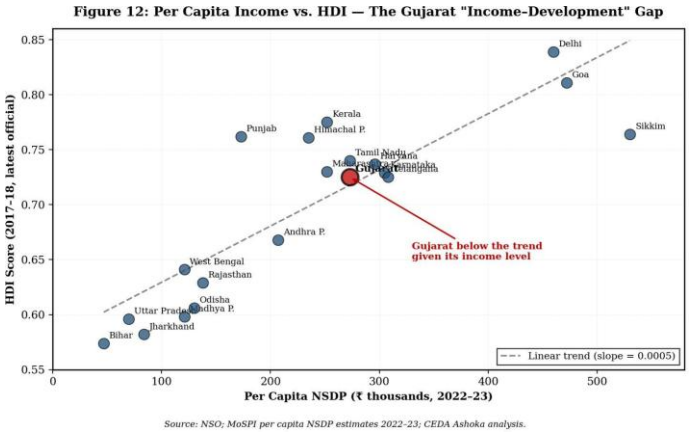


Figure 12: Per Capita Income vs. HDI Score — The Gujarat 'Income–Development' Gap

Figure 12 makes the puzzle visible at a glance. The scatter plot, with per capita NSDP on the horizontal axis and the HDI score on the vertical, shows the expected positive relationship across Indian states. Yet Gujarat sits visibly below the regression line. Given its income level of approximately ₹2,73,558 per capita, the linear-trend prediction would place Gujarat's HDI score in the vicinity of 0.760, comparable to Punjab or Himachal Pradesh; the actual NSO 2017–18 figure was 0.672, a shortfall of around 0.09 index points. This gap, in HDI terms, is large.

The first explanation is structural. The HDI's logarithmic treatment of income means that high per capita income contributes less than proportionally to the composite. A state with Gujarat's income profile cannot achieve a high HDI rank on income alone; it must perform well on health and education. The corollary is that an HDI rank below the income rank is not a Gujarat-specific pathology but a feature of any state whose income lead exceeds its non-income performance — a description that fits Haryana, Maharashtra, and (to a lesser extent) Karnataka, alongside Gujarat.

The second explanation is allocational. As Section 8 documented, Gujarat's social-sector expenditure as a share of total expenditure has historically been below the median for major Indian states, particularly during the mid-2010s. Education spending of around 14 to 15 percent and health spending of 5 to 6 percent fall short of the levels that public-finance scholars associate with rapid HDI gains — typically 18 to 20 percent for education and 7 to 8 percent for health. The recent trajectory shows improvement, but the historical underspending has left a legacy.

The third explanation is intra-state heterogeneity. The dramatic gap between the Golden Corridor and the eastern tribal belt documented in Section 9 means that the state average is dragged down by a substantial minority of districts with very low HDI scores. A more uniform development pattern — of the kind exhibited by Kerala or Himachal Pradesh — would yield a higher state HDI even at lower average income. The implication is that geography-targeted, group-targeted convergence policies are required, and that the standard sector-wide schemes alone will not close the gap.

The fourth explanation is the persistent under-performance on nutrition. Child stunting at 39 percent and wasting at 25 percent (NFHS-5) directly weakens the cognitive and physical development of a substantial share of the next generation, with downstream effects on educational attainment, labour productivity, and ultimately on income. Nutrition is, in this sense, the binding constraint that connects the three HDI dimensions — a poorly-nourished child is more likely to become a poorly-educated adolescent, a less-productive adult, and a parent whose own children inherit the same disadvantage.

The fifth explanation is gender. The lower female participation in formal education and the labour force, the high prevalence of anaemia and other reproductive health concerns, and the social norms that constrain women's autonomy in significant pockets of the state all reduce the contribution that women make to the state's measured human development and depress the GDI. Closing the gender gap is not only an end in itself; it is, by all available evidence, one of the most cost-effective routes to overall HDI convergence.

XI.Policy Recommendations

On the basis of the foregoing analysis, this paper offers seven policy recommendations for the Government of Gujarat. The recommendations are organised in declining order of urgency and are grouped, in Table 7, by the HDI dimension on which their primary effect would be felt.

XI.1 Reallocate Budgetary Priorities Toward Health and Nutrition

The single most consequential recommendation that emerges from this analysis is that Gujarat must raise its health-and-nutrition expenditure to at least 8 percent of total budgetary expenditure on a sustained basis, with at least one-third of that increment earmarked for child and adolescent nutrition. The current health- spending share of around 7 percent is an improvement on the historical baseline, but it remains insufficient to close the malnutrition gap that depresses the state's life-expectancy and education outcomes alike. Specifically, the state should expand the Mukhyamantri Matrushakti Yojana, increase per-beneficiary nutritional supplementation under the Integrated Child Development Services, and integrate the PURNA Yojana with adolescent education programmes in tribal districts.

XI.2 Geography-Targeted Convergence: A Tribal-Belt Compact

Given that the bottom-quartile districts identified in Section 9 are persistent laggards even within Gujarat, a separate, multi-year, multi-departmental convergence programme — modelled on the aspirational-districts framework of NITI Aayog but tailored to Gujarat's tribal geography — is warranted. The compact should set five-year district-level HDI targets, allocate untied funds to district collectorates against achievement of those targets, and establish a performance dashboard that is publicly visible. The Vanbandhu Kalyan Yojana already provides much of the institutional scaffolding for such an effort; what is needed is the explicit linkage of resources to HDI outcomes.

XI.3 Quality, Not Just Access, in Education

The Mission Schools of Excellence initiative is a welcome shift in emphasis from access to quality, but it must be calibrated against learning outcomes rather than infrastructure metrics alone. The state should publicly commit to a five-year ASER and NAS improvement trajectory, with district-level results made available annually. The Mukhyamantri Yuva Swavalamban Yojana should be expanded to cover vocational courses, not only conventional higher education, to address the GER gap and the income-side employability challenge in parallel.

XI.4 Female Labour Force Participation as a Cross-Cutting Objective

The state should establish a target of raising the female labour force participation rate (currently below the all-India average for major industrial states) by ten percentage points over a decade. Achievement of this target requires complementary interventions: expansion of public childcare (anganwadi-plus models), workplace-safety measures, transport solutions in industrial zones, and active support to women's self-help groups through Mission Mangalam. The income, education, and health dimensions all converge on this single objective; raising female participation will pay dividends across the HDI.

XI.5 Institutional Accountability: A Gujarat State Human Development Report

The last Gujarat Human Development Report was published in 2014. A statutory mandate to produce a state HDR every five years — with district-level disaggregation, sex-disaggregated data, and a public review process — would strengthen the accountability loop that connects expenditure to outcomes. The data and analytical capacity already exist within the State Planning Department; what is needed is the legislative and political commitment to institutionalise the exercise.

XI.6 Strengthen Healthcare Workforce in Rural Areas

Despite the success of the Chiranjeevi Yojana in expanding institutional deliveries, the underlying public- health workforce — doctors, auxiliary nurse-midwives, and ASHA workers — remains thin in tribal and rural districts. The state should establish a rural healthcare cadre with structured career progression, subsidised post- graduate training in exchange for rural service, and stipends pegged to the cost of living in remote areas. Tele- medicine integration through the Ayushman Bharat Digital Mission can complement but not substitute for in- person provision.

XI.7 Sustain the Vibrant Gujarat Model, but Pivot to Quality of Employment

The Vibrant Gujarat platform has been successful at mobilising investment, but the resulting industrial base has skewed toward capital-intensive sectors with limited employment elasticity. Subsequent editions of the summit, and the state's industrial policy more broadly, should set explicit employment-creation targets, particularly for women and for tribal-belt districts. Tax incentives and infrastructure support should be tied to commitments on quality of jobs, formalisation, and local hiring.

Table 7: Summary of Policy Recommendations by Dimension and Time Horizon

#	Recommendation	Dimension	Horizon
1	Raise health-and-nutrition expenditure to ≥8% of state budget	Health	Short (1–2 yrs)
2	Tribal-belt convergence compact, HDI-linked finance	All three	Medium (3–5 yrs)
3	Quality-focused expansion of Mission Schools of Excellence	Education	Medium (3–5 yrs)
4	Female labour force participation +10 pts in a decade	Income/Edu.	Long (5–10 yrs)
5	Quinquennial Gujarat Human Development Report (statutory)	All three	Short (1–2 yrs)
6	Rural healthcare cadre with structured incentives	Health	Medium (3–5 yrs)
7	Pivot Vibrant Gujarat toward employment quality	Income	Medium (3–5 yrs)

Notes: "Short" horizon refers to recommendations implementable within one to two financial years given existing administrative capacity; "medium" refers to those requiring three to five years for full rollout; "long" refers to societal-norm-level changes that typically require a decade or more.

XII.Conclusion

This paper has examined the relationship between government policy and Human Development Index outcomes in the state of Gujarat over the period 1990 to 2023. Three principal findings emerge from the analysis. First, Gujarat has registered substantial absolute progress on all three HDI dimensions over the three decades under study: the composite HDI has risen from approximately 0.431 in 1990 to roughly 0.724 in 2023, with the state crossing the threshold of the High Human Development category in the early 2020s. The improvement is real, broad-based, and historically significant.

Second, this absolute progress notwithstanding, Gujarat's position in the inter-state league table on HDI continues to lag its position on income. The state ranked roughly eleventh in HDI in 2017–18 against a top-five position in per capita NSDP. The principal sources of the gap are an Education Index that has trailed both the Health Index and the Income Index for the entire period of measurement, persistent and substantial intra-state disparities (particularly between the industrial Golden Corridor and the eastern tribal belt), and a stubborn child- malnutrition crisis that has resisted the state's robust supply-side healthcare interventions.

Third, the state's flagship policy interventions — Chiranjeevi Yojana, Mukhyamantri Amrutum Yojana, Kanya Kelavani, Shala Praveshotsav, Mission Mangalam, Vahli Dikri Yojana, and Mission Schools of Excellence — have produced measurable, though uneven, effects. The largest gains, in HDI terms, have come from the health interventions of the mid-2000s, which contributed to Gujarat reaching the SDG MMR target a decade ahead of schedule. The education interventions have been more successful at securing enrolment than at securing learning outcomes. The income-side interventions have generated investment and self-help-group activity but have not yet redressed the underlying inequalities of employment and labour force participation.

The policy recommendations advanced in Section 11 build directly on these findings. A reallocation of budgetary priorities toward health and child nutrition, a geography-targeted convergence programme for the tribal districts, a quality-rather-than-access turn in education, a sustained push to raise female labour force participation, and the institutionalisation of a statutory five-yearly state Human Development Report are, in our view, the most consequential steps that the Government of Gujarat could take in the immediate term to close the gap between the state's economic prowess and its human development performance. Each of these is administratively feasible within the state's existing fiscal envelope and institutional architecture; what is required is the political commitment to undertake them.

Looking beyond Gujarat, the lessons of this case study have wider applicability. The experience of the state demonstrates that economic growth, while necessary, is not sufficient for human development; that the structural features of the HDI methodology mean that a focus on income alone yields diminishing returns; that policy interventions must address all three dimensions in a balanced way; and that intra-state heterogeneity can be a more important driver of subnational HDI performance than the average level of economic activity. These lessons are pertinent to other industrialising Indian states with similar income–development gaps — Haryana, Maharashtra, and Tamil Nadu among them — and to any subnational government that aspires to translate economic dynamism into broad-based human flourishing. The HDI, for all its methodological limitations, retains its analytical and political force precisely because it insists that development is, ultimately, about what people are able to be and to do — a measure that no narrowly economic statistic can adequately capture.

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