



**COMPREHENSIVE DEVELOPMENT FRAMEWORK  
REPORT OF STATE OF GUJARAT**

**YOUTH PEACE AND DEVELOPMENT FORUM**

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## FOREWORD

The state of Gujarat occupies a unique and vital position within the broader narrative of Indian civilizational progress. Endowed with profound natural wealth, dense ecological reserves, and a deeply rooted cultural heritage, the state is currently navigating a critical transition. It is moving steadily toward a modernized and diversified economy. The Comprehensive Development Framework Report of the State of Gujarat captures the essence of this historical juncture. It maps a future where the traditional strengths of the region are harmonized with the modern imperatives of proactive governance, rapid infrastructure development, and comprehensive technological integration.

When we examine the evolution of statecraft and regional development, it becomes increasingly clear that effective policymaking requires far more than basic macroeconomic forecasting. True governance demands a nuanced understanding of social behavior, community incentives, and the historical continuities that shape public life.

Traditional rational choice models often fail to account for the complex realities of human decision making at the grassroots level. This framework succeeds precisely because it aligns structural economic models with the lived, everyday realities of the people. By focusing on equitable resource distribution, institutional capacity building, and targeted poverty alleviation, the report offers a detailed blueprint. It bridges the critical gap between aggregate economic growth and genuine human flourishing.

At the Youth Peace and Development Forum (YPD FORUM), our core conviction is that sustainable development cannot be achieved without social cohesion and the active, structural engagement of the next generation. Peace and development are inherently mutually reinforcing concepts. Neither can endure if a society fails to integrate its youngest members into its socio-political fabric.

Gujarat is on the cusp of a significant demographic shift, with its working age population projected to expand rapidly over the coming decade. This presents a narrow but immensely powerful window of opportunity. The true test of any development framework will be its ability to translate physical infrastructure and industrial expansion into tangible, accessible opportunities for the youth, empowering them as the primary stakeholders in the future of the state.

The Comprehensive Development Framework Report acknowledges these shifting dynamics by prioritizing human capital. It recognizes that the wealth of a state lies not only in the minerals beneath its soil but in the potential of its people. The policies outlined herein reflect a deep understanding of behavioral economics, recognizing that citizens are not merely passive recipients of government aid but active participants whose choices must be nurtured through sound policy architecture. By mitigating risks for small enterprises, incentivizing educational attainment, and ensuring that development reaches the most marginalized districts, the framework creates a foundation for sustainable, long term stability.

A crucial component of this vision is the integration of the state's tribal and rural populations into the mainstream economic narrative without erasing their socio-cultural identities. The cultural identity of Gujarat must remain a guiding force as the state modernizes. The preservation of local traditions alongside the adoption of modern industrial practices is not a contradiction but a necessary synthesis.

Development policies must respect the historical context of the communities they serve, ensuring that progress feels organic rather than imposed. The framework thoughtfully addresses this balance, proposing strategies that elevate local communities while connecting them to the broader national and global economy.

Furthermore, we must recognize that true peace is not merely the absence of conflict but the presence of justice, equity, and opportunity. In regions that have historically faced developmental deficits, building physical infrastructure must be accompanied by the building of trust in public institutions. This report outlines actionable methodologies to enhance administrative transparency and accountability. It understands that when citizens see fair distribution of resources and opportunities, the foundations of lasting social peace are strengthened.

This comprehensive document is a vital intervention in the ongoing discourse regarding state capacity and regional transformation in India. It provides policymakers, corporate investors, and civil society leaders with the analytical rigor and empirical data required to drive meaningful, systemic change. It serves as a reminder that the ultimate goal of economics and political thought is the elevation of the human condition.

I commend the extensive research and collaborative effort that has gone into the creation of this document. It is my sincere hope that it will not remain a mere theoretical exercise but will serve as a definitive, actionable guide. The path ahead requires unwavering commitment, but with the right policy architecture in place, we can build a resilient, prosperous, and fundamentally inclusive Gujarat for generations to come.

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This report forms part of a larger national initiative undertaken through the Council for Comprehensive Development Frameworks (CDF Council), constituted by the YPD Forum to facilitate the fast-track preparation of comprehensive development frameworks for all 28 States of India. The Council represents the Forum's commitment to promoting evidence-based policymaking, strategic planning, and long-term developmental thinking across the nation.

The Forum places on record its deep appreciation to **Dheeraj GN**, Chairman of the Youth Peace and Development Forum, for his vision, leadership, and initiative in conceptualizing and guiding this ambitious project. The Forum also extends its heartfelt thanks to **Aravind Saj**, Vice Chairman of the Youth Peace and Development Forum, for his constant support and encouragement throughout the execution of this initiative.

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The Forum acknowledges the commitment, intellectual curiosity, and sense of responsibility demonstrated by each member of the Council. Through research, analysis, discussion, drafting, review, and continuous engagement with developmental issues, these members contributed significantly to the realization of the Council's objectives. Their willingness to dedicate their time and talents to a national developmental initiative reflects a commendable spirit of public service and constructive citizenship.

The Forum also recognizes that the preparation of a comprehensive development framework requires engagement with a wide range of ideas, perspectives, and sources of knowledge. Accordingly, sincere appreciation is extended to all researchers, academicians, policy experts,

development practitioners, government publications, statistical agencies, think tanks, and public institutions whose work provided valuable insights and reference material for this report. Their contributions to the broader body of knowledge on governance, economics, social development, environmental sustainability, infrastructure, education, healthcare, and public policy have enriched the quality and depth of this framework.

The Youth Peace and Development Forum is particularly grateful to the students, young researchers, and volunteers associated with the Forum who continue to demonstrate that youth can play a constructive role in addressing national challenges. Their enthusiasm, creativity, and commitment to public causes embody the ideals upon which the Forum was founded and reaffirm the importance of empowering younger generations to participate actively in nation-building.

The Forum further extends its appreciation to all well-wishers, supporters, advisors, and stakeholders who encouraged this initiative and contributed to its successful completion. Whether through guidance, feedback, consultation, or moral support, their contributions helped strengthen the quality and relevance of this work.

This report represents more than a policy document; it reflects a collective effort to envision a better future. It is the product of shared aspirations, collaborative research, and a common belief that informed planning and constructive dialogue can contribute to meaningful social, economic, and institutional progress. While the recommendations contained herein are intended to support the development of Gujarat, they also form part of a broader national effort to strengthen the foundations of a developed, inclusive, sustainable, and prosperous India.

As India advances towards the centenary of its independence in 2047, the Youth Peace and Development Forum remains committed to fostering research, dialogue, and innovation in support of national development. It is hoped that this report will serve as a useful resource for policymakers, administrators, researchers, civil society organizations, industry leaders, and citizens, and that it will contribute meaningfully to the ongoing pursuit of inclusive growth, good governance, and sustainable development.

With gratitude to all who contributed to this endeavour, the Youth Peace and Development Forum proudly presents this report as a modest contribution towards the shared vision of a stronger Gujarat and a developed India.

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## PREFACE

Gujarat occupies a position in India's regional development landscape that is fundamentally distinct from either of the two states examined in the companion frameworks in this series. Where Bihar is an economy striving to translate recent, above-average growth into human development gains from a historically low base, and Punjab is a state seeking to arrest the structural erosion of a once-dominant agricultural advantage, Gujarat presents a third, highly compelling paradigm. It represents a state that has sustained exceptional economic and industrial growth for well over a decade—marketing itself, with considerable justification, as a premier national model of enterprise, port-led infrastructure, and fiscal discipline—yet continues to register public health, nutrition, and social indicators that sit uncomfortably alongside its macroeconomic success.

Gujarat's economic record over the past decade remains largely unequaled among Indian states. Between the fiscal years 2012-13 and 2021-22, the state's real Gross State Domestic Product expanded at an average annual rate of 8.5 percent, considerably outperforming the national average growth rate of 5.6 percent over the same timeframe. By 2021-22, Gujarat's nominal per capita income stood approximately 60 percent above the national average (NITI Aayog, 2025). This momentum accelerated further in subsequent years: by fiscal year 2023-24, Gujarat's per capita income crossed the ₹3 lakh threshold for the first time, while its aggregate nominal GSDP nearly quadrupled over a twelve-year period, scaling from ₹6.16 lakh crore in 2011-12 to ₹24.62 lakh crore in 2023-24 (ETV Bharat, 2025).

The state's manufacturing and industrial backbone is extraordinarily robust. Gujarat currently contributes approximately 16 percent of India's total industrial output and accounts for nearly 60 percent of national chemical and petrochemical production, alongside dominant market positions in textiles, diamond processing, pharmaceuticals, renewable energy hardware, and automotive manufacturing (Grokopedia, 2026). This industrial momentum has translated into highly favorable formal labor dynamics. The state's overall unemployment rate stood at a low 1.7 percent in 2022-23—well below the national average of 3.2 percent—while its Female Labour Force Participation Rate remained consistently above the national baseline over the same period (NITI Aayog, 2025).

However, this policy framework is written in full awareness of a substantial body of empirical evidence—generated in large part by Gujarat's own public health institutions—that complicates any simple narrative of the "Gujarat model" as an unqualified template for sub-national governance. The National Family Health Survey (NFHS-5), released in 2022, revealed that child health metrics had not only stalled but modestly deteriorated across several key vectors. Stunting among children under five years of age rose from 38.5 percent in NFHS-4 to 39.0 percent in NFHS-5, severe wasting increased from 9.5 percent to 10.6 percent, and the prevalence of underweight children rose from 39.3 percent to 39.7 percent, effectively reversing earlier progress (Soni et al., 2023).

This divergence between wealth creation and biological well-being is further emphasized by spatial analysis within the state. A granular study by researchers at the Indian Institute of

Public Health Gandhinagar revealed that Ahmedabad, Surat, Vadodara, and Rajkot—Gujarat's four largest and most economically prosperous urban municipal corridors—experienced a sharper increase in child stunting, wasting, and underweight rates between 2015-16 and 2020-21 than several of the state's traditionally underserved tribal districts (The Wire, 2023). This outcome represents an unexpected inversion of the traditional relationship between urban economic density and child nutritional security.

Furthermore, a national health policy assessment published in 2026 highlighted that barely 8 percent of children in Gujarat aged 6 to 23 months receive an adequate minimum diet—a figure lower than that recorded in Jharkhand, one of India's lowest-income states. This finding led researchers to explicitly conclude that high aggregate state income and administrative efficiency do not automatically guarantee optimal nutritional outcomes for young children without targeted, equity-focused public interventions (Down To Earth, 2026).

Rather than dismissing or side-stepping this divergence—frequently termed the "Gujarat paradox" in development economics literature—this document places it at the center of its analytical framework. The goal is to evaluate how high fiscal capacity can be effectively directed toward resolving persistent social sector deficits. This framework treats the tension as a core, unifying theme across its chapters, offering a balanced analysis that documents both the state's systemic accomplishments and its structural challenges.

The document opens with a deep dive into Gujarat's industrial policy, port infrastructure, special economic zones, and streamlined regulatory climate that lower the cost of doing business. It then transitions into an evaluation of fiscal architecture, analyzing the state's tax revenue efficiency, public debt management, and capacity to generate capital for large-scale infrastructure projects without compromising fiscal sustainability.

From there, the framework shifts toward a comprehensive review of social sector interventions, evaluating public health delivery systems, early childhood nutrition initiatives, educational learning outcomes, and social safety nets. This leads directly into an examination of spatial and tribal equity, comparing the rapid growth of industrial urban corridors with the socio-economic baselines of the eastern tribal belt. The volume concludes with a Vision 2047 strategic roadmap outlining actionable policy interventions to align Gujarat's social development metrics with its advanced industrial profile by the centenary of India's independence.

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## Executive Summary

Gujarat presents this framework's third distinct development archetype: a state combining sustained, genuinely exceptional economic growth with a persistent and, on some measures, worsening gap in child nutrition and human development outcomes that its economic performance alone has not closed.

**Economic Scale and Growth.** Gujarat's GSDP for 2025-26 was projected at ₹29.82 lakh crore at current prices, with the state's own government data placing the figure closer to ₹33.25 trillion for 2026-27 estimates, representing continued growth of approximately 10 to 12 percent annually in nominal terms (India Brand Equity Foundation, 2026a; Wikipedia, 2026a). Gujarat's real GSDP growth averaged 8.5 percent annually between 2012-13 and 2021-22, and an even more recent calculation found average real growth of 8.42 percent between 2012-13 and 2023-24, the highest among all Indian states with economies exceeding ₹10 lakh crore, surpassing traditionally fast-growing peers including Karnataka at 7.69 percent and Tamil Nadu at 6.29 percent (NITI Aayog, 2025; Indian Masterminds, 2025). Gujarat ranks among India's top four to five largest state economies by GSDP, and its per capita income of ₹3,00,957, crossing the ₹3 lakh threshold for the first time in the 2023-24 reporting cycle, positions the state among India's wealthiest on a per-person basis, trailing only Karnataka and Tamil Nadu among large states by a narrow margin (Indian Masterminds, 2025).

**Industrial and Export Dominance.** Gujarat's economy is anchored overwhelmingly by its secondary sector, which contributed 42.87 percent of GSDP at current prices in 2025-26, ahead of tertiary services at 39.16 percent and a comparatively modest primary agricultural sector at 17.97 percent (India Brand Equity Foundation, 2026b). The state's chemical and petrochemical sector alone contributed 46.16 percent of India's total chemical exports in FY26, worth ₹1,08,259 crore, reinforcing Gujarat's position as the nation's chemical and petrochemical hub (India Brand Equity Foundation, 2026b). Gujarat's total exports reached ₹3,36,789 crore for just the April-July 2025 period of FY26, with petroleum products contributing 38 percent of the total, and the state ranked first nationally on the Export Preparedness Index 2021 (India Brand Equity Foundation, 2026a). FDI inflows into Gujarat stood at ₹4,08,212 crore from October 2019 through June 2025, among the highest cumulative state-level totals in India (India Brand Equity Foundation, 2026a).

**The Nutrition Paradox.** Set against this economic record, Gujarat's child nutrition indicators represent this framework's most consequential and counterintuitive finding, examined in depth in Chapter 6. NFHS-5 data found that stunting among Gujarat's under-five children rose from 38.5 percent to 39 percent between NFHS-4 and NFHS-5, that severe wasting rose from 9.5 percent to 10.6 percent, and that underweight prevalence rose from 39.3 percent to 39.7 percent, reversing gains recorded in the prior survey round despite the state's continued strong economic growth over the intervening period (Soni et al., 2023). Research from the Indian Institute of Public Health Gandhinagar found that Gujarat's four largest, wealthiest urban centers, Ahmedabad, Surat, Vadodara, and Rajkot, recorded sharper deteriorations in

child nutrition indicators than several tribal districts over the 2015-16 to 2020-21 period, and that childhood anaemia rose 17 percent statewide over the same window (The Wire, 2023). A 2026 national analysis found that barely 8 percent of Gujarat children aged 6 to 23 months receive an adequate diet, a lower share than in Jharkhand, one of India's poorest states, a finding independent researchers explicitly cited as evidence that economic prosperity alone does not determine child nutrition outcomes (Down To Earth, 2026).

**Fiscal Position.** Gujarat's fiscal management compares favourably to both Bihar and Punjab, examined in the companion frameworks. The state's 2025-26 budget targeted a fiscal deficit of just 2 percent of GSDP, alongside a projected revenue surplus of 0.7 percent of GSDP, or approximately ₹19,695 crore, indicating genuine fiscal discipline relative to states such as Punjab, whose fiscal deficit reached 4.2 percent of GSDP over the same period as documented in the companion framework (PRS Legislative Research, 2026a). Gujarat's debt and fiscal deficit levels relative to GSDP were found by NITI Aayog to be lower than those of a median Indian state as of 2022-23, and the state ran a revenue surplus of 0.3 percent of GSDP that year, a genuinely distinctive fiscal position among the three states examined across this framework series (NITI Aayog, 2025).

**Structure of the Framework.** Following the same 21-chapter Standardized Document Format applied to the Bihar and Punjab frameworks, this report examines Gujarat's demographic and social profile, fiscal architecture, economic structure, investment climate, and the full range of social, infrastructure, environmental, and governance sectors, before concluding with a Vision 2047 roadmap. The central argument that emerges from this framework's chapters is that Gujarat's development challenge is distinct from both companion states examined in this series: rather than needing to build economic momentum, as Bihar does, or reverse an eroding relative position, as Punjab must, Gujarat needs to direct its already exceptional fiscal and administrative capacity toward the specific, well-documented, and geographically uneven human development deficits, in child nutrition above all, that its economic growth model has not resolved on its own, and in some documented respects has coincided with worsening rather than improving.

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# Chapter 1: State Profile — Geography, Demography and Society

## 1.1 Geographic and Ecological Characteristics of the State

Gujarat occupies the westernmost part of the Indian subcontinent, bordered by Pakistan's Sindh province and the Arabian Sea to the west, Rajasthan to the north and northeast, Madhya Pradesh to the east, Maharashtra to the south, and the union territories of Daman and Diu and Dadra and Nagar Haveli within its territory (World Population Review, 2026). The state possesses the longest coastline of any Indian state, a geographic feature of central importance to its economic profile, examined throughout this framework in the context of port infrastructure discussed in Chapter 8.4 and its dominant petrochemical and export sectors discussed in Chapters 3 and 4 (World Population Review, 2026). Gujarat is the sixth largest Indian state by area, and its terrain encompasses several genuinely distinct physiographic zones: the Rann of Kutch, a vast seasonal salt marsh and desert in the northwest that floods during the monsoon and dries into a blinding white salt flat for the remainder of the year; the Saurashtra Peninsula, a semi-arid plateau region projecting into the Arabian Sea; the forested hill tracts of the state's eastern districts bordering Madhya Pradesh, home to much of Gujarat's tribal population discussed in section 1.4; and the fertile alluvial plains of central Gujarat, historically the state's agricultural core (World Population Review, 2026).

Kutch district, in the state's northwest, is Gujarat's largest district by area at 45,652 square kilometers, encompassing the bulk of the Rann of Kutch salt desert (PopulationU, 2026). This physical geography, combining an extensive arid and semi-arid zone across Kutch and Saurashtra with a fertile, water-abundant central plain and a long coastline, has produced a state whose internal ecological and economic diversity is considerably greater than its uniform international reputation as an industrial powerhouse might suggest, a diversity this framework returns to repeatedly when examining the state's persistent intra-state disparities in Chapter 1.7 and its tribal district deprivation in Chapter 7.2.

## 1.2 Administrative Divisions: Districts, Divisions and Sub-State Units

Gujarat's administrative structure has undergone significant reorganization over recent decades, and sources reviewed for this chapter show some variation in the current district count, reflecting this evolving structure: older compilations record 26 districts, while more recent sources, reflecting subsequent district bifurcations, record 33 districts (Census2011.co.in, 2026; PopulationU, 2026). This framework adopts the more recent 33-district figure as the current administrative structure, while flagging the discrepancy explicitly given the pace of recent district creation in the state. Gujarat's capital is Gandhinagar, a planned city established specifically to serve as the state's administrative seat, distinct from Ahmedabad, the state's largest city and commercial capital, an arrangement broadly analogous to the Chandigarh-Punjab relationship discussed in the companion Punjab framework, though in Gujarat's case both cities lie fully within the state's own territory rather

than being shared with a neighbouring state (World Population Review, 2026). Ahmedabad and Surat are Gujarat's largest districts by population, at approximately 8 million and 6 million respectively as of recent estimates, together constituting a substantial share of the state's total urban population discussed in Chapter 11 (PopulationU, 2026).

### **1.3 Demographic Structure: Population, Density, Growth and Composition**

Gujarat's population, as recorded in the 2011 Census, stood at 60,439,692, comprising 31,491,260 males and 28,948,432 females, with a sex ratio of 918 to 920 females per 1,000 males depending on source, among the lower sex ratios recorded among major Indian states, ranked 24th of 29 states on this measure (Wikipedia, 2026b; IndiaCensus.in, 2026). The state's decadal population growth between 2001 and 2011 was 19.28 percent, a moderation of 3.38 percentage points from the 1991-2001 decade, broadly comparable in trajectory to the demographic transition patterns documented for Punjab in the companion framework, though Gujarat's population growth rate of 1.13 to 1.2 percent as of recent projections remains modestly higher than the national average of 0.9 percent (StatisticsTimes.com, 2026; NITI Aayog, 2025).

As of mid-2026, Gujarat's population is projected at approximately 74.3 million according to Technical Group population projections, making it India's eighth or ninth most populous state depending on the specific projection source consulted, with the state accounting for approximately 5.2 to 5.20 percent of India's total population, the highest share Gujarat has held since 1901 (StatisticsTimes.com, 2026; NITI Aayog, 2025). Gujarat's population density, at 308 to 356 persons per square kilometer depending on source and reference year, remains considerably below that of more densely populated states such as Bihar, examined in the companion framework, where density reaches 1,106 persons per square kilometer (Wikipedia, 2026b; NITI Aayog, 2025). Nearly half of Gujarat's population, 48.7 percent as of 2023 projections, resides in urban areas, a considerably higher urbanization rate than either Bihar or Punjab, examined in the companion frameworks, and one with direct implications for the urban development priorities discussed in Chapter 11 (NITI Aayog, 2025). Gujarat's dependency ratio of 53.9 percent sits below the national average, reflecting the state's comparatively advanced demographic transition, and its Sex Ratio at Birth of 955 female births per 1,000 male births, as recorded in NFHS-5, is notably higher than the national average, a positive indicator that stands in some tension with the state's comparatively low overall sex ratio discussed above, suggesting that Gujarat's historical sex ratio imbalance may be gradually correcting at the most recent birth cohort level even as the effects of past imbalances persist in the state's existing population structure (NITI Aayog, 2025).

### **1.4 Linguistic, Ethnic, Religious and Cultural Profile**

Gujarati is the predominant language of the state, spoken natively by approximately 86 percent of the population, or roughly 52 million people, followed by Hindi at approximately 7 percent, Sindhi at 1.9 percent, reflecting the state's historical role as a destination for Sindhi refugees following Partition, and Marathi and Bhili at 1.5 percent and 1.3 percent

respectively, with Bhili specifically reflecting the state's substantial tribal population discussed below (PopulationU, 2026). On religious composition, the 2011 Census recorded Hindus at 88.57 to 89 percent of Gujarat's population, depending on source, followed by Muslims at approximately 9.6 to 9.67 percent, with Jains, Christians, Sikhs, Buddhists, and Zoroastrians, or Parsis, together constituting the remaining population, each individually below 2 percent (World Population Review, 2026; Census2011.co.in, 2026). Gujarat's Jain population, while numerically small in percentage terms, holds outsized historical and commercial significance within the state, and the Parsi Zoroastrian community, though today numbering only a small fraction of the state's population, holds particular historical importance given the community's centuries-long settlement in Gujarat following their migration from Persia and their subsequent, disproportionate contribution to India's industrial and commercial development nationally.

Gujarat's tribal, or Adivasi, population is concentrated substantially in the state's eastern hill districts bordering Madhya Pradesh, discussed in Chapter 1.1, and represents a demographically and developmentally significant population examined in depth in Chapter 7.2, given the documented pattern, discussed in this framework's Preface and Executive Summary, in which several of these tribal districts recorded comparatively better child nutrition trajectories than the state's wealthier urban centers between NFHS-4 and NFHS-5, a finding of considerable significance to this framework's central analytical thread regarding the relationship between Gujarat's economic prosperity and its human development outcomes.

### **1.5 Human Development Index: State Ranking and Trend Analysis**

Gujarat's Human Development Index stood at 0.737, in the high human development category, ranking the state 23rd among Indian states and union territories according to Wikipedia's compiled 2023 data, a ranking that, notably, places Gujarat behind Punjab's HDI of 0.738, examined in the companion framework, despite Gujarat's considerably stronger per capita income position documented in this framework's Executive Summary (Wikipedia, 2026a). This finding, that Gujarat's HDI ranking essentially matches Punjab's despite Gujarat's substantially higher per capita income, at approximately ₹3,00,957 compared to Punjab's ₹230,523 documented in the companion framework, represents an early and significant indicator of the "Gujarat paradox" this framework's Preface introduces and which the nutrition-specific evidence in Chapter 6 examines in far greater depth. It suggests that Gujarat's exceptional income growth has not translated into a commensurately exceptional composite human development outcome relative to states with considerably lower per capita income, a pattern this framework treats as one of its central analytical findings across the chapters that follow.

### **1.6 Poverty, Inequality and Multidimensional Deprivation Indices**

Gujarat's poverty rate stood at 9 percent as of 2025-26 according to Wikipedia's compiled economic data, a figure notably higher than Punjab's 4.26 percent documented in the

companion framework despite Gujarat's considerably stronger economic growth and per capita income position (Wikipedia, 2026a). A comprehensive, current, district-level breakdown of Gujarat's poverty and multidimensional deprivation indices, comparable to the detailed NITI Aayog Multidimensional Poverty Index analysis presented for Bihar in the companion framework's Chapter 1.6, was not available with sufficient granularity in the sources reviewed for this chapter. Given the tribal district nutrition findings discussed in section 1.4 and examined further in Chapter 6, and given the pesticide and industrial pollution concerns likely to affect specific districts discussed in Chapter 13, it is reasonable to expect Gujarat's poverty and deprivation indicators to display significant intra-state variation, a pattern this framework examines further in the following section.

### **1.7 Intra-State Disparities: Aspirational Districts and Backward Region Identification**

Gujarat's intra-state disparities center substantially on the divide between the state's industrially developed central corridor, anchored by Ahmedabad, Surat, Vadodara, and Rajkot, discussed in Chapter 3.9, and its comparatively underdeveloped eastern tribal belt and, to a lesser extent, its arid Kutch and Saurashtra regions discussed in Chapter 1.1. This framework was unable to confirm, from the sources reviewed for this chapter, the specific number of Gujarat districts currently designated under NITI Aayog's Aspirational Districts Programme, discussed in the companion Bihar framework's Chapter 1.7, and this should be verified directly against NITI Aayog's current programme documentation in any future revision. What is well documented, and discussed further in Chapter 6.2 and Chapter 7.2, is that Gujarat's tribal districts, despite their comparatively lower per capita income relative to the state's industrial corridor, have in some specific and well-researched instances shown better relative child nutrition trajectories than the state's wealthiest cities, a genuinely counterintuitive finding for a conventional urban-rural or industrial-tribal disparity framework, and one this framework treats as requiring more nuanced analysis than a simple "backward tribal district versus prosperous urban center" narrative would suggest.

### **1.8 State's Position in National Rankings Across Key Development Indicators**

Taken together, the indicators reviewed in this chapter position Gujarat as a state whose economic indicators, GSDP growth, per capita income, export performance, and fiscal management, are genuinely exceptional by Indian standards and are examined in detail in Chapters 2 through 4, but whose human development indicators, an HDI ranking essentially tied with Punjab despite a far higher per capita income, a poverty rate more than double Punjab's, and, as this framework's Preface and Executive Summary have already flagged, child nutrition outcomes that in some measures deteriorated even as the state's economy grew rapidly, present a considerably less exceptional picture. This combination distinguishes Gujarat sharply from both companion states examined in this framework series: neither Bihar's pattern of low human development racing to catch up on recent growth, nor Punjab's pattern of eroding relative advantage, quite captures Gujarat's distinctive profile of sustained economic exceptionalism accompanied by human development outcomes that appear to have

partially decoupled from that same economic performance. The chapters that follow examine this decoupling in detail, particularly in Chapter 6's treatment of health and nutrition, while also giving full and fair account of the genuine institutional and economic strengths, examined in Chapters 2 through 4 and Chapter 15, that have made Gujarat a widely referenced model for Indian state-level economic governance.

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## Chapter 2: Fiscal Architecture of the State

### 2.1 Revenue Framework: Own Tax Revenue, Non-Tax Revenue and Devolution

Gujarat's fiscal architecture, like Punjab's examined in the companion framework, is anchored substantially in own-source revenue rather than central transfers, though Gujarat's own-revenue share exceeds even Punjab's. For 2024-25, total revenue receipts were estimated at ₹2,29,653 crore, of which ₹1,68,625 crore, or 73 percent, was to be raised through the state's own resources, with only ₹61,028 crore, or 27 percent, coming from the Centre, split between the state's share in central taxes at 18 percent of revenue receipts and grants at 8 percent (PRS Legislative Research, 2025a). This own-revenue dependence has strengthened further in subsequent budget cycles, with Gujarat's total own tax revenue estimated at ₹1,48,950 crore in 2024-25, an increase of 11 percent over the revised estimate for the prior year (PRS Legislative Research, 2025a).

Despite this strong absolute revenue performance, Gujarat's own tax revenue as a share of GSDP has shown a consistent, if gradual, decline, a finding a dedicated Sixteenth Finance Commission evaluation study identified as a genuine structural signal for the state's fiscal health, noting the consistent decline of the state's own tax revenue-to-GSDP ratio and excessive reliance on GST and VAT specifically as sources warranting continued monitoring (Fincomindia, 2025). Own tax revenue as a percentage of GSDP was recorded at 5.6 percent in 2022-23 actuals, falling to 5.3 percent in the 2024-25 estimate and further to 4.9 percent projected for 2026-27, against a revised estimate of 5.2 percent for 2025-26 (PRS Legislative Research, 2025a, 2026b). This declining ratio, even as absolute collections continue to rise, mirrors a pattern this framework has now documented across all three states examined in this series, suggesting it may reflect a broader structural feature of India's GST-era state fiscal architecture rather than a problem unique to any single state's tax administration.

### 2.2 Expenditure Profile: Composition, Quality and Efficiency

Gujarat's expenditure profile stands in marked contrast to the committed-expenditure-dominated profiles documented for both Bihar and Punjab in the companion frameworks. Total expenditure, excluding debt repayment, for 2026-27 is estimated at ₹3,60,122 crore, an increase of 13 percent over the revised estimate for 2025-26, with the state additionally repaying ₹43,252 crore in debt during the year (PRS Legislative Research, 2026b). A comprehensive, current breakdown of Gujarat's committed expenditure, salaries, pensions, and interest payments, as a share of revenue receipts, comparable to the detailed figures presented for Punjab in the companion framework's Chapter 2.2, was not available with the same specificity in the sources reviewed for this chapter, though the Sixteenth Finance Commission evaluation study's finding that interest payments consume approximately 15 to 18 percent of the state's total revenue indicates a considerably lighter debt-servicing burden than the 23.6 percent documented for Punjab (Gujarat Samachar, 2026). Gujarat's 2026-27 budget notably identifies a regional economic development plan spanning six specific regions, North Gujarat, Central Gujarat, Saurashtra, Coastal Saurashtra,

Kachchh, and Surat, reflecting a deliberate state strategy of directing infrastructure expenditure toward addressing the intra-state disparities discussed in Chapter 1.7, an explicit regional equity framing not paralleled in the equivalent budget documentation reviewed for either Bihar or Punjab (PRS Legislative Research, 2026b).

### **2.3 Capital Expenditure: Infrastructure Investment and Asset Creation**

Gujarat's capital expenditure trajectory reflects the state's overall stronger fiscal position relative to both companion states examined in this framework series. The 2026-27 budget allocates specific, itemized capital commitments including ₹400 crore for works under the Pradhan Mantri Gram Sadak Yojana, discussed in the national context in the companion Bihar framework's Chapter 12.5, ₹200 crore for strengthening and structural improvement of government buildings across districts, ₹150 crore for short-term road maintenance contracts, and ₹138 crore for new district and taluka service buildings across Vav-Tharad and 17 new talukas, reflecting the kind of granular, itemized capital planning that stands in contrast to the more constrained and, in Punjab's case, actively contracting capital expenditure trajectory documented in the companion Punjab framework's Chapter 2.3 (Gujarat Samachar, 2026). Total state public debt stood at approximately ₹3.99 lakh crore by the end of 2025-26, with the 2026-27 budget, if it crosses the anticipated ₹4 lakh crore threshold, projected to push total debt to nearly ₹4.50 lakh crore, a substantial absolute figure that nonetheless represents a considerably lower debt-to-GSDP ratio than documented for either Bihar or Punjab, given Gujarat's much larger overall economic base (Gujarat Samachar, 2026).

### **2.4 Fiscal Deficit, Primary Deficit and Debt Sustainability**

Gujarat's fiscal deficit management represents the strongest performance among the three states examined across this framework series. The state's fiscal deficit for 2025-26 was targeted at 2 percent of GSDP, or ₹58,397 crore, and the revised estimate came in at 1.9 percent, actually below the original budget target, a pattern of under-shooting rather than over-shooting fiscal deficit targets that stands in direct contrast to the pattern of repeated overshoot documented for both Bihar and Punjab in the companion frameworks (PRS Legislative Research, 2026a). For 2026-27, the fiscal deficit is again targeted at 2 percent of GSDP, or ₹65,520 crore, with the state government's own budget communications emphasizing an aim to consistently maintain the Fiscal Responsibility and Budget Management target ceiling of 3 percent of GSDP with meaningful headroom to spare (PRS Legislative Research, 2026b; Gujarat Samachar, 2026).

On debt sustainability, Gujarat's position is markedly stronger than either companion state: government debt stood at just 14.7 to 15.27 percent of GSDP as of 2023-24 and 2025-26 estimates, against a state-set target ceiling of 27.1 percent, meaning Gujarat's actual debt level runs at roughly half its own prudential threshold (Gujarat Samachar, 2026; Wikipedia, 2026a). This compares to Punjab's debt-to-GSDP ratio of approximately 47 percent, documented in the companion framework as the second highest among major Indian states, and represents one of the most significant and consistent fiscal management differentials

identified anywhere across this three-state framework series. The Sixteenth Finance Commission's dedicated evaluation of Gujarat's finances similarly found that the state's fiscal deficit-to-GSDP ratio has been maintained at a consistently low level of 1.2 to 2.5 percent across the evaluation period, in full compliance with the state's own Gujarat Fiscal Responsibility Act, 2005 (Fincomindia, 2025).

## **2.5 State's Borrowings, Guarantees and Off-Budget Liabilities**

Gujarat's total liabilities, including guarantees extended to state public sector undertakings, stood at 27.49 percent of GSDP as of a 2022-23 budget estimate, a figure that, notably, approaches the state's own 27.1 percent debt ceiling target discussed in section 2.4, though this specific total-liabilities figure sits somewhat above the more recent 14.7 to 15.27 percent public debt figures cited for 2023-24 and later years, a discrepancy this framework attributes most plausibly to differing methodological scope, with the higher figure including guarantees and other contingent liabilities and the lower figure reflecting direct public debt alone, though this framework was unable to fully reconcile the two figures from the sources available and flags this as an item requiring direct clarification from Gujarat's Finance Department in any future revision (Deccan Herald reference context, 2022; Gujarat Samachar, 2026). The Sixteenth Finance Commission evaluation study found that total budget outgo to Gujarat's State Public Sector Undertakings increased from ₹15,340.87 crore in 2012-13 to a considerably higher figure by the study's more recent reference year, indicating continued and growing state financial support for these enterprises, though the study's full figure for the most recent year was not fully captured in the sources reviewed for this chapter (Fincomindia, 2025).

## **2.6 Finance Commission Awards: Allocation and Utilisation**

Gujarat's share in central taxes was estimated at ₹42,245 crore for 2024-25, a comparatively modest increase of just 1 percent over the prior year's revised estimate, reflecting Gujarat's position as a state whose Finance Commission devolution share has remained essentially static in relative terms even as the state's own economy and revenue base have grown substantially (PRS Legislative Research, 2025a). This pattern, essentially flat devolution alongside rapidly growing own-source revenue, further reinforces Gujarat's declining relative dependence on central transfers, discussed in section 2.1, and stands in contrast to the more substantial year-on-year devolution growth documented for both Bihar and Punjab in the companion frameworks, a difference attributable to the population and per-capita-income-weighted formula used by successive Finance Commissions, under which a wealthier state such as Gujarat receives a comparatively smaller devolution share relative to its population than lower-income states.

## **2.7 GST Implementation: Revenue Impact and Compensation Status**

Gujarat's GST and Sales Tax/VAT revenue growth has, in specific recent budget cycles, lagged considerably behind the state's overall GSDP growth rate, a finding that PRS

Legislative Research's budget analysis flagged explicitly: State GST and Sales Tax/VAT revenue was estimated to increase by only 4 percent in 2023-24 over the revised estimate for the prior year, even as GSDP was estimated to grow 13 percent over the same period, indicating a tax buoyancy considerably below one for that specific cycle (PRS Legislative Research, 2024). The Sixteenth Finance Commission evaluation study corroborated this concern at a more structural level, finding that Gujarat's overall tax buoyancy declined from 1.08 in the pre-GST period, calculated relative to the years prior to the tax's 2017 implementation, and identifying below-unity tax buoyancy as one of several signals warranting continued fiscal vigilance for the state (Fincomindia, 2025). This finding is significant because it suggests that even a state with Gujarat's exceptionally strong headline economic growth is not automatically translating that growth into proportionate tax revenue gains, a structural tax administration challenge shared, to varying degrees, across all three states examined in this framework series regardless of their otherwise very different growth trajectories.

## **2.8 Public Financial Management Reforms and Audit Compliance**

Gujarat's public financial management architecture benefits from the state's dedicated, government-supported partnership with the Center for Technology Research in Digital Governance, established in collaboration with the International Institute of Information Technology Bengaluru, explicitly aimed at promoting service delivery through e-governance, a public financial management modernization initiative discussed further in the digital governance context of Chapter 16 (Deccan Herald reference context, 2022). The Sixteenth Finance Commission's dedicated evaluation of Gujarat's state finances, covering revenue-GSDP ratios, tax buoyancy, debt sustainability models, and subsidy analysis, alongside the performance of the state's Panchayati Raj Institutions and Urban Local Bodies, represents a considerably more granular independent audit-based assessment than this framework was able to identify for Punjab, though somewhat less exhaustive in the specific sources available than the equivalent evaluation documented for Bihar in that framework's Chapter 2.8 (Fincomindia, 2025).

## **2.9 Centre-State Fiscal Relations: Trends and Themes**

The central theme emerging from this chapter's review of Gujarat's fiscal architecture is one of a state whose own revenue-raising capacity is genuinely exceptional by Indian standards, at 73 percent of total revenue receipts, whose debt-to-GSDP ratio of roughly 15 percent sits at less than half its own prudential ceiling, and whose fiscal deficit has, uniquely among the three states examined in this framework series, consistently come in at or below its own budgeted targets rather than exceeding them. This places Gujarat's fiscal position in genuinely stark contrast to both Bihar, where the core challenge is an inadequate own-revenue base relative to development needs, and Punjab, where NITI Aayog's own Fiscal Health Index ranks the state last among 18 major states due substantially to self-inflicted subsidy and pension commitments. Gujarat's fiscal architecture instead provides the state with genuine, demonstrated headroom to pursue the kind of sustained capital

investment and targeted regional development spending discussed in section 2.2, a fiscal advantage this framework's concluding chapter identifies as one of Gujarat's most significant, if underexamined, assets for addressing the human development and nutrition deficits documented throughout the remainder of this document, deficits that, unlike in Bihar and Punjab, cannot be plausibly attributed to a lack of state fiscal capacity to address them.

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## Chapter 3: Economic Structure, Growth and Sectoral Performance

### 3.1 Gross State Domestic Product: Trends, Growth Rate and Sectoral Share

Gujarat's Gross State Domestic Product growth over the past decade represents the most consistently exceptional performance of any state examined across this framework series. Real GSDP grew at an average rate of 8.5 percent between 2012-13 and 2021-22, and a subsequent, longer calculation extending through 2023-24 found average real growth of 8.42 percent, the highest among all Indian states with economies exceeding ₹10 lakh crore, as documented in this framework's Executive Summary (NITI Aayog, 2025; Indian Masterminds, 2025). Gujarat's GSDP at current prices for 2025-26 was projected at ₹29.82 lakh crore, with growth of 12 percent over the revised 2024-25 estimate, and the state's own 2026-27 government reporting placed the figure at approximately ₹33.25 trillion, with a stated GDP growth rate of 10.4 percent for 2025-26, positioning Gujarat as India's 4th largest state economy for that fiscal year (PRS Legislative Research, 2026a; Wikipedia, 2026a).

On sectoral composition, Gujarat presents the most industry-dominant economic structure of any state examined in this framework series. As of 2025-26, the secondary sector contributed 42.87 percent of GSDP at current prices, followed by tertiary services at 39.16 percent and a comparatively modest primary sector at 17.97 percent, figures broadly consistent with an earlier NITI Aayog assessment that found industry and services contributing 49.3 percent and 34.7 percent of GSVA respectively as of 2021-22, with agriculture at just 15.9 percent (India Brand Equity Foundation, 2026a; NITI Aayog, 2025). This industry-first composition stands in sharp contrast to both Bihar and Punjab, examined in the companion frameworks, where services constitute the largest single sector, and represents Gujarat's most fundamental structural economic distinction within this three-state comparison. Manufacturing recorded the highest sectoral growth rate among all major sectors at 8.8 percent per annum between 2013-14 and 2022-23, ahead of services at 6.9 percent and agriculture at 6.3 percent (NITI Aayog, 2025).

### 3.2 Per Capita Income and Purchasing Power Analysis

Gujarat's per capita income reached ₹3,00,957 as of the most recent reporting, crossing the ₹3 lakh threshold for the first time and positioning the state among India's top five large economies by this measure, trailing only Karnataka and Tamil Nadu among major states by a comparatively narrow margin (Indian Masterminds, 2025). Gujarat's nominal per capita GDP stood at ₹371,016 as of 2024-25 estimates according to the state's own more recent reporting, ranking 8th among Indian states on a per capita basis despite the state's much higher 4th place ranking by aggregate GSDP, an inversion pattern also documented for Punjab in the companion framework, though considerably less pronounced in Gujarat's case (Wikipedia, 2026a). Gujarat's nominal per capita income stood approximately 60 percent above the national per capita income as of 2021-22, a premium considerably larger than the roughly 10 percent premium documented for Punjab over the same reference period in the companion

framework, underscoring the scale of Gujarat's genuine per capita income advantage even as this framework's Chapter 1.5 and 1.6 findings indicate this income advantage has not translated into a commensurately strong human development or poverty outcome (NITI Aayog, 2025).

### **3.3 Primary Sector: Agriculture, Horticulture, Animal Husbandry and Fisheries**

Agriculture occupies a smaller share of Gujarat's GSVA, at 15.9 to 20 percent depending on reference year, than in either Bihar or Punjab, examined in the companion frameworks, yet the sector's employment weight remains disproportionately large, with NITI Aayog's 2022-23 PLFS-based assessment finding agriculture, forestry, and fishing engaging 41.8 percent of Gujarat's working population, the single largest sectoral employment category despite the sector's comparatively modest output share (NITI Aayog, 2025). Gujarat's dairy sector represents a particular agricultural strength: the state achieved annual milk production of 17.28 million metric tonnes in 2024, securing 4th position nationally and contributing 7.49 percent of India's total milk output, with per capita milk availability rising from 291 grams per day in 2000-01 to 670 grams per day by 2022-23, more than double over roughly two decades (India Brand Equity Foundation, 2026a). This dairy performance, discussed further in Chapter 18.5, reflects Gujarat's historically strong cooperative dairy movement, centered on the Amul brand and the Anand pattern of dairy cooperatives, a institutional model of considerable importance to the state's rural economy and one this framework examines in greater depth in its dedicated agriculture chapter.

### **3.4 Secondary Sector: Industry, Manufacturing and Mining**

Gujarat's secondary sector, contributing the largest single share of state output as documented in section 3.1, is built on a genuinely diversified industrial base spanning chemicals, petrochemicals, pharmaceuticals, textiles, gems and jewellery, cement and ceramics, automobiles, and engineering, comprising over 800 large industries and 453,339 micro, small, and medium enterprises as of the most recent reporting (India Brand Equity Foundation, 2026b). Gujarat's pharmaceutical sector alone comprises over 3,300 manufacturing units, contributing 30 to 35 percent of India's total pharmaceutical sector turnover and approximately 28 percent of the country's pharmaceutical exports as of the most recent detailed figures available (India Brand Equity Foundation, 2026b). Gujarat's chemical sector, discussed in this framework's Executive Summary, contributes nearly 60 percent of India's national chemical output, and the state's total installed power generation capacity of 72,932 megawatts as of April 2026, examined further in Chapter 9, provides the substantial and reliable energy base such energy-intensive chemical and petrochemical manufacturing requires (India Brand Equity Foundation, 2026a). Gujarat's diamond processing industry, centered in Surat and discussed further in section 3.9, has faced recent headwinds, with United States tariffs contributing to a 17 percent decline in India's diamond exports to \$13.3 billion in FY2024-25, a sector-specific vulnerability this framework flags as a genuine risk to the Surat regional economy given the city's heavy concentration in this single industry (Groklopedia, 2026a).

### **3.5 Tertiary Sector: Trade, Finance, Real Estate and Services**

Gujarat's services sector, while proportionally smaller than in either Bihar or Punjab, remains substantial in absolute terms and is increasingly anchored by the Gujarat International Finance Tec-City, or GIFT City, near Gandhinagar, a dedicated financial services and international finance special economic zone that has fostered growing professional, scientific, and technical services employment, particularly within the Ahmedabad metropolitan economy discussed in Chapter 3.9 (Grokikipedia, 2026b). Trade and transportation collectively constitute 22.02 percent of employment within Ahmedabad's metropolitan economy specifically, with merchant wholesaling in durable and nondurable goods the largest individual sub-sector, reflecting the city's continued role as a major regional commercial and distribution hub alongside its growing financial services profile (Grokikipedia, 2026b).

### **3.6 Informal Economy: Size, Significance and Integration Challenges**

Gujarat's informal economy, while substantial, has undergone what independent analysis characterizes as meaningful formalization following the 2017 GST implementation, with the state recording a 145 percent rise in registered GST taxpayers between 2017 and 2025 (Grokikipedia, 2026a). Nonetheless, informal and migrant labour continues to underpin much of Gujarat's manufacturing workforce, particularly in Surat's diamond and textile sector, discussed in section 3.4, where the city is home to an estimated 41.76 lakh migrant labourers, drawn from 21 Indian states and 33 districts within Gujarat itself, constituting approximately 58 percent of the city's total population, with roughly 60 percent of these migrants working as contractual labourers or daily wagers across textile manufacturing, dyeing, printing, embroidery, construction, and diamond cutting and polishing (IIM Bangalore, 2026). This scale of dependence on informal, migrant labour represents a structural vulnerability this framework notes explicitly, given that such labour arrangements typically carry limited social security coverage or job security, a vulnerability that became starkly visible during the COVID-19 pandemic, when hundreds of thousands of migrant workers left Surat, Ahmedabad, and Vadodara on foot, bicycle, and whatever private transport was available, and one that continues to characterize the structural composition of Gujarat's industrial workforce even as the state's GST-driven formalization trend, discussed above, has proceeded (IIM Bangalore, 2026).

### **3.7 Labour Market: Employment, Unemployment and Workforce Quality**

Gujarat's labour market presents the most favourable headline indicators of any state examined in this framework series. The state's annual unemployment rate stood at just 1.7 percent as of 2022-23, significantly below the national average of 3.2 percent, and Gujarat's Female Labour Force Participation Rate remained above the national average over the same period, with female participation predominantly concentrated in rural areas and the majority of the female workforce comprising self-employed workers, a pattern broadly similar to that documented for Punjab and Bihar in the companion frameworks (NITI Aayog, 2025). This unemployment performance stands in genuinely stark contrast to Punjab's documented

unemployment rate exceeding 6 percent and youth unemployment of 20.2 percent, examined in the companion Punjab framework, and represents one of the clearest and most consistent labour market advantages Gujarat holds over both companion states examined in this series. MSMEs alone employ over 10 million people within Gujarat, forming what independent analysis characterizes as the backbone of job creation across the state's textile, chemical, and engineering clusters (Grokikipedia, 2026a). Inward labour migration, at 4.62 million interstate migrants recorded in the 2011 Census, plays a documented role in mitigating local skill shortages and unemployment pressures within Gujarat's industrial hubs, reflecting the same migrant labour dependence discussed in section 3.6 (Grokikipedia, 2026a).

### **3.8 Inflation, Price Stability and Consumer Welfare**

A comprehensive, current, Gujarat-specific consumer price inflation assessment, comparable to the figures available for Punjab in the companion framework's Chapter 3.8, was not available with sufficient detail in the sources reviewed for this chapter. Given Gujarat's substantially GST-formalized and industrially diversified economy, discussed in sections 3.4 and 3.6, the state's inflation dynamics would reasonably be expected to track national trends closely, though a precise, current figure was not confirmed and this framework flags it as a data gap for future revision.

### **3.9 Growth Corridors: Engines of Economic Expansion**

Gujarat's economic geography is organized around a well-defined set of specialized industrial growth corridors, each with a distinct sectoral identity: Ahmedabad functions as the state's commercial, financial, and increasingly its diamond and jewellery trading and fabrication hub, discussed in section 3.4, and contributes substantially to Gujarat's position as India's leading merchandise exporting state; Surat, discussed in sections 3.4 and 3.6, dominates India's man-made fabric production at approximately 40 percent of national output and nearly 18 percent of textile exports, alongside its historic diamond cutting and polishing industry; and Vadodara and the broader Kachchh and coastal Saurashtra regions anchor much of the state's petrochemical, port, and heavy industrial activity, discussed further in Chapter 4 and Chapter 8 (India Brand Equity Foundation, 2026a). The state's 2026-27 budget's explicit six-region regional economic plan, discussed in Chapter 2.2, spanning North Gujarat, Central Gujarat, Saurashtra, Coastal Saurashtra, Kachchh, and Surat, reflects a deliberate government strategy of formally recognizing and investing in this multi-corridor structure, a considerably more geographically distributed growth model than the heavily Ludhiana-centered pattern documented for Punjab or even Bihar's more recently emerging, still Patna-concentrated pattern, examined in the companion frameworks. Gujarat's own explicit economic target, referenced in independent analysis, of reaching a \$500 billion economy by 2026-27, underscores the state government's continued ambition to extend this multi-corridor growth model further over the coming years (Grokikipedia, 2026b).

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## **Chapter 4: Investment, Industry and Private Sector Development**

### **4.1 Investment Climate Assessment and Ease of Doing Business**

Gujarat's investment climate stands as this framework's clearest example of sustained, institutionalized ease of doing business reform among the three states examined. The Viksit Gujarat Industrial Policy 2026, unveiled June 15, 2026, and valid for five years from June 1, 2026, represents Gujarat's fourth major industrial policy in recent memory and targets ₹10 lakh crore in new investment over its five-year period, with industries established under the policy expected to receive incentives of approximately ₹2.5 lakh crore over the following fifteen years (The Secretariat, 2026). Chief Secretary Manoj Kumar Das explicitly framed the policy as "the blueprint for taking Gujarat towards a USD 3.5 trillion economy," with the state's GDP having expanded nearly twentyfold over the preceding 22 years, from USD 15.73 billion in 2002-03 to USD 329.70 billion in 2024-25 (The Secretariat, 2026).

The policy's central ease-of-doing-business innovation is its "Choose Your Incentive" framework, which allows eligible investors to select a customized combination of capital subsidy, interest subsidy, or power tariff reimbursement calibrated to their specific business viability, an investor-choice mechanism strikingly similar in concept to the investor-choice incentive structure documented for Punjab's own 2026 industrial policy in the companion framework's Chapter 4.1, suggesting this approach may be emerging as a genuine national best-practice trend among Indian state industrial policies rather than a Gujarat-specific innovation alone (ANI, 2026). The policy's Investor Facilitation Portal functions as a unified digital platform providing access to more than 200 approvals across 18 state departments, integrated with the National Single Window System, a considerably more comprehensive single-window digital architecture than documented for either companion state (IMPRI, 2026). Gujarat's State Jan Vishwas Act, aimed at simplifying regulatory compliance and decriminalizing minor offences, represents a further, distinctly Gujarat-specific ease of doing business reform mechanism not paralleled in the equivalent chapters of the companion Bihar and Punjab frameworks (IMPRI, 2026).

### **4.2 Industrial Policy Framework and MSME Development**

MSME development remains explicitly central to Gujarat's industrial strategy despite the state's large-enterprise-dominated headline economic profile discussed in Chapter 3.4. The Gujarat Industrial Policy 2026 explicitly reaffirms MSMEs as, in the government's own framing, "the backbone of Gujarat's industrial economy," with the policy offering differentiated support spanning MSMEs, large units, mega units, ultra-mega units, selected thrust sectors, research and development centres, startups, women-led enterprises, and dedicated workforce housing (India Briefing, 2026; Institute of Commerce, 2026). As documented in Chapter 3.7, Gujarat's MSMEs already employ over 10 million people, and the 2026 policy's specific commitments to easier finance access, technology upgradation, digital transformation, and simplified regulatory compliance for this segment represent a

continuation and deepening of the state's existing MSME support architecture rather than a fundamentally new departure (Institute of Commerce, 2026). A notable and distinctive feature of the 2026 policy is Project THRIVE, standing for Transition for Harmonized Relocation and Inclusive Vibrant Economy, which encourages industries operating in congested urban areas to relocate to emerging industrial zones, with relocating industries treated as new units eligible for the full suite of capital subsidies, wage support, housing assistance, and regulatory relaxations, an urban decongestion and regional dispersal mechanism specifically relevant to the growth corridor concentration concerns discussed in Chapter 3.9 (Texmart, 2026).

### **4.3 Large and Anchor Industries: Sectoral Analysis**

Gujarat's Industrial Policy 2026 expands the state's designated priority sectors from 16 to 21, now explicitly including semiconductors, green hydrogen, aerospace, drones, robotics, and battery energy storage systems alongside the state's established strengths in chemicals, textiles, and pharmaceuticals discussed in Chapter 3.4 (IMPRI, 2026). Sanand, near Ahmedabad, has emerged as a particularly significant anchor location for semiconductor investment specifically, reflecting Gujarat's broader ambition, discussed further in Chapter 4.5, to position itself as India's leading semiconductor manufacturing hub (India Briefing, 2026). Priority sectors under the new policy additionally include critical minerals, agro-processing, healthcare, semiconductor ancillary units, and recycling, reflecting a policy design deliberately structured around integrated value chains rather than isolated large anchor projects alone, with the policy's own recommended future direction explicitly calling for co-located industrial clusters that integrate upstream production with downstream high-technology manufacturing to improve supply chain resilience and reduce logistics costs (IMPRI, 2026).

### **4.4 Special Economic Zones, Industrial Corridors and Clusters**

Gujarat operates 22 operational Special Economic Zones as of December 2025, spanning textiles, pharmaceuticals, engineering, chemicals, and electronics sectors, a considerably larger and more diversified SEZ portfolio than documented for either Bihar or Punjab in the companion frameworks (India Brand Equity Foundation, 2026). The Gujarat Research & Innovation Park, to be developed by the Gujarat Industrial Development Corporation, is designed specifically to attract leading research and development companies, startups, and technology-driven firms through shared laboratory infrastructure and state-of-the-art facilities, complemented by a planned one-stop digital portal for testing and research and development facilities to facilitate seamless industry access (ANI, 2026). On January 11, 2026, the development of 14 greenfield GIDC industrial estates was announced specifically to strengthen industrial infrastructure across the state, a substantial single-announcement expansion of Gujarat's industrial estate network discussed further in this chapter's regional development context (India Brand Equity Foundation, 2026a). The 2026 policy's explicit commitment to smart and sustainable infrastructure, including worker housing, stormwater management, desalination, and next-generation GIDC facilities aligned with Industry 4.0 and

5.0 principles, represents a considerably more environmentally integrated industrial infrastructure approach than documented in either companion state's industrial policy (ANI, 2026).

#### **4.5 Foreign Direct Investment: Inflows, Sectoral Distribution and Policy**

Gujarat's foreign direct investment performance is, by a substantial margin, the strongest of the three states examined across this framework series. Cumulative FDI equity inflows into Gujarat reached ₹4,08,212 crore, or approximately US\$46.11 billion, from October 2019 through June 2025, dwarfing the comparable figures documented for both Bihar and Punjab in the companion frameworks (India Brand Equity Foundation, 2026a). The Gujarat government's own statement accompanying the 2026 industrial policy explicitly claims the state has established "national leadership in foreign direct investment, ports, industrial infrastructure, and Ease of Doing Business," a claim this framework finds substantially supported by the comparative FDI data reviewed across all three states in this series (The Secretariat, 2026). Semiconductor investment represents a particular current FDI priority, with the state government explicitly recommending expansion of specialized workforce development programmes, including participation in the India Semiconductor Workforce Development Program, to address anticipated technical skill shortages in this emerging sector before they constrain the pace of realized investment (IMPRI, 2026).

#### **4.6 Public Sector Undertakings: Performance and Reform Agenda**

As documented in Chapter 2.5, total budget outgo to Gujarat's State Public Sector Undertakings increased substantially from ₹15,340.87 crore in 2012-13, per the Sixteenth Finance Commission's evaluation study, though the study's more recent comparative figure was not fully captured in the sources reviewed for this chapter. A comprehensive, current, entity-by-entity financial performance assessment of Gujarat's state public sector undertakings, comparable in detail to the analysis this framework series has been able to assemble for Bihar's public sector enterprise portfolio in the companion framework's Chapter 4.6, was not available with sufficient specificity in the sources reviewed for this chapter, and represents a priority area for further primary research through Gujarat's Finance Department and its published PSU annual reports.

#### **4.7 Public-Private Partnership Framework and Pipeline**

Gujarat's public-private partnership framework operates substantially through its port and infrastructure development model, discussed further in Chapter 8.4, where private sector participation in port operations and industrial infrastructure has been a defining and long-standing feature of the state's development approach, predating the more recently adopted PPP frameworks documented for both Bihar and Punjab in the companion frameworks. The Industrial Policy 2026's emphasis on PM Gati Shakti integration and multimodal connectivity development, discussed in Chapter 4.4, reflects continued state commitment to coordinated public infrastructure investment designed explicitly to de-risk

and support private industrial investment, a strategy this framework's cumulative three-state comparison suggests represents one of Gujarat's most consistently applied and successful governance approaches relative to the companion states.

#### **4.8 Regional Cooperation: Shared Region and Growth**

Gujarat's regional cooperation dynamics center substantially on its extensive coastline and port network, discussed further in Chapter 8.4, which position the state as a critical logistics and trade gateway not only for its own economy but for a considerably wider swath of northern and central India, a role broadly analogous to, though considerably more developed than, the aspirational logistics gateway role discussed for Bihar's relationship to Kolkata port in the companion framework's Chapter 4.8. The Industrial Policy 2026's explicit goal of "encourag[ing] investment promotion in emerging regions to stimulate local employment, reduce migration and ensure more equitable economic development across Gujarat" reflects direct policy acknowledgment of the intra-state regional disparity concerns discussed in Chapter 1.7, extending the state's regional cooperation and development framework inward, toward its own less-developed districts, rather than solely outward toward external trade partners (Institute of Commerce, 2026). Gujarat's proximity to Pakistan's Sindh province, discussed in Chapter 1.1, represents a border relationship structurally similar to Punjab's international border constraint discussed in the companion framework, though Gujarat's border region is considerably less populated and economically central to the state's overall growth story than Punjab's border districts are to that state's economy.

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## **Chapter 5: Education — Access, Quality and Future Readiness**

### **5.1 Elementary Education: Enrolment, Retention, Dropout and Learning Outcomes**

Gujarat's elementary education system presents a genuinely puzzling profile within UDISE+ data, one that extends this framework's central "Gujarat paradox" thread from Chapter 1 and the Executive Summary into the education sector specifically. Gujarat operates 53,425 schools as of the 2025-26 reporting cycle, and while the state recorded elementary enrolment increases at the aggregate level, positive alongside only Telangana and Odisha among major states, this aggregate figure masks a considerably more troubling underlying trend: Gujarat's primary Gross Enrolment Ratio collapsed from 93.1 percent to just 79.6 percent over four years, a 13.5 percentage point decline that independent education data analyst Professor Arun C. Mehta, formerly of the National Institute of Educational Planning and Administration, identified as one of the most significant negative findings in his comprehensive state-by-state UDISE+ review (Education for All in India, 2026a). The state additionally recorded a net decline of 271 schools in 2024-25 alone, a reduction Mehta's analysis flagged among the more significant state-wise school count reductions nationally that year (Education for All in India, 2026a).

On a more positive note, Gujarat's count of zero-enrolment schools, a data quality and functional-school indicator this framework has tracked across both companion state frameworks, stood at just 58 as of 2025-26, down slightly from 63 the prior year, and considerably lower than the 274 recorded in 2023-24 and dramatically lower than the 2,167 recorded in Rajasthan or the 12,954 recorded in Bihar over comparable reporting periods, examined in the companion Bihar framework (Vibes of India, 2026; Education for All in India, 2026a). The Gujarat government's long-running Shala Praveshotsav school enrolment campaign, operating for more than two decades, was specifically deployed in 2025-26 to address an estimated 6.4 lakh students reported as dropped out from the previous year, with a three-day enrolment campaign in June reducing the number of children still out of school to approximately 50,000 by the campaign's conclusion (Vibes of India, 2026). This combination, a genuinely troubling primary GER collapse alongside comparatively strong performance on the zero-enrolment school indicator and an active, sustained state enrolment campaign infrastructure, illustrates precisely the kind of mixed and sometimes contradictory picture that recurs throughout this chapter's treatment of Gujarat's education system.

### **5.2 Secondary and Senior Secondary Education: Transition and Achievement**

Gujarat's secondary education performance represents this framework's most striking single education finding across all three states examined in this series. UDISE+ 2025-26 data placed Gujarat's overall secondary school dropout rate at 15.7 percent, compared to a national average of 9.5 percent, with the situation notably worse among boys, at 17.6 percent against a

national average of 10.9 percent, than among girls, at 13.3 percent against a national average of 8 percent (Vibes of India, 2026). A separate UDISE+ analysis using the 2024-25 reporting cycle placed Gujarat's secondary dropout rate at 16.9 percent, explicitly flagging Gujarat, alongside Madhya Pradesh and Mizoram, as recording an "alarmingly high" secondary dropout rate (Education for All in India, 2026a). The Performance Grading Index 2.0, released alongside the UDISE+ 2025-26 report and discussed in the companion Bihar and Punjab frameworks, specifically identified Ladakh, Gujarat, Chhattisgarh, and Karnataka as recording the highest secondary-level dropout rates of any state or union territory in the country, placing Gujarat in genuinely troubling company relative to considerably lower-income and lower-capacity administrative units (ENSURE IAS, 2026; Vajiram and Ravi, 2026).

This finding stands in the starkest possible contrast to the companion Punjab framework's Chapter 5.2, where Punjab was found to lead the nation specifically in the Performance Grading Index's Learning Outcomes domain and to record Class 12 retention of 67.8 percent against a national average of 47.2 percent. Gujarat, by comparison, saw only 54.5 percent of students reach Class 12 as of the 2025-26 UDISE+ reporting, according to independent journalistic analysis of the same dataset (InsightfulTake, 2026). This represents, within this three-state framework series, the single clearest instance in which a state with dramatically stronger economic indicators, documented throughout Chapters 1 through 4, records meaningfully weaker educational retention outcomes than a considerably less economically dynamic peer state, reinforcing this framework's central analytical finding regarding the limits of Gujarat's economic growth model as a predictor of social sector performance.

### **5.3 Higher Education: Institutional Capacity, Gross Enrolment and Quality**

Gujarat's higher secondary Gross Enrolment Ratio was recorded at 43.4 percent as of a NITI Aayog reference year, a figure the Macro and Fiscal Landscape assessment for the state explicitly presented alongside the national average without asserting Gujarat's figure exceeded it, suggesting Gujarat's higher secondary GER sits at or somewhat below the national benchmark, a notable finding given the state's per capita income advantage documented throughout this framework (NITI Aayog, 2025). Gujarat's literacy rate stood at 78 percent as of the 2011 Census, higher than the national average, though this framework notes this figure now considerably predates the current reporting period and should be read alongside the more recent and more troubling secondary-level retention data documented in section 5.2 (NITI Aayog, 2025). A comprehensive, current assessment of Gujarat's higher education institutional density and outward student migration patterns, comparable to the detailed treatment given to this topic for Bihar in the companion framework's Chapter 5.3, was not available with sufficient detail in the sources reviewed for this chapter, though given the state's comparatively low secondary and higher secondary retention documented above, the pool of students actually reaching the point of higher education enrolment eligibility in Gujarat may itself be more constrained than the state's overall economic profile would suggest.

## **5.4 Technical, Vocational Education and Training (TVET) Ecosystem**

Gujarat's technical and vocational education architecture benefits from close integration with the state's industrial policy framework discussed in Chapter 4, particularly the Viksit Gujarat Industrial Policy 2026's explicit call for expanded specialized workforce development initiatives, including participation in the India Semiconductor Workforce Development Program, discussed in Chapter 4.5, to address anticipated technical skill shortages in advanced manufacturing sectors. This close integration between TVET and industrial cluster development parallels the similar linkage documented for Punjab in the companion framework's Chapter 5.4, and stands in contrast to the more recently developed equivalent relationship documented for Bihar. A comprehensive, current, quantitative assessment of Gujarat's TVET enrolment volumes and completion rates specific to this chapter's education focus, as distinct from the industrial policy framing discussed in Chapter 4, was not available with sufficient detail in the sources reviewed for this chapter.

## **5.5 Teacher Recruitment, Training and Professional Development**

Gujarat's teacher workforce data reveals findings consistent with the broader pattern of mixed performance documented throughout this chapter. National UDISE+ 2024-25 data recorded teacher strength crossing 1 crore nationally for the first time, with more than 51 percent female representation among the 95.07 lakh teachers engaged in school education as of the 2021-22 reference year cited in national reporting, though a Gujarat-specific breakdown of this teacher strength and gender composition data was not confirmed with precision in the sources reviewed for this chapter (Careers360, 2025; Vajiram and Ravi, 2026). Gujarat recorded 2,462 single-teacher schools as of the 2023-24 UDISE+ reporting cycle, a figure this framework notes without the same degree of anomalous year-on-year volatility documented for Punjab's single-teacher school count in the companion framework's Chapter 5.1, where the equivalent figure jumped 68-fold in a single year, suggesting Gujarat's single-teacher school reporting reflects a more stable underlying data collection methodology (Education for All in India, 2026a).

## **5.6 Digital Education, EdTech Integration and ICT in Schools**

Gujarat has emerged as a genuinely notable national example of AI-enabled dropout prevention technology deployment within the school system, with independent education policy analysis explicitly citing "Gujarat's AI Success" as a potential blueprint for dropout prevention across India, built specifically around integration of UDISE+ data with the state's own Student Data Management System, or SDMS, to enable data-driven, early identification of students at risk of dropping out, supporting timely intervention through counselling, scholarships, remedial support, and family engagement (Education for All in India, 2026b). This AI-driven early warning system represents a genuinely distinctive digital education innovation not paralleled in the equivalent chapters of either companion Bihar or Punjab framework, though the persistence of Gujarat's alarmingly high secondary dropout rate, documented in section 5.2, despite this technological investment, suggests that even

sophisticated early-warning data systems have not yet been sufficient, on their own, to resolve the state's underlying secondary retention crisis, reinforcing this chapter's recurring theme that Gujarat's challenges lie less in technological or infrastructure capacity than in translating that capacity into improved outcomes.

### **5.7 Special Education: Children with Disabilities and Inclusive Schooling**

A comprehensive, current, Gujarat-specific assessment of special education provision and inclusive schooling infrastructure for children with disabilities was not available in the sources reviewed for this chapter, consistent with the equivalent data gap identified in both companion Bihar and Punjab frameworks. Independent UDISE+ reporting noted that enrolment of Children with Special Needs increased nationally in the most recent reporting cycle, though a Gujarat-specific figure was not isolated within the sources reviewed for this chapter (Careers360, 2025). This continues to represent a priority area for further primary research across all three states examined in this framework series, best pursued through direct engagement with each state's respective disability rights bodies and departments of social justice and education.

### **5.8 State-Specific Educational Challenges and Reform Priorities**

Gujarat's education system presents this framework's most striking illustration yet of the disconnect between economic prosperity and social sector performance that runs throughout this document. Where Gujarat's elementary school infrastructure indicators, zero-enrolment school counts, and technological innovation compare favourably or even lead nationally in specific respects, discussed in sections 5.1 and 5.6, the state's core retention outcomes, its collapsing primary GER and its alarmingly high secondary dropout rate placing it in the bottom tier nationally alongside Ladakh, Chhattisgarh, and Karnataka, represent a genuine and significant underperformance relative to what Gujarat's economic and fiscal capacity, documented in Chapters 2 through 4, would predict. This finding, combined with the child nutrition evidence discussed in this framework's Preface and examined further in Chapter 6, suggests that Gujarat's most urgent state-specific education reform priority is not infrastructure or technology investment, where the state already performs comparatively well, but rather a more fundamental examination of why students, and particularly boys, are leaving the school system at the secondary stage at rates exceeding those of considerably poorer and lower-capacity states, an inquiry this framework's concluding chapter identifies as deserving the same level of state government urgency currently being directed toward the industrial and investment priorities documented in Chapter 4.

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## Chapter 6: Health, Nutrition and Population

### 6.1 Public Health Infrastructure: Facilities, Human Resources and Gaps

Gujarat's public health infrastructure, on conventional facility-count and scheme-coverage metrics, presents a considerably stronger picture than documented for either Bihar or Punjab in the companion frameworks. The state maintains 807 hospitals empanelled under the Pradhan Mantri Jan Arogya Yojana as of 2026 data, including more than 178 private facilities, spanning major cities including Ahmedabad, Surat, and Rajkot, a hospital network density this framework has not found matched in either companion state's Ayushman Bharat empanelment figures (Ayushman Card Hospital List, 2026). A 2022 Press Information Bureau state series report on Gujarat's health sector found that 41 lakh patients had availed of free treatment under Ayushman Bharat in the state, disproportionately benefiting women, deprived communities, and tribal populations, with the scheme collectively saving patients more than ₹7,000 crore in treatment costs as of the reporting date (Press Information Bureau, 2022).

Despite this comparatively strong facility infrastructure and scheme utilization, this chapter's findings, examined below, indicate that facility access and financial protection alone have not resolved Gujarat's most significant and persistent public health challenge: child nutrition, discussed in depth in section 6.3. This pattern, strong health infrastructure and financing access coexisting with a specific and severe unresolved outcome gap, mirrors precisely the pattern this framework has already documented for Gujarat's education system in Chapter 5, reinforcing this document's central analytical finding that Gujarat's institutional and financial capacity, genuinely stronger than either companion state's on most conventional measures, has not translated uniformly into correspondingly strong outcomes across every social sector.

### 6.2 Epidemiological Profile: Communicable and Non-Communicable Disease Burden

A comprehensive, current, Gujarat-specific epidemiological assessment covering communicable and non-communicable disease burden was not available with sufficient detail in the sources reviewed for this chapter. What this framework's research did surface, and what carries particular significance given Gujarat's dominant industrial and chemical manufacturing base documented in Chapter 3.4, is the district-level nutrition research discussed in this framework's Preface and Executive Summary, which found that Gujarat's four largest, most industrially developed urban centers, Ahmedabad, Surat, Vadodara, and Rajkot, experienced sharper increases in child stunting, wasting, and underweight prevalence than several of the state's tribal districts between the NFHS-4 and NFHS-5 survey rounds (The Wire, 2023). This urban-industrial nutrition deterioration pattern, while not itself a direct measure of industrial pollution exposure, raises a plausible hypothesis regarding the health effects of rapid, industry-led urbanization on child welfare that this framework flags as warranting dedicated epidemiological investigation, rather than asserting a causal claim the available sources do not support.

### 6.3 Maternal and Child Health: MMR, IMR, Under-5 Mortality and Nutrition

Gujarat's Infant Mortality Rate stood at 16 per 1,000 live births as of the most recent state-by-state analysis, a figure considerably below the national IMR of approximately 23 to 25 as of 2023 and 2025 reporting, and well below the elevated rates documented for Bihar in the companion framework (India Data Map, 2026; PRS Legislative Research, 2026c). Independent analysis explicitly attributed Gujarat's comparatively low IMR to the state's stronger food programmes, framing Gujarat as a positive counter-example to the elevated infant mortality documented in lower-income states (India Data Map, 2026). This IMR finding sits in direct and striking tension with this chapter's central nutrition finding, discussed below, illustrating that Gujarat's public health profile bifurcates sharply by indicator: the state performs comparatively well on infant survival specifically, while performing considerably worse on the separate, related but distinct measure of child nutritional status.

That central nutrition finding, introduced in this framework's Preface and Executive Summary and explored further in section 6.2, bears full and direct restatement in this chapter given its centrality to any credible assessment of Gujarat's health system performance. NFHS-5 data found that stunting among Gujarat's children under five rose from 38.5 percent to 39 percent between NFHS-4 and NFHS-5, that severe wasting rose from 9.5 percent to 10.6 percent, and that underweight prevalence rose from 39.3 percent to 39.7 percent, reversing gains recorded in the prior survey round (Soni et al., 2023). Regular wasting improved modestly, from 26.4 percent to 25.1 percent, while the prevalence of overweight children under five more than doubled, from 1.9 percent to 3.9 percent, indicating that Gujarat's child nutrition profile is not simply one of uniform undernutrition but of a more complex "double burden" pattern combining persistent undernutrition with rising overweight prevalence, a pattern often associated with rapid dietary transition in urbanizing, industrializing populations (Soni et al., 2023). Anaemia prevalence among Gujarat's children rose by 17 percent statewide over the five years between NFHS-4 and NFHS-5, and by 12 percent specifically among young girls, findings researchers at the Indian Institute of Public Health Gandhinagar characterized as requiring urgent recognition of anaemia and malnutrition as distinct public health challenges warranting dedicated policy attention, including the establishment of a nutrition intelligence unit and the identification of high-priority talukas for targeted sub-district action plans (The Wire, 2023).

A 2026 national analysis extended this concerning picture further, finding that barely 8 percent of Gujarat children aged 6 to 23 months receive an adequate diet, a figure lower than the more than 13 percent recorded in Jharkhand, one of India's poorest states, with the researchers explicitly concluding that a state's economic prosperity or reputation for good governance does not, on its own, determine child nutrition outcomes (Down To Earth, 2026). This finding, drawn from Gujarat's own leading public health research institutions rather than from external critics, represents this framework's single most significant and well-substantiated challenge to any simplified reading of Gujarat's development record, and

this framework treats it, consistent with its Preface's stated approach, as a central rather than peripheral finding.

#### **6.4 Universal Health Coverage: State Health Assurance Schemes**

Gujarat's implementation of Ayushman Bharat, discussed in section 6.1, benefits from the state's 807-hospital empanelled network and demonstrated utilization of 41 lakh beneficiary treatments, figures that suggest considerably stronger scheme penetration and utilization than documented for either Bihar or Punjab in the companion frameworks, where implementation gaps in rural awareness and empanelled facility density were identified as significant constraints (Ayushman Card Hospital List, 2026; Press Information Bureau, 2022). The scheme's coverage of ₹5 lakh per family annually, with no restriction on family size, age, or gender, and full portability allowing beneficiaries to access treatment at any empanelled hospital nationwide, applies uniformly to Gujarat as to other states, though Gujarat's stronger empanelled hospital density arguably makes this portability feature more consequential for Gujarat-origin beneficiaries traveling elsewhere than for beneficiaries traveling into Gujarat from less-served states (Wikipedia, 2026c).

#### **6.5 Mental Health Services: Availability, Access and Stigma Reduction**

A comprehensive, current, Gujarat-specific assessment of mental health service availability, comparable to the Punjab-specific findings on addiction and mental health treatment infrastructure documented in the companion framework's Chapter 6.5, was not available in the sources reviewed for this chapter. Given Gujarat's comparatively low crime rate, discussed in Chapter 1.3, and the absence in the sources reviewed for this chapter of any documented substance abuse crisis comparable in scale to Punjab's, this framework does not have evidence to suggest mental health service demand in Gujarat follows the same acute, addiction-driven pattern documented for Punjab, though this represents an inference rather than a confirmed finding, and dedicated mental health service assessment remains a priority area for further primary research.

#### **6.6 Nutrition Programmes: ICDS, Mid-Day Meal and Poshan Abhiyan**

Gujarat has received substantial central government support for its nutrition programme architecture, with the Government of India releasing ₹29,976.16 lakh to Gujarat under the POSHAN Abhiyaan between fiscal years 2017-18 and the reporting date of a 2022 Press Information Bureau assessment (Press Information Bureau, 2022). Despite this sustained central funding commitment, the NFHS-5 findings documented in section 6.3, recording worsening rather than improving stunting, severe wasting, and underweight prevalence over the exact period this POSHAN Abhiyaan funding was being disbursed, represent a direct and troubling indicator that funding allocation alone has not been sufficient to reverse Gujarat's child nutrition deterioration. This finding parallels, in a different specific form, the public financial management execution gap this framework documented for Bihar's health budget underutilization in the companion framework's Chapter 6.1 and Chapter 6.8, suggesting that

across multiple, very differently resourced Indian states, the gap between nutrition programme funding and nutrition outcome improvement represents a genuinely difficult and, on the evidence reviewed across this three-state series, not yet well-solved policy implementation challenge.

## **6.7 Population Stabilisation and Family Planning**

Gujarat's demographic transition, discussed in Chapter 1.3, is comparatively advanced, with a dependency ratio below the national average and a population growth rate that, while modestly above the national average at 1.13 to 1.2 percent, reflects a state well past the high-fertility phase documented for Bihar in the companion framework. A comprehensive, current, Gujarat-specific Total Fertility Rate figure was not confirmed with precision in the sources reviewed for this chapter, though Gujarat's demographic indicators overall suggest a fertility trajectory closer to national replacement level than either Bihar's or, to a lesser extent, Punjab's, examined in the companion frameworks.

## **6.8 Health System Strengthening and Future Preparedness**

The central health system finding to emerge from this chapter is a genuine and significant bifurcation in Gujarat's public health performance: on indicators of health infrastructure scale, financial protection scheme coverage, and infant mortality specifically, the state performs comparatively strongly, consistent with its overall economic and fiscal advantages documented throughout this framework. Yet on the specific, and arguably more fundamental, indicator of child nutritional status, Gujarat has recorded documented deterioration over the exact period during which the state's economy and health infrastructure investment both continued to grow, a finding drawn directly from the state's own leading public health research institutions rather than from external critique. This bifurcation suggests that Gujarat's health system strengthening priority for the coming decade should not center on further expanding hospital networks or insurance scheme coverage, where the state already performs comparatively well, but rather on the kind of dedicated, taluka-level nutrition intelligence and intervention infrastructure that Indian Institute of Public Health Gandhinagar researchers have explicitly called for, treating child malnutrition and anaemia as distinct, first-order public health emergencies warranting the same institutional urgency and resourcing currently directed toward the state's industrial and economic growth priorities documented in Chapters 3 and 4.

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## **Chapter 7: Social Justice, Inclusion and Community Welfare**

### **7.1 Scheduled Castes: Demographic Profile, Deprivation and Development Programmes**

Gujarat's Scheduled Caste population, as recorded in the 2011 Census, stood at 40,74,447, or 6.74 percent of the state's total population, a considerably smaller proportional share than documented for either Bihar, at 19.65 percent, or Punjab, at 31.94 percent, in the companion frameworks (Wikipedia, 2026d; CensusOfIndia.net, 2026). The Government of Gujarat formally recognizes 35 distinct castes under this category, with the Mahyavanshi, Dhedh, and Maru Vankar communities constituting the single largest group at 16,08,359 people, followed by Bhambi and related communities at 10,32,128, and the Chuhra, Valmiki, and related communities at 4,39,444 (Wikipedia, 2026d). A comprehensive, current, quantitative assessment of Gujarat's Scheduled Caste land ownership and multidimensional poverty indices, comparable to the detailed landlessness data documented for Punjab's Scheduled Caste population in the companion framework's Chapter 7.1, was not available with sufficient specificity in the sources reviewed for this chapter, and represents a priority area for further primary research.

### **7.2 Scheduled Tribes: Rights, Forest Dwelling Communities and Welfare Measures**

Gujarat's Scheduled Tribe population represents a considerably larger and more developmentally significant demographic than the state's Scheduled Caste population, standing at 89,17,174, or 14.75 percent of the state's total population as of the 2011 Census, more than double the state's SC population share (CensusOfIndia.net, 2026; Wikipedia, 2026e). Gujarat officially recognizes 33 notified Scheduled Tribes, including the Bhil and related sub-groups, historically the state's largest tribal community, alongside the Gamit, Dhodia, Rathva, Naikda, and Siddi communities, the latter a distinctive community of East African descent recognized as a Scheduled Tribe in specific districts (Wikipedia, 2026e). Gujarat's tribal population is concentrated in the state's eastern districts, forming a continuous belt stretching from Mount Abu on the Rajasthan border in the north to Dahanu near the Maharashtra border in the south, with this Tribal Sub-Plan area constituting 18 percent of the state's total geographic area (Tribal Development Department, 2026).

As documented in this framework's Preface, Executive Summary, and Chapter 6.2, several of Gujarat's tribal districts recorded comparatively better child nutrition trajectories between NFHS-4 and NFHS-5 than the state's wealthier urban centers, a genuinely counterintuitive finding given the tribal population's lower average income relative to the state's industrial corridor. On state welfare programming, Gujarat achieved the top national ranking for July 2025 in implementing the Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan, targeting Particularly Vulnerable Tribal Groups with enhanced educational facilities, healthcare infrastructure, and skill-based livelihoods, with the state approving 12,489 pucca homes, electrifying 5,200 tribal households, and deploying 37 mobile communication towers under

this scheme (Grokikipedia, 2026c). The state's Gyankunj Project had established 28,012 smart classrooms across 7,408 government primary schools in tribal areas by August 2024, and the number of Eklavya Model Residential Schools serving tribal students expanded to 44 by 2024, accommodating more than 11,000 Scheduled Tribe students (Grokikipedia, 2026c). Independent analysis has noted ongoing controversy regarding the eligibility of specific communities, including Rabari, Bharvad, and Charan, for continued Scheduled Tribe status, with tribal Members of Parliament petitioning in 2020 for the removal of these pastoralist communities from the ST list on grounds that their inclusion dilutes benefits intended for more traditionally disadvantaged tribal groups, an unresolved classification dispute this framework flags without taking a position on its merits (Grokikipedia, 2026c).

### **7.3 Other Backward Classes: Identification, Reservation and Social Mobility**

A comprehensive, current, quantitative assessment of Gujarat's Other Backward Classes population and reservation framework was not available with sufficient detail in the sources reviewed for this chapter. Gujarat's caste landscape includes historically significant communities such as the Patidar, or Patel, community, whose 2015-2018 reservation agitation, led by activist Hardik Patel and seeking OBC-equivalent reservation status, represented one of the most significant social mobilization movements in the state's recent political history, with legal cases against protestors only being withdrawn by the state government in comparatively recent reporting (Britannica, 2026). This framework notes this episode as a significant recent precedent for caste-based mobilization in Gujarat without further elaboration, given the absence of detailed current outcome data in the sources reviewed for this chapter, and flags OBC-specific demographic and welfare data as a priority area for further primary research.

### **7.4 Gender Equity: Women's Participation in Education, Economy and Governance**

Gujarat's gender indicators present a mixed picture consistent with this framework's broader findings regarding the state's uneven social sector performance. Female literacy stood at 69.68 percent as of the 2011 Census, compared to male literacy of 85.75 percent, a gap of over 16 percentage points, and the state's overall sex ratio of 920 females per 1,000 males, discussed in Chapter 1.3, remains below the national average (CensusOfIndia.net, 2026). Notably, and in a genuinely distinctive finding relative to the state's overall sex ratio, Gujarat's Scheduled Tribe population records a sex ratio of 981 females per 1,000 males, considerably closer to parity than the state's general population sex ratio, a pattern that echoes, in a different specific form, the tribal district nutrition finding discussed in section 7.2 and Chapter 6.3, and further reinforces this framework's observation that Gujarat's tribal population, despite lower average income, does not uniformly trail the state's general population on every social indicator (CensusOfIndia.net, 2026). As documented in Chapter 3.7, Gujarat's Female Labour Force Participation Rate exceeded the national average as of 2022-23, predominantly concentrated in rural areas and self-employment, a pattern broadly

consistent with the female labour force structures documented for both Bihar and Punjab in the companion frameworks.

## **7.5 Child Rights, Protection and Development: POCSO, Child Labour and Nutrition**

Gujarat's child protection architecture operates through the same national POCSO and Juvenile Justice Act frameworks documented in the companion frameworks. The most significant child welfare finding for Gujarat, discussed extensively in Chapter 6.3, is the state's documented deterioration in child nutrition indicators between NFHS-4 and NFHS-5, a finding of such centrality to this framework's overall assessment of Gujarat that this chapter defers to Chapter 6.3's detailed treatment rather than repeating it in full here. A comprehensive, current, Gujarat-specific assessment of child labour prevalence, comparable to the estimates available for Bihar in the companion framework's Chapter 7.5, was not available in the sources reviewed for this chapter.

## **7.6 Welfare of Elderly Persons: Pension, Care Infrastructure and Policy**

A comprehensive, current assessment of Gujarat's elderly welfare architecture was not available in the sources reviewed for this chapter, consistent with the equivalent data gap identified in both companion Bihar and Punjab frameworks. Given Gujarat's comparatively advanced demographic transition, discussed in Chapter 1.3 and Chapter 6.7, the state faces a nearer-term elderly care planning horizon than Bihar, broadly comparable to the horizon documented for Punjab, though without the same scale of youth outmigration-driven elderly-headed household dynamic documented for Punjab in the companion framework's Chapter 7.6, given the absence of evidence in this framework's research of comparable outmigration pressure specific to Gujarat.

## **7.7 Persons with Disabilities: Rights, Accessibility and Empowerment**

A comprehensive, current, Gujarat-specific assessment of disability rights implementation and accessibility infrastructure was not available in the sources reviewed for this chapter, representing the same data gap identified consistently across all three states examined in this framework series. This continues to represent a priority area for dedicated primary research through Gujarat's Department of Social Justice and Empowerment in any future revision of this document.

## **7.8 Minority Communities: Development, Representation and Welfare**

Gujarat's Muslim population constitutes 9.6 to 9.67 percent of the state's total population according to the 2011 Census, or approximately 58.47 lakh people, making Islam the state's second largest religion after Hinduism, at 88.57 percent, with Jain, Christian, Sikh, and Buddhist communities together constituting less than 2 percent of the population (CensusOfIndia.net, 2026). Gujarat's Jain community, while numerically small, holds particular historical and commercial significance within the state's business and trading

traditions, and the state's small Parsi Zoroastrian population, discussed in Chapter 1.4, similarly holds historical significance disproportionate to its current numerical size. A comprehensive, current, quantitative assessment of socio-economic outcomes specifically for Gujarat's Muslim population, comparable to the detailed Asian Development Research Institute findings on Muslim poverty and identity documentation gaps documented for Bihar in the companion framework's Chapter 7.8, was not available in the sources reviewed for this chapter, and this framework flags this specifically as an area requiring careful, evidence-based primary research given the historical significance of communal relations in the state's political history, an area this framework does not attempt to characterize further without direct, current, and reliable socio-economic data specific to the period covered by this document.

## **7.9 Social Security and Beneficiary-Linked Welfare Architecture**

Gujarat's social security architecture operates through the same centrally sponsored scheme framework documented throughout this framework series, layered with state-specific tribal welfare programming discussed in section 7.2, including the Vanbandhu Kalyan Yojana's skill center initiatives, which have targeted vocational training through Industrial Training Institutes and Pradhan Mantri Kaushal Vikas Yojana-linked centers, contributing to measurable livelihood improvements among Scheduled Tribe youth by 2025, though independent analysis notes that comprehensive poverty metrics for this population remain contested due to uneven implementation across different tribal districts (Grokikipedia, 2026c). Gujarat's beneficiary-linked welfare architecture, on the evidence reviewed throughout this chapter and the preceding health and education chapters, appears to combine genuinely strong scheme design and, in the case of tribal welfare programming specifically, demonstrated national-leading implementation performance, with the persistent and largely unresolved nutrition and education retention gaps documented in Chapters 5 and 6, once again illustrating this framework's central finding that Gujarat's institutional capacity for programme design and delivery infrastructure does not uniformly translate into commensurate outcome improvement across every welfare domain.

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## Chapter 8: Transport and Connectivity Infrastructure

### 8.1 Road Network: National Highways, State Highways and Rural Roads

Gujarat's road network benefits from the state's flat coastal and inland plain terrain, discussed in Chapter 1.1, and from sustained state investment in expressway and highway infrastructure supporting the state's dominant industrial and port-driven economy documented in Chapters 3 and 4. The Ahmedabad-Dholera Expressway, spanning approximately 109 kilometers, was inaugurated on March 31, 2026, providing dedicated high-speed connectivity to the Dholera Special Investment Region, one of the flagship greenfield industrial developments discussed further in Chapter 4.4 (Veemi Solutions, 2026). A comprehensive, current, consolidated figure for Gujarat's total road network length and National Highway kilometrage, comparable to the detailed figures presented for Bihar and Punjab in the companion frameworks, was not available with the same specificity in the sources reviewed for this chapter, though Gujarat's demonstrated capacity to complete large-scale expressway projects on the timeline documented above suggests a road construction execution capacity considerably stronger than the multi-year delays documented for comparable projects in either companion state.

### 8.2 Railways: Existing Network, Pending Projects and Expansion Proposals

Gujarat's railway infrastructure is undergoing a substantial, port-and-industry-oriented expansion explicitly designed to integrate the state's major ports, discussed in section 8.4, with its industrial hinterland. A proposed eight-track rail expansion plan encompasses six distinct corridors: the Kutch Coastal Ring Corridor, spanning 600 kilometers and linking Bhuj, Mundra, Kandla, and Porbandar; the North-Central Industrial Spine, spanning 650 kilometers through Palanpur, Mehsana, Ahmedabad, Vadodara, and Dahej; the South Gujarat Express Corridor, spanning 550 kilometers connecting Vadodara, Bharuch, Surat, Navsari, and Vapi; the Saurashtra Loop, spanning 700 kilometers linking Rajkot, Jamnagar, Morbi, Junagadh, and Bhavnagar; the Central Airport Connector, spanning 300 kilometers; and the North-West Freight Link, spanning 450 kilometers connecting Kutch's interior to Ahmedabad and Vadodara's industrial centers (Rail Infra, 2025). This planned network is explicitly designed to give every major Gujarat port, Mundra, Kandla, Dahej, Pipavav, Hazira, and Bhavnagar, direct rail interface for rapid goods evacuation, with projected logistics cost reductions of up to 30 percent for hinterland industries once fully operational (Rail Infra, 2025). Gujarat accounts for nearly 40 percent of India's total cargo throughput, a scale of freight dependency that explains the ambition and specificity of this rail expansion programme relative to the more passenger-oriented rail investment priorities documented for Bihar and Punjab in the companion frameworks (Rail Infra, 2025).

Beyond state-specific rail infrastructure, Gujarat serves as the western terminus of significant national Dedicated Freight Corridor activity, with the Union Budget 2026-27 announcing a new approximately 2,100 kilometer Dankuni-to-Surat freight corridor connecting West Bengal to Gujarat, fast-tracked by the Railway Board for pre-construction work almost immediately following the announcement (Maritime Gateway, 2026). Daily freight traffic on

the existing Dedicated Freight Corridor network climbed from an average of 247 trains per day in 2023-24 to 371 trains per day by early 2025, with a new single-day record of 892 interchange trains set across Indian Railways zones by January 2026, illustrating the accelerating operational utilization of infrastructure that directly serves Gujarat's port and industrial freight demand (Maritime Gateway, 2026).

### **8.3 Aviation: Airport Infrastructure and Air Connectivity**

Gujarat's aviation infrastructure spans eight major airports, Ahmedabad, Vadodara, Surat, Rajkot, Jamnagar, Bhavnagar, Porbandar, and Bhuj, with Ahmedabad serving as the state's principal international gateway, providing what independent analysis characterizes as good international connectivity supporting the state's trade and tourism sectors (Gujarat PCS Notes, 2026; Rail Infra, 2025). As documented in this framework's Executive Summary, the Government of Gujarat announced plans in September 2025 to develop two additional greenfield airports at Dahod, serving passenger and industrial demand in eastern Gujarat, and Dwarka, located near a major pilgrimage site and intended to enhance both tourism and strategic connectivity (India Brand Equity Foundation, 2026). A further, particularly significant aviation development is the Dholera International Airport, being developed near Navagam approximately 20 kilometers from the Dholera Special Investment Region discussed in section 8.1, through a joint venture comprising the Airports Authority of India, the Government of Gujarat, and the National Industrial Corridor Development and Implementation Trust (Veemi Solutions, 2026). As of January 2026, the Airports Authority of India had published a request for proposals to select a consultant supporting operator onboarding, indicating genuine implementation activity, though this framework notes explicitly, consistent with its practice of avoiding premature claims of project completion, that the airport should not be characterized as operational until scheduled commercial services actually begin (Veemi Solutions, 2026).

### **8.4 Ports, Inland Waterways and Logistics Hubs**

Gujarat's port infrastructure represents, without qualification, the most developed and economically consequential port system of any Indian state, and stands as the single most distinctive infrastructure asset differentiating Gujarat from both Bihar and Punjab, examined in the companion frameworks, neither of which possesses any coastline at all. Gujarat possesses 1,600 kilometers of coastline, the longest of any Indian maritime state, spanning 16 coastal districts and hosting 48 ports in total, positioning the state as India's nearest maritime outlet to the Middle East, Africa, and Europe (Gujarat State Electronics Mission, 2026). The state's major ports include Mundra, Hazira, Kandla, officially renamed Deendayal Port, Dahej, Pipavav, and Bhavnagar (Gujarat State Electronics Mission, 2026).

Mundra Port has achieved a historic milestone as the first Indian port to handle 200 million metric tonnes of cargo in a single year, cementing its status as India's largest commercial port by tonnage, operating under an integrated private-port-led model through Adani Ports SEZ, encompassing a 6,473-hectare multi-product Special Economic Zone and a 168-hectare Free

Trade Warehousing Zone within a broader Mundra Economic Hub spanning over 8,000 hectares (Tarangya, 2026; PrimeLand Advisors, 2026). Deendayal Port at Kandla similarly surpassed 150 million metric tonnes in FY25, and functions as the critical hub for dry and liquid bulk trade in western India, particularly for edible oils, fertiliser, salt, and timber imports, operating its own Kandla Special Economic Zone hosting export-oriented manufacturing (Tarangya, 2026; PrimeLand Advisors, 2026). The Gujarat Maritime Board alone accounted for nearly 66 percent of India's total non-major port traffic as of the most recent reporting, underscoring the degree to which Gujarat's port infrastructure serves not merely the state's own economy but functions as the primary maritime gateway for the broader industrial hinterlands of North and West India (Tarangya, 2026). Nationally, of 294 identified rail and road-port connectivity projects under the Sagarmala programme, 84 have been completed, comprising 63 rail and 21 road projects, with a further 66 under active implementation as of mid-2026, a substantial share of which serve Gujarat's port network specifically given the state's outsized share of national port infrastructure (Maritime Gateway, 2026).

### **8.5 Urban Mass Transit: Metro, Bus Rapid Transit and Integrated Mobility**

A comprehensive, current, detailed assessment of Gujarat's urban mass transit infrastructure, including the Ahmedabad Metro and the state's pioneering Bus Rapid Transit System, Ahmedabad's Janmarg, which served as an early and widely referenced model for BRT implementation among Indian cities, was not available with sufficient current detail in the sources reviewed for this chapter. Independent transportation analysis noted that rapid urbanization and increasing vehicle ownership have led to traffic congestion in Gujarat's major cities, an infrastructure strain identified as an ongoing challenge for the state's transportation planning despite its otherwise strong infrastructure investment record (Gujarat PCS Notes, 2026). This represents a priority area for further primary research through Gujarat's Urban Development and Urban Housing Department in any future, more granular revision of this framework.

### **8.6 Multimodal Logistics: Last-Mile Connectivity and Freight Corridors**

Gujarat's multimodal logistics strategy, evident throughout this chapter, is distinguished by its deliberate integration of port, rail, road, and air infrastructure around a small number of clearly defined industrial and export corridors, an approach considerably more systematically planned than the more incrementally developed multimodal strategies documented for Bihar and Punjab in the companion frameworks. The Gujarat Maritime Board's dedicated Last Mile Connectivity programme, explicitly designed to link the state's major ports with supporting road and rail infrastructure, exemplifies this integrated approach (GMB Ports, 2026). Gujarat's demonstrated capacity to plan and, on the evidence of the completed Ahmedabad-Dholera Expressway discussed in section 8.1, execute major multimodal infrastructure projects on stated timelines represents one of the clearest institutional strengths this framework has identified for Gujarat relative to the companion states, and stands as a genuine template other states might reasonably study, even as this framework's Chapters 5

and 6 findings caution against treating Gujarat's infrastructure execution capacity as automatically transferable to the very different institutional and political economy challenges involved in improving education retention or child nutrition outcomes.

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## **Chapter 9: Energy, Power and Renewable Transition**

### **9.1 Power Generation: Installed Capacity, Mix and Dependence Profile**

Gujarat's total installed power generation capacity reached 51,869 megawatts as of October 2024, up from 48,914 megawatts on March 31, 2024, and 42,719 megawatts on March 31, 2023, an increase of 9,150 megawatts within just eighteen months, reflecting the state's sustained and accelerating capacity expansion (DeshGujarat, 2025). This capacity scale, self-generated substantially through in-state assets rather than dependence on central allocation, contrasts sharply with the heavily centrally-dependent generation structure documented for Bihar in the companion framework's Chapter 9.1, where 84 percent of installed capacity derives from central utilities. Gujarat generated 1,49,094 million units of electricity in 2023-24, with generation for just the first six months of 2024-25 reaching 93,067 million units, indicating continued year-on-year growth in actual power output alongside the state's expanding installed capacity base (DeshGujarat, 2025).

### **9.2 Transmission and Distribution: Infrastructure, Losses and Reliability**

A comprehensive, current, quantitative assessment of Gujarat's transmission and distribution loss rates and distribution utility financial performance, comparable to the detailed turnaround analysis presented for Punjab's PSPCL in the companion framework's Chapter 9.2, was not available with the same specificity in the sources reviewed for this chapter. Gujarat's transmission infrastructure supporting its renewable energy expansion, discussed in section 9.4, includes dedicated high-capacity connections such as the 765 kilovolt transmission line linking the Khavda Renewable Energy Park to India's central grid, engineered specifically to support effective power distribution to over 16.1 million homes once the park reaches full capacity, indicating substantial and deliberate transmission infrastructure investment accompanying the state's generation capacity growth (BlackRidge Research, 2026).

### **9.3 Rural and Household Electrification: Coverage and Quality**

Gujarat's rural and household electrification is effectively universal, consistent with the state's overall strong infrastructure base documented throughout this framework and broadly comparable to the near-universal coverage documented for Punjab in the companion framework's Chapter 9.3. A comprehensive, current, quantitative assessment of electrification quality, including outage frequency and reliability metrics specific to Gujarat's rural distribution network, was not available with sufficient detail in the sources reviewed for this chapter, and represents a priority area for further primary research through Gujarat's Energy and Petrochemicals Department.

### **9.4 Renewable Energy Potential: Solar, Wind, Hydro and Biomass**

Gujarat's renewable energy sector represents, without meaningful qualification, the most exceptional single infrastructure achievement documented anywhere across this three-state framework series, and stands as a genuine national and, on several specific metrics, global leadership position. Gujarat ranks first nationally in total installed renewable energy capacity, at 50.386 gigawatts as of May 2026, first in installed wind power capacity at 15,850.56 megawatts, first in rooftop solar installations with over 13 lakh installations totaling 7,408.10 megawatts, and second nationally in installed solar power capacity specifically, at 32,302.7 megawatts (India's News, 2026; New Kerala, 2026). This renewable capacity is drawn from 23,259.27 megawatts of ground-mounted solar projects, 7,408.10 megawatts of rooftop solar spanning the Surya Gujarat scheme, the national PM Surya Ghar Yojana, and other rooftop initiatives, 1,434.66 megawatts from hybrid projects, and 200.48 megawatts from off-grid systems including PM-KUSUM agricultural solar pumps (New Kerala, 2026).

The centerpiece of Gujarat's renewable ambition is the Khavda Renewable Energy Park in Kutch district, planned for an ultimate capacity of 37.35 gigawatts and already the world's largest renewable energy park at an achieved capacity of 15.54 gigawatts as of May 2026, up from 11.33 gigawatts just five months earlier in December 2025, illustrating a genuinely rapid pace of capacity addition (New Kerala, 2026; Business Standard, 2026). The park, developed substantially by Adani Green Energy Limited at a project cost of approximately ₹1.5 lakh crore across 72,400 to 72,600 hectares of government wasteland allocated under Gujarat's Government Waste Land Policy, is designed to eventually generate approximately 81 billion units of electricity annually, sufficient to power an estimated 16.1 million households, with the full 30 gigawatt hybrid solar-wind project targeted for completion by 2029 (BlackRidge Research, 2026; Wikipedia, 2026f). Independent environmental journalism has raised specific concerns regarding the project's ecological footprint, given its scale and location, cautioning that the mega renewable energy park may not be as unambiguously green in its full lifecycle impact as its clean-energy framing suggests, a concern this framework flags for balanced consideration alongside the project's genuine decarbonization contribution (Global Energy Monitor, 2026).

Gujarat's Integrated Renewable Energy Policy 2025, effective from December 24, 2025 through December 31, 2030, provides a unified regulatory framework spanning solar, wind, hybrid, distributed renewable energy, and battery energy storage systems, and specifically enables on-demand grid connectivity, flexible commissioning timelines, repowering provisions for ageing wind installations, and integrated battery storage deployment (BioEnergy Times, 2026). At the Renewable Energy Investors Meet 2024 held in Gandhinagar, Gujarat announced a further, more ambitious target of reaching 105 gigawatts of total renewable capacity by 2030, which would represent approximately 20 percent of India's national 500 gigawatt non-fossil fuel capacity target for the same year, an outsized contribution from a single state to the national decarbonization goal (BioEnergy Times, 2026). Gujarat's cumulative renewable energy sector investment has generated an estimated 2.37 lakh direct and indirect jobs as of the most recent state government data, representing a genuinely significant employment contribution from the sector alongside its generation capacity achievements (Business Standard, 2026).

## **9.5 Energy Efficiency, Conservation and Demand-Side Management**

A comprehensive, current, Gujarat-specific assessment of energy efficiency and demand-side management programming was not available with sufficient detail in the sources reviewed for this chapter. Gujarat's Akshay-Urja-Setu digital facilitation portal, referenced in the context of the state's 2025 renewable energy policy, indicates some institutional investment in digital energy management infrastructure, though a detailed assessment of its specific demand-side management functions, as distinct from renewable project facilitation, was not confirmed in the sources reviewed for this chapter (India's News, 2026).

## **9.6 State Electricity Regulatory Framework and Tariff Policy**

Gujarat's electricity regulatory framework, administered through the Gujarat Electricity Regulatory Commission, has evolved substantially to accommodate the state's rapid renewable capacity growth documented in section 9.4, with the 2025 Integrated Renewable Energy Policy specifically strengthening consumer participation mechanisms including group and virtual net-metering, rooftop and agricultural solar provisions, circular-economy measures for renewable equipment lifecycle management, and dedicated green jobs and skill development programming (BioEnergy Times, 2026). This regulatory sophistication, combined with the state's waiver of Inter-State Transmission System charges for solar and wind projects commissioned within specified windows and its permission of up to 100 percent foreign direct investment in the wind sector under the automatic route, reflects a genuinely comprehensive and investor-oriented renewable energy regulatory architecture that stands as one of the more clearly transferable policy models this framework has identified across its three-state comparative series, distinct from the more fiscally constrained and subsidy-encumbered power sector regulatory environment documented for Punjab in the companion framework's Chapter 9.6 (Global Energy Monitor, 2026).

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## **Chapter 10: Water, Sanitation and Solid Waste Management**

### **10.1 Drinking Water Supply: Coverage, Quality and Infrastructure**

Gujarat is formally among the small group of Indian states to have achieved 100 percent rural household tap water connectivity under the national Jal Jeevan Mission, appearing consistently alongside Goa, Telangana, Haryana, Himachal Pradesh, Punjab, and several union territories across multiple independent reporting sources covering different points in the mission's 2025-26 reporting cycle (Dhyeya IAS, 2025; Organiser, 2026; DD India, 2025). This places Gujarat in the same top-performing coverage tier as Punjab, documented in the companion framework's Chapter 10.1, and stands in sharp contrast to the functional coverage gaps documented for Bihar in that framework's equivalent chapter. However, and this qualification is important given this framework's recurring finding regarding the gap between formal coverage statistics and genuine water security in Gujarat specifically, this formal 100 percent connectivity figure sits in direct tension with the extensive, well-documented water scarcity crisis affecting Gujarat's Kutch and Saurashtra regions, examined in section 10.2, where entire villages have reportedly received no water through the primary regional canal infrastructure across more than seven decades since that infrastructure's initial planning, a tension this framework flags explicitly rather than treating the two findings as straightforwardly reconcilable without further clarification from Gujarat's Water Resources Department.

### **10.2 Irrigation Infrastructure: Command Area, Efficiency and Water-Use Productivity**

Gujarat's irrigation infrastructure story centers on the Narmada Valley Project, envisioned in 1946 around the Sardar Sarovar and Narmada Sagar dams together with a planned network exceeding 3,000 smaller dams, sub-canal, and branch canals, with an original target of irrigating 18 lakh hectares through a canal network spanning 74,000 kilometers (The Federal, 2023). Independent investigative reporting found that, as of the most recent assessment reviewed for this chapter, only 27,189 kilometers, or 36 percent, of this planned canal network had actually been constructed, with 5,975 kilometers of canals, including critical branch and sub-canal connecting the main canal to individual fields and villages, remaining unbuilt as of December 31, 2022 (The Federal, 2023). This incomplete infrastructure has left specific villages in Gujarat's Kutch district, the state's largest district discussed in Chapter 1.1, entirely without Narmada canal water despite the project's initial foundation stone having been laid 71 years prior to the reporting date, with the village of Dayapur in Lakhpat taluka, located 520 kilometers from the Narmada Main Canal, cited as a particularly stark example (The Federal, 2023). A 2026 investigative analysis from the South Asia Network on Dams, Rivers and People found that the Gujarat government has not published annual figures on Narmada-irrigated area by taluka or district, nor on the specific allocation of Narmada water across irrigation, industrial, urban, and rural uses in Central Gujarat, Kutch, Saurashtra, and North Gujarat, for a period of two decades, with the investigation's own source suggesting the

state government may not possess credible ground-truth figures at all, relying instead on satellite-based estimates of limited verifiability (SANDRP, 2026).

To address the specific water scarcity in these underserved regions, the state government has continued incremental project approvals, including a ₹451 crore scheme approved in October 2025 to bring Narmada water to the Khadir region of Kutch's Bhachau taluka, storing Kutch Branch Canal water in the Suvai Dam before pumping it via pipeline to 194 ponds and six minor irrigation schemes, explicitly designed both to address water scarcity and to reduce groundwater overuse in the area (DeshGujarat, 2025). A complementary, larger-scale initiative, the Saurashtra Narmada Avtaran Irrigation project, or SAUNI, launched by Prime Minister Narendra Modi, aims to fill 115 major dams across Saurashtra's chronically drought-prone 11 districts by diverting floodwater overflowing from the Sardar Sarovar Dam, using a 1,125-kilometer pipeline network rather than conventional open canals, a design choice intended to reduce evaporation losses in the region's hot, arid climate (Wikipedia, 2026g). These initiatives, while genuine and ongoing, have not yet resolved the fundamental infrastructure gap documented above, and this framework treats Gujarat's irrigation story as one of partial, incremental progress against a still substantially unmet original planning target, rather than as a completed success comparable to the state's power sector achievements documented in Chapter 9.

### **10.3 Sanitation and Open Defecation Free Status: Post-ODF Sustainability**

A comprehensive, current, Gujarat-specific assessment of Open Defecation Free Plus sustainability and post-construction toilet usage verification was not available with sufficient detail in the sources reviewed for this chapter, consistent with the equivalent data limitation identified in both companion Bihar and Punjab frameworks. Given Gujarat's considerably stronger overall infrastructure and municipal governance capacity, documented throughout this framework, sanitation infrastructure quality in Gujarat's urban and rural areas would reasonably be expected to compare favourably to national averages, though this framework declines to assert specific figures without direct confirmation and flags this as a priority area for further primary research.

### **10.4 Solid Waste Management: Municipal, Biomedical and Hazardous Waste**

Gujarat's solid waste management challenge is distinguished from that of both companion states by the state's dominant chemical, petrochemical, and pharmaceutical manufacturing base, documented extensively in Chapter 3.4 and Chapter 4.3, which generates hazardous industrial waste streams considerably more significant in scale and toxicity than the predominantly municipal and agricultural waste challenges documented for Bihar and Punjab. A comprehensive, current, quantitative assessment of Gujarat's municipal, biomedical, and hazardous waste processing capacity was not available with sufficient detail in the sources reviewed for this chapter, though the industrial effluent findings discussed in section 10.5 below provide indirect but significant evidence regarding the state's historical

difficulty in fully containing and treating hazardous waste streams from its dominant industrial sector.

### **10.5 Liquid Waste and Sewerage: Urban and Peri-Urban Treatment Infrastructure**

Gujarat's liquid waste and industrial effluent treatment challenge represents one of the more significant and long-documented environmental governance gaps identified anywhere in this three-state framework series, directly connected to the state's industrial dominance discussed throughout Chapters 3 and 4. Investigative environmental journalism found that despite India's 2002 construction of the Narmada canal network and subsequent water augmentation investments, clean water remains scarce specifically in Gujarat's industrial areas, with numerous efforts over the years having failed to stem widespread discharge of untreated industrial effluents, reducing biodiversity and the regenerative capacity of the state's water bodies (The Conversation, 2023). Gujarat's coastal areas specifically have seen a documented 15 percent decline in high-value fish stocks, with many of the state's rivers facing local extinction of entire fish communities as a consequence of sustained effluent discharge (The Conversation, 2023). In direct response to this documented pollution burden, India's Ministry of Environment and Forests imposed a 2010 moratorium on new industrial construction within eight of Gujarat's most polluted industrial clusters, curbing further expansion of existing clusters and mandating immediate closure of non-compliant factories operating within these designated zones (The Conversation, 2023). A subsequent Supreme Court mandate required all polluting industries nationally to install effective primary effluent treatment facilities meeting quality standards by March 31, 2017, a deadline of particular direct relevance to Gujarat given the state's outsized concentration of the industries this mandate targeted (The Conversation, 2023). This documented, multi-decade pattern of industrial water pollution, alongside the child nutrition and dropout findings documented in Chapters 5 and 6, provides further and independent corroboration of this framework's central analytical thread: that Gujarat's genuine and substantial industrial success has, in specific and well-documented respects including this one, coincided with environmental and public health costs that the state's economic growth trajectory has not automatically resolved.

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## **Chapter 11: Urban Development, Housing and Smart Cities**

### **11.1 Urbanisation Trends and Urban Governance Architecture**

Gujarat's urbanization rate, discussed in Chapter 1.3, stood at approximately 48.7 percent as of 2023 projections, positioning the state as considerably more urbanized than either Bihar or Punjab examined in the companion frameworks, and approaching the roughly 50 percent threshold at which India's urban population is projected to contribute an outsized share of national GDP. Gujarat's own state government has explicitly framed urban development as a multi-decade strategic priority, declaring 2005 the state's "Urban Year" under then-Chief Minister Narendra Modi, and marking 2025, two decades later under current Chief Minister Bhupendra Patel, as the "Urban Development Year" to accelerate world-class city development initiatives (News on Project, 2026). This sustained, multi-decade institutional continuity in urban development prioritization, spanning changes in the specific individuals leading the state government, represents a genuinely distinctive governance feature relative to the more recently intensified urban development attention documented for both Bihar and Punjab in the companion frameworks.

### **11.2 Urban Local Bodies: Financial Health, Capacity and Service Delivery**

Gujarat's state budget allocation for urban development reflects the scale of this sustained institutional priority: the Urban Development and Urban Housing Department received ₹33,504 crore for fiscal year 2026-27, including ₹16,116 crore for the Swarnim Jayanti Mukhyamantri Urban Development Scheme, a state-specific urban infrastructure programme that increased 17 percent over the previous year's allocation (News on Project, 2026). This single state scheme's allocation alone exceeds the total urban local area development budgets documented for either Bihar or Punjab in the companion frameworks, underscoring the scale differential in urban governance financial capacity across the three states examined in this series. A comprehensive, current, entity-level assessment of individual Urban Local Body financial autonomy and own-source revenue collection within Gujarat, comparable to the detailed Panchayati Raj Institution revenue analysis available for Bihar in the companion framework's Chapter 2.6, was not available with the same specificity in the sources reviewed for this chapter.

### **11.3 Housing: Demand Assessment, Affordability and Flagship Schemes**

Gujarat's urban housing delivery under the Pradhan Mantri Awas Yojana-Urban framework has reached substantial scale, with 919,204 homes delivered in urban Gujarat to date, and PMAY-Urban 2.0 having approved more than 0.1 million additional houses as of the most recent reporting (Construction World, 2026). Rajkot's Lighthouse Project, part of a national Global Housing Technology Challenge initiative, delivered 1,144 monolithic homes using innovative rapid-construction technology, representing a technologically distinctive housing delivery model not paralleled in the equivalent chapters of either companion Bihar or Punjab framework (Construction World, 2026). Gujarat's residential real estate market, discussed

further in the smart cities context of section 11.4, shows particularly strong growth momentum in specific suburban corridors, including Vesu and Pal in Surat, driven by the city's proposed metro system and its Smart Cities Mission inclusion, and Bhayli and Vasna-Bhayli Road in Vadodara, driven by growing information technology sector development and strategic connectivity to both Ahmedabad and Mumbai (GujjuTicks, 2026).

#### **11.4 Smart Cities Mission and AMRUT: State-Level Implementation Review**

Gujarat's implementation of the national Smart Cities Mission represents this framework's strongest documented example of mission completion performance across all three states examined in this series. Six Gujarat cities, Ahmedabad and Surat selected in the mission's first phase in January 2016, Vadodara added in the second phase in September 2016, and Dahod, Gandhinagar, and Rajkot added in the third phase in June 2017, together undertook 359 projects worth approximately ₹115.07 billion, of which 357 projects worth ₹112.77 billion had been completed as of the most recent reporting, with the remaining two projects, worth ₹2.29 billion, nearing completion (Construction World, 2026; Square Yards, 2026). This 99.4 percent project completion rate by value stands in stark and direct contrast to the documented gap between reported completion and visible on-the-ground civic improvement found for Punjab's Smart Cities Mission implementation in the companion framework's Chapter 11.4, where independent journalistic assessment found persistent potholed roads, encroachments, and non-functional infrastructure despite comparable formal project completion claims. This framework flags this contrast as significant, though it also notes that formal project completion, however well-documented in Gujarat's case, is not itself direct proof of the civic-quality-of-life outcomes such projects are ultimately intended to produce, and a comparable, independent, ground-level livability assessment of Gujarat's smart cities, similar to the Ease of Living Index findings documented for Punjab's cities in the companion framework, was not available in the sources reviewed for this chapter.

Each of Gujarat's six smart cities has pursued a distinct thematic focus: Surat has prioritized flood control systems, real-time water quality monitoring, and traffic command centres; Ahmedabad has emphasized public Wi-Fi, solar rooftop deployment, smart waste bins, and heritage site rejuvenation; Vadodara has focused on e-learning classrooms, LED streetlighting, and stormwater drainage; Rajkot has developed integrated command and control centres alongside traffic automation and environmental sensors; Gandhinagar, India's first fully operational smart city, was planned from inception with a green belt, integrated data grids, and dedicated safe public transport infrastructure; and Dahod, the mission's sole representative from Gujarat's tribal eastern belt discussed in Chapter 7.2, has focused on improved drainage, smart infrastructure poles, and dedicated zones for street vendors (Godrej Properties, 2025). Complementing the Smart Cities Mission, AMRUT 2.0 water supply projects worth ₹630.39 crore reached 82,328 households as of the most recent reporting, with a parallel sewerage project component worth ₹575.58 crore, and 18 of 89 railway stations across the state had been redeveloped and inaugurated under the national Amrit Bharat Station Scheme (News on Project, 2026; Construction World, 2026). Gujarat's 2026-27 budget additionally allocated ₹12.78 billion specifically for sports and transport infrastructure

explicitly to prepare the state's cities for hosting components of the 2030 Commonwealth Games, a specific and internationally significant urban infrastructure deadline not paralleled in either companion state's framework (Construction World, 2026).

### **11.5 Heritage Cities, Cultural Landscapes and Urban Tourism**

Ahmedabad holds particular heritage distinction as India's first city to be designated a UNESCO World Heritage City, and the Smart Cities Mission's specific commitment to heritage site rejuvenation within the city, discussed in section 11.4, reflects deliberate integration of this heritage status with the city's broader smart city development strategy (Godrej Properties, 2025). Vadodara's cultural heritage, reflecting the city's history as the former princely state capital of Baroda, similarly informs its smart city development approach, with the city's mission projects explicitly designed to integrate technology into healthcare, education, and public safety while preserving the character of a metropolitan area independent analysis characterizes as renowned for its cultural heritage alongside its industrial development (Godrej Properties, 2025).

### **11.6 Urban Poverty, Slum Rehabilitation and In-Situ Upgradation**

A comprehensive, current, Gujarat-specific assessment of urban poverty and slum rehabilitation, comparable to the equivalent, similarly thin data gap identified for both Bihar and Punjab in the companion frameworks, was not available with sufficient detail in the sources reviewed for this chapter. Given Gujarat's substantial migrant labour population documented in Chapter 3.6, particularly Surat's estimated 41.76 lakh migrant workers constituting approximately 58 percent of the city's population, informal and precarious urban housing arrangements for this migrant population represent a plausible and significant urban poverty dimension specific to Gujarat's major industrial cities that this framework was unable to quantify with confidence from the sources available, and this represents a priority area for further primary research through Gujarat's Urban Development and Urban Housing Department in any future, more granular revision of this framework.

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## **Chapter 12: Rural Development and Decentralised Governance**

### **12.1 Panchayati Raj Institutions: Structure, Devolution and Capacity**

Gujarat operates the standard three-tier Panchayati Raj structure documented across both companion frameworks, comprising Gram Panchayats, Taluka Panchayats, and District Panchayats. A comprehensive, current, quantitative assessment of Gujarat's Panchayati Raj Institution count, own-source revenue collection, and functional devolution status, comparable to the detailed Sixteenth Finance Commission evaluation available for Bihar in the companion framework, was not available with sufficient specificity in the sources reviewed for this chapter. Given Gujarat's considerably stronger overall fiscal and administrative capacity, documented throughout Chapters 2 and 11, it is reasonable to expect Gujarat's Panchayati Raj Institutions to exhibit stronger functional capacity than the near-total absence of Panchayat-level tax collection documented for Bihar in the companion framework, though this framework declines to assert this without direct confirmatory data and flags it as a priority area for further primary research through Gujarat's Panchayat, Rural Housing and Rural Development Department.

### **12.2 MGNREGA: Coverage, Wage Trends and Livelihood Outcomes**

A comprehensive, current, Gujarat-specific assessment of MGNREGA person-days generated, wage payment timeliness, and beneficiary demographics was not available with sufficient detail in the sources reviewed for this chapter. As documented in the companion Punjab framework's Chapter 12.2, the national rural employment guarantee framework is itself undergoing significant structural transformation through the Viksit Bharat-Guarantee for Rozgar and Aajeevika Mission (Gramin) Act, 2025, which formally replaces MGNREGA nationwide effective July 1, 2026, increasing the statutory employment guarantee from 100 to 125 days per household while shifting state governments' funding contribution from 10 to 40 percent of programme costs. Given Gujarat's considerably stronger fiscal position relative to both Bihar and Punjab, documented in Chapter 2, this funding ratio shift represents a materially smaller relative fiscal burden for Gujarat than the significant strain this framework's companion Punjab document identified for that state, given Gujarat's substantially larger revenue base and its demonstrated pattern of running fiscal deficits below rather than above its own budgeted targets.

### **12.3 Rural Housing: PMAY-Gramin and State Schemes**

Gujarat's rural housing delivery under the national Pradhan Mantri Awaas Yojana-Gramin framework operates alongside the state's urban PMAY delivery documented in Chapter 11.3, within the same overarching national scheme architecture discussed in the companion Bihar and Punjab frameworks. A comprehensive, current, Gujarat-specific figure for PMAY-Gramin houses completed was not available with sufficient specificity in the sources

reviewed for this chapter, and represents a priority area for further primary research through the scheme's own state-level dashboard.

## **12.4 Livelihood Promotion: SHGs, Cooperatives and Rural Enterprise**

Gujarat's rural livelihood promotion architecture is anchored by what is, without serious competitor among any institution examined across this three-state framework series, the single most successful rural cooperative institution in Indian economic history: the Gujarat Cooperative Milk Marketing Federation, operating under the Amul brand. Founded as the Kaira District Cooperative Milk Producers' Union in Anand on December 14, 1946, Amul pioneered what became known as the "Anand Pattern" of dairy cooperative organization, a three-tiered structure comprising village-level Dairy Cooperative Societies, federated under district-level Milk Unions, in turn federated under the state-level Gujarat Cooperative Milk Marketing Federation established in 1973 (Wikipedia, 2026i; Dairy Knowledge Portal, 2026). This model spearheaded India's "White Revolution" beginning in 1970, and GCMMF today is controlled by 3.6 million milk producers across the state, generating group turnover of ₹90,000 crore for fiscal year 2025, an extraordinary scale of rural cooperative economic activity that dwarfs the cooperative institutions documented for either Bihar's JEEViKA or Punjab's more diffuse cooperative movement in the companion frameworks (Wikipedia, 2026i).

Amul's continued institutional innovation was demonstrated in February 2026 with the launch of "Amul AI" in Anand by Chief Minister Bhupendra Patel, an initiative explicitly designed to integrate artificial intelligence into the cooperative's data management and farmer engagement framework, transitioning the federation's network of over 36 lakh milk producers across 18,500 villages from traditional data management toward an integrated AI-driven system (News on Air, 2026). Chief Minister Patel explicitly framed this initiative within the broader national "Sahkar Se Samriddhi," or prosperity through cooperation, policy agenda, and within Prime Minister Modi's public 2025 call for India to establish five to six more large-scale cooperatives with the national reach and impact of Amul (News on Air, 2026; Deccan Herald, 2025). Underscoring this national ambition, the Amul Bengal Dairy Project, home to what is billed as the world's largest curd manufacturing plant, held its foundation stone laying ceremony on July 19, 2026, in West Bengal, explicitly designed to export the Anand Pattern cooperative model, developed and refined in Gujarat over nearly eight decades, to benefit over 1.25 lakh dairy farmers in its initial phase, with potential to eventually connect 2.5 lakh milk producers outside Gujarat entirely (Amul Dairy, 2026). This represents a genuinely distinctive finding within this framework series: Gujarat's most successful rural development institution is not merely serving the state's own population but is being actively extended as an explicit national policy template to other states, a form of institutional export not documented for any equivalent programme in either the Bihar or Punjab frameworks.

## **12.5 Rural Infrastructure: PMGSY, Connectivity and Market Linkages**

Gujarat's rural road connectivity, discussed in Chapter 8.1, is comparatively advanced relative to both companion states, reflecting the state's overall strong infrastructure investment record. A comprehensive, current, Gujarat-specific PMGSY completion figure was not available with sufficient detail in the sources reviewed for this chapter, though Gujarat's demonstrated infrastructure execution capacity, evident throughout Chapters 8 through 11, provides reasonable grounds to expect comparatively strong rural road connectivity outcomes relative to national averages, an inference this framework notes as directional rather than as a confirmed finding pending direct data.

## **12.6 Community-Based Development Institutions and Participatory Planning**

Gujarat's community-based rural development institutions extend well beyond the dairy cooperative model discussed in section 12.4 to include the broader network of village-level cooperative societies spanning agricultural credit, marketing, and input supply that has historically characterized Gujarat's rural economy, reflecting the same cooperative institutional tradition that produced the Amul model. The cumulative picture emerging from this chapter is one of a rural development architecture whose defining strength is not any particular government scheme but rather a genuinely exceptional, nearly eight-decade-old, farmer-owned cooperative institution that has achieved a scale of member participation, economic impact, and now technological modernization and national institutional export that this framework has not found paralleled anywhere else across the three states examined in this series. This stands as a significant counterpoint to this framework's recurring "Gujarat paradox" finding documented in Chapters 5, 6, and 10: where several of Gujarat's state-led social sector interventions have shown a documented gap between investment and outcome, the state's oldest and most bottom-up, farmer-owned rural institution, Amul, represents perhaps the single most unambiguous rural development success story identified anywhere across this entire three-state framework series, a finding this framework's concluding chapter returns to when considering what, specifically, Gujarat's development model has and has not succeeded in replicating across its other sectors.

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## **Chapter 13: Environment and Natural Resource Governance**

### **13.1 Forest Cover, Biodiversity and Wildlife Conservation**

Gujarat's forest resources are concentrated substantially in the state's eastern tribal belt, discussed in Chapter 7.2, and, distinctively among the states examined in this framework series, in an extensive coastal mangrove ecosystem discussed in greater depth in section 13.6. Gujarat holds the second largest mangrove cover of any Indian state, at 23.66 percent of India's total mangrove area, behind only West Bengal at 42.45 percent, with the state's mangrove cover increasing by 253.06 square kilometers between 2001 and 2023 according to the India State of Forest Report 2023 (Press Information Bureau, 2025). A longer-term comparison found Gujarat's mangrove cover had increased nearly threefold since 1987, from approximately 427 square kilometers to 1,177 square kilometers by the 2019 forest report, a substantive recovery that independent research attributes at least partially to localized conservation efforts, even as the state government's own records acknowledge that over 14 mangrove species have already become locally extinct in Gujarat (World Sustainable Development Forum, 2026). Under the national Mangrove Initiative for Shoreline Habitats and Tangible Incomes, launched in June 2023, Gujarat planted over 19,000 hectares of new mangrove cover within two years, dramatically exceeding the entire nation's five-year target of 54,000 hectares within roughly the same timeframe as Gujarat's own two-year achievement, with major plantation activity concentrated in Kutch, Bhavnagar, Surat, and the Dumas-Ubhrat coastal stretch (Civildaily, 2025). Gujarat also holds Asia's only wild population of the Asiatic lion, concentrated in the Gir Forest National Park in Saurashtra, a globally significant conservation asset not paralleled by any comparable single-species stronghold documented for either Bihar or Punjab in the companion frameworks.

### **13.2 Land Use Change, Soil Degradation and Land Resource Management**

Gujarat's coastal land use presents a specific and well-documented tension between the state's status as India's largest producer of marine salt, contributing 80 percent of the country's total marine salt production, and the ecological integrity of the coastal mangrove habitat discussed in section 13.1 (World Sustainable Development Forum, 2026). Large areas of historical mangrove habitat have been leased to industry specifically for the creation of salt pans, a land use conversion that independent research found has elevated soil and water salinity levels across affected coastal areas, directly reducing the natural regeneration capacity of the state's remaining mangrove forests, illustrating a genuine trade-off between one of Gujarat's significant traditional industries and its more recent, substantial conservation investment documented in section 13.1 (World Sustainable Development Forum, 2026). A comprehensive, current, quantitative assessment of Gujarat's inland soil degradation, distinct from this specific coastal salinity dynamic, was not available with sufficient detail in the sources reviewed for this chapter.

### **13.3 Water Bodies, Wetlands and River Ecosystem Health**

Gujarat's river ecosystem health, discussed in the industrial effluent context of Chapter 10.5, faces sustained pressure from the state's dominant chemical and petrochemical manufacturing base. The Purna River in South Gujarat exemplifies this pressure, having been the subject of specific academic flood forecasting and hydraulic structure research given its role within the state's broader water resource management challenges (Wikipedia, 2026j). Academic research on the Gulf of Khambhat's mangrove-lined coastal wetlands, using satellite-based NDVI indexing and Landsat and Sentinel imagery to track decadal land use and land cover change, has identified coastal development, aquaculture expansion, freshwater diversion, and climate change as the principal threats to these wetland ecosystems, threats directly connected to the industrial and agricultural water demands documented throughout Chapters 3, 4, and 18 of this framework (ScienceDirect, 2022).

### **13.4 Mining and Mineral Resource Governance**

A comprehensive, current, quantitative assessment of Gujarat's mining sector, encompassing the state's limestone, bauxite, and lignite reserves that support its cement, ceramics, and chemical industries documented in Chapter 3.4, was not available with sufficient detail in the sources reviewed for this chapter. This represents a priority area for further primary research through Gujarat's Department of Mines and Minerals in any future, more granular revision of this framework, particularly given the direct relevance of mineral input availability to the state's dominant chemical, cement, and ceramics manufacturing sectors documented throughout Chapters 3 and 4.

### **13.5 Pollution: Air, Water, Noise and Soil — Status and Regulatory Response**

Gujarat's industrial pollution profile, examined in the water-specific context of Chapter 10.5, extends to marine and coastal chemical contamination as well. Academic research conducted at Veraval on Gujarat's coast has specifically documented the effects of chemical industry effluents on local seaweed biodiversity, providing further, geographically specific evidence of the industrial pollution burden this framework has now documented across multiple distinct Gujarat coastal and riverine contexts (International Journal of Scientific Research in Science and Technology, 2025). This pattern, recurring across Chapter 10's freshwater findings and this chapter's marine and coastal findings, reinforces this framework's assessment that industrial effluent management represents one of the more significant and only partially resolved environmental governance gaps in a state whose economic model, documented throughout Chapters 3 and 4, is more heavily weighted toward chemical and petrochemical manufacturing than any other Indian state's. A comprehensive, current, city-specific air quality index dataset for Gujarat's major industrial centers, including Ahmedabad, Surat, and Vadodara, was not available with sufficient granularity in the sources reviewed for this chapter, representing a data gap this framework flags explicitly and one that should be addressed through direct reference to Gujarat Pollution Control Board and Central Pollution Control Board continuous monitoring station data in any future, more detailed revision of this document.

### **13.6 Coastal and Marine Resource Management (Where Applicable)**

Unlike both Bihar and Punjab, examined in the companion frameworks, this section applies directly and substantially to Gujarat, given the state's 1,600 kilometer coastline, documented in Chapter 8.4, the longest of any Indian state. Gujarat's coastal resource management centers on the tension, discussed in section 13.2, between the state's major salt production and port and petrochemical industries, discussed in Chapters 4 and 8, and the ecological integrity of its extensive mangrove and coastal wetland systems, discussed in sections 13.1 and 13.3. Gujarat's mangrove restoration performance under the MISHTI programme, discussed in section 13.1, represents one of this framework's more genuinely positive and well-documented environmental governance findings for the state, demonstrating that targeted, adequately resourced ecological restoration can achieve substantial results even within a state whose overall industrial development model imposes significant and continuing pressure on the same coastal ecosystems being restored. Financial support of ₹17.96 crore was released from the Compensatory Afforestation Fund Management and Planning Authority to Gujarat and five other coastal states and union territories for degraded mangrove restoration in fiscal year 2024-25 specifically, funding the treatment of 3,836 hectares of degraded mangrove habitat nationally (Down To Earth, 2025). This coastal and marine resource management dimension represents a genuinely distinctive feature of Gujarat's environmental governance profile relative to the landlocked states examined in the companion frameworks, and one this framework's concluding chapter identifies as both a significant asset and a continuing area of unresolved tension between the state's industrial and conservation priorities.

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## **Chapter 14: Climate Change and Ecological Security**

### **14.1 State Climate Vulnerability and Risk Profile**

Gujarat presents this framework's most hazard-diverse climate vulnerability profile of any state examined across the series, combining significant exposure to cyclones, drought, extreme heat, and, increasingly, flash flooding, often within the same districts and sometimes within the same season. Historical analysis found that traditionally drought-prone areas including Jamnagar, Rajkot, Surat, and Valsad have shown a documented shift toward extreme flooding and storm surge events over the past decade, even as drought continues to affect other parts of the state simultaneously, a pattern researchers attribute directly to climate change's effect on rainfall variability and intensity (Singh et al., 2022). In 2016 alone, 1,115 villages across six districts, Banaskantha, Dwarka, Kutch, Jamnagar, Porbandar, and Rajkot, were sufficiently affected by drought to generate formal damage claims, and longitudinal research found Gujarat experienced nine major droughts between 1977 and 2012, with the Saurashtra, Kutch, and northern Gujarat regions specifically found to experience famine-level conditions roughly every third year (Singh et al., 2022; Gujarat Institute of Disaster Management, 2023).

Gujarat's coastline, discussed in Chapter 8.4 and Chapter 13.6, exposes the state directly to cyclone risk from the Arabian Sea, a body of water independent climate research has found to be warming at 3.9 millimeters per year in sea level rise terms, above the global average of 3.4 millimeters, with warming sea surface temperatures increasingly enabling rapid cyclone intensification to Category 4 or 5 strength within 24-hour windows (LegacyIAS, 2026). The same analysis identified coastal Gujarat as experiencing approximately 0.15 additional extreme weather events per decade, part of a broader documented "wet desert" trend in which northwest India is experiencing increasing extreme rainfall even as the traditionally wetter Indo-Gangetic plains, discussed in the companion Bihar and Punjab frameworks, experience a documented drying trend, resulting in floods occurring in traditionally dry areas and, in places, droughts in traditionally wet ones (LegacyIAS, 2026).

### **14.2 State Action Plan on Climate Change: Review and Second Generation Reforms**

Gujarat holds a genuinely pioneering position in Indian sub-national climate adaptation planning specifically with respect to extreme heat. Ahmedabad developed and implemented South Asia's first comprehensive citywide Heat Action Plan in 2013, a plan whose approach and methodology subsequently informed the development of local Heat Action Plans across numerous other Indian cities and districts (Gujarat Institute of Disaster Management, 2023). Building on this foundation, Gujarat's more recent Report on Extreme Heat Exposure and Actions for Gujarat provides district-level vulnerability analysis and temperature threshold data specific to each of the state's 33 districts, discussed in Chapter 1.2, explicitly designed to complement and extend Ahmedabad's original city-level model to a comprehensive, statewide framework (Gujarat Institute of Disaster Management, 2023). This represents,

without serious competitor, the most institutionally mature and internationally influential single climate adaptation planning achievement identified anywhere across this three-state framework series, and stands in useful contrast to the more recently developed, less formally documented climate planning architecture identified for both Bihar and Punjab in the companion frameworks.

### **14.3 Disaster Risk Profile: Hazard, Exposure and Vulnerability Mapping**

Gujarat's State Disaster Management Plan maintains dedicated hazard risk zonation mapping across each of the state's principal disaster categories, including distinct Cyclone Hazard Risk Zonation, Storm Surge Hazard Risk Zonation, Drought Hazard Risk Zonation, Flood Hazard Risk Zonation, and Tsunami Hazard Risk Zonation maps, alongside a dedicated Industrial and Chemical Hazard vulnerability assessment, this last category reflecting the state's uniquely dominant chemical and petrochemical manufacturing base documented in Chapter 3.4 and the industrial pollution findings documented in Chapter 10.5 and Chapter 13.5 (Gujarat State Disaster Management Authority, 2024). This dedicated industrial and chemical hazard mapping category represents a genuinely distinctive feature of Gujarat's disaster risk profile not paralleled in either companion Bihar or Punjab framework, reflecting the direct disaster risk implications of the state's industrial concentration examined throughout this document.

### **14.4 Disaster Risk Reduction: Institutional Mechanisms and Preparedness**

Gujarat's institutional disaster risk reduction architecture is anchored by the Gujarat Institute of Disaster Management, an autonomous society under the state government specifically entrusted with human resource development, capacity building, training, research, and documentation across the disaster management field, offering formal qualifications including a Post Diploma in Industrial Safety and dedicated professional training programmes such as its Cyclone Risk Mitigation and Management course (Gujarat Institute of Disaster Management, 2026). This represents a considerably more institutionally developed, dedicated disaster management training infrastructure than documented for either companion state in this framework series. In direct operational application of this institutional capacity, ADRA India implemented an Anticipatory Heatwave Response Plan in 2025 specifically covering Gujarat's Saurashtra and Kutch regions, working in close collaboration with the National Disaster Management Authority and local District Disaster Management Authorities, operationalizing 22 Cooling Centres across targeted communities by the conclusion of the intervention period, an anticipatory rather than purely reactive disaster response model reflecting international best practices adapted from climate-vulnerable contexts in Nepal and Bangladesh (ADRA India, 2025).

### **14.5 Post-Disaster Response, Relief and Reconstruction Framework**

Gujarat's disaster response capability was demonstrated in near-real-time reporting reviewed for this chapter, including a March 19, 2026 event in which unseasonal rainfall and strong

winds disrupted normal life across multiple districts, with Kutch particularly affected by heavy rainfall spells in Nakhatrana, Lakhpat, Abdasa, Bhuj, Mandvi, and Mundra, Saurashtra districts including Rajkot, Junagadh, Dwarka, Morbi, Botad, and Jamnagar experiencing similar disruption, Bhavnagar affected by dust storms and whirlwinds, and Surendranagar district experiencing what local reporting characterized as a mini-cyclone (News on Air, 2026a). This kind of granular, near-real-time state government weather and disaster reporting, covering specific talukas and districts within hours of an event, illustrates a functioning routine disaster monitoring and public communication infrastructure operating continuously across Gujarat's diverse hazard profile, distinct from and complementary to the state's more formal Heat Action Plan and Disaster Management Plan architecture discussed in sections 14.2 and 14.3.

#### **14.6 Green Economy Transition: Opportunities and Structural Challenges**

Gujarat's green economy transition is anchored substantially by the renewable energy achievements documented extensively in Chapter 9.4, where the state's 50.386 gigawatt total renewable capacity and its position as host to the world's largest renewable energy park represent genuine and internationally significant decarbonization achievements. This renewable leadership sits alongside the mangrove restoration and coastal ecosystem investment documented in Chapter 13.1 and 13.6, together constituting the two clearest environmental governance successes this framework has identified for Gujarat across its full 21-chapter review. Yet this green economy progress coexists, as this chapter and Chapters 10 and 13 have documented, with continuing and only partially resolved industrial effluent and coastal salinity pressures arising from the very chemical, petrochemical, and salt production industries that anchor much of the state's economic strength documented in Chapter 3. Gujarat's green economy transition challenge for the coming decade is therefore less about building new low-carbon capacity, where the state already leads the nation by a wide margin, and more about reconciling that genuine decarbonization leadership with the unresolved legacy industrial pollution burden documented throughout this chapter and the preceding water and environment chapters, a reconciliation this framework's concluding chapter identifies as a distinctive priority specific to Gujarat's particular development model.

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## **Chapter 15: Administrative Governance Reform**

### **15.1 Structure of State Administration and Inter-Departmental Coordination**

Gujarat's administrative structure follows the standard Indian state model, with the state secretariat in Gandhinagar, discussed in Chapter 1.2, overseeing administration across the state's 33 districts. Gujarat's digital governance infrastructure, discussed further in Chapter 16, provides one distinctive lens on inter-departmental coordination: the state's Investor Facilitation Portal, discussed in Chapter 4.1, integrates more than 200 approvals across 18 state departments into a single digital interface, a degree of formal cross-departmental integration this framework has not found documented with comparable specificity for either Bihar or Punjab in the companion frameworks, and one that plausibly reflects genuinely stronger inter-departmental coordination capacity for at least the specific, high-priority function of industrial investment approval.

### **15.2 Anti-Corruption Framework: Lokayukta, Vigilance and Enforcement**

A comprehensive, current, quantitative assessment of Gujarat's Anti-Corruption Bureau case disposal rates, Lokayukta caseload, and comparative corruption perception indicators was not available with sufficient detail in the sources reviewed for this chapter, consistent with the equivalent data gap identified for both companion states across this framework series. Gujarat's Jan Vishwas Act, discussed in Chapter 4.1 in the context of ease of doing business reform, specifically decriminalizes minor regulatory offences, a reform this framework notes may have the secondary effect of reducing opportunities for the kind of low-level regulatory harassment and associated informal payment demands that anti-corruption frameworks in other states are often designed to address, though this represents an inference rather than a directly evidenced finding regarding actual corruption reduction outcomes.

### **15.3 Legal and Judicial Administration: Pendency, Access and Reform**

Gujarat's judicial capacity presents a picture broadly consistent with the national judicial vacancy pattern documented across both companion Bihar and Punjab frameworks, though with some evidence of a somewhat more active and sustained recruitment cadence. The Gujarat High Court announced 237 Civil Judge vacancies in its April 24, 2026 notification, following a 212-vacancy recruitment cycle initiated in the prior year with examinations conducted through 2025 and into 2026, indicating a judiciary actively engaged in multiple, overlapping recruitment cycles rather than a single, long-delayed exercise (PW Live, 2026a, 2026b; OjasGujarat.net, 2026). The Gujarat High Court's own institutional digital infrastructure, including its published Institution Disposal Pendency Reports, an eGujHC Vision Document released in December 2024, a "Nyay Setu" case management initiative, hybrid hearing capability, and both a High Court-level and district-level "Virtual Justice Clock" providing public, real-time case disposal tracking, represents a considerably more transparent and digitally accessible judicial administration infrastructure than this framework was able to document for either Bihar's Patna High Court or the shared Punjab and Haryana

High Court in the companion frameworks (High Court of Gujarat, 2026). Despite this stronger digital transparency infrastructure, a precise, current, consolidated pendency figure comparable to the 215,000-case backlog documented for the Patna High Court in the companion Bihar framework's Chapter 15.3 was not extracted with the same specificity from the sources reviewed for this chapter, and would be available in more precise form directly from the Gujarat High Court's own published Institution Disposal Pendency Reports referenced above.

## **15.4 Police Modernisation and Internal Security Management**

Gujarat Police's 2026 recruitment cycle notified 13,591 vacancies, a substantial single-cycle recruitment drive broadly comparable in scale to the recruitment activity documented for Punjab Police in the companion framework's Chapter 15.4 (Prepp.in, 2026). A comprehensive, current, consolidated assessment of Gujarat Police's sanctioned strength against actual deployed strength, and of the state's police-to-population ratio relative to Bureau of Police Research and Development recommended benchmarks, was not available with sufficient specificity in the sources reviewed for this chapter. Gujarat's coastal geography, discussed in Chapter 1.1 and Chapter 8.4, and its border with Pakistan, discussed in Chapter 1.1 and Chapter 4.8, mean that Gujarat Police's internal security responsibilities extend to coastal and maritime security functions not paralleled in the landlocked companion states, a distinctive operational dimension this framework flags without further elaboration given the absence of detailed, current sources on this specific function within the materials reviewed for this chapter.

## **15.5 Regulatory Governance: Quality, Consistency and Independence**

Gujarat's regulatory governance framework, discussed extensively in Chapter 4.1 and Chapter 9.6, includes sector-specific bodies such as the Gujarat Electricity Regulatory Commission, discussed in Chapter 9.6, and the Gujarat Pollution Control Board, discussed in Chapter 13.5. The state's demonstrated capacity to design and implement genuinely investor-responsive regulatory frameworks, evident in the Viksit Gujarat Industrial Policy 2026's "Choose Your Incentive" mechanism discussed in Chapter 4.1 and the state's renewable energy regulatory sophistication discussed in Chapter 9.6, suggests a regulatory governance capacity that performs particularly strongly in the specific domain of economic and industrial regulation, though this framework's findings in Chapters 10 and 13 regarding sustained industrial effluent discharge indicate that this same regulatory capacity has been considerably less consistently effective in the domain of environmental compliance enforcement specifically, a divergence this framework flags as a genuine and significant finding rather than treating Gujarat's regulatory governance as uniformly strong across every domain.

## **15.6 Reduction of Red-tapism: Simplification and Way Forward**

Gujarat's red tape reduction efforts, discussed in depth in Chapter 4.1, including the Jan Vishwas Act's decriminalization of minor offences and the Investor Facilitation Portal's consolidation of over 200 approvals across 18 departments, represent this framework's most developed single example of systematic ease-of-doing-business reform across the three states examined in this series. This reform architecture, however, as this chapter's section 15.5 discussion notes, appears to have been applied considerably more thoroughly to the domain of industrial and investment approval than to the domain of environmental compliance and enforcement, an asymmetry this framework's concluding chapter identifies as a specific and addressable priority for Gujarat's continued governance reform agenda.

### **15.7 Civil Service Strength: Vacancy Rates and Training Institutions**

Gujarat's civil service recruitment continues through the Gujarat Public Service Commission, whose 2026 recruitment notifications spanned 252 posts across Assistant Engineer, Manager, and Nursing Officer categories under a single, recent recruitment cycle, indicating continued, active civil service recruitment activity broadly comparable in character to the recruitment cadence documented for both companion states (OjasGujarat.net, 2026). A comprehensive, consolidated assessment of Gujarat's overall civil service vacancy rate across all departments was not available with sufficient specificity in the sources reviewed for this chapter. Taken together with the judicial and police vacancy data documented in sections 15.3 and 15.4, this chapter's cumulative finding is that Gujarat, despite its considerably stronger fiscal capacity and demonstrated infrastructure execution record documented throughout this framework, nonetheless shares the same basic pattern of ongoing, multi-cycle public service recruitment activity documented for both Bihar and Punjab, suggesting that administrative staffing capacity constraints represent a genuinely shared, structural feature of Indian state governance generally rather than a challenge unique to states with weaker fiscal or economic performance, even as Gujarat's stronger digital transparency infrastructure, particularly within its judiciary, discussed in section 15.3, provides a genuinely more accessible public window into these ongoing capacity constraints than this framework was able to document for either companion state.

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## **Chapter 16: Technology-Enabled Service Delivery**

### **16.1 Digital Infrastructure: Broadband, Optical Fibre and Connectivity Coverage**

Gujarat's digital infrastructure ambition has reached a genuinely distinctive scale with the launch of the Viksit Gujarat Data Centre Policy 2026-29, unveiled by Chief Minister Bhupendra Patel in Gandhinagar, explicitly designed to position the state as India's leading hyperscale artificial intelligence data centre hub (India Brand Equity Foundation, 2026c). The policy leverages Gujarat's distinctive existing infrastructure advantages, including 69 gigawatts of installed power capacity, of which 47 gigawatts derives from renewable sources documented in Chapter 9.4, alongside dedicated industrial hubs at Dholera and GIFT City discussed in Chapter 4.4 and Chapter 11 (India Brand Equity Foundation, 2026c). The scale of ambition here is genuinely striking in national context: while India generates nearly 20 percent of the world's data, the country currently accounts for only around 3 percent of global data centre capacity, and Gujarat alone has already received proposals for nearly 10 gigawatts of data centre capacity, with the state targeting development of up to 7.5 to 8 gigawatts under the new policy framework, figures that, if realized, would represent a data infrastructure investment scale without precedent among any Indian state examined across this framework series (India Brand Equity Foundation, 2026c; The News Mill, 2026).

The policy's incentive structure includes a 2.5 percent capital subsidy on eligible fixed capital investment specifically within the Dholera region, claimable over ten years, an interest subsidy of up to 4 percent on term loans for ten years capped at ₹25 crore annually, a power tariff subsidy of ₹1 per unit for twenty years, and full exemptions on stamp duty and registration fees, alongside desalination plant assistance reflecting the water resource constraints discussed in Chapter 10.2 that any large-scale data centre development in Gujarat's arid regions would need to address (Fintech Biz News, 2026; India Brand Equity Foundation, 2026c). In direct implementation of this policy ambition, Gujarat signed a landmark agreement with Larsen & Toubro Vyoma at the India AI Impact Summit 2026 in New Delhi on February 20, 2026, under which L&T Vyoma will invest ₹25,000 crore to establish a 250 megawatt Green Data Centre in the Dholera Special Investment Region, discussed in Chapter 8.1 and Chapter 11.4, targeted for operational commencement by 2028 and explicitly designed to run on clean energy sourced from the state's renewable capacity discussed in Chapter 9.4 (News on Air, 2026b). Gujarat's own 2026-27 state budget had already set aside more than ₹850 crore specifically for artificial intelligence and digital services investment ahead of this agreement, underscoring the sustained, multi-year fiscal commitment underpinning this digital infrastructure ambition (News on Air, 2026b).

### **16.2 e-Governance Architecture and Digital Public Infrastructure**

Gujarat's e-governance foundation predates its current AI infrastructure ambitions by more than two decades, built around the Gujarat State Wide Area Network and State Data Centre established under the National e-Governance Plan, alongside the unified Gujarat Portal,

functioning as a single-point entry portal providing government information and transaction services to both citizens and businesses across most state departments (Government of Gujarat, Department of Science and Technology, 2026; Gujarat Informatics Limited, 2026). The state's e-City initiative established City Civic Centres, also known as Jan Seva Kendras, providing citizens integrated access to tax collection, certificate issuance, permission letters, complaint filing, and information services, with the model successfully piloted in the Ahmedabad Municipal Corporation before being replicated across six additional Municipal Corporations including Surat, which independent documentation specifically noted had successfully established its own civic centre network (Gujarat Informatics Limited, 2026). This civic centre model, structurally comparable in function to the Sewa Kendra network documented for Punjab in the companion framework's Chapter 16.2 and Bihar's Right to Public Services framework discussed in that framework's equivalent chapter, appears, based on the sources reviewed for this chapter, to have been an earlier and more municipally-distributed implementation than either companion state's more centralized state-level service delivery architecture.

### **16.3 Citizen Service Delivery: CSCs, Service Portals and Mobile Governance**

Gujarat's citizen service delivery architecture spans more than 250 government websites providing information across the state's functional departments and subordinate organizations, reflecting a considerably more institutionally distributed, department-by-department digital presence than the single, unified service portal models documented for both Bihar and Punjab in the companion frameworks (Government of Gujarat, Department of Science and Technology, 2026). The state government has continued to expand the State Portal's functional scope specifically to accept citizen requests for land record copies, ration card applications, and various certificate and beneficiary-oriented scheme applications including housing schemes, indicating an ongoing, incremental service expansion approach rather than a single, comprehensive platform relaunch (Government of Gujarat, Department of Science and Technology, 2026).

### **16.4 Data Governance, Open Data Policy and Privacy Framework**

Gujarat's approach to data governance is undergoing significant evolution in direct response to the state's data centre and AI infrastructure ambitions discussed in section 16.1, with the Data Centre Policy 2026-29 explicitly emphasizing data security, digital resilience, and what state officials characterize as "technological autonomy" as core policy objectives alongside the policy's investment attraction goals (The News Mill, 2026). This framing suggests Gujarat's data governance policy development is increasingly oriented toward supporting large-scale, hyperscale commercial data infrastructure specifically, a considerably different data governance emphasis than the primarily citizen-service-oriented data governance frameworks documented for Bihar and Punjab in the companion frameworks, reflecting Gujarat's distinctive positioning as an aspiring national and international data infrastructure hub rather than solely a state government service delivery platform operator.

## 16.5 Cybersecurity: State-Level Institutional Mechanisms

A comprehensive, current, Gujarat-specific assessment of cybersecurity institutional mechanisms and incident response capacity was not available with sufficient detail in the sources reviewed for this chapter, consistent with the equivalent data gap identified across both companion state frameworks. Given the scale of Gujarat's emerging hyperscale data centre and AI infrastructure investment, discussed in section 16.1, the cybersecurity resilience requirements facing the state's digital infrastructure going forward are likely to be considerably more complex and consequential than those facing either companion state's government service delivery platforms, given the fundamentally different threat profile associated with hosting globally significant, privately-operated hyperscale AI computing infrastructure as opposed to primarily domestic citizen service delivery systems. This represents a priority area for dedicated, forward-looking primary research as Gujarat's data centre policy moves from announcement toward implementation over its 2026-29 policy period.

## 16.6 Emerging Technologies: AI, Geospatial Systems and Smart Governance

Gujarat's capital city Gandhinagar hosted one of seven regional AI conferences leading to the India-AI Impact Summit 2026, explicitly themed around "People, Planet, and Progress" and promoting AI innovation and governance across the sector, with dedicated summit themes spanning AI for smart agriculture and rural prosperity, AI for healthcare and public wellbeing, AI for governance and public service delivery, AI for urban and rural transformation, and AI for fintech and digital inclusion (India AI Impact Summit, 2026). Gujarat's own state government framing explicitly positions the state as fostering AI adoption "across governance, agriculture, healthcare, and industry," a framing directly consistent with the state's demonstrated AI-enabled dropout prevention system discussed in Chapter 5.6, its Amul AI cooperative modernization initiative discussed in Chapter 12.4, and its emerging hyperscale AI data infrastructure ambitions discussed in section 16.1 above (India AI Impact Summit, 2026). Taken together, these findings position Gujarat as pursuing a more comprehensive, multi-sectoral AI integration strategy than this framework has identified for either companion state, spanning direct government service delivery applications, agricultural and cooperative sector modernization, and large-scale commercial digital infrastructure hosting simultaneously, a breadth of AI policy ambition this framework's concluding chapter identifies as one of Gujarat's most forward-looking and potentially consequential governance investments, while also noting that the actual realized impact of this considerable AI policy ambition on the specific human development outcomes documented as weaknesses in Chapters 5 and 6, education dropout and child nutrition respectively, remains to be demonstrated rather than assumed.

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## **Chapter 17: Innovation, Research and Knowledge Economy**

### **17.1 State Innovation Ecosystem: Startups and Accelerators**

Gujarat's startup ecosystem operates under a formal state Startup Policy administered through the state's Industries Commissionerate, providing funding, mentorship, and market access support explicitly designed to help startups become significant contributors to the state's revenue and employment base, alongside dedicated incentive provisions for incubators and higher education institutions supporting the broader startup ecosystem (Startup India, 2026). IIT Gandhinagar's Innovation and Entrepreneurship Center, a Section 8 company incorporated under the Companies Act, 2013 and promoted by the institute specifically to implement its incubation, intellectual property management, commercialization, and entrepreneurship development strategy, represents the state's most institutionally embedded technology business incubator, providing portfolio companies direct access to the institute's laboratories, technical expertise, and infrastructure, alongside a developing 10,000 square foot dedicated facility including tinkering laboratories and a Prototype Development Center on the institute's Palaj campus (IIT Gandhinagar Innovation and Entrepreneurship Center, 2026; Entrepreneurship and Innovation Initiative, 2026).

A notable and significant recent finding, however, complicates any straightforward narrative of unbroken investment momentum for Gujarat specifically: independent financial market analysis found that Gujarat, which had been among India's leading destinations for new investor additions through the end of 2025, slipped to ninth place nationally in 2026, with National Stock Exchange data showing the state added only 51,700 new investors in May 2026, its weakest monthly increase since April 2025, a decline independent analysts attributed to market volatility, foreign investor outflows, and geopolitical uncertainty affecting investor sentiment more broadly rather than to any Gujarat-specific policy failure (Outlook Business, 2026). This finding is significant because it appears to have directly informed the state government's own strategic pivot, discussed in section 17.2, toward positioning innovation and research-led growth as a new economic engine precisely as the state's traditional investor activity momentum showed signs of softening.

### **17.2 Research and Development: Academic-Industry Linkages**

The Viksit Gujarat Industrial Policy 2026, discussed extensively in Chapter 4, explicitly rolls out capital subsidies, patent support, and dedicated innovation infrastructure specifically to attract research-intensive investment and position Gujarat as what independent business journalism characterized as "a global R&D destination," offering land reimbursement, payroll support, and concessional power tariffs specifically to attract research and development centres, alongside direct financial assistance for intellectual property filings and patent registrations (Outlook Business, 2026). This represents a genuinely distinctive academic-industry linkage strategy relative to both companion states examined in this framework series, treating research and development infrastructure itself, rather than merely manufacturing capacity, as a primary target of state industrial policy incentive design.

The most concrete and immediate expression of this strategy is Gujarat's July 2026 announcement of a semiconductor research and training hub at IIT Gandhinagar, backed by a ₹190 crore state investment and explicitly designed to strengthen India's semiconductor ecosystem through advanced research, skill development, and industry-ready training in chip design (Business News This Week, 2026). This initiative aligns directly with the Government of India's national Semiconductor Mission, under which the Silicon and Advanced Semiconductor Manufacturing Research and Training Hub, known by the acronym SAMARTH, is being established at IIT Gandhinagar specifically to train 10,000 semiconductor professionals, a workforce development target of considerable scale relative to the current size of India's domestic semiconductor talent pool (IIT Gandhinagar, 2026). IIT Gandhinagar's own recent international research activity, including more than 10 memoranda of understanding signed with leading global universities in 2025 alone and engagement with more than 40 international institutions and agencies across Asia, the United States, and Africa, indicates an institution actively building the kind of global academic network this semiconductor hub and Gujarat's broader research ambitions would require to succeed (IIT Gandhinagar, 2026).

### **17.3 Intellectual Property: Awareness, Registration and Commercialisation**

Gujarat's Industrial Policy 2026, discussed in section 17.2, explicitly incorporates dedicated financial assistance for intellectual property filings and patent registrations as a named priority within its broader innovation-led growth strategy, a formal state commitment to IP support broadly comparable in structure, though with a considerably stronger emphasis on research-intensive investment attraction specifically, to the patent cost coverage mechanisms documented for both Bihar's Startup Policy and Punjab's Startup Punjab framework in the companion documents (Outlook Business, 2026). A comprehensive, current, quantitative assessment of Gujarat's actual patent filing volumes and commercialization outcomes was not available with sufficient specificity in the sources reviewed for this chapter, and represents a priority area for further primary research through Intellectual Property India's state-disaggregated filing data.

### **17.4 Knowledge Institutions as Engines of Development**

Gujarat's knowledge institution landscape is anchored by IIT Gandhinagar, discussed extensively in sections 17.1 and 17.2, alongside the Indian Institute of Management Ahmedabad, one of India's most internationally recognized business schools, and a substantial network of state and private universities. The state's Gujarat IT/ITeS Policy 2022-2027, unveiled at GIFT City on February 8, 2022, set an explicit target of generating 1 lakh direct jobs in the IT and IT-enabled services sector and raising the state's IT export value from ₹3,000 crore to ₹25,000 crore over the policy's five-year term, a target this framework notes without being able to confirm the policy's actual achievement against this goal given the absence of a current, comprehensive mid-term or terminal evaluation in the sources reviewed for this chapter (Wikipedia, 2026k). This concentration of Gujarat's most prominent knowledge institutions within the Ahmedabad-Gandhinagar corridor specifically raises the

same geographic concentration question this framework flagged for Punjab's Mohali-Chandigarh knowledge corridor in the companion framework's Chapter 17.4: whether the benefits of this institutional density extend meaningfully to Gujarat's tribal eastern districts and its Kutch and Saurashtra regions, discussed in Chapter 1.7 and Chapter 7.2, or remain substantially concentrated within the state's already most economically developed central corridor.

### **17.5 Building a Youth Innovation and Research Ecosystem**

Gujarat's youth innovation ecosystem faces a structural tension distinct from, though related to, the youth outmigration dynamics documented for Punjab in the companion framework's Chapter 17.5 and Chapter 20.4. Where Gujarat's overall unemployment rate of 1.7 percent, documented in Chapter 3.7, suggests the state's youth face considerably less acute employment scarcity than their Punjab counterparts, this framework's Chapter 5 findings regarding Gujarat's alarmingly high secondary school dropout rate raise a different and, in some respects, more fundamental concern regarding the pipeline of young people who might eventually participate in the state's ambitious innovation and semiconductor workforce development plans discussed in section 17.2: a state cannot train 10,000 semiconductor professionals through initiatives such as SAMARTH, discussed above, if a meaningful share of its youth are leaving the formal education system well before reaching the secondary completion and higher education entry point such advanced technical training would require. This tension, between Gujarat's genuinely ambitious and well-resourced innovation and research infrastructure investment and its documented, unresolved secondary education retention crisis, represents this framework's clearest illustration yet of how the "Gujarat paradox" introduced in this document's Preface manifests specifically within the innovation and knowledge economy domain.

### **17.6 Skill Development, Employability and Workforce Alignment**

Gujarat's skill development ecosystem, discussed in the semiconductor-specific context of section 17.2, is being actively scaled to meet the workforce demands of the state's emerging priority sectors identified in Chapter 4.3, including semiconductors, artificial intelligence, and advanced manufacturing. The SAMARTH hub's 10,000-professional training target, discussed above, represents a concrete, quantified skill development commitment considerably more specific and ambitious than the more general skill development programming documented for either Bihar's Kushal Yuva Programme or Punjab's industrial cluster-linked skill centres in the companion frameworks. Whether this ambitious, high-technology-specific skill development investment can be matched by a correspondingly improved secondary and higher education retention pipeline, discussed in section 17.5 and Chapter 5.8, represents the single most consequential open question this framework identifies for the long-term success of Gujarat's innovation and knowledge economy strategy, and one this framework's concluding chapter returns to directly when assessing the coherence of Gujarat's overall human capital development approach.

## **Chapter 18: Agriculture, Allied Sectors and Food Security**

### **18.1 Cropping Pattern, Agricultural Productivity and Input Use**

Gujarat's cropping pattern reflects the state's diverse agro-climatic zones documented in Chapter 1.1, spanning water-intensive crops in the fertile central plains alongside drought-tolerant crops adapted to the arid Kutch and Saurashtra regions. Groundnut and cotton represent Gujarat's two most economically significant crops by government procurement volume: over the past decade, 52.48 lakh metric tonnes of groundnut have been procured from the state, generating ₹31,941 crore in farmer payments, while 25.23 lakh metric tonnes of cotton procurement provided farmers ₹17,759 crore even during periods of declining global cotton prices (NewKerala, 2026). Gram, a major rabi season crop, saw procurement of 16.81 lakh metric tonnes worth ₹9,549 crore, while tur, particularly important to farmers in Central and South Gujarat, saw 4.97 lakh metric tonnes procured for ₹3,222 crore, with mustard, soybean, urad, and moong procurement directly benefiting thousands of additional small and marginal farmers across the state (NewKerala, 2026). This diversified crop procurement portfolio, spanning oilseeds, fiber crops, pulses, and cereals, represents a considerably broader agricultural base than the two-crop wheat-paddy dominance documented for Punjab in the companion framework's Chapter 18.1, a structural difference this framework attributes substantially to Gujarat's more varied agro-climatic geography.

### **18.2 Irrigation and Water Use Efficiency in Agriculture**

Gujarat's agricultural irrigation, discussed extensively in Chapter 10.2, continues to depend substantially on the still-incomplete Narmada canal network, with the state government continuing to expand Narmada River water access for irrigation purposes across various districts, including through the ₹451 crore Khadir region scheme discussed in Chapter 10.2 (Farmonaut, 2026). Water conservation has emerged as an explicit policy focus alongside this irrigation expansion, with technology providers offering resource management tools specifically designed to help Gujarat's farmers optimize water usage and contribute to more sustainable farming practices, a technology-forward approach to agricultural water management consistent with the state's broader digital governance ambitions documented in Chapter 16 (Farmonaut, 2026). Given this framework's Chapter 10.2 finding that Gujarat's Narmada canal network remains only 36 percent complete relative to its original planning target, with specific villages in Kutch still lacking any canal water access more than seven decades after the project's initial foundation, the water use efficiency gains available through improved irrigation technology in areas that do have canal access should not be read as resolving the more fundamental infrastructure completion gap documented in that chapter.

### **18.3 Agricultural Marketing, Price Realisation and Farmer Income**

Gujarat's agricultural marketing architecture has been substantially reshaped by Minimum Support Price procurement reforms over the past decade, with the state government explicitly crediting these reforms with providing farmers "one and a half times the cost of cultivation"

and delivering a sevenfold increase in farmer participation and thirteenfold rise in procurement value between 2016-17 and 2025-26 (NewKerala, 2026). In 2025-26 alone, over 14 lakh farmers sold 32.54 lakh metric tonnes of produce worth ₹23,800 crore through this MSP procurement system, a scale of farmer participation and transaction value this framework has not found documented at comparable scale for either Bihar or Punjab in the companion frameworks (NewKerala, 2026). The state government specifically credits Direct Benefit Transfer and online procurement systems with enhancing transparency, reducing the role of middlemen, and ensuring timely farmer payments, addressing precisely the kind of delayed payment and middleman exploitation problems this framework's companion Punjab document documented in that state's moong procurement failure, discussed in the companion framework's Chapter 18.8 (NewKerala, 2026). This represents a genuinely distinctive and, on the evidence reviewed for this chapter, more consistently and reliably implemented procurement architecture than documented for either companion state, though this framework notes that these figures derive from government sources and a comparable independent, farmer-perspective assessment of Gujarat's procurement experience, similar to the ThePrint investigative reporting that informed this framework's more critical assessment of Punjab's procurement gaps, was not available in the sources reviewed for this chapter.

#### **18.4 Food Processing Industry and Value Chain Development**

Gujarat's food processing industry benefits directly from the state's substantial agricultural procurement base documented in section 18.3 and its exceptional dairy cooperative infrastructure documented in Chapter 12.4, with the Amul model's group turnover of ₹90,000 crore for fiscal year 2025 representing, by a considerable margin, the single largest agricultural value chain and food processing enterprise documented anywhere across this three-state framework series. Beyond dairy, Gujarat's groundnut and cotton processing industries, linked to the procurement volumes documented in section 18.1, support substantial downstream oil extraction, textile, and export industries discussed in Chapter 3.4 and Chapter 4. A comprehensive, current, quantitative assessment of Gujarat's food processing capacity utilization and cold chain infrastructure specifically, beyond the dairy sector already documented in depth in Chapter 12.4, was not available with sufficient detail in the sources reviewed for this chapter.

#### **18.5 Animal Husbandry, Dairy and Poultry: Economic Contribution**

Gujarat's dairy sector, discussed extensively in Chapter 3.3 and Chapter 12.4, represents the single strongest agricultural allied sector performance documented anywhere across this framework series, with the state's 17.28 million metric tonne annual milk production in 2024 securing 4th position nationally and contributing 7.49 percent of India's total milk output, built substantially on the Anand Pattern cooperative model discussed in Chapter 12.4 (India Brand Equity Foundation, 2026a). This dairy sector strength provides Gujarat's rural economy a degree of income stability and formal market integration that this framework has not found documented at comparable scale in either companion state's animal husbandry sector, reinforcing this chapter's assessment that Gujarat's allied agricultural sectors, taken

together with the state's MSP procurement architecture discussed in section 18.3, represent genuine and substantial rural economic strengths that stand in useful contrast to some of this framework's more critical findings regarding Gujarat's social sector performance in Chapters 5 and 6.

## **18.6 Fisheries: Inland, Marine and Aquaculture**

Gujarat's fisheries sector benefits distinctively from the state's 1,600 kilometer coastline, discussed in Chapter 8.4 and Chapter 13.6, positioning Gujarat as one of India's most significant marine fishing states, a structural advantage neither Bihar nor Punjab, both landlocked, can share. However, as documented in Chapter 10.5, this framework found evidence of a 15 percent decline in high-value coastal fish stocks attributable to sustained industrial effluent discharge, indicating that Gujarat's fisheries sector, despite its coastal advantage, faces a documented and significant environmental threat to its long-term productivity that inland-fisheries-dependent states such as Bihar and Punjab do not face in the same specific form. A comprehensive, current, quantitative assessment of Gujarat's total marine and inland fisheries production volume was not available with sufficient specificity in the sources reviewed for this chapter.

## **18.7 Horticulture, Floriculture and Medicinal Plants**

A comprehensive, current, quantitative assessment of Gujarat's horticulture, floriculture, and medicinal plants sector was not available with sufficient detail in the sources reviewed for this chapter. Given Gujarat's diverse agro-climatic zones documented in Chapter 1.1, spanning the fertile central plains well suited to horticultural diversification and the state's demonstrated capacity for agricultural technology adoption discussed in section 18.2, this sector likely represents an area of genuine, if currently under-documented in the sources available, potential for the kind of value-added crop diversification that Punjab's agricultural policy, examined in the companion framework's Chapter 18.7, has struggled unsuccessfully to achieve at scale.

## **18.8 Agricultural Credit, Insurance and Risk Management**

Gujarat's crop insurance framework operates through the national Pradhan Mantri Fasal Bima Yojana, which completed nine years of operation as of February 2025 and was extended by Union Cabinet approval through 2025-26 with a total national budget of ₹69,515 crore, covering more than 50 crops across Kharif, Rabi, and commercial or horticultural seasons nationally, including groundnut and cotton, Gujarat's two most significant crops discussed in section 18.1 (News on Air, 2025b; CalcWise Finance, 2026). Unlike Punjab, which opted out of PMFBY in favour of its own state-run crop assistance scheme as documented in the companion framework's Chapter 18.8, this framework's research did not surface evidence that Gujarat has similarly opted out of the national scheme, suggesting Gujarat continues to participate in PMFBY alongside its own robust MSP procurement architecture documented in section 18.3, a combination of national insurance coverage and strong state-level

procurement support that, taken together, represents a more comprehensively layered farmer risk management architecture than this framework has documented for either companion state individually. The national Agricultural Technology Management Agency framework has additionally trained approximately 1.27 crore farmers nationally between 2021 and 2025, strengthening district-level agricultural advisory services and promoting locally suitable technology adoption, a national extension services framework within which Gujarat's own substantial agricultural technology adoption, discussed in section 18.2, likely benefits from above-average uptake given the state's demonstrated institutional capacity documented throughout this framework (KPIAS Academy, 2026).

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## **Chapter 19: Tourism, Culture and Creative Economy**

### **19.1 Tourism Asset Inventory: Natural, Heritage, Religious and Adventure**

Gujarat's tourism asset base is genuinely broad relative to either companion state examined in this framework series, spanning the Statue of Unity in Kevadia, the world's tallest statue at 182 metres and a tribute to Sardar Vallabhbhai Patel; the Rann of Kutch, discussed in Chapter 1.1, whose seasonal transformation into a moonlit white salt desert anchors the state's flagship Rann Utsav festival; the Gir National Park in Saurashtra, home to Asia's only wild population of the Asiatic lion, discussed in Chapter 13.1; the ancient Harappan civilization ruins at Dholavira, a UNESCO World Heritage Site; and a major pilgrimage circuit spanning Dwarka, Somnath, Ambaji, and Pavagadh (Cretum Advisory, 2026; Gujarat Package, 2026). This combination of a world-record modern monument, an ancient UNESCO archaeological site, a globally unique wildlife sanctuary, and a major multi-faith pilgrimage circuit within a single state represents a tourism asset diversity this framework has not found matched in either the companion Bihar or Punjab frameworks, both of which, as documented in their respective Chapter 19 treatments, center their tourism identity substantially around a smaller number of dominant sites.

### **19.2 Tourism Infrastructure: Hotels, Connectivity and Facilitation**

Gujarat's tourism infrastructure benefits directly from the state's exceptional road, rail, and air connectivity documented in Chapter 8, with independent industry analysis specifically crediting continued investment in road connectivity, night tourism infrastructure, and handicraft market development with reviving the local rural economy around Kutch, particularly following Dholavira's UNESCO designation and the sustained growth of the annual Rann Utsav (Cretum Advisory, 2026). Gujarat's pilgrimage destinations, including Dwarka, Somnath, Ambaji, and Pavagadh, are being actively revitalized with improved amenities, guided tours, and heritage hotel development explicitly designed to provide what tourism industry analysis characterizes as "a complete spiritual experience" (Cretum Advisory, 2026). The state's Rann Utsav Tent City itself, professionally managed by Gujarat Tourism and now running for the equivalent of nearly 100 days annually, from late November through early March, represents a genuinely sophisticated, purpose-built seasonal tourism infrastructure model, offering luxury tent accommodation alongside cultural programming, folk performances, and Gujarati cuisine (Rann Utsav, 2026a, 2026b).

### **19.3 Domestic and International Tourist Flows: Trends and Targets**

Gujarat records over 3.5 crore domestic tourist visits annually according to industry analysis of the state's tourism policy impact, a steady and substantial rise in footfall that industry sources attribute directly to the state's sustained tourism infrastructure investment (Cretum Advisory, 2026). This annual visitation figure, while not directly comparable in methodology to the specific 2024 arrival figures documented for Bihar in the companion framework's Chapter 19.3, nonetheless indicates a tourism sector operating at a scale considerably larger

than documented for either companion state, consistent with Gujarat's broader economic scale advantages documented throughout this framework. Gujarat's tourism policy implementation has generated over 1 lakh jobs specifically in hospitality, transport, and handicrafts, according to the same industry analysis, providing a concrete, quantified employment impact figure this framework has not found matched with comparable specificity in either the Bihar or Punjab tourism chapters (Cretum Advisory, 2026).

#### **19.4 Cultural Heritage Preservation and Institutional Framework**

Gujarat's cultural heritage preservation framework operates through Gujarat Tourism, the state's authorized government tourism promotion body, which directly organizes and curates the Rann Utsav festival as an official state property, alongside broader heritage site management responsibilities spanning the Dholavira UNESCO site and the state's major pilgrimage centers discussed in section 19.1 (Rann Utsav, 2026a). This direct, government-curated management model for the state's flagship tourism festival represents a more centralized and institutionally coordinated heritage tourism governance approach than this framework has documented for either Bihar's Bodh Gaya circuit, managed substantially by the Shiromani Gurdwara Parbandhak Committee-equivalent religious bodies and state tourism corporations jointly, or Punjab's Golden Temple, managed independently by the Shiromani Gurdwara Parbandhak Committee as documented in the companion framework's Chapter 19.4.

#### **19.5 Creative Industries: Handicrafts, Performing Arts and Cultural Economy**

Gujarat's creative economy is anchored by an exceptionally rich and commercially significant handicraft tradition, particularly concentrated in the Kutch region, encompassing fine textiles, intricate embroidery, Bandhani tie-dye sarees, traditional jewellery, detailed mirror work, and Patola silk weaving, all actively showcased and sold through the Rann Utsav's dedicated handicraft markets and through Kutch's broader artisan economy (Rann Utsav, 2026a, 2026b; Gujarat Package, 2026). Industry analysis explicitly credits Gujarat's tourism policy with empowering artisans, self-help groups, and tribal communities specifically through homestays and cultural experience programming, directly connecting the state's tourism sector to the tribal welfare priorities discussed in Chapter 7.2 (Cretum Advisory, 2026). Gujarat's kite-making industry, centered on the internationally recognized Ahmedabad International Kite Festival held each January, represents a further distinctive creative industry success, with the annual event driving surges in handmade kite sales and traditional clothing while fostering genuine international cultural exchange, as visiting kite enthusiasts bring novel kite designs and flying techniques that have, over time, expanded the local kite-making industry's reach into both domestic and international export markets (Morning Kashmir, 2024). This deliberate cultivation of an internationally-facing niche creative industry around a specific, culturally rooted craft tradition represents a genuinely distinctive model this framework has not found documented in comparable form for either companion state's creative economy chapter.

## **19.6 Film, Media and Content Industries as Economic Drivers**

A comprehensive, current, quantitative assessment of Gujarat's film and media industry specifically was not available with sufficient detail in the sources reviewed for this chapter, consistent with the equivalent data gap identified for both companion Bihar and Punjab frameworks. Gujarat's Statue of Unity and Rann of Kutch locations have featured prominently in Indian film and television production and promotional content given their striking visual character, and Gujarati-language cinema maintains an active, if nationally smaller-scale, regional film industry relative to the considerably larger and more commercially dominant Punjabi film and music industry documented in the companion Punjab framework's Chapter 19.6. This represents a genuine gap in the evidence base available for this framework rather than an indication that the sector lacks economic significance, and should be addressed through direct engagement with Gujarat's Department of Tourism and its film facilitation office, the Gujarat Film Development Corporation, in any future, more granular revision of this document.

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## **Chapter 20: Cross-Cutting Themes and Integrated Policy Imperatives**

### **20.1 Sustainable Development Goals of the State**

A comprehensive, current assessment of Gujarat's specific NITI Aayog SDG India Index score and ranking was not available with sufficient detail in the sources reviewed for this chapter. Given this framework's chapter-by-chapter findings, particularly the documented deterioration in child nutrition indicators between NFHS-4 and NFHS-5 discussed in Chapter 6.3 and the alarmingly high secondary school dropout rate documented in Chapter 5.2, it is reasonable to expect Gujarat's SDG performance on SDG 2, Zero Hunger, and SDG 4, Quality Education specifically, to fall short of what the state's strong performance on SDG 1, No Poverty, given its 9 percent poverty rate documented in Chapter 1.6, and SDG 8, Decent Work and Economic Growth, given its 1.7 percent unemployment rate documented in Chapter 3.7, might otherwise predict. This pattern, in which a state's economic and poverty-reduction SDG performance diverges from its nutrition and education SDG performance, would represent, if confirmed by direct index data, a distinctive Gujarat-specific profile relative to Bihar's more uniformly low performance and Punjab's more uniformly environmental performance gap, both documented in the companion frameworks, and this framework flags direct confirmation of Gujarat's SDG India Index score as a priority area for future revision.

### **20.2 Gender Mainstreaming Across Sectors**

Gender considerations recur throughout this framework in patterns distinctive to Gujarat's specific social and economic structure. Chapter 3.7 documented Gujarat's above-average Female Labour Force Participation Rate, Chapter 7.4 documented the state's comparatively low overall sex ratio of 920 females per 1,000 males alongside a notably higher Sex Ratio at Birth of 955 and an even higher tribal population sex ratio of 981, and Chapter 6.3 documented that Gujarat's child nutrition deterioration included a 12 percent rise in anaemia specifically among young girls between NFHS-4 and NFHS-5. This combination, a state performing comparatively well on female economic participation and showing improving birth-level sex ratios, while simultaneously showing worsening anaemia specifically among girls, illustrates the same kind of indicator-specific divergence this framework has documented repeatedly across Gujarat's education and health chapters, reinforcing the analytical caution this framework has maintained throughout: aggregate or single-indicator gender statistics for Gujarat should not be read as implying uniform performance across every related dimension of gender equity.

### **20.3 Youth Policy and Demographic Dividend Realisation**

Gujarat's youth policy imperative presents a genuinely distinctive profile relative to both companion states examined in this framework series. Unlike Punjab, where this framework's companion document identified a direct and explicit link between elevated youth

unemployment and large-scale illegal emigration, Gujarat's youth face a considerably more favourable domestic labour market, with unemployment at just 1.7 percent as documented in Chapter 3.7. Yet Gujarat's youth innovation and skill development ambitions, discussed in Chapter 17.5 and 17.6, face a different constraint: the alarmingly high secondary school dropout rate documented in Chapter 5.2, which this framework has identified as potentially undermining the pipeline of technically qualified young people the state's semiconductor and AI workforce development initiatives, discussed in Chapter 17.2, will require. This suggests Gujarat's youth policy priority is less about generating sufficient domestic employment opportunities, where the state already performs strongly, and more about ensuring its young people remain within the formal education system long enough to access those opportunities once they become available.

## **20.4 Migration: Internal, Inter-State and International Dimensions**

Gujarat's international migration profile, like Punjab's documented in the companion framework, is dominated by long-established emigration patterns rather than the internal migration pattern documented for Bihar, though Gujarat's specific emigration history and current channels differ meaningfully from Punjab's. Gujarati emigration has historically followed several distinct streams: to East Africa in earlier generations, and subsequently to the United Kingdom, the United States, Canada, and Australia by both professionals and, in earlier waves, unskilled labourers, with a further, distinctive stream of Gujarati diamond merchants, predominantly from the Jain community, establishing themselves in Antwerp, Belgium, historically a major international diamond trading center connected directly to the Surat diamond processing industry documented in Chapter 3.4 (Population Conference, 2025). The Patel community specifically, historically concentrated in the Charotar area around Anand district, discussed in Chapter 12.4 as the birthplace of the Amul cooperative model, has an unusually high rate of family emigration and maintains particularly strong transnational philanthropic connections to their home villages and districts, with academic research characterizing Gujarati diaspora engagement as skewing toward social remittances, including charity, disaster relief, and community gifts, alongside conventional financial remittances (Population Conference, 2025).

At the national level, India received an estimated \$129.1 billion in remittances in 2024, the highest single-year remittance inflow ever recorded by any country, with a structural shift having occurred in which advanced economies have now overtaken Gulf nations as India's primary remittance source, a shift of particular relevance to Gujarat given the state's historically strong ties to Western diaspora destinations specifically, discussed above, relative to Punjab's mixed legal-Western and illegal-Gulf-transit migration pattern documented in the companion framework's Chapter 20.4 (BharatNotes, 2026). Total NRI deposits in India stood at approximately ₹14.16 lakh crore, or \$164.7 billion, as of March 2025, and the Reserve Bank of India's December 2024 increase in FCNR deposit rate ceilings specifically targeted mobilizing greater NRI deposit inflows, a diaspora financial engagement mechanism this framework notes as particularly relevant to Gujarat given the state's large, financially established, and long-settled diaspora population in developed-economy destinations

(BharatNotes, 2026). Unlike the acute, crisis-driven donkey-route migration and mass deportation events documented for Punjab in the companion framework's Chapter 20.4, this framework's research for Gujarat surfaced no comparable evidence of a current illegal migration crisis of similar scale or visibility, suggesting Gujarat's international migration profile, while numerically very substantial given the size and historical depth of its diaspora, currently presents a considerably less acute policy and humanitarian concern than Punjab's.

## **20.5 Science, Technology and Innovation for Development**

Gujarat's science, technology, and innovation ecosystem, discussed comprehensively in Chapter 17, extends cross-sectorally into the state's agricultural technology adoption discussed in Chapter 18.2, its AI-enabled education dropout prevention system discussed in Chapter 5.6, and its emerging hyperscale AI data infrastructure ambitions discussed in Chapter 16.1 and 16.6, together constituting the most comprehensive, multi-sectoral technology integration strategy identified anywhere across this three-state framework series. The persistent question this framework has raised throughout, most explicitly in Chapter 17.5, is whether this technology investment breadth will translate into commensurately improved outcomes in the specific social sector domains, education retention and child nutrition, where Gujarat's performance has been found wanting despite the state's demonstrated technological and administrative capacity in other areas.

## **20.6 Statistical System Strengthening and Evidence-Based Policymaking**

This Gujarat framework has, consistent with the practice established in both companion documents, repeatedly flagged data gaps across numerous chapters, including tourism-specific film industry data in Chapter 19.6, judicial pendency figures in Chapter 15.3, and disability rights provision in Chapter 7.7.

A further, distinctive and genuinely significant statistical finding specific to Gujarat, not paralleled in either companion framework, concerns the Narmada water allocation transparency gap documented in Chapter 10.2, where independent investigative research found that the state government has not published annual figures on Narmada-irrigated area by district for two decades, with the investigation's own sources suggesting the state may not possess credible ground-truth figures at all.

This finding, alongside the striking divergence this framework has documented between Gujarat's strong infant mortality performance and its worsening child nutrition indicators, discussed in Chapter 6.3, suggests that statistical system strengthening in Gujarat should prioritize not merely the collection of additional data, but the independent, third-party verification of existing state-reported figures in politically sensitive domains specifically, given the genuine risk this framework has identified that favourable headline statistics, such as 100 percent Jal Jeevan Mission tap water coverage discussed in Chapter 10.1, may coexist with considerably less favourable ground realities in specific regions or indicators.

## **20.7 Public Participation: Behavioural Change and Citizen Engagement**

Gujarat's citizen engagement architecture, discussed in Chapter 16.2 and 16.3, spans one of the most institutionally developed and historically continuous digital and physical citizen service networks documented across this three-state framework series, including the state's long-running Jan Seva Kendra civic centre model and its more than 250 departmental information websites. Gujarat's civic engagement landscape has not, on the evidence reviewed across this framework's chapters, exhibited the same scale of organized, confrontational civil society mobilization documented for Punjab's farmer protest movement in the companion framework's Chapter 20.7, though the state's Patidar reservation agitation, discussed briefly in Chapter 7.3, demonstrates that large-scale social mobilization is a feature of Gujarat's political landscape when specific community grievances reach a sufficient threshold. This framework's concluding chapter considers what form of citizen engagement and independent civil society scrutiny might be most effective in closing the specific gaps this framework has identified between Gujarat's strong policy design and infrastructure investment capacity and its more uneven outcome delivery in education, nutrition, and environmental compliance.

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## **Chapter 21: State Vision 2047 — Strategic Priorities and Development Roadmap**

### **21.1 Long-Term Vision and Flagship Missions**

Gujarat holds the distinction, according to NITI Aayog's own Chief Executive Officer, of being the first Indian state to craft a comprehensive, formally structured long-term vision document of this kind, with the "Viksit Gujarat@2047" vision unveiled at the Vibrant Gujarat Global Summit in January 2024, well ahead of the equivalent Bihar and Punjab vision documents discussed in the companion frameworks (ANI, 2024a). The document sets explicit, quantified targets: a Gross State Domestic Product of USD 3.5 trillion by 2047, up from the state's current contribution of approximately 8.3 to 8.5 percent of national GDP; per capita annual income of USD 38,000 to USD 40,000; net zero carbon emissions by 2047; women's employment participation reaching 75 percent; and average life expectancy rising to 84 years through strengthened health infrastructure (ANI, 2024a). Chief Minister Bhupendra Patel has continued to reaffirm and build on this vision across multiple subsequent public forums, including the Ninth NITI Aayog Governing Council meeting in July 2024, where he introduced the complementary "Gujarat@2047 Dynamic Document-Roadmap," built on two explicit pillars, "Earning Well" and "Living Well," and announced the establishment of the Gujarat State Institution for Transformation, or GRIT, a dedicated state-level think tank modeled explicitly on NITI Aayog itself and tasked with systematically tracking progress against the Prime Minister's "GYAN" framework of Garib, Yuva, Annadata, and Naari, the poor, youth, farmers, and women (ANI, 2024b).

Most significantly for this framework's assessment of Gujarat's institutional follow-through capacity, Chief Minister Patel moved from vision articulation to formal implementation planning on June 30, 2026, unveiling the "Viksit Gujarat@2047 Implementation Roadmap," prepared jointly by GRIT and the Planning Division of the state's General Administration Department, explicitly described by the state government as marking "a decisive step from long-term vision to on-ground execution" (India Shipping News, 2026). This represents a genuinely distinctive institutional maturity relative to both companion states examined in this framework series: where Bihar's Saat Nishchay-3 roadmap and Punjab's Vision Document 2047, discussed in the companion frameworks' respective Chapter 21.1 sections, remain at the stage of target articulation, Gujarat has already progressed to a formally structured, dedicated-institution-backed implementation planning phase, a distinction consistent with this framework's broader finding, documented throughout Chapters 4, 8, 9, and 11, that Gujarat's demonstrated capacity to translate stated policy ambition into structured execution mechanisms exceeds that of both companion states in most infrastructure and economic domains.

### **21.2 Medium-Term Priority Action Plan (2025–2030)**

Gujarat's medium-term priorities, drawing on this framework's chapter-by-chapter findings, should center on four interconnected areas, each chosen specifically because they represent

domains where this framework has identified a genuine gap between the state's demonstrated institutional capacity and its actual outcomes to date. First, and most urgently, child nutrition intervention specifically targeting the documented deterioration in stunting, wasting, and underweight prevalence discussed in Chapter 6.3, given that Gujarat's own leading public health researchers have explicitly called for a dedicated nutrition intelligence unit and taluka-level targeted action plans, a recommendation this framework endorses as deserving the same institutional weight and GRIT-level tracking currently being applied to the state's economic growth targets. Second, secondary education retention, addressing the alarmingly high dropout rate documented in Chapter 5.2, which this framework has identified as placing Gujarat in the bottom tier of Indian states on this specific indicator despite the state's considerably stronger elementary infrastructure and per capita income. Third, industrial effluent enforcement, addressing the documented, multi-decade pattern of water and coastal pollution discussed in Chapters 10.5 and 13.5, given that this framework's review found Gujarat's environmental regulatory capacity considerably less consistently effective than its economic and industrial regulatory capacity, discussed in Chapter 15.5. Fourth, Narmada canal completion and water allocation transparency, addressing the specific, documented gap in Kutch and Saurashtra discussed in Chapter 10.2, where independent investigation found the state government has not published Narmada water allocation data by district for two decades.

### **21.3 Financing Strategy: Resource Mobilisation, Revenue Enhancement and Expenditure Rationalisation**

Gujarat's financing strategy for its Vision 2047 targets benefits substantially from the genuinely strong fiscal position documented in Chapter 2, where the state's debt-to-GSDP ratio of approximately 15 percent sits at less than half its own prudential ceiling, and where the state has consistently met or bettered its own fiscal deficit targets rather than exceeding them, a pattern of fiscal discipline this framework has not found matched by either Bihar or Punjab, examined in the companion frameworks. This genuine fiscal headroom means that, unlike Bihar, where the constraint is an inadequate own-revenue base, or Punjab, where the constraint is a self-inflicted subsidy burden crowding out capital investment, Gujarat's Vision 2047 financing challenge is less about raising or freeing up additional resources and more about the deliberate reallocation of a portion of the state's already substantial and growing fiscal capacity toward the specific, underperforming social and environmental domains identified in section 21.2, domains that have received comparatively less sustained institutional priority than the state's industrial, infrastructure, and digital economy investments documented throughout Chapters 4, 8, 9, and 16. The state's own emphasis on reaching 32,302.7 megawatts of solar capacity and hosting the world's largest renewable energy park, discussed in Chapter 9.4, demonstrates that Gujarat is fully capable of directing sustained, multi-year fiscal and institutional attention toward a chosen priority at genuinely world-leading scale; this framework's central recommendation for Gujarat's financing strategy is that the state's child nutrition and secondary education retention crises deserve an equivalent, sustained, and specifically targeted institutional commitment.

## **21.4 Centre-State Partnership: Centrally Sponsored Schemes and Special Grants**

Gujarat's centre-state fiscal relationship, discussed in Chapter 2.6, is distinguished by the state's declining relative dependence on Finance Commission devolution, a consequence of the state's own strong and growing revenue base rather than any weakening of the underlying formula-based transfer relationship. Union Finance Minister Nirmala Sitharaman's own public characterization of Gujarat as "the growth engine of the country," offered at the Vibrant Gujarat Global Summit vision document unveiling discussed in section 21.1, reflects the genuinely close alignment between Gujarat's own Vision 2047 targets and the national Viksit Bharat 2047 framework discussed in the companion Bihar and Punjab frameworks (ANI, 2024a). This alignment positions Gujarat favourably to continue accessing national schemes tied to advanced manufacturing, semiconductor development, and renewable energy, discussed in Chapters 4, 9, and 17, given the state's demonstrated execution capacity in exactly these priority national mission areas.

## **21.5 Inter-State Cooperation: Regional Development Councils and River Boards**

Gujarat's inter-state cooperation requirements center substantially on the Narmada river system, discussed in Chapter 10.2 and Chapter 13.3, whose management involves coordination with Madhya Pradesh, Maharashtra, and Rajasthan as co-riparian states, a coordination dimension this framework's research did not examine in comprehensive detail but which bears directly on the still-incomplete canal infrastructure documented in Chapter 10.2. Gujarat's coastal and port infrastructure, discussed in Chapter 8.4, additionally positions the state as a critical logistics gateway not only for its own economy but for the broader landlocked states of Rajasthan, Madhya Pradesh, and, to a lesser extent, the northern Indian states examined in the companion Bihar and Punjab frameworks, an inter-state economic interdependence this framework's Chapter 8.4 findings on the Gujarat Maritime Board's 66 percent share of national non-major port traffic underscore as a genuinely significant, if underexamined, national economic integration function.

## **21.6 International Collaboration: Common Development Agenda and Global Partnership**

Gujarat's international collaboration profile, discussed in Chapter 20.4, is anchored by one of the world's largest, most geographically dispersed, and most financially established diaspora populations, spanning East Africa, the United Kingdom, the United States, Canada, Australia, and specialized commercial communities such as the Antwerp diamond trading network. This diaspora depth, combined with the state's semiconductor partnership ambitions discussed in Chapter 4.5 and Chapter 17.2, its hyperscale AI data centre investment attraction discussed in Chapter 16.1, and its renewable energy sector's substantial foreign direct investment discussed in Chapter 9.4, positions Gujarat as this framework's clearest example of a state actively and successfully competing for globally mobile capital and technology partnerships, a positioning that Chief Minister Patel's direct engagement with global semiconductor firm

NXP, discussed in Chapter 17.2, and the state's L&T Vyoma AI data centre agreement, discussed in Chapter 16.1, both concretely exemplify.

## **21.7 Monitoring, Evaluation and Results Framework**

Gujarat's establishment of GRIT, discussed in section 21.1, as a dedicated, NITI-Aayog-modeled state institution specifically tasked with tracking Vision 2047 progress represents the most institutionally sophisticated monitoring and evaluation framework this document series has identified across all three states examined. This framework's central recommendation for GRIT's own effectiveness is that its published tracking metrics should explicitly and transparently include the specific indicators this framework has found Gujarat underperforming on, child stunting and wasting rates, secondary school dropout rates, and industrial effluent compliance rates, rather than concentrating disclosure on the state's stronger-performing economic and infrastructure indicators alone. The Narmada water allocation transparency gap documented in Chapter 10.2 provides a specific, cautionary precedent this framework urges GRIT to avoid replicating: a genuinely capable state institution choosing, whether deliberately or through simple institutional inertia, not to publish data that would reveal an uncomfortable gap between stated policy success and ground-level reality.

## **21.8 Accountability Architecture: Legislature, Civil Society and Citizens**

Gujarat's accountability architecture benefits from a comparatively strong, if unevenly applied, digital transparency infrastructure, including the Gujarat High Court's public Virtual Justice Clock discussed in Chapter 15.3 and the state's more than 250 departmental information websites discussed in Chapter 16.3. Gujarat's own leading public health research institutions, including the Indian Institute of Public Health Gandhinagar, whose independent NFHS-5 analysis this framework has cited repeatedly throughout Chapter 6, demonstrate that credible, methodologically rigorous, in-state independent research capacity exists and is willing to publish findings, including on child nutrition, that complicate the state government's own preferred growth narrative. This framework's concluding recommendation is that Gujarat's Vision 2047 accountability architecture would be considerably strengthened by formally and publicly incorporating this kind of independent academic and civil society research capacity into GRIT's own monitoring framework, rather than allowing the state's genuinely accomplished economic and infrastructure narrative, documented extensively throughout Chapters 2 through 4, 8, 9, and 16 of this framework, to overshadow the equally well-documented and equally credible findings, produced by Gujarat's own researchers, regarding the state's unresolved child nutrition, secondary education, and environmental compliance challenges. A state that has demonstrated, through Amul, discussed in Chapter 12.4, through its renewable energy programme, discussed in Chapter 9.4, and through its Smart Cities Mission completion rate, discussed in Chapter 11.4, that it can execute complex, multi-decade institutional commitments at genuinely world-class scale, possesses every structural capability needed to apply that same execution discipline to closing its remaining human development gaps; whether it chooses to do so with the same sustained priority

currently given to its economic growth targets is, on the evidence this framework has assembled, the central open question determining whether Gujarat's Vision 2047 will represent a genuinely comprehensive developed state, or a continuation of the selectively distributed prosperity this framework has documented throughout its 21 chapters.

## End Note

This Comprehensive Development Framework for the State of Gujarat has been compiled across 21 chapters following the same Standardized Document Format applied to the companion frameworks for Bihar and Punjab, drawing on the most current publicly available data as of mid-2026, and cited throughout in APA 7th edition format. Taken together, the three frameworks in this series demonstrate that Indian state development does not follow a single trajectory along which states are simply further ahead or behind one another. Bihar combines low human development with recent above-average growth; Punjab combines historically high human development with an eroding relative economic position and a self-inflicted fiscal crisis; and Gujarat, examined in this document, combines sustained, genuinely exceptional economic growth and infrastructure execution with human development outcomes, in child nutrition and secondary education specifically, that its own researchers have found have not kept pace, and in some measures have worsened, over the same period. Where Gujarat-specific data was not available with sufficient granularity or currency, this framework has said so explicitly rather than substituting plausible-sounding estimates. Readers using this framework for planning or policy purposes should treat the flagged data gaps, most notably in the state's SDG India Index score, disability rights provision, and film industry data, as priority areas for direct primary research through the relevant Gujarat government departments before final decisions are based on this document alone.

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