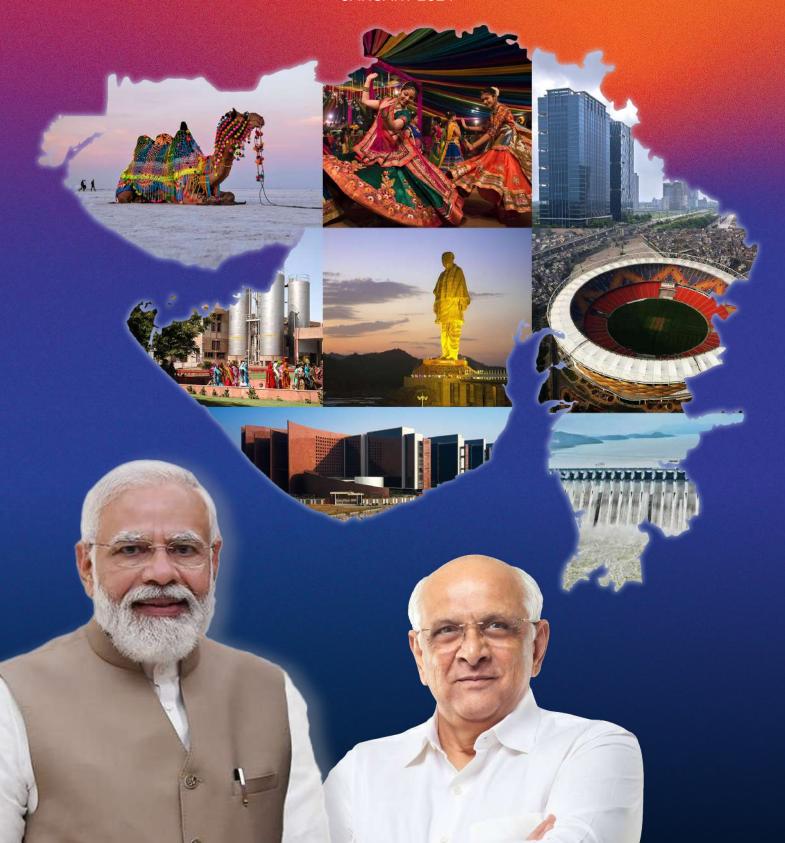


# VIKSIT GUJARAT@2047

Gujarat's roadmap towards Viksit Bharat@2047

JANUARY 2024





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# **List of Abbreviations**

Abbreviation	Description
Al	Artificial Intelligence
AISHE	All India survey on Higher Education
AQI	Air Quality Index
AR	Augmented Reality
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BISAG	Bhaskaracharya Institute for Space Applications and Geoinformatics
BMI	Body Mass Index
BRT	Bus Rapid Transit
CAGR	Compound Annual Growth Rate
CoE	Centres of Excellence
CUG	Central University of Gujarat
CWSN	Children With Special Needs
DEPC	District Export Promotion Council
DIETS	District Institute of Education & Training
DREAM city	Diamond Research and Mercantile City
E2E	End-to-end
EIR	Economic Impact Research
e-NAM	e- National Agriculture Market
EV	Electric Vehicle
FDI	Foreign Direct Investment
FPO	Farmer Producer Organization
FY	Financial Year
GCC Zone	Global Capacity Centers Zone
GCERT	Gujarat Council of Educational Research and Training
GDP	Gross Domestic Product
GER	Gross Enrollment Rate
GIDC	Gujarat Industrial Development Corporation
GIFT City	Gujarat International Finance Tec-City
GIS	Geographic information systems

Abbreviation	Description
Gol	Government of India
GSDM	Gujarat Skill Development Mission
GSDP	Gross State Domestic Product
GSVA	Gross State Value Added
GVA	Gross Value Addition
ha	Hectare
HEI	Higher Education Institution
HIC	High Income County
HWC	Health and Wellness Centres
ICAI	Institute of Chartered Accountants of India
ICDS	Integrated Child Development Services
iCREATE	International Centre of Entrepreneurship and Technology
ICT	Information and Communications Technology
iNDEXTb	Industrial Extension Bureau
IoT	Internet of Things
IP	Intellectual Property
IPPU	Industrial Processes and Product Use
IT	Information technology
ITeS	Information technology enabled services
ITIs	Industrial Training Institute
KPI	Key Performance Indicator
kW	kilo Watt
L&T	Larsen & Toubro
LFPR	Labour Force Participation Rate
LPCD	Litre per Capita per Day
MBBS	Bachelor of Medicine, Bachelor of Surgery
MERITE	Multidisciplinary Education and Research Improvement in Technical Education
MIC	Middle Income Country
MIS	Management Information System

# **List of Abbreviations**

Abbreviation	Description
ML	Machine Learning
MLD	Millions of Litre per Day
MMLP	Multi-Modal Logistics Park
MMT	Multi-modal Transportation of Goods
MNC	Multi National Company
MoSPI	Ministry of Statistics and Programme Implementation
MPI	Multi Dimensional Poverty Index
MPTA	Manpower, Personnel and Training Assessment
MRO	Maintenance, Repair and Operations
MSME	Ministry of Micro, Small & Medium Enterprise
MtCO2e	Metric Tonnes of Carbon Dioxide Equivalent
MUFG	Mitsubishi UFJ Financial Group, Inc
MVS	Multi Village Scheme
NCRB	National Crime Record Bureau
NEP	National Education Policy
NFHS	National Family Health Survey
NIMHANS	National Institute of Mental Health and Neurosciences
NIPUN	National Initiative for Proficiency in Reading with Understanding and Numeracy
NIRF	National Institutional Ranking Framework
NITI	National Institution for Transforming India
ODOP	One District One Product
OECD	Organisation for Economic Co-operation and Development
ONDC	Open Network for Digital Commerce
OOPE	Out of Pocket Expenditure
PCB	Printed Circuit Board
PHC	Primary Health Centers
PIB	Press Information Bureau
PMJAY	Pradhan Mantri Jan Arogya Yojana
PMSMA	Pradhan Mantri Surakshit Matritva Abhiyan
POSH	Prevention of Sexual Harassment

Abbreviation	Description
PPP	Public Private Partnership
R&D	Research & Development
RBI	Reserve Bank of India
RBSK	Rashtriya Bal Swasthya Karyakram
SaaS	Software as a service
SEZ	Special Economic Zone
SC	Sub-Centre Sub-Centre
SCRB	State Crime Record Bureau
SDG	Sustainable Development Index
SHE-Team	Safety, Health and Environment- Team
SHG	Self Help Groups
SIR	Special investment region
SME's	Small and medium-sized enterprises
SOP	Standard Operating Procedure
ST	Scheduled Tribe
STEM	Science, technology, engineering, and math
tC02e	tonnes of carbon dioxide equivalent
UHC	Universal Health Coverage
UK	United Kingdom
ULB's	Urban Local Bodies
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United States of America
USD	United States Dollars
UT	Union Territory
VR	Virtual Reality
VR/AR	Virtual reality / Augmented reality
WHO	World Health Organization
WTTC	World Travel & Tourism Council
\$	United States Dollars

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### **Foreword**

Gujarat is a land of immense opportunities and achievements. Gujarat is one of the fastest growing state economies with a substantial share in country's GDP. Gujarat has showcased a wide spectrum of developmental models. The enterprising people of Gujarat have an inherent trait of transforming challenges into the opportunities.

As we embark on the transformative journey towards the centennial year of our nation's independence, it is imperative to set forth a vision that resonates with the aspirations of every citizen of our vibrant state. Our collective aspirations, for a prosperous, sustainable, and inclusive Gujarat, drive this endeavor. The vision document for *Viksit Gujarat* is not merely a roadmap but a testament to our commitment to build a future that nurtures aspirations and leaves no one behind.

Through concerted efforts, strategic planning, and harnessing the power of innovation, we aim to further boost opportunities and sustainable development in Gujarat. Education, healthcare, infrastructure, agriculture, and industry are amongst the key domains where we seek to bring about a transformative change. Gujarat has already prepared a comprehensive 5-year State Vision Document. This *Viksit Gujarat@2047* report is a significant step forward towards achieving our long term vision for a glorious future.

Gujarat is poised to emerge as even stronger global value chain player, contributing significantly to the nation's prosperity and progress. Our commitment is to augment the ecosystem that continues to nurture entrepreneurship and innovation. This will enable us to accelerate economic growth and create abundant opportunities for our citizens. The success of our vision will be measured not just by economic metrics but by the positive impact in the lives of every citizen.

I call upon every stakeholder – government, private sector, civil society and most importantly, the citizens of Gujarat – to actively participate in shaping this vision and contribute to its realization. Let us work together with dedication, unity and resolve to transform our Vision for Gujarat into a glorious reality by the year 2047.

Jai Jai Garvi Gujarat!

### BHUPENDRABHAI PATEL

Chief Minister, Gujarat

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This is not merely a roadmap but a testament to our commitment to build a future that nurtures aspirations and leaves no one behind.



### **Preface**

Hon'ble Prime Minister has envisioned the next 25 years as 'Amrit Kaal'. During Amrit Kaal, he has called for collective efforts to propel our country and its citizens to new heights of prosperity, envisioning a 'New India'. To make this dream a reality, each state and union territory within the Union of Bharat must embark on a path of a holistic and immediate action.

Gujarat is one of the larger state economies of Bharat with nearly 5% share in Bharat's population and 8.3% in GDP with a high growth trajectory. As we commence the journey towards transformation, it is imperative to reflect upon the current status of Gujarat, a state renowned for its entrepreneurial spirit, vibrant culture, and commitment to progress. We present 'Viksit Gujarat@2047', a visionary document encapsulating progress, prosperity, and inclusive development, imbibed with the ethos of 'Living Well' and 'Earning Well'.

Over a span of three months, many stakeholders across state ministries, districts and Industry have actively contributed to this document. Several committee meetings and workshops were conducted with ministries and district administrators to gather visions, goals and intervention ideas for specific sectors. I want to also thank the local industry bodies - CII and FICCI - for helping us engage with their members to get practical ideas and

suggestions for the state's all-round development. Finally, the document has been developed with the support of NITI Aayog, aligning with the cooperative federalism spirit envisaged in the Constitution of India.

Viksit Gujarat@2047 document is a commitment towards realizing aspirational goals. Each sector-specific vision is accompanied by a strategic roadmap, ensuring that no aspect of Gujarat's growth and development is left unaddressed. This document is crafted with the citizens at the centre. The government continues to be committed to efficient, transparent, and accountable governance, utilizing this document as a guide for policy design. Recognizing that no one can predict precisely outcomes over two and a half decades, the report is intended to be a living document, which would be revised periodically towards achieving the stated goals as the implementation progresses.

I express gratitude to all those who have contributed to shaping this vision for Gujarat. The journey to 2047 is not only about achieving economic milestones, but also about fostering a sense of pride, inclusivity, and sustainable growth. Let *Viksit Gujarat @2047* be a testament to our collective commitment to build a Gujarat that thrives, with no citizen left behind.

**RAJ KUMAR, IAS** 

Chief Secretary to Government of Gujarat

## **Note to the Reader**

This report builds further on a preceding report titled "Strategy for Government of Gujarat to enable India to become a \$5 Tn economy". The document has been structured around 11 pivotal themes, and the roadmap and interventions articulated within it transcend different government departments and organizations.

It is of paramount importance to recognize that this document is not intended as a standalone action plan; rather, it stands as a guiding beacon intended to drive substantive discussions. The projections made herein are not rigid forecasts; rather, they constitute a dynamic framework, subject to continuous refinement in tandem with evolving socio-economic landscapes. Since this document is spanning a long-term vision encompassing two and a half decades, it is meant to be a living document, which should be updated periodically under the ownership

of Government of Gujarat, as the implementation progresses over time.

While reasonable precaution has been taken to ensure accuracy of data referred to in the report, it is pertinent to acknowledge that all aspects might not have undergone independent verification and some variations in the datasets may persist across various data sources. The mention of certain entities or products in this document does not imply endorsement or recommendation by the Government of Gujarat.

Readers are invited to thoroughly engage with this report, gain insights into the evolving vision for *Viksit Gujarat*. Any constructive feedback towards improvement of this report is welcome.

Hope you find this report insightful and enjoyable!

# **Executive Summary**

'Viksit Bharat 2047' is Hon'ble Prime Minister's vision towards making Bharat a developed economy and society by the time the country completes 100 years of independence. The country must leverage its unique strengths, its strong demographic base and emerging opportunities in the changing global landscape. Gujarat is well placed to play a key role in achieving this vision with its current strong position and development mindset. The state is home to 5% of the country's population and contributes nearly 8.3% to the economy, with highest share (over 18%) in the national industrial output and around 1.7 times higher per capita income than the national average. The state has grown at 12% CAGR (2011-2021), higher than national average of 10.4% (nominal, in INR terms), and is set to become Viksit (developed) ahead of 2047 to bolster the country's path towards development.

By 2047, Gujarat has potential to become about \$3.5 Tn economy from \$259 Bn in FY22, with per capita income of over \$38,000. The population in 2047 will likely be 8-9 crores, with a median age of 38-40 years, of which around 70% are likely to live in the urban areas.

The dream of 'Viksit Gujarat' envisions that by 2047, every citizen in the state will be "Earning Well" and "Living Well" within the fabric of a "valued" and "valuable" society.

### **VIKSIT GUJARAT@2047**

### A future where every citizen in Gujarat will be

### **Living Well**

Ensuring universal access to essentials & best-in-class amenities

### **Earning Well**

Advancing the economy while enhancing prosperity of each citizen

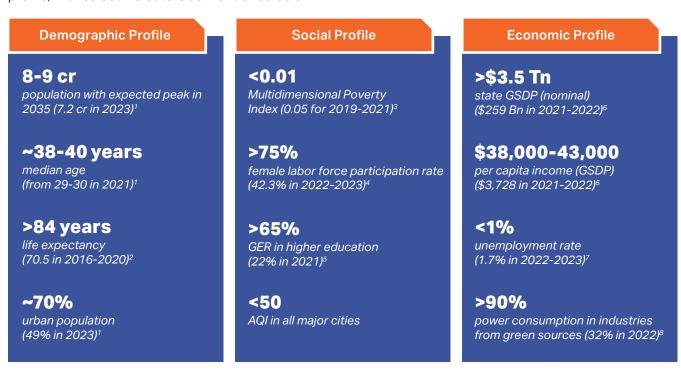
...within the fabric of a "valued" and "valuable" society

Gujarat is expected to continue to be a home of strong ethos, culture and family values fostering a cohesive and thriving society, while emerging as a developed economy driven by new economic opportunities.

The defining parameters of Viksit Gujarat@2047 will include the following, among others:

- Gujarat@2047 is envisioned to be a healthier, more educated, and sustainable society with equitable access to all world class amenities - clean environment, good quality air and water, sanitation, 24x7 electricity, 100% healthcare coverage, multidisciplinary education and skilling, and a secure society.
- The Services sector is envisioned to see a quantum leap, achieving over 46% GSVA contribution (from nearly 35% in FY22), with the state emerging as the preferred destination for knowledge economy, tourism, and financial services.
- The industrial sector is envisioned to continue to be the core strength for state economy with high exports and greater share of high value adding sectors, including Semiconductors, Automotive Aerospace and Renewable Energy, propelling future growth.
- The rural Gujarat is envisioned to see Agriculture and allied sectors operating at optimal productivity with high farmer value share leading to overall farmer incomes multiplying, coupled with diverse employment opportunities for rural workforce. The quality of life in rural areas is envisioned to be at par with urban areas.
- Gujarat@2047 is envisioned to become even stronger as India's gateway to the Middle East and Europe, thereby emerging as one of the global trade hotspots. This will be powered by developing vibrant logistics corridors and port cities.
- Gujarat@2047 is envisioned to have a robust, transparent, accountable and citizen centric governance, via one-stop e-governance solutions powered by latest technological advancements.

Each citizen Living and Earning Well will lead to a significant shift in Gujarat's demographic, social and economic profile, with select indicators as mentioned below:



<sup>1.</sup> Population projections for India and States 2011-2036, Ministry of Health and Family Welfare 2020; 2. SRS Based Abridged Life Tables, Ministry of Home Affairs 2016-20; 3. National Multidimensional Poverty Index, Niti Aayog 2023; 4. According to usual status (ps+ss) - Age group 15 years and above, Periodic Labor Force Survey 2022-23, Ministry of Statistics and Program Implementation; 5. AISHE Report, 2020-2021; 6. State-wise GDP, MoSPI 2021-22; 7. Periodic Labor Force Survey 2022-23, MoSPI; 8. Climate Change Department, Government of Gujarat.

# **Executive Summary**

### **Viksit Gujarat@2047 framework**

*Viksit Gujarat* roadmap will drive strategic transformation across every aspect of the citizen's lives, economy and governance. The focus will be on eleven key themes distributed across three pillars-Empowered citizens, Thriving economy, and Key enablers to achieve this.

### **Empowered citizen - Living Well** Thriving economy - Earning Well Industries of the Future Healthcare and Nutrition for all Human capital: Education and Skilling Services of the Future Art, Culture and Sports 07 Gujarat as Tourism Hub Nari Shakti: Women-led Development Agriculture, Irrigation & Rural Development City Agglomerations: Transport Governance 2.0: Key Vibrant socio-10 and Logistics Reform, Perform **Enablers** economic epicenters Infrastructure and Transform

Sustainability and Technology to be core thrust areas across themes

### Empowered citizens: Living Well

#### **Healthcare and Nutrition for all**

Viksit Gujarat@2047 envisions a monumental shift towards wellness, ensuring lifelong access and affordability to world-class healthcare. The state is committed to creating a healthy society, eradicating anemia and malnutrition, achieving 100% universal healthcare coverage and reducing out of pocket expenses. Through these, health outcomes in state are expected to enhance materially, including rise in average life expectancy to about 84 years and reduction in Infant Mortality Rate to less than 2 per thousand births.

The key focus areas to achieve this vision include:

- 1. Holistic physical and mental health curricula in primary and secondary schools.
- 2. Digital health records and paperless administration.
- 3. Premier-quality healthcare and better geriatric care facilities across all towns and villages.
- 4. Multidisciplinary model for healthcare including extensive research and reach for AYUSH.
- 5. A premier center for healthcare workforce development and pandemic preparedness.

### **Human capital: Education and Skilling**

*Viksit Gujarat*@2047 is aimed to emerge as a global hub for human capital, with world-class educational institutions and advanced skill development centers as key pillars. The state aspires to transform into a knowledge-driven society. The education and skilling ecosystem of 2047 will be employability-focused and market-driven, with high end innovation in the state. Select key outcomes near crucial in realizing this vision include achieving 100% Gross Enrolment ratio in primary and over 65% ratio in tertiary education, over 95% NAS scores across all grades, and integration and mainstreaming of skilling with formal education.

Gujarat's education and skilling roadmap is developed around three pillars i.e., school education, higher education, and skilling ecosystem. The focus areas across the pillars include:

- Best-in-class infrastructure and capacity at state and private academic institutions, such as GCERT, DIETs, etc.
- 2. Phygital approach including connected schools, AR/VR in delivery and assessments, etc.
- 3. Incubation centers and accelerators/ pre incubation systems in all major higher education institutes.
- 4. A world class skill university in the state.
- 5. Strong industry-academia partnerships to sync skilling with evolving industry needs and develop a workforce that is being continuously trained.

### **Art, Culture and Sports**

Over the coming two decades, the state aspires to build a society which not just adapts to the evolving global trends, but is also deeply rooted in Gujarat's rich culture and traditions. Gujarat of 2047 will continue to be known for strong ethos and values. Each citizen is envisioned to have an active lifestyle and have pride in living and furthering local culture and traditions. Gujarat's rich heritage is envisioned to be well-recognised globally, with targeted over 20 UNESCO recognized assets. The cultural and creative industries could have an over 5% GDP contribution. The state also aims for a significant jump in the performance of athletes at the world stage.

To achieve this vision, the state strives towards imbibing the essence of traditional values while maintaining an active lifestyle, with:

- 1. India's traditional knowledge system synthesized in educational courses.
- 2. Traditions catalyzed into economic resources with reskilling/upskilling of heritage professionals.
- 3. At least one mega cultural center in every district.
- 4. World class sporting infrastructure with tech-embedded training, nutrition, and coaching facilities.
- 5. Integration with school curricula via 'Pay-and-Play' facilities to encourage active sporting lifestyle.

### Nari Shakti: Women-led Development

Gujarat aspires to unlock and harness women's true and complete potential, creating avenues for their growth, empowerment, and leadership by providing them with the right platform. This involves not just providing access to enabling amenities for women but also ensuring their economic self-reliance and prosperity, their empowered voices in decision making, and building a culture of equal opportunities in all aspects. The aim is to achieve up to 75% female labor force participation, high women participation in state legislation and to ensure gender parity in higher education and wages.

# **Executive Summary**

The implementation roadmap charts out key focus areas for economic and social empowerment of women, such as:

- 1. Enhanced healthcare access and outcomes, with assured better nutrition through Ayurveda supplements & traditional dietary recipes.
- 2. Strong entrepreneurial support via incubators and self-help groups (like Sakhi Mandals) in every village.
- 3. Gender inclusive and responsive planning by encouraging corporates to build cohesive policies.
- 4. Increased participation of women and SHGs in local panchayats and urban level bodies.
- 5. Large scale gender sensitization, correcting the gender balance across institutions.

### ■ Thriving economy: Earning Well

### Industries of the future

Gujarat envisions to emerge as the growth engine for *Viksit Bharat*, aiming to fortify its leadership in manufacturing, high-value exports, while championing sustainability. The state aspires to elevate its industries and maintain largest share in India's goods exports, by driving strategic differentiation across identified sectors and fortifying position in global value chain.

The path to the envisioned future involves:

- 1. Anchor-investor led push for next-gen and focus sectors, such as Semiconductors, Green Hydrogen, EV and components, Aerospace and defense.
- 2. Green-led growth via clean energy generation (such as solar PV, wind), recycling, and cleantech sectors (such as Green Hydrogen, Carbon Capture, Utilization and Storage, Biofuels).
- 3. A vibrant support ecosystem for MSMEs.
- 4. Industry-academia collaboration to build an industry ready talent pool.
- 5. Streamlined governance for enhanced ease of doing business.

### Services of the future

Gujarat has potential to achieve a quantum leap in services, with a strong focus on new-age technologies. By emerging as a leading service provider to India and the world, Gujarat is envisioned to generate stronger, high-quality employment opportunities. The state is envisioned to strengthen its position in India's Services landscape with over 15% contribution in national Services GVA and 20% in number of SaaS startups. The state also aspires to emerge as a knowledge hub by elevating local universities to rank among the top universities, with at least 10 of those among global top 250.

The key priority is to develop a strong enabling ecosystem for global players to participate and invest, while fostering capability development, integrating latest technology and innovation, and building high-quality standards in line with global best in class.

Going ahead, the state aspires to achieve this through

- 1. Dedicated new sector-specific regional hubs, similar to GIFT City, enabling easy access to research, innovation and skilled workforce.
- 2. Active promotion of STEM courses across the state and refresh of curriculum with next-gen skills (such as AI/ML, blockchain).
- 3. Partnering with anchor investors/ players to accelerate the Services sector ecosystem.
- 4. New age working models to drive growth across Tier 2 and 3 cities and foster gender balanced workforce.

### **Gujarat as Tourism Hub**

Gujarat has the potential to emerge as a global tourism hotspot for diverse experiences, ensuring that "Khushboo Gujarat Ki" appeals to all tourist demographic groups and tastes. By 2047, Gujarat aims to be among the Top 3 destinations in India for both domestic and foreign tourists. Tourism is envisioned to act as one of the primary economy drivers in the state with over 12% GSVA share and over 15% contribution to India's tourism GVA.

The key focus areas include development of both human capital and infrastructure and launching of targeted campaigns to embed Gujarati culture and instill 'Atithi Devo Bhava' (Guest is God) philosophy in state's tourism.

The implementation roadmap involves various initiatives such as:

- Targeted destination development strategy around key anchor assets like Statue of Unity, Rann of Kutch, and Gir Somnath.
- 2. Geo-thematic circuits with top-notch infrastructure and connectivity.
- 3. Promotion of niche tourism offerings by leveraging existing strengths to offer diverse range of experiences, such as cruise, ecological, adventure, cinematic, wellness, and desert.
- 4. Real-time tech-integrated connectivity across key landing locations in Gujarat
- 5. Personalized end-to-end tourist experiences by leveraging Aatitihyam dashboard data.
- 6. Technology enabled interactive tourism experiences.

### Agriculture, Irrigation, & Rural development: Farmers & village prosperity

Gujarat aspires to transform its rural landscape to ensure prosperity and standard of living at par with urban areas. Rural Gujarat aims for universal access to essential amenities and pushing the Multidimensional Poverty Index below 1%. Moreover, the rural workforce is envisioned to have expanded freedom of career choices and access to opportunities for diverse employment beyond core agriculture. Simultaneously, the state envisions a globally competitive and sustainable agriculture economy, guaranteeing continued food and nutrition security of its population, and multiplying the farmer incomes. Gujarat is committed to adopting sustainable agricultural practices, with a target of over 25% of land under natural farming. Additionally, the state aims to strengthen water security, ensuring irrigation for rising agricultural requirements and potable drinking water for its needs.

To achieve these aspirations, the state would focus on priority areas across the three sub-themes:

- 1. Agriculture and allied sectors: Focus on high productivity, diversified clusters, especially for horticulture, dairy and inland fisheries; best-in-class technology with smart farm machinery, drones, etc. and R&D on seeds and inputs; robust market linkages driving high value exports; push for FPOs and cooperatives to activate large-scale farming; assured irrigation with expanded micro irrigation, water conservation practices, and high water use efficiency; building a sustainable agriculture ecosystem.
- 2. Non-farm sectors: Focus on skill development, credit access, technology integration, product offtake ecosystem, global branding and social well-being.
- 3. Rural infrastructure: To drive high standard of living via cluster-based approach for social infrastructure, coupled with a seamless mobility.

# **Executive Summary**

### Key enablers

### City agglomerations as vibrant socio-economic epicenters

With estimated 70% urban population by 2047, Gujarat envisions to transform its cities into globally competitive, livable, and sustainable urban centers by 2047. The state aspires to have at least ten city agglomerations contributing over \$50 Bn GDP each, with three over \$250 Bn and two over \$500 Bn. Economic growth will be accompanied with high livability profile with at least two city agglomerations recognized in the top 100 of the EIU Global Liveability Index.

The key focus areas include:

- 1. Long term economic vision and planning for each major agglomeration.
- 2. Hyperlocal neighborhoods, extensive mobility and social infrastructure to establish easy access to essential amenities.
- 3. Best in class sustainability-driven infrastructure and services, such as green transport, efficient buildings, retrofit disaster resilient infrastructure, disaster management and emergency response services.
- 4. Self-sufficient urban governing bodies by leveraging digital avenues to establish alternate monetizing mechanisms.

### **Transport and Logistics Infrastructure**

Gujarat will continue to bolster itself as a key International Maritime hub and India's logistics gateway to the Middle East and Europe. This vision is centered on the development of reliable, timely and sustainable multimodal transport systems, prioritizing the establishment of top-tier, inclusive public infrastructure preferred by citizens. Gujarat will strengthen its position as the leading port state in India, with share in cargo handled at over 50%, and at least 2 ports among global top 50. The state vows for zero tolerance for fatalities through accidents.

The infrastructure roadmap focuses on

- 1. Logistic clusters around integrated port cities and free trade zones in the state.
- 2. Emerging ecosystems around air freight hubs, ship repair, building & recycling, and MRO facilities.
- 3. Dedicated road network (expressway, highway airstrips) across tourist & economic hubs, mass transit systems like metro rail, BRT, across all major cities.
- 4. Transformation of existing infrastructure to best-in-class globally, such as ports into multi-terminal mega ports and transshipment ports.
- 5. Technology integration via a smart mobility system and unified logistic platform.

### Governance 2.0: Reform, Perform and Transform

Viksit Gujarat@2047 is envisioned to serve as a beacon of people-centric, proactive, responsive, and accountable governance, and to set standards for others to emulate. The governance of Viksit Gujarat will be marked by even stronger citizen centricity at the forefront of state decision making, affordable, transparent, and inclusive service delivery, strengthened and empowered local institutions, and a collaborative ecosystem.

The emphasis will be on:

- 1. Digital and Data-led governance via establishment of a one-stop Digital services portal, with human intervention limited to exceptional cases.
- 2. Capability and competency building in state departments, including new skills needed within government.
- 3. Outcome-Oriented Framework for assured transparency and accountability.
- 4. Institutionalize legal reforms with robust law enforcement to decrease litigation and court backlog.

# 01

# Vision and Macro-Strategy



### ■ Vision and Macro-Strategy

### 1.1.1 Background

Hon'ble Prime Minister has given a coveted vision of *Viksit Bharat*@2047, i.e., making India a developed country by 2047. It calls for greater efforts from every citizen of the country in the coming 25 years, known as "Amrit Kaal". This vision mainly encompasses- attaining new heights of prosperity, making the best facilities available both in the villages and the cities, eliminating unnecessary interference by the Government in the lives of citizens, and building the world's most modern infrastructure. Gujarat has been the country's fastest growing major economy having a substantial share of 8.3% to national GDP and determined to make its best contribution towards achieving the vision of *Viksit Bharat*@2047.

### 1.1.2 Gujarat's inherent strengths and current standing

Gujarat is known as an industrially developed state in the country. The state has achieved a tremendous economic growth through port-led development. Further, Gujarat has a series of inherent strengths which can be leveraged to build a successful future. In terms of geographical strengths, the state has the longest coastline in the country and a strategic location, with potential to become even stronger as India's gateway to Middle East, Africa and Europe, and with vast Indian hinterland. Among cultural strengths, the vibrant Gujarati heritage has a harmonious blend of diverse set of arts, festivals, traditions, and an inherent entrepreneurial culture. Besides, the state has a leading 20-25% share in Indian diaspora which maintains strong links with homeland w.r.t. business, remittance, philanthropy, etc.

Over the last two decades, Gujarat has taken significant strides towards socio-economic prosperity with key achievements, as mentioned below:

\$3,728 per	18% share in	33% share in	~70%	Ranked 1st in	Ranked 1st in
capita income	India's total	total exports,	reduction	SDG 3, i.e.,	NITI Aayog's
(GSDP), over	industrial	highest	in Maternal	Good Health	Good
50% higher	production,	among all	Mortality Rate	and Well-being,	Governance
than the	highest among	states	from 2001	as per latest	Index. <sup>5</sup>
national per	all states	(Nov 2023). <sup>3</sup>	to 2020.4	SDG India	
capita average	(FY20). <sup>2</sup>			Index 3.0, NITI	
(FY22). <sup>1</sup>				Aayog	
				2020-21.5	

Leveraging its varied strengths and the continuous progress, Gujarat is ready to set itself on an inspirational path of sustainable and inclusive growth towards *Viksit Gujarat@2047*, thereby driving the nation towards *Viksit Bharat@2047*. Going forward, Gujarat will transform itself into a developed state that will be seen as a role model not just for India, but for the entire world.

<sup>1.</sup> State-wise GDP, Ministry of Statistics and Program Implementation 2021-22; 2. Annual Survey of Industries 2019-20; 3. Ministry of Commerce and Industry, Government of India; 4. Socio-Economic Review 2022-23, Government of Gujarat; 5. NITI Aayog, Government of India.



# A future where every citizen in Gujarat will be



...within the fabric of a "valued" and "valuable" society



### 1.1.3 Viksit Gujarat: What Gujarat has envisioned to be in 2047

Living Well: In Viksit Gujarat@2047, every citizen of Gujarat will have...

state of Gujarat.

- Equitable access to clean environment, breathable air, adequate sanitation, safe drinking water and 24x7 electricity.
   A Sustainable society to live in, with net-zero achievement by 2047.
   High quality healthcare coverage for lifetime, ensuring a well-nourished and healthy life for all.
   Universal access to multidisciplinary education and vocational skilling, led by Phygital approach to teaching, including connected schools, AR/VR in delivery and assessments, etc.
   Access to high-speed, on-time and safe transport infrastructure, enhancing proximity with quality social facilities like schools, hospitals and sports centers.
- Access to more transparent, accountable and efficient government services, along with end-to-end e-governance platforms powered by latest technologies such as AI.

An inclusive and value-based society where each citizen is a strong contributor and proud resident of



**Earning Well:** In addition to ensuring social development for every citizen, *Viksit Gujarat*@2047 will be a developed economy with **over** \$3.5 Tn GSDP exhibited by the following:

- Multi-sectoral employability aided by world-class skilling ecosystem, with access to meaningful employment as per each person's ambition, driving per capita income (GSDP) to \$38,000-43,000.
- Leading share in global industrial economy led by higher contribution from emerging high-value-added sectors such as Semiconductors, Automotive, Aerospace and Renewable Energy.
- Quantum leap in Services sector with Gujarat being recognized as a hub for areas such as knowledge economy, tourism and financial services.
- Diverse livelihood opportunities with increasing involvement of rural workforce in non-farm sectors, driving multi-fold increase in rural household incomes.
- Continued port-led development, making Gujarat as one of the global trade hotspots and a key node of the India Middle East Europe Economic Corridor.
- Vibrant economic hubs featuring leading brownfield and greenfield cities such as Dholera, GIFT City,
   DREAM City and new port-led cities, well-connected with upstream and downstream supply chain centres.



### Gujarat@2047 at a glance

Every citizen Living and Earning Well will lead to a significant shift in Gujarat's demographic, social and economic profile, with key indicators as mentioned below:

# Demographic Profile

### 8-9 cr

population with expected peak in 2035 (7.2 cr in 2023)<sup>1</sup>

### 38-40 years

median age (from 29-30 in 2021)<sup>1</sup>

### >84 years

life expectancy (70.5 in 2016-2020)<sup>2</sup>

### ~70%

urban population (49% in 2023)¹

### Social Profile

### <0.01

Multidimensional Poverty
Index (0.05 for 2019-2021)<sup>3</sup>

### >65%

GER in higher education (22% in 2021)<sup>5</sup>

### >75%

female labor force participation rate (42.3% in 2022-2023)<sup>4</sup>

### <50

AQI in all major cities

### Economic Profile

### >\$3.5 Tn

State GSDP (nominal) (\$259 Bn in 2021-2022)<sup>6</sup>

### <1%

unemployment rate (1.7% in 2022-2023)<sup>7</sup>

### \$38,000-43,000

per capita income (GSDP) (\$3,728 in 2021-2022)<sup>6</sup>

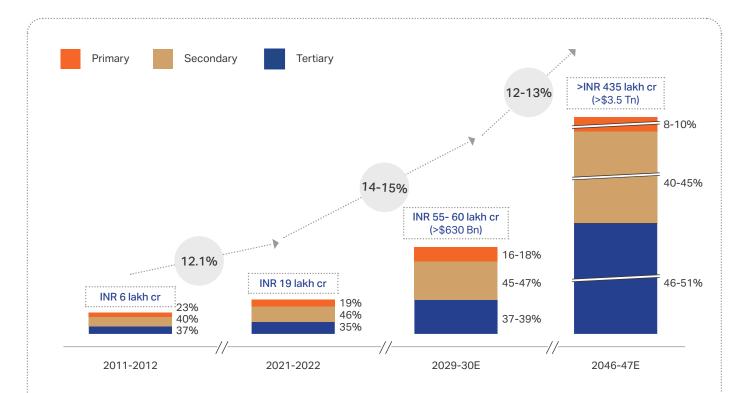
### >90%

power consumption in industries from green sources (32% in 2022)8

<sup>1.</sup> Population projections for India and States 2011-2036, Ministry of Health and Family Welfare 2020; 2. SRS Based Abridged Life Tables, Ministry of Home Affairs 2016-2020; 3. National Multidimensional Poverty Index, Niti Aayog 2023; 4. According to usual status (ps+ss) – Age group 15 years and above, Periodic Labor Force Survey 2022-2023, Ministry of Statistics and Program Implementation; 5. AISHE Report, 2020-2021; 6. State-wise GDP, MoSPI 2021-2022; 7. Periodic Labor Force Survey 2022-2023, MoSPI; 8. Climate Change Department, Government of Gujarat.

With an aspiration to become a \$3.5 Tn economy, Gujarat is expected to grow at 14-15% CAGR by 2030 and further at 12-13% CAGR till 2047. Over time, as nominal growth rate declines and inflation reduces, Gujarat's real growth rate is expected to persist, facilitating its transition to a developed economy.

Exhibit 1: Projected sectoral share in state GDP for Viksit Gujarat@2047



Sector	CAGR 2016-2022	CAGR 2022-2030	CAGR 2030-2047	Key growth vectors
Primary (Agri & Mining)	10.3%	10-13%	7-9%	Allied Agriculture sectors, including Horticulture & Fisheries.
Secondary (Industries)	13.6%	13-15%	11-13%	High-value added sectors such as Semiconductors, Automotive and Aerospace.
Tertiary (Services)	11.5%	14-16%	13-15%	Knowledge economy, diversified Tourism, IT/ITeS and Financial services.
Overall	12.1%	14-15%	12-13%	-

Sectoral share is originally computed as a share of GVA, which is around 87-88% of GDP. Here, the shares are rescaled to make it add up to 100% of GDP.

 $Source: Industrial \, Development \, \& \, Economic \, Growth \, in \, Gujarat, \, IBEF; \, State-wise \, GDP, \, Ministry \, of \, Statistics \, and \, Program \, Implementation. \, Government \, Of \, India.$ 

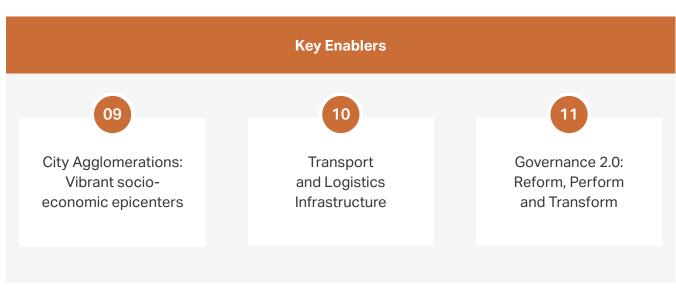
### 1.1.4 Thematic framework for Viksit Gujarat@2047

To achieve the above-mentioned vision for *Viksit Gujarat*@2047, a guiding framework comprising of 11 overarching themes across 3 key areas has been developed, as depicted below:

Exhibit 2: Thematic framework for Viksit Gujarat@2047







Sustainability and Technology to be core thrust areas across themes

# **Empowered citizens: Living Well**

2.1

Healthcare and Nutrition for all



### Healthcare and Nutrition for all

### 2.1.1 Context

Significant strides have been made by Gujarat through various initiatives to improve the availability and affordability of healthcare services leading to noteworthy improvements in health outcomes. The state government has taken proactive measures to elevate nutritional and health status of people living in Gujarat.

### Key trends shaping the sector

### Increase in the ageing population

Increasing ageing population across the world and in India necessitate proactive healthcare planning for the elderly with preventive and integrated care model.

### **Technological advancements**

The landscape is continuously evolving with rapid technological advancements such as genome testing, telemedicine, personalized medicine, AR and VR for training, etc.

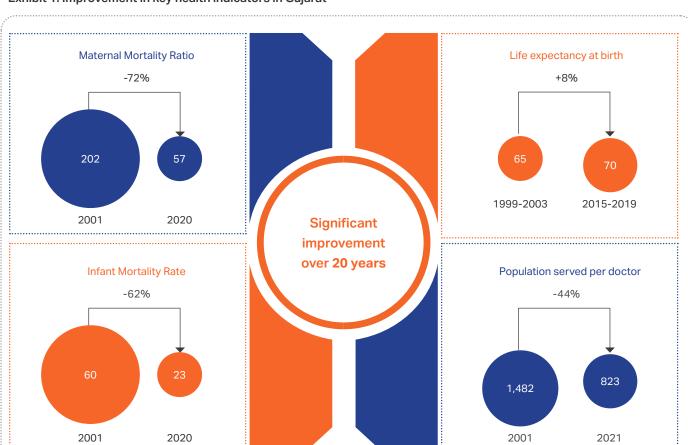


Exhibit 1: Improvement in key health indicators in Gujarat<sup>1</sup>

1. Gujarat State Socio-Economic Review 2022-2023, Directorate of Economics and Statistics, Government of Gujarat.

Gujarat has implemented pivotal policy measures and specific initiatives, across critical domains, including the following:

#### **Extensive Healthcare Network**

In Gujarat, 9,900¹ Health and Wellness Centers, operational under Ayushman Bharat, are delivering primary healthcare services at the doorstep. The Swasthya Nidhi program aims to further enhance healthcare infrastructure by establishing and upgrading medical colleges, district hospitals, and community health centers.

### Telemedicine and "Hub and Spoke" Model

To enhance accessibility, Gujarat has adopted telemedicine model, utilizing Health and Wellness Centers as spokes to extend services to remote areas. Gujarat's 'One Dialysis' program has established high-quality dialysis centers in every taluka, following a hub-and-spoke model.

#### Maternal and Child Health & Nutrition Initiatives

Aligned with national priorities, Gujarat has implemented key initiatives such as Janani Suraksha Yojana, Pradhan Mantri Surakshit Matritva Abhiyan and Bal Sakha-3, emphasizing maternal and child health. Gujarat addresses child malnutrition through initiatives like *Kuposhan Mukt* Gujarat Maha Abhiyan, PM POSHAN (MDM), Doodh Sanjivani Yojana and use of *Poshak*– double fortified salt.

### **Ayushman Bharat PM-JAY**

As part of the world's largest health assurance scheme, Gujarat covers approximately 72.22 lakh families, with over 58 lakh individuals benefiting from claims exceeding INR 11,386 crore<sup>1</sup>. Under PMJAY- Mukhyamantri Amrutam, Gujarat has provided crucial medical services, including organ transplantations, joint replacements, cancer treatments, and surgical procedures.

### **Mental Health Initiative**

The state initiated the Gujarat Digital Academy for Mental Health, emphasizing mental healthcare in collaboration with National Institute of Mental Health and Neurosciences, Bengaluru.

### **AYUSH Mainstreaming**

Gujarat leads in mainstreaming AYUSH, with medical officers at Primary Healthcare Centers (PHCs) and Rashtriya Bal Swasthya Karyakram (RBSK) teams and AYUSH Health & Wellness Centers. State houses 36 Ayurved colleges, 45 Homoeopathic colleges and WHO Global Centre for Traditional Medicine<sup>1</sup>.

Despite significant improvements in health outcomes, there are areas of further improvement.

Women & child health and nutrition outcomes: Malnutrition remains a significant challenge among children (under 5 year) with 39% being stunted, 40% underweight and 25% wasted (vs. national average of 19.3%)<sup>2</sup>. In addition, 65% of women (aged 15-49) are anaemic<sup>3</sup>.

Prevalence of Non-communicable diseases (NCDs): Gujarat's proportion of total disease burden from NCDs is  $56.7\%^4$ . As per NFHS-5 survey, in Gujarat, 22.6% female and 19.9% male are obese (BMI  $\geq$ 25.0 kg/m²), and 43.5% female and 40.9% male have high risk waist-hip ratio. Cancer cases are also on the rise—with an estimated incidence of 73,382 cases in Gujarat in 2022<sup>5</sup>.

Need for strengthening workforce and infrastructure: Gujarat has around 12 doctors per 10,000 population (vs ~20 in middle income countries and ~40 in higher income countries). Around 34.2% of PHCs function 24x7 in rural areas, and there was about 52% shortfall in number of urban PHCs as per mid-year population data from July 2021<sup>6</sup>. District hospitals have around 19 beds per 100,000 population, lower than other states such as Karnataka (33), Kerala (22), and Odisha (22)<sup>7</sup>.

Rising ageing population: By 2046 the population size of the elderly in India will be higher than the population size of children aged 0–14 years. In Gujarat too, the share of the elderly population is projected to increase to 15.4% (in 2036) from 10% (in 2021)<sup>8</sup>, rising further by 2047. Specific care networks would be required to cater to this rising segment.



2. NFHS-5, 2019-2021; 3. Press Information Bureau, 'Anaemia Mukt Bharat' (Release ID: 1795421); 4. India: Health of the Nation's States — The India State-Level Disease Burden Initiative: ICMR, PHFI, and IHME, 2017; 5. Answer to Rajya Sabha Question no. 1555, Ministry of Health and Family Welfare, Government of India (dt. 20.12.2022); 6. Rural Health Statistics, 2021-2022, MoHFW, GoI; 7. Best Practices in the Performance of District Hospitals. NITI Aayog (2021); 8. India Ageing Report 2023, United Nations Population Fund (UNFPA) and International Institute of Population Sciences (IIPS).

Exhibit 2: Rising elderly population in Gujarat<sup>1</sup>



<sup>1.</sup> Population Projections for India and States 2011-2036, Ministry of Health and Family Welfare, Government of India.

### 2.1.2 Vision for 2047

By 2047, Gujarat envisions healthy and productive citizens, empowered by quality nutrition and affordable access to world class multi-disciplinary health facilities. Health sector of Gujarat would not just serve the citizens, but also be a hub for medical tourism as well as global delivery of health services.

# Wision Shift from illness to wellness with enhanced accessibility to affordable world-class healthcare for lifetime. Nutrition as a cornerstone of well-being: Nurturing a healthy Gujarat. Access to affordable healthcare: 100% Universal Health Coverage (UHC). Empowered and skilled healthcare workforce: >30 doctors, >100 nurses and midwives per 10,000 population. Gujarat leading the way in holistic multi-disciplinary healthcare: Driving India's elevation in AYUSH.

### 2.1.3 Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

	Metrics	Current status	Target (2030)	Target (2047)	Benchmarks / References
Overall health outcomes	Life expectancy (years)	70.5 <sup>1</sup>	>77	>84	83.6 (Japan, Australia, Norway)²
Wellness,	Maternal Mortality Ratio (per lakh live births)	57³	<40	<5	3 (Norway, Spain), 4 (Japan Germany) <sup>4</sup>
prevention and primary care	Infant Mortality Rate (per 1000 live births)	23 <sup>3</sup>	<8	<2	2 (Germany, Japan, Norway) <sup>©</sup>
Strengthened Quality of care	%age OOPE (as %age of THE)	40.8% <sup>6</sup>	<15%	<8%	USA (9.9%), France (8.9%), South Africa (5.4%) <sup>7</sup>
Empowered health workforce	Doctors per 10,000 population	~12 <sup>11</sup>	>15	>30	39 (HIC - UK, Germany Australia) <sup>8</sup> 17 (MIC - Thailand, Malaysia, Brazil) <sup>8</sup>
	Nurses and midwives per 10,000 population	~1511	>40	>100	120 (HIC - UK, Germany Australia) <sup>9</sup> 40 (MIC - Thailand, Malaysia, Brazil) <sup>9</sup>
AYUSH for India & World	No. of AYUSH professionals	~50,00010	-	>2.5L	-

Note: OOPE – Out of Pocket Expenditure, THE – Total Health Expenditure; HIC – High income countries; MIC-Middle income countries.

1. SRS Based Abridged Life Tables, Ministry of Home Affairs 2016-2020; 2. WHO, Global Health Observatory, 'Life Expectancy at Birth', 2020; 3. Sample Registration System (SRS) Bulletin (2018 & 2019) and SRS (2018-2020), Registrar General of India; 4. World Bank Data, 'Maternal mortality ratio (modeled estimate, per 100,000 live births)', 2020; 5. WHO, Global Health Observatory, 'IMR per 1,00,000 live Births', 2021; 6. National Health Accounts 2019-2020; 7. World Bank Data, 'Out-of-pocket expenditure (% of current health expenditure)',2020; 8. WHO Global Health Repository, 2020, Doctors per 10,000 persons; 9. WHO, Global Health Observatory, 2020, 'Nursing and midwifery personnel (per 10 000 population); 10. Ministry of AYUSH, Government of India; 11. Socio-Economic Review (Gujarat state), 2022-2023.

### 2.1.4 Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

Prioritizing wellness, preventive and primary care Ensuring universal access to essential healthcare services

Revitalizing the healthcare workforce through transformative measures Leading the way for India's elevation in AYUSH



Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:

#### Exhibit 3: Roadmap 2023-2047: Key interventions and strategic reforms



Short term interventions to achieve 2030 goals and activate blueprint for 2047

Long term interventions for 2030-2047

#### Wellness, Preventive and Primary care

- Focused efforts in bridging nutritional gap (constitution of 'Health and Nutrition Mission', enhanced Community-based Management of Acute Malnutrition (CMAM), etc.)
- Prioritize and mainstream mental health through school based mental health awareness programs and meantal health training of PHC and HWC professionals.
- Institutionalize diagnosis & screening (such as mandatory sickle cell screening for each child delivery in tribal areas etc.)
- Drive at-home selfcare and wellness to reduce incidences and burden on primary care systems.
- Holistic physical and mental health curricula in primary and secondary schools.

#### Universal access to essential healthcare

- Ensure universal health coverage and reduce OOPE through saturation of eligible households across key state and national schemes, middle-class health security plan, etc.
- Ensure enhanced access for all (such as functional special new-born care units and newborn stabilization unit facility in every taluka, conversion of all SCs and PHCs into AB-HWCs, etc.)
- Establish elderly care network (e.g., multilevel elderly care service system including institutions, communities, and families, better geriatric care facilities).
- Digital health records and paperless administration to enhance efficiency, minimizing paperwork and improved accessibility.
- World class facilities across the state (e.g., premier quality healthcare within 20 minutes radius for primary, 60 minutes for secondary for all towns and villages).

#### Health workforce transformation

- Adequate human capital in all public healthcare institutions (e.g., distributed specialist allocation, diversified routes for career develop, etc.)
- Establish a premier center for healthcare workforce development and pandemic preparedness (e.g., estimation of human capital gaps).
- Build an advanced tech-empowered healthcare workforce (train healthcare professionals in advanced technologies and new age skills).
- Establish Health hubs in all major cities, leveraging PPP.
- Performance-Linked incentives for healthcare professionals.

#### Driving India's elevation in AYUSH

- Mainstream AYUSH practices
- Drive higher research and innovation in AYUSH (e.g., AYUSH research grants, promotion of locally available herbs, at least 3 'Yoga Centres of Excellence' across the state, etc.)
- Establish Gujarat as hub for AYUSH.

# **Empowered citizens: Living Well**

2.2

Human capital: Education and Skilling



# Human capital: Education and Skilling

#### 2.2.1 Context

Education is a key driver of economic growth and societal advancement, empowering individuals with essential skills for decision-making and critical thinking. It provides access to better opportunities, improving living standards and narrowing socio-economic disparities. Additionally, education fosters cultural understanding and tolerance, preparing individuals to adapt and innovate in a rapidly evolving global scenario. The knowledge base formed by education, is further expanded upon through skilling and vocational training which equips individuals with the ability to adapt to evolving life challenges and opportunities, promoting personal growth and career progression.

#### Key trends shaping the sector

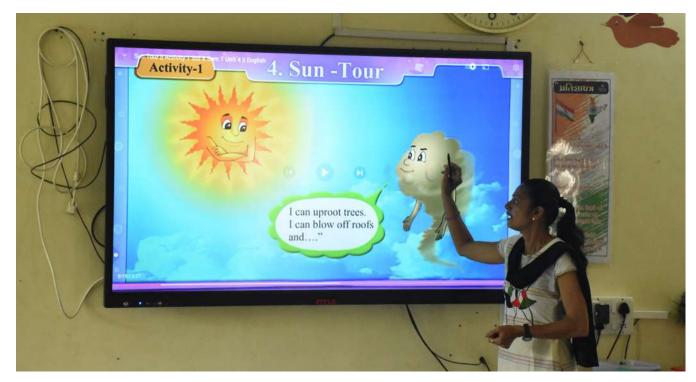
#### Rising talent shortage worldwide

Countries across the world have started to face shortage of skilled human capital which is expected to rise significantly. India could play a vital role to bridge this gap.

#### Al assisted learning

The integration of Digital Technologies, Data, and Al in education is revolutionizing learning worldwide, including in India. These technologies enable personalized learning experiences and immersive learning through tools like Al tutors and virtual reality applications.

Gujarat has a robust educational framework, ranking 6th in NITI Aayog's School Education Quality Index. This foundation in education and skilling can be explored through the following key dimensions.



#### **Strong Foundation in Elementary Education**

Approximately 8.5 Mn¹ children are currently enrolled at the elementary level, with a Gross Enrollment Ratio (GER) already near 100%.

#### **Rising Secondary Education**

Continuously increasing level of enrollment at secondary and senior secondary education levels with around 2.9 Mn¹ students currently enrolled.

#### **Expanding Higher Education**

The higher education sector currently enrolls about 1.6 Mn<sup>2</sup> students across more than 80 universities and 2200 colleges.

#### **Dynamic Skilling Ecosystem**

The skilling ecosystem in Gujarat caters to up-skilling and re-skilling needs of a rising working-age population.

Gujarat has implemented key schemes and strategic initiatives to further strengthen and boost its education and skilling sectors, focusing on the following key areas:

#### **Educational Infrastructure and Access**

The 'Mission Schools of Excellence' focuses on upgrading school facilities and infrastructure. Initiatives such as 'Model Schools' specifically aim to bring education to underprivileged and remote areas, ensuring broader access to quality learning. In addition, since 2019, Gujarat has been operating first of its kind, Vidya Samiksha Kendra for data driven decision making in the sector.

#### **Entrepreneurship and Placement Support**

Policies and schemes such as Student Startup and Innovation Policy (SSIP) 2.0 and IMPACT Scheme (Integrated Module of Placement, Apprenticeship and Training) have a key role in Gujarat being ranked No.1 in the startup performance ranking in the country<sup>3</sup>.

#### Initiatives related to the Implementation of NEP 2020 in Higher Education

Gujarat Public Universities Act 2023, SOP for NEP 2020, Common Curriculum and Credit Framework are key initiatives towards implementation of NEP in the state.

#### **Skill Enhancement**

In 2020, the Industries and Mines Department of Gujarat launched the 'Scheme for Enhancement of Technical Competence and Manpower. The 'Mukhyamantri Bhavishya Lakshi Kaushal Vikas Yojana' aims to create a skilled workforce with new age skills across various sectors. To advance training in emerging technologies, Gujarat is developing 41 Nodal ITIs<sup>4</sup> as Mega ITIs. In addition, Project Sankalp aims to foster a mutually beneficial ecosystem, encouraging partnerships between industry associations, industries, and GSDM for demand-based skill development programs in both manufacturing and service sectors.

<sup>1.</sup> Unified District Information System for Education Plus (UDISE+), 2021-2022; 2. All India Survey on Higher Education (AISHE), 2020-2021; 3. States Startup Ranking 2021, DPIIT, Government of India; 4. Labour, Skill Development and Employment Department, Government of Gujarat.

#### **Industry Collaboration and Technical Education**

The establishment of Centers of Excellence, in collaboration with global companies, focuses on high-demand sectors such as 5G and automation. The MERITE Program specifically targets the enhancement of technical education, aligning it more closely with industry requirements and increasing the employability of graduates.

While existing policies and interventions have driven notable growth in education and skilling, the state aspires to maximize its potential by emphasizing on the following key areas:

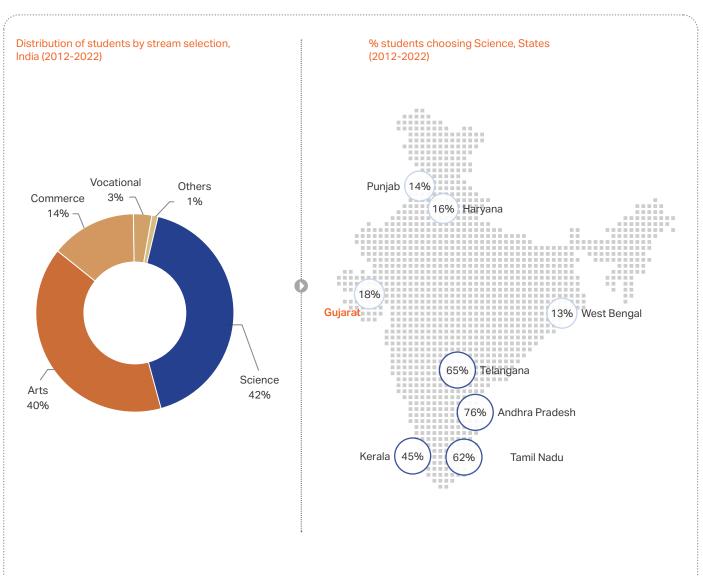
#### **Boosting Learning Outcomes**

The state shall continue to focus on enhancing learning outcomes at various educational stages, as measured in the National Achievement Survey.

#### Increase enrollment in STEM programs

In the last 10 years, 18% of students have chosen Science post grade 10th, compared to 42% in India. Focus shall be on increasing this share of students choosing STEM programs.

Exhibit 1: Stream Selection post 10th grade in India1



1. Study by Ministry of Education, Government of India through PARAKH (Performance Assessment, Review and Analysis).

#### Closing the inclusivity gap

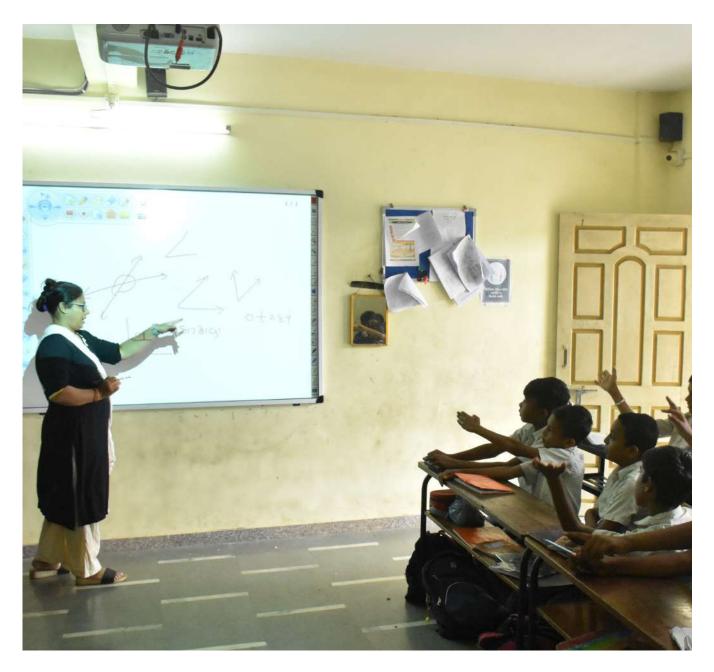
To tackle disparities in educational opportunities, focus shall be on improving the gender parity index, which is currently 0.87 in higher education<sup>5</sup>. The Gross Enrollment Ratio for STs in higher education stands at 18%, compared to the state average of 22%, highlighting the need for targeted initiatives for the vulnerable sections<sup>5</sup>.

#### **Expanding Vocational Training Access and Quality**

With only 3% of the population aged 15 years and above engaged in formal vocational training<sup>6</sup>, Gujarat shall focus on mainstreaming vocational training, creating flexible entry and exit opportunities, etc.

#### Focus on adequate teacher quantity and quality

About 35% of schools have a pupil-teacher ratio less than 30 in the state<sup>6</sup>. The focus shall be on enhancing the quantity and quality of teachers across the stages of formal and informal learning.



5. AISHE Report, 2020-2021; 6. Sarva Shiksha Abhiyan, Education Department, Government of Gujarat, 2021-2022

#### 2.2.2 Vision for 2047

By 2047, Gujarat envisions to emerge as one of the global suppliers of human capital, well equipped with necessary skills.

#### **Education & Skilling@2047**

Vision

Gujarat as a global hub for human capital, and home of world-class educational institutions and skill development centers.

A knowledge driven society: Significantly reduced education and skill disparity (100% literacy rate, 0% drop out rate in school education across all communities).

**Industry-relevant higher education and skilling ecosystem,** with multiple pathways and focus on vocational education.

Innovation driven education and skilling ecosystem: >5% of patents filed in India (vs 1.6% today).

A culture of research in higher education: Significantly higher number of citations by faculties in universities.

**Enabler to value driven society:** Nurturing empathetic and respectful citizens with high integrity and an understanding of the nation's and state's history, culture and heritage.



## 2.2.3 Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

	Metrics	Current status	Target (2030)	Target (2047)	Benchmarks / References
School education	GER (secondary) <sup>1</sup>	79%	>85%	100%	US (100%), Japan (100%)²
	Literacy rate <sup>3</sup>	78%	>90%	100%	Japan (99%), Sri Lanka (92%) <sup>4</sup>
	% schools with pupil teacher ratio < 30¹	65%	>80%	100%	-
	Dropout rates – upper primary⁵	1.5%	0%	-	-
	Dropout rates – secondary <sup>5</sup>	5%	0%	-	-
	GER (tertiary) <sup>6</sup>	22%	>40%	>65%	US (85%), UK (77%), Japan (65%) <sup>2</sup>
	GER (tertiary) – ST <sup>6</sup>	18%	>40%	>65%	-
Higher education	Gender parity index <sup>6</sup>	0.87	1	-	India: 1.05 <sup>6</sup>
	Average number of enrollments per institution <sup>6</sup>	526	-	1500	Brazil (~3000) <sup>10</sup> , USA (~3600) <sup>11</sup>
	% of patents filed in India <sup>7</sup>	1.6%	-	>5%	Tamil Nadu (8%)
Skilling ecosystem	% age 15-59 population with formal vocational / technical training <sup>8</sup>	~3%	>15%	>50%	% workforce with formal training: South Korea (96), Japan (80), UK (68), USA (52) <sup>9</sup>
	Vocational gross enrolment ratio (as % of enrolment in higher secondary)	-	-	>50%	South Korea, China, Singapore (25-35%) Netherlands, Germany (45%+%) <sup>10</sup>
	Vocational gross enrolment ratio (as % of enrolment-tertiary)	-	-	>50%	-

<sup>1.</sup> UDISE+, 2021-2022; 2. World Bank; 3. Census 2011; 4. UNESCO; 5. School Education Department, Gujarat; 6. AISHE, 2020-2021; 7. Intellectual Property India Annual report, 2021-2022, Ministry of Commerce and Industry Department,  $Government \ of \ India; 8.\ NSDC-Estimating \ the \ skill \ stock \ in \ Gujarat, \ 2019-2020; 9.\ National \ Skill \ Development \ Mission-A \ Framework \ Mission-A \ Mission-A \ Framework \ Mission-A \ Mis$ for implementation, MSDE; 10. OECD; 11. National Center for Education Statistics, USA.

### 2.2.4 Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

Prioritizing improving school education outcomes

Reimagining higher education with higher quality, industry integration and innovation

Revamping the skilling ecosystem with evolving needs towards 2047



Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:

#### Exhibit 2: Roadmap 2023–2047: Key interventions and strategic reforms



Short term interventions to achieve 2030 goals and activate blueprint for 2047

Long term interventions for 2030-2047

#### Improving school education outcomes

- Ensure adequate teacher quantity and quality through pre-service reforms, annual need based in-service trainings, etc.
- Revamp school education delivery structure through consolidation of schools leveraging GIS mapping under Samagra Shiksha, secondary school footprint expansion, etc.
- Integrate early child education and focus on Foundational Literacy & Numeracy outcomes under NIPUN Bharat.
- Enable holistic and inclusive education for all (e.g., tribal culture in education, sign language curriculum, gender sensitization, focus on life skills, etc.)
- Promote English education curriculum across school education to build human capital for the emerging priorities of Gujarat (e.g. at least 1 English medium government school in each taluka).
- Teachers' excellence (e.g., 100% teachers for academic and vocational teaching, lifelong blended in-service teacher professional development).
- Best-in-class infrastructure and skilled capacity at state institutions such as GCERT, DIETs, etc.
- Technology led transformation with phy-gital systems, connected schools, use of AR/VR in delivery and assessments, etc.

#### Reimagining higher education.

- Focus on enhancing quality and ranking of institutes (e.g., significantly higher participation in NIRF, consolidate unaccredited sub-scale colleges, strengthen faculty capacity, etc.)
- Prioritize employability and industry-integration (e.g., vocational GER to account for about 40% of GER, mandate employment-related comm. / soft skills, contextualize curricula to industry needs).
- Promote establishing incubation and accelerators / pre incubation systems in all major HEIs.
- Increase inclusivity in higher education (e.g., scholarship programs especially for STEM, safe campus environment, customized skill development programs for women, inclusive infrastructure, etc.)
- Strengthen autonomy and flexibility while maintaining accountability of higher education institutions
- Enhance financing through private and public expenditure (e.g., education bonds, cost recovery / internal resource generation in select universities, PPPs. etc.)

- Develop innovative financing mechanisms (e.g., customized scholarships, loans and funding based on financial background and future earning potential of students, etc.)
- Best-in-class academic, industrial partnerships to enable teaching, research & innovation basis local economy needs.
- Establish knowledge economy hubs through PPP models.
- Phy-gital systems, connected universities, use of AR/VR in delivery and assessments.

#### Revamping skilling ecosystem .

- Integration of skilling in education system with mainstreaming of vocational training (flexible entry and exit, age-appropriate compulsory vocational training, etc.)
- Establish academic and industrial partnerships to enable curation and delivery in sync with evolving industry needs (e.g., industry involvement in standards, curricula, certifying trainers, assessments, etc.)
- Establish at least 1 world class skill university with multiple functions (e.g., skill mapping, designing curricula for entrepreneurship skills, etc.)
- Establish funding and financing support for the skilling ecosystem (streamline schemes; catalyze private capital, international aid, etc)

- Best-in-class skill focused institutions with deep industry integration (e.g., ITI CoEs, design & delivery of programs by industry, etc.)
- Best-in class programs responding to global needs & partnerships etc. and drive easy access to institutes by global students.
- Well-developed skill financing ecosystem with support to all students through different means (loans, scholarships, innovative financing instruments, etc.)



# **Empowered citizens: Living Well**

2.3

Art, Culture and Sports



# Art, Culture and Sports

#### 2.3.1 Context

Gujarat, a state known for its rich diversity, has a history that spans from the ancient Harappan Civilization through various significant historical eras. This long journey, from ancient roots to modern achievements, is marked by a timeless tapestry of historical and cultural traditions that highlight the state's glory. Known for its vibrant contributions to India's cultural landscape, Gujarat is a kaleidoscope of art, architecture, culture, and heritage. These elements are not just relics of the past but are vibrantly integrated into the everyday lives of its people, showcasing a living, breathing cultural legacy.

#### Key trends shaping the sector

#### Immersive experiences

Virtual and Augmented Reality Heritage experiences offering immersive, interactive tours of historical sites and cultures.

#### Rise of hyperlocal and micro-cultures

Digital Connectivity has led to a growing emphasis on community identity fostering the preservation of culture and heritage along with the revival of local languages, customs and traditions.

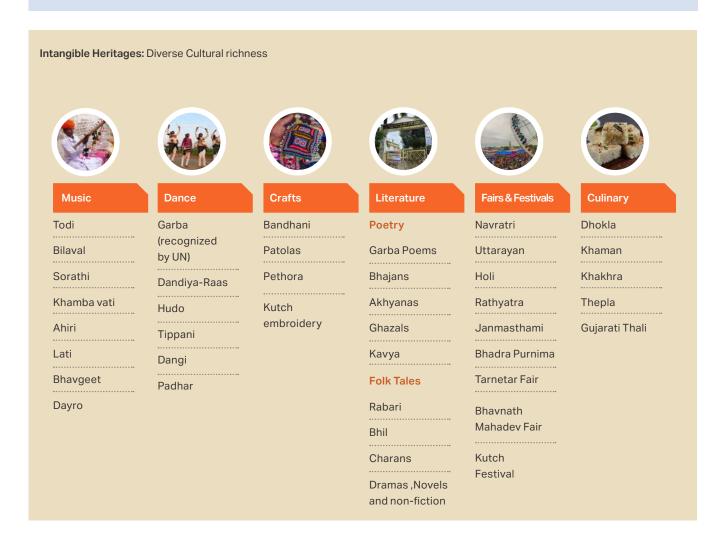
#### **Tech augmented sports**

Advanced biomechanics, and Al-driven coaching is enhancing personalized training and optimizing performance with highly tailored training and nutritional plans.

Gujarat's rich culture and heritage is represented vividly by different art, languages, crafts, festivals and architecture, forming the foundations for the promotion, preservation and development of the culture. Gujarat is also a home to various tangible and intangible heritages:



#### Tangible Heritages: Architectural Marvels and landscapes National **Palaces** Monuments and Religious Sites Landscapes and Forts Modhera Sun Temple **Uparkot Fort** Gir National Park Champaner Rani ki Vav Marine National Park Akshardham Temple Bhujia Fort Somnath Temple Jama Masjid Laxmi Vilas Palace Rann of Kutch Dwarkadish temple Dholavira Sidi Saiyyed Mosque



The value system and ethos of Gujarat is deeply embedded in community spirit, family values, hospitality, entrepreneurial spirit and acumen. The vibrancy of the community spirit is experienced in festivals like Navratri where the entire community, young and old, participate in Garba. As Rabindranath Tagore said, 'The tapestry of our future is woven with the threads of our past', these rich ethos and values of Gujarat will form foundational pillars for the changing landscape of the state.

An active lifestyle plays a crucial role in physical and mental development of an individual. Engraining physical activity in the value system is essential for well-rounded and healthy citizens. The government has taken various initiatives to unlock sporting potential of the state with enabling policies like Sports Policy 2022 –2027, universities like Swarnim Gujarat Sports University, sporting events like Khel Mahakumbh along with push for businesses with initiatives like Sports Startup Conclave.

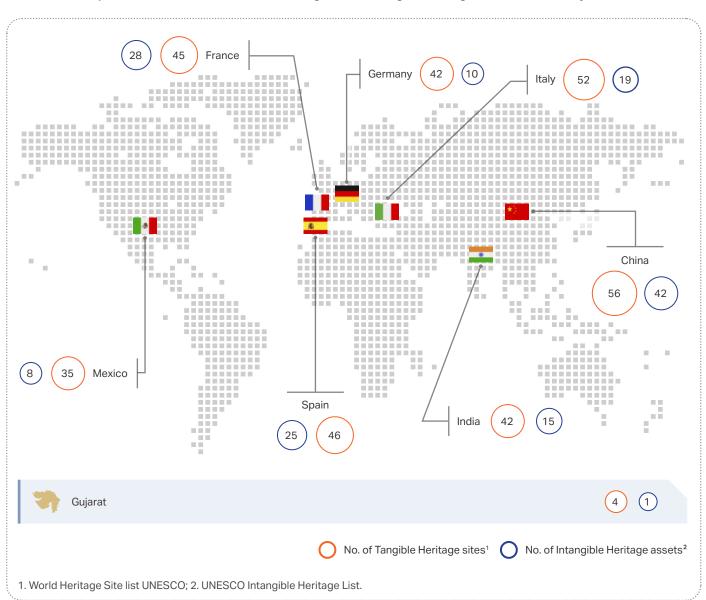
However, there are 3 key areas to consider

Potential for higher global recognition for Gujarat's tangible and intangible heritage.

Dedicated policy for collection and recovery of artifacts, sites and monuments.

Higher representation of state athletes at world stage with special emphasis on competitions like Olympics. Asian Games etc.

Exhibit 1: Comparative assessment of number of Tangible and Intangible heritage assets identified by UNESCO



#### 2.3.2 Vision for 2047

*Viksit Gujarat* in 2047 envisions intergenerational change which is deeply rooted in traditions, ethos and values. Citizens encourage active use of ethos and values to foster community growth, promote active lifestyle and cherish traditional heritage and culture.

### Art, Culture and Sports @2047

Vision

Deep-rooted traditional Indian and Gujarati ethos and value system, with culture, traditional arts and sports ingrained in day-to-day lifestyle.

**Value-based society** that thrives on strong principles, brim with diverse culture, exuding lively ethos, and fostering **ethical behavior** in citizens and systems.

Global recognition for traditional art and artists, fostering acknowledgment and incentives, building economic foundations for culture and heritage.

**Cultural influence** spanning across the globe via the dynamic **global diaspora**, firmly embedding Gujarat in the hearts of people worldwide.

**Diverse and inclusive sporting ecosystem** with world class infrastructure to foster active lifestyle and catapult sportspersons from Gujarat at world sporting stage.

#### Narendra Modi Stadium- World's Largest Cricket Stadium



# 2.3.3 Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

Metrics	Current Status	Target (2030)	Target (2047)	Benchmarks / References
Number of UN recognized global tangible and intangible heritage	5	10+	20+	Intangible¹: China (43), France (28), Italy (19)
% share of culture & creative industries in GDP	-	-	>5%	USA (4.4%)², World average (3.1%)³
% of Museums and libraries digitized	-	100%	-	-
Number of performing arts and mega cultural centers	-	1 in each district	-	-
Number of total medals in Summer Olympics <sup>4</sup>	0	>1	>5 (Total) >1 (Gold)	US (Total: 113; Gold: 39), Australia (Total: 46; Gold: 17)
Number of Centers of Excellence for sports <sup>5</sup>	1	>5	>10	Maharashtra (2), Haryana (2)

## 2.3.4 Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

Promoting value based society with	Catalyzing tradition and legacy into	Establishing to Showcasing Gujarati	Enabling development of world class sports
rich culture, vibrant ethos and ethical	vibrant economic resources	heritage at global stage	infrastructure and a player centric
citizens	133341035	3.0390	ecosystem

Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:

#### Exhibit 1: Roadmap 2023–2047: Key interventions and strategic reforms



Action agenda to achieve 2030 goals and ensure readiness for 2047

Reforms agenda for 2030-2047

#### Value based society with rich culture, vibrant ethos and ethical citizens

- Introduce school education courses, experiential learning and degrees focusing on ethos, values and culture like Bhavai, Duha, Gurjari, Garvi.
- Organize drives across the state to propagate value-based way of living.
- Cultural research institutes dedicated to studying and preserving cultural values, ethos and practices.

#### Catalyzed tradition and legacy into vibrant economic resources

- Setup world class incubation and innovation hubs for art and culture driven MSMEs/ startups.
- Enhance credit instruments and financial assistance programs for regional artists.
- Create strong market linkages with domestic and export markets, develop new market opportunities- art fairs and exhibitions, regional festivals.
- Build dedicated upskilling and reskilling centers across the state for best-in-class design, development, marketing and business practices.
- International recognition for local brands with global art exchange centers, driving brand identity and learnings from best practices.

#### Gujarati heritage at global stage

- Develop end to end digital ecosystem for immersive cultural experiences-VR/AR, make "Khushboo Gujarat ki" omnipresent across the world.
- Launch global campaigns to engage diaspora on large scale- host worldwide regional events, leverage social media, drive community engagement.
- Collection, Preservation, Upgradation and Promotion of cultural and heritage sites.
- District-level cultural & recreational centers to showcase heritage & support local artists e.g., Hamdan Bin Mohammad Heritage Center, UAE.

#### World class sports infra and player centric ecosystem

- Strengthen sports integration with school curricula- infra, culture, participation mandates.
- Develop world-class sports infra to provide adequate facilities, introduce "Pay n Play" to ensure maintenance.
- Facilitate district-level workshops and training to foster skill development and athletic prowess.
- State-of-the-art sports performance and research centers for advanced training and research to transform athlete development.



# **Empowered citizens: Living Well**

2.4

Nari Shakti: Women-led Development



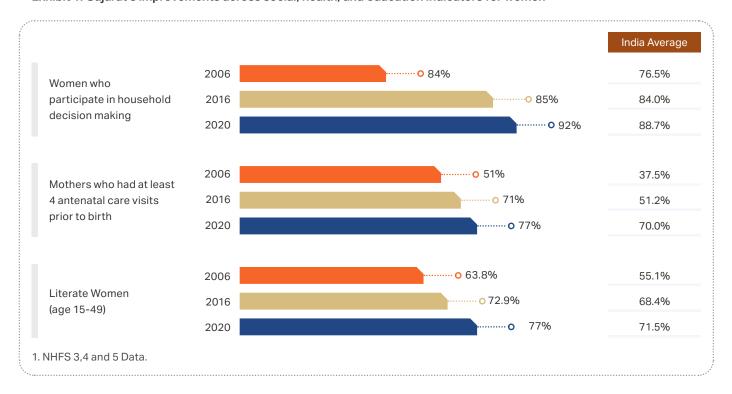
# Nari Shakti: Women-led Development

#### 2.4.1 Context

The empowerment of women is crucial for global economic growth and gender equality. In India, this empowerment is significant with women having founded around 18% of all startups in the last five years<sup>1</sup>. This development is to be reflective of a global trend in the coming years, where empowering women catalyzes significant economic and societal progress in countries and societies.

	Key trends shaping the sector
	Bridging the gap  Affirmative actions to ensure inclusive decision-making bodies.
	Technology's role in breaking the barrier  Technological transformation providing new avenues for the economic empowerment of women.
	ujarat has been a steadfast champion of gender equality, dedicating considerable efforts towards women's elfare. This commitment has yielded impressive improvements in several key areas, highlighted as follows:  Female literacy in Gujarat has significantly improved, rising to 76.5% and narrowing the literacy gap between males and females from 22% in 2001 to 14% by 2020 <sup>2</sup> .
•	The state has achieved increased school enrollment for girls at the elementary level, with a gross enrollment ratio of 94% for girls compared to 91% for boys <sup>3</sup> .
•	There has been a substantial decrease in Maternal Mortality Ratio in Gujarat, to 57 per live 1,00,000 live births in 2018-2020 from 202 in 1999-2001 <sup>4</sup> .
•	Gujarat has also ensured the safety and security of women with rate of crime against women at 22 <sup>5</sup> cases per lakh women, far lower than the India average of 66.4 <sup>5</sup> .
•	Higher proportion of women participate in household decision making as per NFHS-5 compared to earlier-92% currently vs 84% in 2006².

Exhibit 1: Gujarat's improvements across social, health, and education indicators for women<sup>1</sup>



In order to foster growth and empowerment of women, Gujarat has implemented the following policy meansures:

#### **Healthcare & Nutrition**

In Gujarat, 'Mukhyamantri Matrushakti Yojna' caters to the nutritional needs of pregnant and lactating mothers, playing a crucial role in maternal and child health. The 'Poshan Sudha Yojana' delivers nutritious meals and supplements to mothers in tribal region.

#### **Economic Empowerment**

The Gujarat Women Economic Development Corporation Ltd. (GWEDC), launched in 1981 aids economically and socially disadvantaged women with financial, training, and marketing support. Gujarat's 'Mission Mangalam' seeks to integrate the women self-help groups into broader economic activities creating livelihoods and financial autonomy.

#### Skilling, Training, & Education

In Gujarat, various initiatives have been launched to foster gender equality in education and skill development. The 'Kanya Kelavani Yojna' aims to boost girls' enrollment and retention in schools, while the 'Mahila Swavalamban Yojana' empowers women from marginalized backgrounds by promoting self-employment and entrepreneurship. Notably, the 'Mahila Samruddhi Yojana' focuses on economically uplifting women by encouraging them to establish micro-enterprises.

#### Safety and Wellbeing

Gujarat has enhanced women's safety and wellbeing through the establishment of over 2496 Multipurpose Women Welfare Centers for social, economic and legal support at district and taluka levels. The state also introduced the '181 Abhyam Women Helpline' and Mobile App in 2018-2019, offering telephonic assistance, emergency rescue, counseling services and information about women-specific schemes to adolescent girls and women in distress.

These focused initiatives have led to remarkable progress in reducing the gender gap and empowering women. However further progress and equality can be achieved by addressing following key areas:

#### Social and Health disparity

The state has a lower sex ratio of 965 against the national average of 10207. Some women in Gujarat still encounter social and health disparities, with only 66% women (age 15-24 years) using hygienic menstrual protection methods compared to India's 77% average7.

#### **Educational and Skilling gaps**

Despite high enrolment rates, only 34% of women receive 10 or more years of schooling, compared to 46% for men<sup>7</sup>.

#### **Empowerment opportunities**

Financial and cultural barriers remain obstacles to women's advancement. Limited access to credit markets further exacerbates these challenges. This emphasizes the importance of comprehensive efforts to address disparities and promote financial inclusion for women.



#### Nari Shakti@2047

Vision

Unlocking women's true and complete potential for a prosperous and equitable Gujarat by 2047.

Access to essential services for all women: healthcare, education & skill development, social safety.

Economic self reliance and prosperity for women: >75% participation in labor force (vs. 42% currently¹).

Empowered women's voices in governance and decision-making, ensuring **strong** representation of women in shaping policies, laws and businessess.

A society & culture where women are treated equally.

1. Periodic Labor Force Survey, 2022-2023, MoSPI.



## 2.4.3 Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

	Metrics	Current status	Target (2030)	Target (2047)	Benchmarks / References
Social & health security	Maternal Mortality Rate (per lakh births)	57¹	<40	<5	3 (Norway, Spain), 4 (Japan, Germany) <sup>2</sup>
	% women age 15-49 years who are anaemic³	65%	<45%	<5%	-
·	Number of crimes against women per 1,00,000 population	22	0	-	-
	% of seats held by women in state legislation4	8%	-	>40%	-
Enhanced	Female Labor Force Participation Rate (LFPR)	42% <sup>5</sup>	>50%	>75%	USA (56%), World average (47%)
economic opportunities	% women with an operating bank or savings account	70%³	>90%	100%	USA (96.8%), Germany (100%), UK (99.9%) <sup>2</sup>
	Gross enrolment ratio (elementary, secondary) <sup>6</sup>	94%, 73%	100%, >85%	100%	-
Skilling ecosystem	Gap between male and female literacy levels	14%³	<6%	0	China (3%), Brazil (-0.4%)²
	Gender Parity Index in higher education <sup>7</sup>	0.87	1	-	-

<sup>1.</sup> Sample Registration System (2018-2020); 2. World Bank; 3. NHFS-5, 2019-2021; 4. MIS - State Legislation; 5. Periodic Labor Force Survey, 2022-2023, MoSPI; 6. UDISE+, 2021-2022; 7. AISHE, 2020-2021; 8. Crime in India 2022 Report, National Crime Records Bureau (NCRB)

# 2.4.4 Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

Euleanaine agaid againite	Facilitatina accumin	Developming the evilture land
Enhancing social security	Facilitating economic	Revamping the cultural and
and health outcomes for	empowerment and	social fabric towards achieving
all women	stimulating higher	complete gender equality
	workforce participation	

Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:

#### Exhibit 2: Roadmap 2023-2047: Key interventions and strategic reforms







Action agenda to achieve 2030 goals and ensure readiness for 2047

Reforms agenda for 2030-2047

#### Enable social security and health

- Enhance healthcare access and outcomes for women (eg. better nutrition to all pregnant and lactating mothers through Ayurveda supplements and traditional dietary recipes, additional anganwadi centers and Working Women Hostel with day-care facility, etc.)
- Develop inclusive infrastructure and ecosystem for safety and social security (eg. public toilets with best-in-class hygiene, sanitary pad vending machines in public institutions, safe streets with street-lights and CCTV, SHE-Team in all districts, integrated digital platform, etc.)
- Support adolescent girls with intergenerational gender and nutritional disadvantages (eg. regular health check up in schools such as Kishori Shakti Yojna).
- Establish best-in-class safe social environment across homes and workplace (promote and ensure implementation of POSH, SHE-Box, integrated helpline with digital apps and emergency response, prioritized and fast-tracked judicial process, etc.)

#### **Enable economic empowerment**

- Focused efforts towards skilling and training of women (eg. women-centric training programs at flexible hours, mentorships, etc.)
- Provide entrepreneurial support and access to finance (eg. enhacing "herSTART" program, "5-year post launch program for entrepreneurship", etc.)
- Facilitate increased participation in Gig workforce by providing training, marketplace access, and incentives.
- Facilitate significantly higher participation in all sectors.
- Policy reforms to promote gender equality practices in corporate organizations

#### Revamp cultural and social fabric

- Drive gender sensitization across all forums (eg. students and teachers in schools, workplaces, awareness programs and community engagement, etc.)
- Promote gender inclusive and responsive planning (eg. encouraging corporates to build cohesive policies, participation of SHGs in local panchayats and the ULB).
- Encourage and drive significantly higher participation of women in policy making positions.





# **Thriving economy: Earning Well**

3.1

Industries of the Future



# Industries of the Future

#### 3.1.1 Context

Gujarat is an industry-led economy with 45.3% GSVA contribution from the secondary sector, of which 36.7% comes from manufacturing<sup>1</sup>. It is the leading manufacturing state in the country with the highest manufacturing GVA growth at 14.9% CAGR between 2011-20212 with nearly 19% contribution in FY21-22. It has also been instrumental in driving India's export surge, with share in merchandise exports rising from 21% to 33% from FY13 to FY233. From an investment perspective, Gujarat has become a prime destination, increasing its contribution to India's cumulative FDI. Between October 2019 and September 2022, the state received FDI of over INR2 lakh cr, constituting 18% of the nation's total FDI and solidifying its position as one of the most attractive states for foreign investment in India1.

#### Key trends shaping the sector

#### **Transition towards Sustainable Manufacturing**

Emphasis on carbon - neutral manufacturing processes - green hydrogen and derivatives, EV and components and RE powered battery storage.

#### **Enabling Next-Gen Industrial Workforce**

Workforce trained in new-age skills - AI/ML, IoT and advanced analytics for seamless human-machine collaboration.



1. Annual Survey of Industries, 2019-20; 2. State-wise GDP, MoSPI; 3. Gujarat Socio- Economic Review, 2022-23.

Table 1: Gujarat's performance in manufacturing sectors can be divided into three archetypes viz. the leading sectors, growth sectors and opportunity sectors based on decadal analysis of data.

#### **Leading Sectors**

The sectors where Gujarat has maintained leading position in the country, with GVA share >10% since FY09, and surpassed the national average growth rate in the last decade



products

botanical products

processing

#### **Growth Sectors**

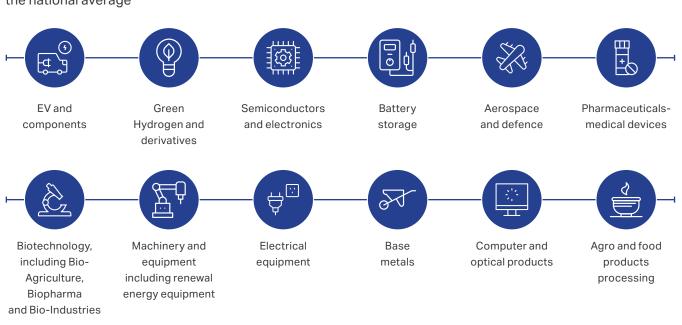
products

The sectors which contributed <10% to national GVA in FY09, but have experienced higher than national growth rate (with >5% delta) in the last decade



#### **Opportunity Sectors**

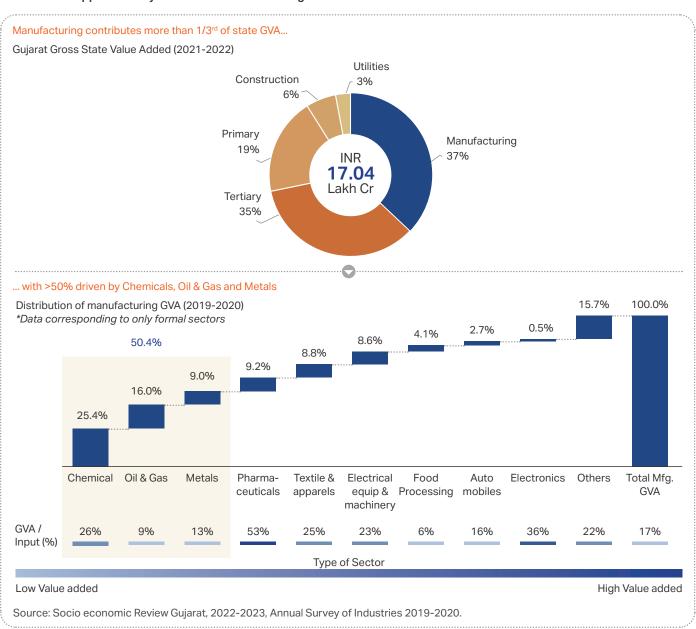
The sectors with <10% contribution to national GVA, and growth rate at par or less than the national average



The success of Gujarat's industrial sector is attributed to several factors, including well-developed port infrastructure, strong commitment to business reforms, and proactive initiatives like introduction of Industrial Extension Bureau (iNDEXTb), a dynamic investment promotion agency, aimed at propelling the state's industrial development and socio-economic advancement. Additionally, Gujarat launched Industrial Policy 2020-2025, Atmanirbhar Scheme, 2022, Gujarat Electronics Policy, 2022-2028, and the Gujarat Semiconductor Policy, 2022-2027 all which are critical to propel the industrial sector in the future and make the state a global business destination for next-gen sustainable manufacturing. The state also achieved several industry milestones with the establishment of the Dholera SIR, DREAM city and iCREATE which when combined with the robust industrial policy and skill development framework, shall help Gujarat continue its impressive industrial growth while ensuring high value addition and sustainability.

While Gujarat has excelled in generating overall GVA, there is substantial untapped potential in the state to increase value addition and enhance sustainability in its sectoral composition (approximately 50% of GVA is contributed by chemical, oil & gas and metals)<sup>4</sup>. Gujarat recognizes the urgency of climate action and is committed to transition to cleaner technologies and processes, promoting sustainable practics while driving value addition across industries.

Exhibit 1: Gujarat's Manufacturing sector contributes more than a third of GSVA; Chemicals, Oil & Gas and Metals contribute approximately 50% of the Manufacturing GVA



Nearly 64%<sup>5</sup> of Gujarat's industry GVA comes from 5 out of 33 districts, thus presenting significant potential for growth & diversification across other regions. Additionally, a critical focus area is to develop workforce skillset, especially in emerging sectors such as automobiles, food processing, and electronics. By establishing industry-specific training centers and promoting public-private partnerships in vocational education, the state aims to create a highly skilled workforce that caters to the specific needs of the thriving industries.

Table 2: A detailed breakdown of the key skill requirements across focus sectors<sup>6</sup>. (Non-exhaustiuve)

Focus Sector	Skilling requirements
Automobile	Specialized welders in Arc welding who can work in extreme conditions on advanced fabrication equipments.
Textile & Apparel	Provide career advancement opportunities through focused skilling programs to reduce operator attrition.
Food Processing	Need for upskilling of workforce with latest technologies to retain and attract skilled professionals equipped for evolving demand.
Electrical machinery	Need for upskilling of workforce with latest technologies to retain and attract skilled professionals equipped for evolving demand.
Electronics	Skilling the workforce to develop and utilize cutting- edge technology, driving innovation and progress.
Pharmaceuticals	Investment in bioinstrumentation skills to utilize advanced diagnostic and therapeutic tools for personalized and effective healthcare solutions.
Basic Metals	PCB instrumentation skills to monitor and control processes with greater precision, optimize production and minimize waste.



Implementation of formal training programs to build on the existing knowledge base and attract new talent to foster innovation.



5. Annual Survey of Industries, 2019-2020; 6. District wise skill gap study for the state of Gujarat (2012-2017, 2017-2022).

#### 3.1.2 Vision for 2047

By 2047, Gujarat to further strengthen its leadership position in the India's industrial sector and emerge as the key anchor for driving high value-added exports and push towards achieving the sustainability goals for the country.

#### Industries of the future@2047

Vision

Gujarat as the growth engine for Viksit Bharat with world class industrial hub driven by cutting- edge tech, attractive investment environment and climatesmart practices.

Global benchmark in value addition led growth backed by next-gen tech & innovation.

Pivotal player in emerging sectors, driving India's dominance in global value chains, with >40% contribution to country's goods exports.

Emerge as the recycling capital for India, fostering a thriving circular economy and advancing sustainability through carbon credits and green energy initiatives.

High-end skilling ecosystem and empowering entrepreneurial environment with MSMEs at the forefront- small and medium enterprises having increase share (vs current <1%1).

**Driving balanced regional growth** with Industries serving as the key economic anchor for potential Tier-2 and Tier-3 regions.

1. Ministry of MSMEs.



# **3.1.3 Macro goals for 2030 and 2047**

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

Macro goal / metric	Current status	Target (2030)	Target (2047)	Benchmarks / References
Growth in value of goods exported (\$, nominal)	-	>2x	>15x	-
% of power consumption in industries from green sources <sup>1</sup>	32%	>50%	>90%	Norway (71.6)², Brazil (46.2%)², Canada (29.9%)²
% of small and medium enterprises in Gujarat (out of all MSMEs) <sup>3</sup>	<1%	>5%	>10%	-

<sup>1.</sup> Socio-economic Survey 2021-2022 Gujarat; 2. Council on Energy, Environment and Water; 3. Ministry of MSME.



## 3.1.4 Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

Identifying strategic differentiation in each sector and building presence in global value chain Driving cluster-based growth through premier industrial parks and business hubs Establishing a vibrant
MSME ecosystem to setup
upcoming enterprise
for growth

Developing a differentiated capability advantage along with Industry-ready talent pool Ensuring green-led approach as the key principle of industrial growth

Enhancing ease of doing business with streamlined policy regulations and simplified governance



Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:

#### Exhibit 2: Roadmap 2023-2047- Key interventions and strategic reforms (I)



Action agenda to achieve 2030 goals and ensure readiness for 2047

Reforms agenda for 2030-2047

#### Strategic differentiation and capability advantage in global value chain

- **Deploy sector-specific** task forces to design a collaborative framework aimed at fortifying Gujarat's standing in global value chain.
- Facilitate integration with Industry 4.0 technologies to drive leadership in opportunity sectors through best- in class efficiency, quality and innovation.
- Strengthen DEPC mandate to develop robust district wise export promotion plans, leveraging ODOP scheme, to augment district export potential.
- End-to-end manufacturing ecosystem and global relevance in identified sectors with established presence across value chain.

#### Cluster-based industrial growth

- Setup premier industrial parks offering end-to end business ecosystem, enabling competitiveness in factor costs of utilities, labour, etc.
- Facilitate participation of anchor investors to drive development of sector specific clusters in the state.
- Tech and Innovation-driven clusters with dedicated incubation hubs to test and build new-gen products and solutions.

#### Vibrant MSME ecosystem

- Setup dedicated MSME support ecosystem for handholding and fostering skill development to setup for growth.
- Drive formalization of MSMEs e.g., access to low-cost credit to all MSMEs.
- Support exports through MSMEs with targeted incentives and strong market linkages.
- Accelerate competitiveness of MSMEs through enhanced access to technology and innovation infrastructure.
- Established platforms for MSMEs to engage in technology transfer agreements & collaborations.

#### Differentiated capability advantage, along with Industry-ready talent pool

- Institutionalize talent development and establish a comprehensive framework to prepare an Industry- ready talent pool in the state.
- Establish sector specific Centers of Excellence (CoEs) in collaboration with key industry players.
- Institutionalize centralized agency to drive unified new-age R&D and innovation efforts.
- Establish an apex body to champion culture of high quality, work ethics and widespread behavioral change.
- State of the art, sector
  wise CoEs to drive balanced regional
  skill development and technocentric growth.



Action agenda to achieve 2030 goals and ensure readiness for 2047

Reforms agenda for 2030-2047

#### Green led growth

- Scale up renewable energy and other clean energy generation capacity.
- Establish a comprehensive recycling ecosystem across the state- develop infrastructure, disseminate best practice, create end- to end value chain.
- Set up R&D CoEs to build technological expertise in cleantech sectors. e.g.,
   Green Hydrogen, Carbon Capture, Utilization and Storage and biofuels etc.
- Established carbon credit trading framework: Developed mechanisms to facilitate Carbon Credit trading & incentivize emissions reduction.

#### Simplified governance for ease of doing business

- Streamline policy regulations through reforms and State level Dispute Management system.
- Institutionalize State owned Holding Companies (SoHCs) for efficiencies in corporate governance and strategic asset management.
- Establish state level Regulatory Impact Analysis (RIA) body for agile policy reforms.
- Agile regulatory frameworks to adapt to technological advancements and evolving market dynamics.



# **Thriving economy: Earning Well**

3.2

Services of the Future



## Services of the Future

#### 3.2.1 Context

The Services sector contributes over 50% to India's GDP, and stands as the largest recipient of foreign direct investment in the country, with sub-sectors like Finance, Banking, Insurance, Testing and Analysis, Non-Financial Business receiving 16% of total FDI inflows of India approximating \$13 Bn in FY 23¹. The sector is expected to drive India's future growth and contribute upto 56% to GDP by 2047². The Government of India has identified twelve champion Services sectors³ as growth drivers, earmarking INR5000 crore to support sectoral initiatives in these sectors. To drive this growth, Gujarat will play a pivotal role by capitalizing on the large untapped potential of the sector in the state.

#### Key trends shaping the sector

#### **Generative Al**

Broader growth in Generative AI has revolutionized various fields such as autonomous systems, and advanced predictive analytics to transform various sectors like education, finance, healthcare, IT etc.

#### Digitization and Hyper-personalization

Integration of physical and digital realms led to growth of immersive services across sectors like tourism, education, medical, sports etc.

Traditionally, Gujarat has been an industries-led economy with around 45% GSVA contributed by the secondary sector, and Services contributing approximately 35%. Going ahead the state is increasing its focus on Services, evident from the 2017-2022 CAGR of 10.5% compared to national average of 7.5%. While the growth rate has been higher than the national average, the state's contribution to national Services GVA remains at  $6.2\%^4$ .



1. Ministry of Commerce and Industry; 2. NITI Aayog Calculations; 3. Champion Sector include information Technology & Information Technology enabled Services (IT& ITeS), Tourism and Hospitality Services, Medical Value Travel, Transport and Logistics Services, Accounting and Finance Services, Audio Visual Services, Legal Services, Communication Services, Construction and Related Engineering Services, Environmental Services, Financial Services and Education Service; 4. Ministry of Statistics and Programme Implementation.

Over the years, Gujarat has taken various initiatives to accelerate the Services sector growth and capture the growing global value of the new economy. Select initiatives include:



Development of services clusters and zones like GIFT City, Garima Park, L&T Knowledge Park.



Dedicated policies like
Startup and Innovation
Policy 2022-2027, IT-ITeS
Policy 2022-2027,
Cinematic Tourism Policy
2022-2027, etc. for promotion
of Services led businesses.



New age skill development initiatives such as Kaushalya—
The Skill University, a knowledge hub in Gandhinagar, and a think tank in partnership with Ahmedabad
Mangement Association.

**Deep dive- GIFT City** 

#### Gateway for international financial services with a hub for new age technological and financial services

Gujarat International Finance Tec-City (GIFT City) is India's first operational greenfield smart city and International Financial Services Centre (IFSC) providing world class connectivity to global hubs. With the formation of International Financial Services Centers Authority (IFSCA), special economic zone and world-class infrastructure, GIFT City operates over 560 business units, 25 banks, two foreign universities, and is also home to three international exchanges. Going ahead, GIFT City will unlock value in sectors like sustainable financing, next generation tech services, banking and finance, education etc. and enhance partnerships across global businesses.

To achieve a quantum leap in Services and emerge as a leading contributor to the national Services GVA, the state has identified the following key areas of focus:

#### **Enhance Services skilling ecosystem**

Increase penetration of formal vocational training among youth.

#### **Expand footprint of global Services sector players**

Strengthen access to skilled human capital, develop a more innovative ecosystem, enhance air connectivity and upgrade infrastructure to attract global players.

#### Foster new-age startups

Leverage the GIFT City Ecosystem to actualize the potential of new age startups such as fintech.

#### Drive growth through unified governance and coordination

Currently, multiple sector-wise governing bodies manage individual Services sectors, creating the requirement for coordinated planning and development.

### Sector's scope and potential

### **Gujarat's existing** strengths

#### Key focus areas going forward



India's IT sector approximately at \$230 Bn revenue, grew at 10% in FY 231.

Gujarat's IT exports grew at Garima, L&T tech park, GIFT 14.4% CAGR (2017-2022)2. City, etc.

Launched dedicated IT-ITeS policy 2022-2027.

Established IT parks and hubs-

Increase uptake of STEM (only 18.33% students opt for science education today3).

Improved direct flight connectivity with key global markets- US & UK (>75% of India's IT/ITeS exports<sup>1</sup>).



Accounting & **Financial** 

Among Top 4 states w.r.t. contribution in national Banking and Insurance GVA4.

West region constitutes around 33% of total ICAI registered accountants5.

Established India's first International Financial Services Center in GIFT City, hosting int'l stalwarts like Google, Barclays, Deutsche Bank, MUFG, etc.

Introduction of a dedicated fintech policy like Maharashtra and Tamil Nadu.

Upskilling / Reskilling of accountants with next-gen tech - AI, ML, Analytics, etc.



**Educational &** Knowledge

\$117 Bn market size in India. expected to reach \$313 Bn by 2030<sup>6</sup>.

Approximately 45% of state's population is under 25 years of age-significant opportunities7. Established Gandhinagar knowledge hub, hosting major universities, institutes & CoEs.

Signed MoUs with foreign universities to establish campus in GIFT city.

Developing engineering colleges to hold space in NIRF's Top 100 rankings

Building universities with emphasis on imparting new-age technology and skills.



**Aviation** Maintenance, Repair & **Operations** 

India's air fleet size expected to grow at 113% from 713 (FY22) to 1522 by (FY31)8.

>75% of country's MRO business with foreign firms-potential to bring in-house8.

Ongoing plans to setup large scale MRO hubs across the state for e.g., Ahmedabad, Ankleshwar, Dholera, Keshod, etc.

Establishing dedicated MRO training institutes.

Setting up Federal Aviation Administration (FAA) / European Union Aviation Safety Agency (EASA)-approved MRO centers.



Healthcare

India's healthcare market size at \$372 Bn, grown at a CAGR of 22% over 2016-20229.

Demand to further grow exponentially with ageing population (median age of 40 by 204710) and inflow of medical tourism.

Presence of renowned local multispecialty hospitals like Kiran multispecialty hospital, Zydus, KD hospital, etc.

Partnerships with leading hospital chains like Max, Manipal, Fortis, etc.

Robust Digital framework to encourage health tech startups, clinical trials etc.



Real estate

Urban population to increase two-fold from 3.2 cr today to >6 cr by 2047<sup>10</sup>.

Opportunity to capitalize on both commercial and residential spaces for upcoming industrial and services hubs.

Launched Gujarat Land Bank portal containing information about land parcels in various industrial estates of GIDC, Dholera SIR, SEZs etc.

Ahmedabad recognized with the most affordable real estate among Top 7 metropolitan cities in India<sup>11</sup>. Focus on increasing penetration on organized real estate beyond select industrial/service parks.

1. Economic Survey 2022-2023; 2. Department of Science and Technology, Gujarat; 3. AISHE Report 2020-2021; 4. RBI; 5.ICAI; 6. Invest India; 7. Gujarat Socio-economic review 2022-2023; 8. NITI Report MRO in India; 9. NITI Report Investment Opportunities in India's Healthcare; 10. NITI Aayog Calculations; 11. Knight Frank Affordability index.

#### 3.2.2 Vision for 2047

A *Viksit Gujarat* in 2047 would observe a quantum leap in the Services sector and become a leader in new-age technology through development of integrated sector specific hubs unifying research, innovation and workforce skilling.

### Services of the future@2047

Vision

Gujarat as a service provider to the world offering high quality solutions, value added exports, driven by best-in-class cost structures, innovation and targeted investments.

Quantum leap in services: Services to contribute >46% of GSVA (current 35%).

Major contributor to India's rise in exports: >10% share of India's service exports.

Emerge as a **leader in next-gen tech** such as drone, blockchain, Al/ML, Metaverse, IoT, Robotics, with a robust innovation ecosystem and advanced tech integration.

Services for the world: World class finance and IT/GCC zones such as GIFT; Emerge as one of the most attractive investment destinations in the world.



## 3.2.3 Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

Macro goal / metric	Current status	Target (2030)	Target (2047)	Benchmarks / References
Contribution to India's Services GVA¹ (%)	6.2%	>8%	>15%	Maharashtra (17.1%), Karnataka (11.9%)
Contribution to India's Services exports² (%)	1.2%	>3%	>10%	Karnataka (26.8%), Tamil Nadu (18.2%)
Number of Universities in top 250 rankings (QS) <sup>4</sup>	0	>3	>10	USA (45), UK (31) , China (9)
% of International Students in Gujarat as to India <sup>5</sup>	5.5%	>10%	>20%	Karnataka (17%), Punjab (13.5%), Maharashtra (10.2%)
% of SaaS startups in Gujarat to India <sup>6</sup>	6.58%	>10%	>20%	Maharashtra (20%), Karnataka (10%)

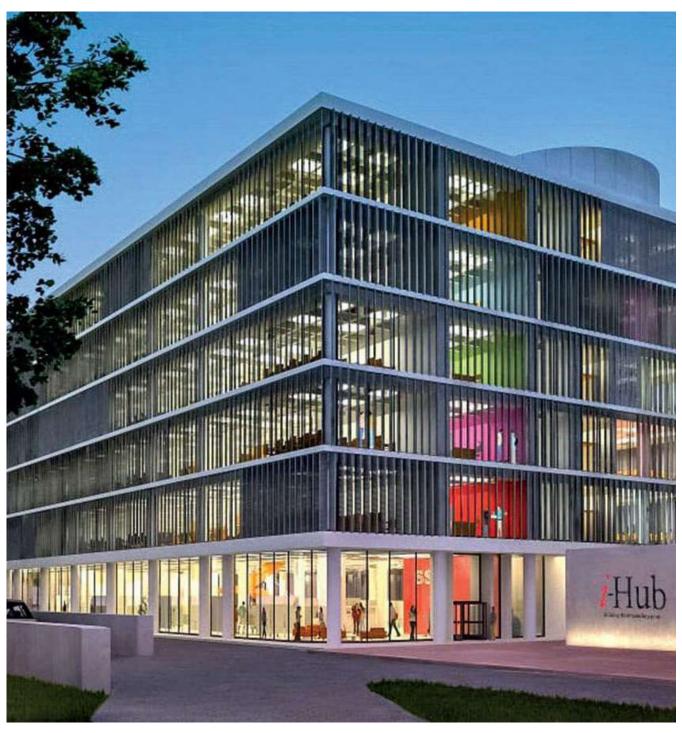
<sup>1.</sup> Ministry of Statistics and Programme Implementation; 2. Ministry of Commerce and Industry; 3. Directorate of Economics and Statistics; 4. QS Rankings; 5. AISHE Report 2020-2021; 6. Tracxn.



## 3.2.4 Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

Developing a strong enabling ecosystem as a foundation for the quantum leap Fostering capability development in line with the Services talent needs Facilitating adoption and integration of advanced tech, R&D and innovation Establishing
Gujarat as a global
benchmark for high
service quality



Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:

#### Exhibit 2: Roadmap 2023–2047: Key interventions and strategic reforms



Action agenda to achieve 2030 goals and ensure readiness for 2047

Reforms agenda for 2030-2047

#### **Strong Enabling Ecosystem**

- Develop dedicated regional hubs mapped with specific sub-sectors, driving unified development of infrastructure, capability and innovation.
- Partner with anchor investors/ players to accelerate the Services sector ecosystem.
- Widespread sustainable practices and climate friendly ecosystem in Services sector.

#### Capability development in line with the Services talent needs

- Harmonize skill taxonomy, develop skill scorecards to map industry demand with workforce skilling.
- Refresh higher-education curriculum with next-gen skills (e.g., Al/ML, Blockchain), promote adoption of STEM courses.
- Create platform and structures to promote life-long learning in collaboration with employers.
- State of the art, sector
  wise CoEs in Tier 2/3 cities to drive
  balanced regional skill development
  and promote gender balanced
  workforce.

#### Advanced tech adoption and innovation

- Develop IP-leadership in R&D to capture high-value add areas including AR/VR, Big Data.
- Promote global industry academia collaboration to foster innovation across startups/SMEs.
- Sandboxes for priority innovation areas with emphasis on frontier technologies.

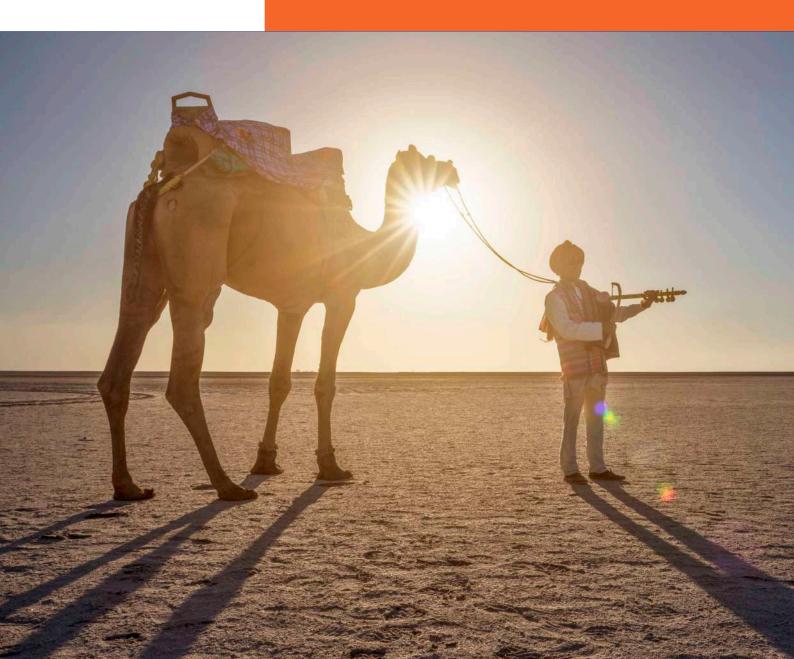
#### Gujarat as benchmark for high service quality

- Leverage Government of India's trade and mutual recognition agreements with targeted market outreach.
- Host and participate in international trade events to bolster Gujarat's image as a hub for high-quality, high value next-gen Services.
- Strengthen cyber-security measures and introduce data privacy regulations to ensure future readiness.
- Priority packages for high value target countries with geography specific offerings.

# **Thriving economy: Earning Well**

3.3

Gujarat as Tourism Hub



# Gujarat as Tourism Hub

#### 3.3.1 Context

In today's dynamic global landscape, tourism takes center stage as a vital economic driver, contributing an impressive 7.6% to the global GDP in 2022¹. India, while currently at 6th position in terms of GDP share, holds tremendous potential to emerge as a global tourism hub, by the virtue of its wide variety of offerings and destinations, rich diversity of people and culture, and well-known heritage sites (42 UNESCO recognized)². Gujarat contributes 8-10% to India's tourism GDP³ and stands at rank 5 among other states in terms of tourist footfall. While the state's rank in domestic tourist footfall is 5, it emerged the highest in terms of foreign tourist footfall in 2022. Post-Covid-19, the state has shown highest growth in overall footfall among Indian states⁴.

Exhibit 1: Pre-Covid growth of tourist footfall was at par with national average, but behind top performing states, however, the state has been outperforming other states post Covid-19 pandemic



<sup>1.</sup> EIR 2022, WTTC report; 2. UNESCO World Heritage Convention Website; 3. Tourism Department, Government of Gujarat; 4. Annual India Tourism Statistics, Ministry of Tourism, Government of India.

#### Key trends shaping the sector

Evolution of Augmented and Virtual Reality (AR/VR) is expected to augment the real-life tourist experiences and upgrade virtual experiences to bring diverse tourism atmosphere at home.

B-leisure travel, the blend of business and leisure, is reshaping the stay and spending behavior of business travelers, with them exploring destinations beyond traditional corporate settings and the industry adapting catering to their both professional and leisure needs.

The state has high potential to further strengthen its tourism offerings and emerge among the Top 3 tourist destinations in India with the diverse range of experiences to offer, for example,

Globally unique elements, including the world's tallest statue (Statue of Unity), only white desert (Rann of Kutch) and India's first UNESCO World Heritage City, Ahmedabad.

Unmatched diversity, with 4 UNESCO Heritage Sites, 4 National parks, 23 Wildlife sanctuaries and presence of unique wildlife like Asiatic lions<sup>5</sup>.

Rich mix of occasions & themes, through series of cultural events and festivals like Rann Utsav, International Kite Festival and Navratri.

Scenic Coastline and Beaches: the longest coastline in the country, housing multiple scenic beaches like Shivrajpur, Mandvi, Tithal to provide a coastal retreat for visitors.

Over the last few years, the state government has taken proactive measures to elevate Gujarat's position as a top-tier tourism destination by implementing focused policy interventions and promotional initiatives, including:

#### **Targeted Tourism Policies**

Targeted Tourism Policies, including Gujarat Tourism Policy 2021-2025, Gujarat Heritage Tourism Policy 2020-2025, Gujarat Cinematic Tourism Policy 2022-2027, and Gujarat Homestay Policy 2014, to drive focus towards development of tourism infrastructure in the state.

#### Increasing investments

The state increased FY24 tourism budget by approximately three times (INR 759 crore in FY23 to 2078 crore in FY24) to build infrastructure, develop tourist destinations and generate employment opportunities<sup>3</sup>.

#### **AATITHYAM** dashboard

To leverage the potential of data capturing and analytics in Tourism sector, Gujarat launched AATITHYAM dashboard in May 2023 for real time tourist data collection, to help in planning schemes, develop tourist facilities and initiate projects to further develop the tourist destinations in line with preferred tourist experiences.

#### Large scale promotional Campaigns

'Khushboo Gujarat Ki' campaign for overall state and specific campaigns for different destinations and events for e.g., Rann Utsav, International Kite Festival, etc. to promote Gujarat's rich cultural diversity to a global audience.

While the comprehensive policies and targeted interventions have already contributed to a significant growth, the state has major potential to further expand its tourism sector, by focusing on four key value unlocks:

#### **Broadening Tourism Spectrum**

While Gujarat has the potential for diversified tourism segments like coastal, natural, wildlife, etc., the current tourist footfall is majorly concentrated towards spiritual (42%), business (26%), and leisure (14%)<sup>3</sup>. Thus, there is substantial potential to raise awareness about other segments and attract visitors.

#### **Infrastructure Advancements**

There is significant potential to build ancillary infrastructure at key destinations, through world-class facilities as food stalls, cafes, restaurants, water sports, and beach shacks, particularly in newly developed destinations.

#### **Strengthening Multimodal Connectivity**

Ahmedabad airport is directly connected with only three out of top 10 countries w.r.t. tourism footfall in India, while the other three international airports in the state are connected with none. Additionally, key tourist destinations will benefit from seamless last-mile connectivity in terms of rail and road infrastructure, and suitable time schedules for tourist convenience. Thus, going ahead, the state to focus on improving multimodal connectivity to cater to both domestic and international tourists.

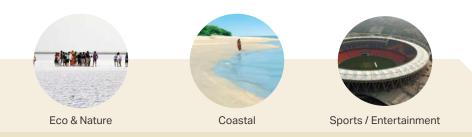
#### **Increasing Inter- State and international Tourists**

With 98.7% of tourists being domestic in 2022-2023, of which 63% originate from within the state<sup>3</sup>, there's a significant opportunity to attract more inter-state and international visitors, known for their higher spending capacity, to boost tourism revenue.

Going ahead, Gujarat has the potential to strengthen its position in the global tourism market and emerge as one of India's top preferred destinations by 2047. To achieve this, the state will develop its tourism offerings and experiences, catering to the key demographic segments that would define global tourism market in 20479;

Illustrative

Gen Z (Aged 30-45)



Prefer customized travel experiences, away from traditional sun, sea and sand-based tourism; Highly influenced by social media and peer recommendations; Willing to take risks and seek unique experiences.

Millenials (Aged 45-60)



Seek authentic, "live like a local" experiences; Prefer shorter, independent trips with inclination to create own travel itineraries.

**Silver Haired Tourist** (Aged 60+)



Seek leisure activities and peaceful travel experiences;

Often with families, thus require attractions suitable across age groups; Expected higher share of medical tourism.

**B-leisure travelers** (Business + Leisure)





Wellness

Travel to escape routine and experience change in work environment; Prefer locations with staycations, tranquil tourist destinations, and easy accessibility.

#### 3.3.2 Vision for 2047

By 2047, Gujarat to transform into a prominent global tourism hub, positioning itself among the top choices for tourists, both domestic and international, within the country. The state's distinct and diverse range of tourism attractions to appeal to a wide array of tastes and demographics, contributing to its prominence in the global tourism sector.

### Gujarat as a Tourism Hub@2047

Vision

'KHUSHBOO GUJARAT KI' - Global hotspot for diverse tourism experiences, catering to all demographics.

Universal treasure of diverse tourism experiences, catering to all tastes and demographics, contributing >12% to state's GVA.

Pioneering global tourism influx in India, positioned among Top 3 states for international tourist arrivals.

Championing a tourist-first ethos: exemplary service and personalized treatment, **rooted in strong, inherent Gujarati values.** 

Holistic tourist experiences with >5 unique tourism hubs crafted around multiple distinguished destinations, to provide a multiverse of adventure and activities.



## 3.3.3 Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

Macro goal / metric	Pre-covid state (2019)	Current status	Target (2030)	Target (2047)	Benchmarks / references
Share of international tourist visits out of total footfall in the state	2.1%1	1.29%²	>5%	>8%	Puducherry (8%), Delhi (7.6%), Kerala (6%)³
Contribution of Tourism to State GVA	8%4	8-10%²	>10%	>12%	Mexico (15.7%), Spain (14.2%), China (13%) <sup>5</sup>
Contribution of Gujarat to India's Tourism GDP	7.3%	8-10%	>12%	>15%	-
Ranking in number of domestic tourists in India <sup>6</sup>	9	5	Top 3	Тор 3	-
Ranking in number of foreign tourists in India <sup>6</sup>	12	1	Top 10	Top 3	-
Average length of stay for tourists	-	2.27	>4	>6	-

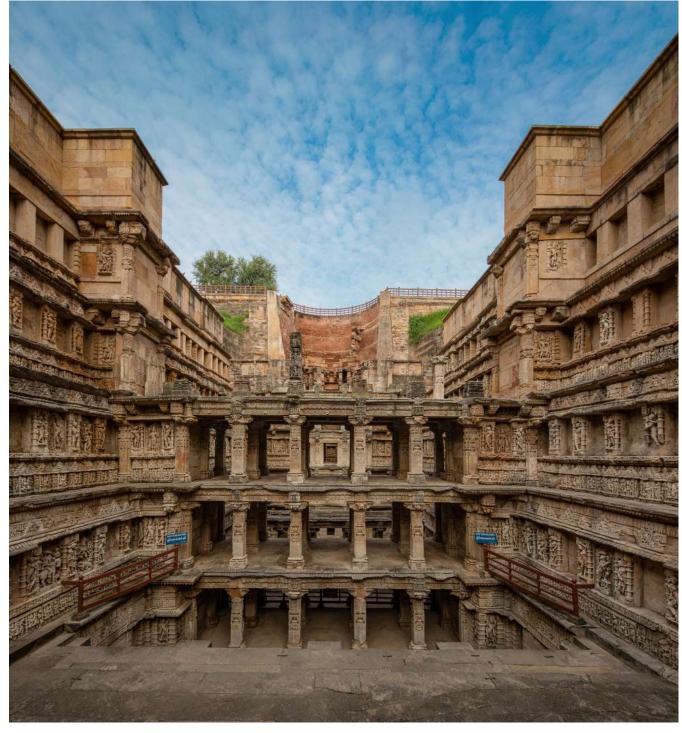
<sup>1.</sup> Tourism Corporation of Gujarat Limited; 2. Tourism Department, Government of Gujarat; 3. 2019 values, Annual India Tourism Statistics, Ministry of Tourism, Government of India; 4. Strategy document for Government of Gujarat to enable India to become a \$5 Tn economy, 2022; 5. Pre Covid Levels, EIR, 2020, WTTC; 6. Annual India Tourism Statistics, Ministry of Tourism, Government of India; 7. Tourism Sector Assessment in the State of Gujarat Annual report FY22-23, EY LLP-TMIPL Consortium.



## 3.3.4 Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

Inculcating touristfirst philosophy, attitudes and behaviors at the core of tourism sector Developing all-taste, all-demographic suited tourist offerings and experiences Establishing worldclass infrastructure and connectivity for high-end tourist convenience Leveraging data to create targeted tourist outreach, experiences, and create a global brand



Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:

#### Exhibit 3: Roadmap 2023–2047: Key interventions and strategic reforms



Short term interventions to achieve 2030 goals and activate blueprint for 2047

Long term interventions for 2030-2047

#### Tourist-first philosophy, attitudes, and behaviors at the core

- Upgrade educational courses and skill development programs to meet international standards, fostering creation of a globally competitive tourism workforce.
- Launch targeted campaigns to embed Gujarati culture and instill Atithi Devo Bhava philosophy.
- Introduce skilling programs in local art and crafts to foster a culture-rich ecosystem for tourists, while developing employment opportunities.
- Destination Management
   Organization (DMOs) setup across
   tourist destinations with local
   community representation.

#### All-taste, all-demographic tourist offerings and experiences

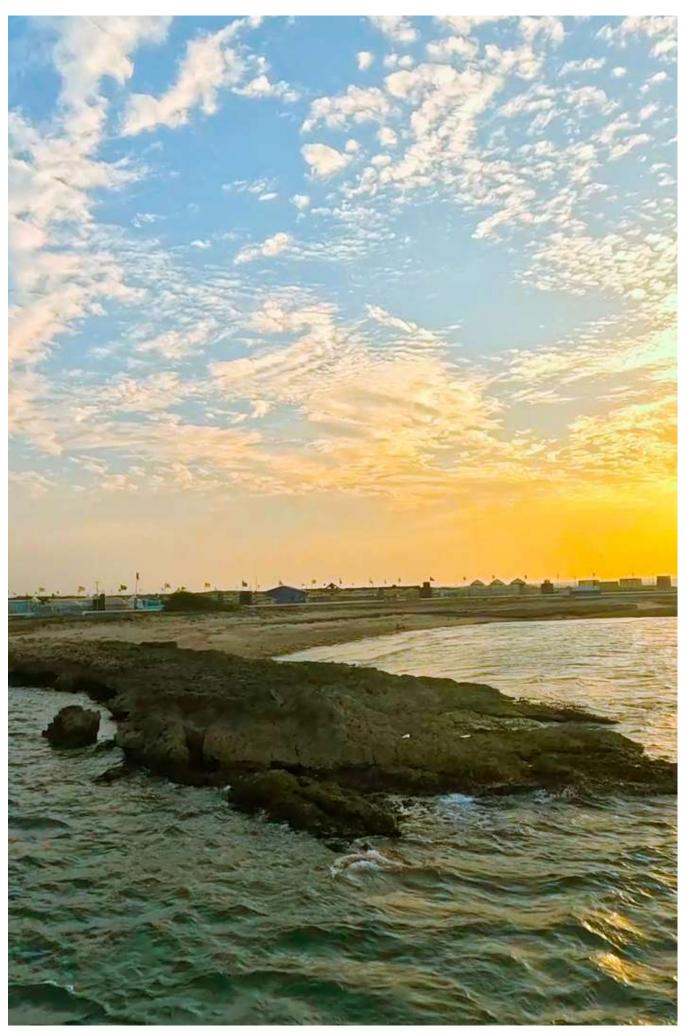
- Execute a targeted destination development strategy to establish diverse tourism clusters around key anchor assets.
- Orchestrate geo- thematic circuits: Enhance tourist connectivity and experiences via top-notch infrastructure and collaboration with local industries.
- Establish and promote niche tourism offerings for diverse customer segments, leveraging existing strengths.
- Multiple tourism clusters and thematic circuits operationalized, including new tourism opportunities such as cruise tourism, eco-tourism, etc.

#### World class connectivity and hospitality infrastructure

- Augment terminal & connectivity infra for a seamless travel experience:
   Multi-modal connectivity and wayside infrastructure.
- Streamline regulations to energize hospitality sector with diverse stay
  options, high-quality standards and local collaboration.
- Revamp infra and on-ground facilities to elevate tourist experience, while also increasing opportunities of monetization.
- Attract global players and funds using PPP for infrastructure and offering development.
- Real-time tech-integrated connectivity ensuring effortless access to key landing locations in Gujarat, connecting international, domestic, and last-mile links.
- All inclusive infrastructure to accommodate people with special needs, providing easy access and communication at every destination.
- Guidelines for promoting sustainable tourism development and ecofriendly tourist activities.

#### Data-driven tourist outreach, experience design, and global branding

- Design personalized end-to-end tourist experiences using digital and data solutions.
- Enhance global recognition of diverse tangible & intangible elements through UNESCO world heritage inscriptions.
- Promote "KHUSHBOO GUJARAT KI" via omnichannel targeted campaigns.
- Technology enabled interactive tourism experiences- personalized virtual assistant accompanying each tourist, enabling automated services.



# **Thriving economy: Earning Well**

3.4

Agriculture, Irrigation & Rural Development



# Agriculture, Irrigation, and Rural Development

#### 3.4.1 Context

The development of rural India is crucial to realize the vision of Viksit Bharat, given that it is home to 64%¹ of the population, employs 70%² of the workforce, and contributes approximately 40%³ to the GDP. In Gujarat, the rural areas make up around 50% of the population and contribute significantly to the state's economy. Of the rural workforce, around 64%⁴ is involved in Agriculture and allied sectors, thus signifying the importance of this sector for overall development of the region.

#### Key trends shaping the sector

#### Move towards Nutritional security, health and wellness

Globally, there is an increasing focus on prioritizing health and wellness, resulting in higher consciousness of nutritional content of the food and thus higher diversification of the consumption and production basket in Agriculture.

#### **Precision Farming**

Precise monitoring and control of farm conditions via advanced technologies such as GPS, IoT, AI/ML, drones, etc. to optimize input usage, crop yields and drive greater sustainability.

For the comprehensive development of rural Gujarat, the two building blocks of Viksit Gujarat are considered, focusing on both economic prosperity and improved quality of life:

#### **Economic prosperity**

The average per capita income in rural Gujarat will meet international standards to provide individuals and households with a prosperous livelihood. Achieving this involves focus on two key levers:

#### I. Agriculture & Allied Sectors

Agri & allied sectors support livelihoods of about 50-55% of households in Gujarat, exceeding the national average of 40-45%<sup>5</sup>, with a GVA contribution of 15.9%<sup>6</sup>. The average Agri household income is INR 12,631<sup>7</sup> per month which is higher than national average, but potential to improve compared to the top-performing states like Punjab (INR 26,701) and Haryana (INR 22,841). In the last decade (2011-2021), Gujarat's Argi and allied sector has grown at a remarkable 9.7% CAGR, compared to 5.7%<sup>6</sup> India's average, primarily driven by allied sectors, as shown in the Exhibit.

<sup>1.</sup> World Bank; 2. Periodic Labour Force Survey (PLFS) 2020-2021, MoSPI; 3. Smart Cities mission, India.gov.in; 4. Periodic Labour Force Survey (PLFS) 2020-2021, MoSPI; 5. National Financial Inclusion Survey 2016-2017, NABARD; 6. Socio-economic Review 2022-2023, Government of Gujarat; 7. Press release, Ministry of Agriculture & Farmers Welfare 2022.

Exhibit 1: Gujarat's Agriculture growth rate has been higher than the national average, and is driven by allied sectors

#### Gujarat has observed higher growth than the country average in last 10 years

	India	Gujarat
10 year CAGR for Agri and Allied sectors GVA (2011-2021)	5.7%	9.7%
Share of Agri and Allied sectors in overall GVA (2021-2022)	18.9%	15.9%
Share of Agri households <sup>1</sup>	40-45%	50-55%
Average farm household income	INR 10.2k	INR 12.6k
Average crop productivity (INR/ha) <sup>2</sup>	123k	142k

#### Growth rate driven by livestock, forestry and fishing while crops make up the largest share in GVA

Share of Agri & Allied subsectors in overall state GVA (%)



<sup>1.</sup> Households that earn min. INR 5000 per month from agriculture operations (agri and allied activities) and have at least one member self-employed in agriculture during last 365 days; 2. Calculated as Gross Value Added for Crops / Total cultivable Agri land.

Source: Socio-economic Review 2022-2023, Government of Gujarat; India GVA Distribution 2021-2022, MoSPI; National Financial Inclusion Survey, 2016-2017, NABARD; Press release, Ministry of Agriculture & Farmers Welfare 2022; State wise GSVA / NSVA, MoSPI.

Crops (Agriculture + Horticulture), representing around 65% of Agri and allied GVA, grew by 8.3% CAGR, with a strategic shift to high-value horticulture and high nutrient-millet cultivation9.

Dairy and livestock, accounting for 22% of Agri and allied GVA<sup>8</sup>, is driving focus towards high value-added dairy products and diversification to tap into the state's potential of poultry production.

In fisheries and aquaculture, with around 5% of Agri and allied GVA<sup>8</sup> share, Gujarat is a leading producer (17% of India's fisheries production) and exporter (17% of India's fisheries exports) of marine fish in India<sup>8</sup>. However, inland fish production lags behind other states (1.5% share in national production)9, offering ample room for growth, especially through diversified inland fishing and aquaculture.

Over the last two decades, Gujarat has made significant strides in Agriculture and allied sectors. With around 60%<sup>10</sup> area under semi-arid and arid zones, the state has significantly enhanced its irrigation infrastructure, achieving over 59% net irrigation coverage<sup>14</sup>, exceeding the national average. The state is taking proactive efforts to address climate change impacts by promoting sustainable farming practices through initiatives such as the establishment of the Organic Agriculture Development Board and Gujarat Natural Farming Science University.

Going forward, the key priority is to increase Agri productivity and value realization to enhance farmer incomes, while ensuring sustainability. To achieve this, Gujarat will drive development over six key areas to streamline the current processes and setup for future growth.

#### Securing access to irrigation

58% state area under arid and semi-arid zones<sup>10</sup>, and around 60% net area under irrigation<sup>14</sup>.

#### Increasing effectiveness in land utilization

Around 20% of agricultural land under wastelands, with potential to be upgraded for cultivation<sup>14</sup>.

#### Supply chain development and value addition

Post harvest investment and R&D for managing post-harvest losses<sup>13</sup>, scope for market infrastructure development in fisheries, and potential for stronger quality and certification systems.

#### Small scale to at-scale farming

Over 65% of farmers own less than 2 ha of land, with average land holding at 1.9 ha<sup>12</sup>.

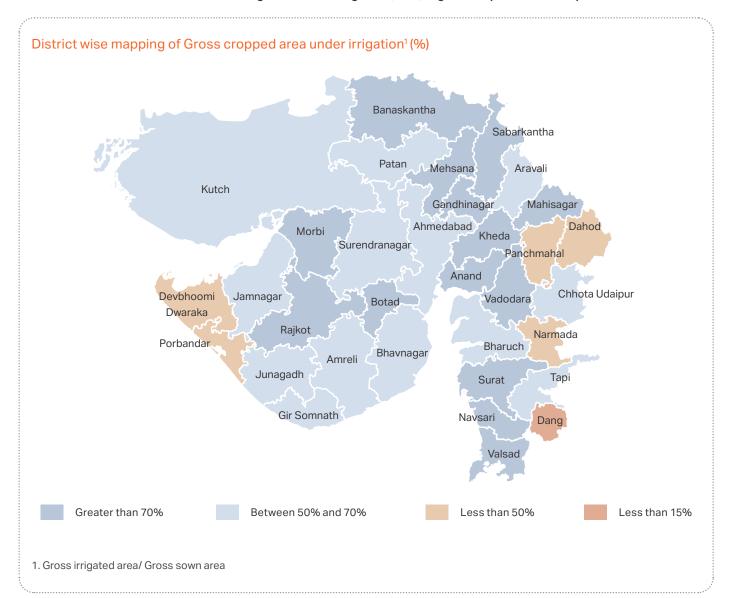
#### Increasing productivity and yields

Potential to improve yield of major crops, including foodgrains, horticulture crops, compared to national averages and top performing states.

#### Potential climate change impact

Extreme weather events leading to crop loss, e.g., unseasonal rainfall damaging ~42k ha (i.e., 21% of surveyed area with >33% damage) of farmland in Mar'2315.

<sup>8.</sup> State-wise GSVA/ NSVA 2021-2022, MoSPI; 9. Commissionerate of Fisheries, Gujarat; 10. State Level Bankers' Committee, Gujarat Website; 11. Handbook of Statistics on Indian states, RBI 2021-2022; 12. Socio-economic Review 2022-2023, Government of Gujarat; 13. Study to determine post harvest losses in India, MoFPI 2022; 14. Statistical Abstract 2021-2022, Government of Gujarat; 15. Press release, Government of Gujarat, March 2023.





#### **II. Non-Farm Sectors**

According to the 2021-2022 Periodic Labor Force Survey, 63.7% of the rural workforce in Gujarat is engaged in Agriculture. Despite agriculture's significant workforce contribution, it accounts for only 15.9% of the state's GVA, resulting in around 70% lower per capita income than other sectors. Thus, moving forward, Gujarat will not only focus on enhancing agricultural productivity but also on diversifying employment opportunities in the state, by fostering growth of the secondary and tertiary sectors. Rural workforce of 2047 should have adequate choices and resources to venture into fields beyond Agriculture, including both traditional and modern lines of work.

#### Quality of life:

In addition to economic well-being, it is crucial to ensure that all rural citizens should have access to good amenities for high quality of life, comparable to urban standards. Currently, Gujarat ranks  $23^{rd}$  out of 36 states / UTs on NITI Aayog's Multidimensional Poverty Index<sup>18</sup>, which assesses access to basic facilities. The key facilities where the state has improvement potential include access to nutrition, clean cooking fuel, sanitation, and housing. A closer look at the data reveals that the state's lower MPI is primarily driven by 11 eastern border districts, such as Dohad, Dang, and Narmada. These districts face unique challenges due to their geographical challenges, which reduces the ease of access.

Gujarat will work to eliminate regional disparities, and to ensure equitable access to both core and advanced infrastructure and services in all districts.

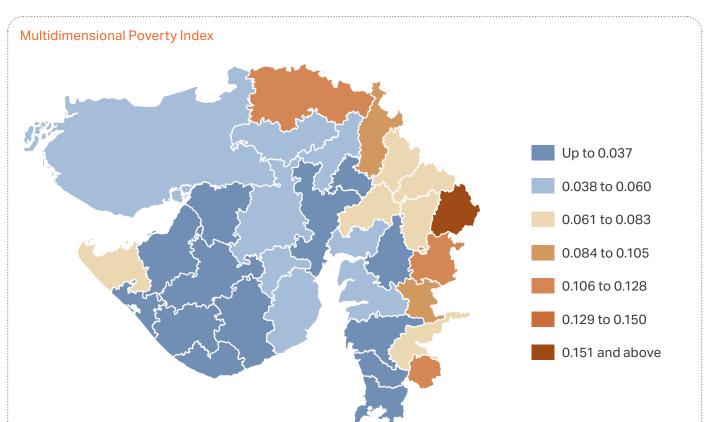


Exhibit 3: Snapshot of Gujarat's Multidimensional Poverty score

#### 3.4.2 Vision for 2047

Viksit Gujarat in 2047 will be characterized by a revitalized rural economy, driven by high-value agriculture, guaranteed access to irrigation and clean drinking water, diversified economic opportunities, and high quality of life.

## Agriculture, Irrigation & Rural in Gujarat@2047

Vision

Vitalizing rural regions to achieve prosperity and standard of living at par with urban areas.

Self-sufficient and thriving communities amid reduced poverty levels, with Multidimensional Poverty Index <0.01.

Globally **competitive and sustainable agriculture** sector with sustained food security for the growing population, while assuring farmer prosperity.

Diversified livelihoods surrounded by higher income opportunities with **increased share** of workforce employed in non-farm sectors.

Widespread freedom of choice & quality of living through increased accessibility and mobility, providing modern infrastructure and facilities within 60 minutes reach of rural areas.

**Integrated, empathetic, self-governing** rural society, firmly **anchored in cultural heritage,** unified values, and collaborative endeavors.

Rural Gujarat as rejuvenation for urban centers via cultivation of indigenous arts, heritage textiles, ecotourism, etc., fostering a deep-rooted connection with nature and cultural heritage.



## 3.4.3 Economic prosperity

## I.I Agriculture and allied sectors | Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

	Metrics	Current Status	Target (2030)	Target (2047)	Benchmarks / References
	Yield of Cereal crops (MT/ha)	2.71	>2.9	>3	-
	Yield of Pulses crops (MT/ha)	1.3 <sup>1</sup>	>1.4	>1.5	Canada (2.2), USA (2.17), Ethiopia (1.88) <sup>2</sup>
	Yield of Fruits (MT/ha) <sup>2</sup>	18.8	>20	>25.1	Andhra Pradesh (24.1), Uttar Pradesh (22.0), Tamil Nadu (20.9)
	Yield of Vegetables (MT/ha) <sup>2</sup>	20.1	>22.7	>25.1	Kerala (30.3), Andhra Pradesh (25.8), Tamil Nadu (24.9)
Agri & Horticulture	Average post- harvest losses	Upto 11%³	<9%	<6%	-
	Area under irrigation (Net irrigated/Net Sown Area)	59.6%⁴	-	>70%	Punjab (100%), Haryana (92%), Madhya Pradesh (81%) <sup>5</sup>
	Area under micro irrigation (per unit Gross Sown Area) <sup>2</sup>	16.4%	>23%	>36%	Andhra Pradesh (26.4%) Tamil Nadu (21.1%), Karnataka (17.6%)
	Farm mechanization (Farm power availablity, kW/ha)	2.61	>4.5	>7	-
	Share of land under Natural Farming	3% <sup>6</sup>	>10%	>25%	Austria (26%), Uruguay (20%)²
airy &	Share of Gujarat in India's dairy production <sup>7</sup>	7.5%	>8%	>10%	Rajasthan (14.6%), Uttar Pradesh (14.9%)
vestock	Share of Gujarat in India's dairy exports <sup>6</sup>	25%	>30%	>50%	Maharashtra (28.6%)

<sup>1.</sup> Agriculture Department, Government of Gujarat; 2. Agricultural Statistics at Glance 2021-2022, MoAFW; 3. Study to determine post harvest losses in India, MoFPI 2022; 4. Statistical Abstract of Gujarat State, 2023; 5. Handbook of Statistics on Indian states, RBI 2021-2022; 6. ATMA & SAMETI Directorate, Gujarat; 7. APEDA Website; 8. Directorate of Animal Husbandry, Government of Gujarat; 9. FAOSTAT; 10. Commissionerate of Fisheries, Government of Gujarat.

	Metrics	Current status	Target (2030)	Target (2047)	Benchmarks / References
	Average cattle productivity (kg/animal/year)	2200 <sup>8</sup>	>2300	>2800	USA (10k), New Zealand (4.5k), World avg (2.7k) <sup>9</sup>
Fisheries &	Share of Gujarat in India's fisheries production	6.1% <sup>14</sup>	>6.5%	>7.3%	Andhra Pradesh (29.5%), West Bengal (12.6%)³
Aquaculture	Share of Gujarat in India's fisheries exports	17% <sup>14</sup>	>18%	>20%	-

<sup>1.</sup> Agriculture Department, Government of Gujarat; 2. Agricultural Statistics at Glance 2021-2022, MoAFW; 3. Study to determine post harvest losses in India, MoFPI 2022; 4. Statistical Abstract of Gujarat State, 2023; 5. Handbook of Statistics on Indian states, RBI 2021-2022; 6. ATMA & SAMETI Directorate, Gujarat; 7. APEDA Website; 8. Directorate of Animal Husbandry, Government of Gujarat; 9. FAOSTAT; 10. Commissionerate of Fisheries, Government of Gujarat.

## I.II Agriculture and allied sectors | Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

Enhancing productivity with
high value, diversified clusters
with advanced value chain
infrastructure

Integrating state-of-the-art farming technology and research with on-ground practices

Creating a robust marketing ecosystem and implementing targeted value addition

Accelerating growth of farmer collectives to achieve economies of scale and facilitate large scale farming

Expanding irrigation access in water-scarce regions to ensure 'Har Khet ko Pani'

Implementing strong
sustainable farming norms
and practices to
build resilience

Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:



Short term interventions to achieve 2030 goals and activate blueprint for 2047

Long term interventions for 2030-2047

#### High productivity, diversified clusters with next-gen value chain infrastructure

- Develop commodity wise clusters, drive crop diversification and adoption of advanced practices, for market linked production, in close partnership between producers and FPOs.
- Develop certified nurseries, tissue culture laboratories, hatcheries for availability of the right varietals through high quality seeds / saplings.
- Facilitate investments in collaboration with private sector to develop robust value chain infra for post harvest product management.
- Introduce modern methods via more focus on financing, handholding and scale up e.g., Deep sea fishing, high value marine capture aquaculture.

 High-tech farming, including precision agriculture and modern controlledenvironment farming methods.

#### Best-in-class technology and R&D integration

- Set up Agri tech startup incubation and innovation hubs (leveraging National Digital Agri Stack) to introduce tech driven innovations.
- Strengthen university research & farm innovations to develop new inputs, seed varieties and promote new interventions.
- Revamp farmer extension to embed advanced practices and latest technologies, leveraging physical and digital channels.
- Upskill and incentivize local talent to pursue Agri tech courses, establish education programs & certifications.
- Re-imagined Agri research & innovation model; facilitate global partnerships and deeper engagement with corporates.

#### Robust domestic & export linkages and targeted value addition

- Create strong brand architecture to establish global identity for state products, parallels to Gir Kesar Mango & Kutchi Date.
- Provide stronger support to Agri exporters & SMEs, facilitate farmer linkage, through dedicated societies / organizations for Agri export support.
- Transform domestic market structure, build digital transaction layer, leveraging technologies like ONDC and e-NAM.
- Scale-up value addition capacity and infrastructure, across product categories.
- Linkages with end-use markets for value addition such as nutraceuticals and health care.
- Established export markets for diversified commodity basket and targeting specialty segments, such as Indian diaspora abroad.

#### Large-scale farming & post harvest management with FPOs & Collectives

- Setup FPO incubators to accelerate farmer collectivization, with unified access to training, partnerships, credit sources, business mentorship, and regulatory guidance.
- Create umbrella organization to support FPOs with exports and market linkages and to scale up contract farming.
- Push towards land digitization, titling, and leasing to enable scale up of FPOs, cluster development and traceability.
- Transformed agri education system and dedicated universities focused on high-end and vocational skilling – across crops, dairy and fisheries.



Short term interventions to achieve 2030 goals and activate blueprint for 2047

Long term interventions for 2030-2047

#### 'Har Khet ko Pani'- Fostered irrigation in water-scarce regions

- Develop advanced irrigation infrastructure and propagate farm practices on micro irrigation- e.g., drip, sprinkler.
- Build drought resilient ecosystem through higher water efficiency crop-mix and effective harvesting structures.
- Grid based pipeline infrastructure spanning across every farm to enable easy adoption of drip irrigation practices.

#### Sustainable agriculture, resilient to climate shocks & resource depletion

- Strengthen mandate for Organic Agriculture Development Board, Gujarat to drive cohesive action- strengthening certification, branding, value chain development.
- Facilitate adoption of climate-smart agri practices on ground- Natural farming, high crop diversification, efficient resource usage, waste-to-wealth- to drive adaptation, resilience and co-benefits.
- Circularity in agricultural practices, including scale-up of biofuels and other sustainable end-uses.
- Regeneration of fallow and waste lands to increase net sown area, through improved practices.

## II.I Non-farm sectors | Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

Metrics	Current Status	Target (2030)	Target (2047)	Benchmarks / References
Share of workforce employed in non-farm sectors <sup>11</sup>	36%	>45%	>60%	Tamil Nadu (63%), Kerala (70%)
Women having a bank or savings account that they themselves use	67.5% <sup>12</sup>	>90%	>99%	Tamil Nadu (91.7%), Karnataka (87.7%)
Households with any usual member covered under a health insurance/ financing scheme	41.1% <sup>12</sup>	>80%	>99%	Telangana (65%), Kerala (55.4%)
Self Help Groups with Credit (bank) linkage	15% <sup>13</sup>	>60%	100%	Andhra Pradesh (90%), Karnataka (85%)

<sup>11.</sup> Periodic Labour Force Survey (PLFS) 2021-2022, MoSPI; 12. NFHS-5, Ministry of Health and Family Welfare; 13. NABARD Report on Status of Microfinance in India 2021-2022.

## II.II Non-farm sectors | Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

Simplified access to credit for development and scale up of rural enterprises

Enhanced skill development in rural areas to meet industry standards across industries

Seamless tech integration with adoption of new generation tools and techniques

Social safety nets to ensure social well-being of rural employees and entrepreneurs Effective product off-take ecosystem with robust market linkages and partnerships

'Vocal for local': strong global branding for unique and innovative regional products

Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:



2030



Short term interventions to achieve 2030 goals and activate blueprint for 2047

Long term interventions for 2030-2047

#### Non-farm sectors

- Strengthen local industry collaborations and vocational education system to cater to hyperlocal employment opportunities; Strengthen apprenticeship-based models, create programs for continuous skill upgradation.
- Facilitate access to digital tools & technology for rural enterprises, launch community driven campaigns to drive widespread digital literacy.
- Enhance social safety networks and increase penetration of insurance and risk-mitigation measures for rural societies.
- Develop market linkages pan-India and globally, via best-in-class phygital commerce ecosystem, buyer-seller meets, trade fairs, local exhibitions, etc.
- Establish strong brand for "Rural Gujarat", through geo-specific product innovation, traditional heritage, and targeted marketing programs.
- Augment right credit ecosystem for rural areas alternate rating mechanisms, renewed lending products, e.g., cashflow based lending.
- Rural tech hubs- business incubators, mentorship programs & venture capital support to foster tech driven entrepreneurship & innovation.
- Rural businesses integrated with industry to feature on global platform.

## 3.4.4 Living Well

## I. Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

Metrics	Current Status	Target (2030)	Target (2047)	Benchmarks / References
Multi-Dimensional Poverty Index (MPI) Score (for Rural) <sup>14</sup>	0.075	<0.03	<0.01	Kerala (0.003), Tamil Nadu (0.011)
nfant Mortality Ratio for Rural) <sup>15</sup>	27	<8	<2	Germany, Japan, Norway (2) <sup>22</sup>
Households using clean fuel as primary source of energy for cooking (for Rural) <sup>17</sup>	58.2%	>80%	>99%	Telangana (95.7%), Karnataka (86.6%)
Population living in households hat use an improved sanitation facility (for Rural) <sup>18</sup>	63.3%	>99%	-	Kerala (98.5%), Telangana (72.9%)
Percentage surfaced ural roads <sup>19</sup>	87.1%	>92%	100%	Rajasthan (92.2%)
Households with public ransport facility within 500 m for Rural) <sup>16</sup>	86%	>92%	>99%	Himachal Pradesh (95%), Telangana (94.7%)
nternet Subscribers per 100 population (for Rural) <sup>20</sup>	43.70	>90	100	Kerala (57.5%), Punjab (48.8%)
Rural Drinking water supply per capita (Liter Per Capita per Day) <sup>21</sup>	~70	>100	>100	-
Share of villages covered by surface based Multi /illage Scheme (MVS) <sup>20</sup>	~80%	100%	100%	-
Capacity of alternate sources and desalination plants	~370 MLD <sup>8</sup>	-	>2000 MLD	-

<sup>14.</sup> Multi Dimensional Poverty Index Report, NITI Aayog, 2023; 15. Sample Registration Survey Report 2020, Census Board; 16. World Bank Infant Mortality Data; 17. Multiple indicator survey (NSS round 78), 2020-2021; 18. NFHS-5, Ministry of Health and Family Welfare; 19. Basic Statistics of Road in India (2018-2019); 20. Telecom Authority of India Report 2022; 21. Water Supply Department, Government of Gujarat; 22. World Bank Infant Mortality Data

## II. Key thrust areas and plan of action

Development of rural areas will be driven by a clustered village approach to ensure access to world class amenities to all citizens in the state. The clusters would be enabled by access to seamless mobility infrastructure both within clustered villages and from villages to urban centers. Building a rural society with high standard of living requires access to the following set of infrastructure and services.

Core infrastructure
that must reach every
household to meet basic
living requirements, for
example, proper housing,
drinking water, sanitation,
nutrition, electricity, clean
cooking fuel, internet, etc.

Core services, including access to quality healthcare, education, social security, banking and financial inclusion, etc.

Advanced infrastructure and services, such as tertiary hospitals, skilling centers and universities, employment hubs, sports facilities, multi-modal transport hubs, etc.

To build seamless access to these infrastructure and services, Gujarat shall untertake the following interventions. Besides, to ensure the access to potable drinking water in line with the growing population, the state will undertake additional interventions for water supply management:



Short term interventions to achieve 2030 goals and activate blueprint for 2047

Long term interventions for 2030-2047

#### **Living Well**

- Mobilize district authorities to partner with the national rural grid planning agency, to address region-specific challenges and establish village clusters to ensure best-in-class amenities for all.
- Strengthen Rural local bodies and empower governance via capacity building, infrastructure development, decentralized planning systems and technologically integrated solutions.
- Orchestrate adequate public-private financing mechanisms for infrastructure setup and grid development across rural clusters.
- Develop seamless multimodal logistics and mobility infrastructure- Within all rural clusters and between rural clusters and nearby city agglomerations.

#### Deep Dive: Drinking Water

- Develop new and alternate sources to ensure regional water security for pure drinking water.
- Introduce technology-driven demand management and accounting practices, building a responsible and financially sustainable water supply system.

 Resilient infrastructure basis geo specific climate risks for rural clusters, and widespread adoption of sustainable practices.

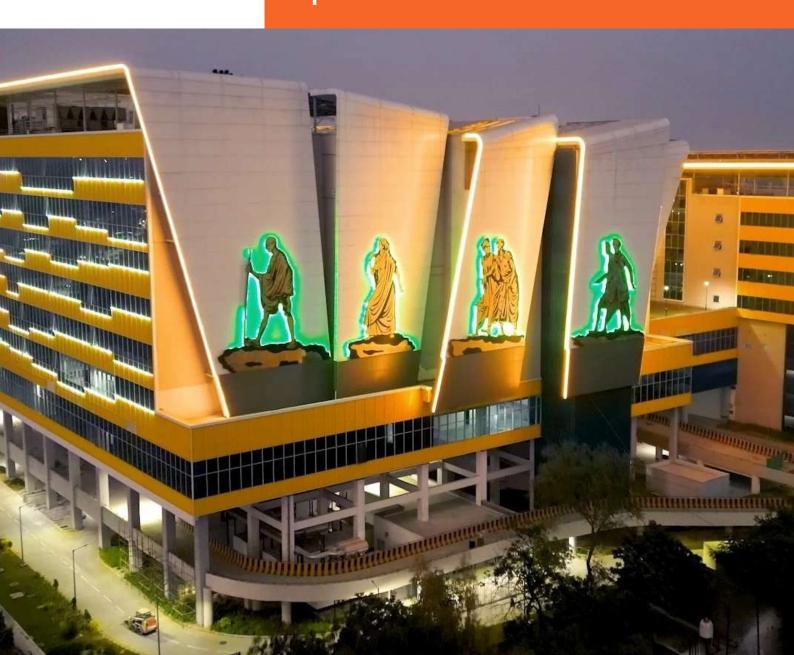
#### Deep Dive: Drinking Water

 Augment water supply infrastructure including new surface reservoirs, desalination plants, and 100% coverage of smart metering systems for sustainable access and fiscal viability.

# **Key enablers**

4.1

City Agglomerations: Vibrant socio-economic epicenters



## City agglomerations as vibrant socio-economic epicenters

## 4.1.1 Context

City agglomerations, once viewed solely as economic engines, are evolving into vibrant hubs of social interaction. By prioritizing initiatives like providing safe and affordable housing, ensuring access to clean water, and investing in public transportation, these urban centers can strive to guarantee a decent quality of life for all citizens.

Embracing sustainable practices to reduce pollution and minimize energy consumption will not only create healthier environments but also safeguard resources for future generations. Additionally, robust infrastructure and disaster preparedness programs can protect both assets and people against manmade and natural hazards.

## Key trends shaping the sector

#### Rise of meta cities

New cities, which is both physical and digital, with distributed zones of influence, virtual connections, flatter density with large population size and focus on low carbon infrastructure.

## Cluster or agglomeration driven approach

Cities are extending boundaries and planning long term economic and social development for city center and outgrowths.

Gujarat has many major cities such as Ahmedabad, Gandhinagar, Surat, Rajkot, Vadodara which have witnessed significant economic growth.

Exhibit 1: Major cities of Gujarat



Ahmedabad, the largest city, serves as a crucial economic hub with a diverse industrial base and well-developed infrastructure. Gandhinagar hosts GIFT city (Gujarat International Finance Tec-City)—India's first international financial services center. Surat, known as the "Diamond City," is also a major economic center with textile and diamond processing manufacturing industries. The regions in close proximity of Vapi and Navsari could be major contributors to the agglomeration's growth. Vadodara, an industrial and educational hub, excels in petrochemicals, engineering, and chemicals. Rajkot, an important industrial city, specializes in engineering, automotive, and casting industries, along with a robust small-scale industry sector.

Exhibit 2: Major sectors contributing to city economies in Gujarat

Ahmedabad	Textiles	Automotive	Pharmaceuticals	
	Engineering	Information Technology	Real Estate	
Surat	Diamond Cutting & Polishing	Textile & Garment Manufacturing	Real Estate	
Vadodara	Educational	PetrochemicalS	Engineering	
	Oil & Gas Refineries	Art & Culture		
Rajkot	Engineering	Automotive ancilliaries	Casting Industries	
	Traditional Handicrafts	Jewelry Manufacturing	Food processing	



The state recognizes the need to translate economic growth into improved liveability for which several initiatives are underway:

## **Smart City Projects**

Ahmedabad, Surat, Rajkot, Vadodara, Gandhinagar and Dahod are amongst the 100 cities chosen under the Smart City Mission by the Ministry of Housing and Urban Affairs to focus on technology driven infrastructure development and service delivery.

#### **Environmental initiatives**

Surat's Green Grid Mission aims to curb air pollution through tree planting and renewable energy initiatives, while the Sabarmati Riverfront Development project in Ahmedabad and the Vishwamitri Riverfront in Vadodara focuses on promoting urban ecology to include green spaces and recreational areas.

## **Urban governance initiatives**

The e-Nagar project in Gujarat leverages ICT to provide a single window platform for citizens to access various municipal services online, along with promoting transparency and efficiency in administrative processes. Ahmedabad's Municipal budget allows citizens to directly allocate a portion of the city budget to projects they prioritize, fostering community engagement.

#### **Sustainable Mobility**

Gujarat is actively promoting electric vehicles, with charging stations being developed in major cities like Ahmedabad and Surat. The state is also working on integrating public transport systems and creating cycle-friendly infrastructure in cities like Vadodara and Rajkot.



While the comprehensive policies and targeted interventions have already contributed to a significant growth, the state has identified significant potential to further unlock city agglomerations' by focusing on three areas:

#### **Developing resilient cities**

Rajkot and Jamnagar, vital engines of Gujarat's economic growth, navigate a complex intersection of development and environmental realities. While Rajkot faces water scarcity, Jamnagar encounters occasional cyclones and floods<sup>1</sup>.

With only 2% of India's water resources serving 5% of the population, and 80% of surface water used for agriculture, cities face a limited supply for domestic and industrial needs<sup>2</sup>. To ensure a sustainable future, targeted interventions in water conservation, infrastructure development, and alternative sources are essential. A study by BISAG and CUG basis Landsat images of four decades, reveal the reducing green spaces in Ahmedabad over 4 decades owing to rise in Urban-dense space (Exhibit 3).

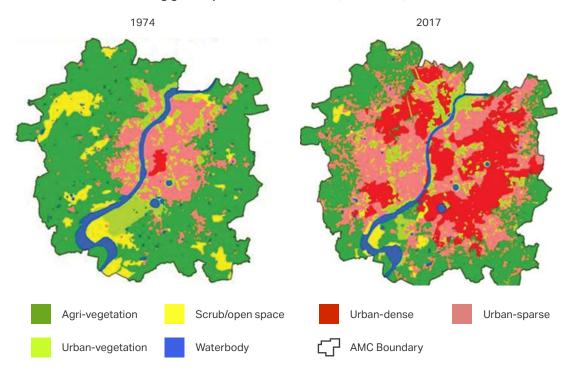


Exhibit 3: Ahmedabad's reducing green spaces over 4 decades (1974-2017)

Source: Study by Bhaskaracharya National Institute for Space Applications and Geo- informatics and Central University of Gujarat, 2017: Landsat images of 4 decades

## Potential for enhanced livability conditions

Some city pockets still face suboptimal livability conditions with presence of slums in cities. No city in Gujarat has been ranked among top 100 of the EIU global liveability index. In order to enhance quality of life, it is pertinent to integrate nature in to the urban fabric, fostering shared spaces and equitable access, and embracing resilient design. By integrating green corridors, prioritizing clean energy, and empowering residents through inclusive infrastructure, Gujarat can transform city agglomerations into thriving, connected and future proof hubs for enhanced living.

## Need for strengthened Urban governance

To fully unlock the immense economic potential of the cities, it would be important to equip the Urban Local Bodies (ULBs) with the right skill sets<sup>3</sup>. Further, it would be pertinent to enhance revenue streams by leveraging public-private partnerships, smart city initiatives etc. to attain financial autonomy<sup>4</sup>.

<sup>1.</sup> Mapping India's Climate Vulnerability- A district level assessment, 2021; 2. Gujarat Infrastructure Development Board; 3. Centre for Policy Research, 2021; 4. Comptroller and Auditor General of India, 2022.

## City agglomerations@2047

Vision

Distributed growth led by city agglomerations as epicenters of economic growth, high-quality of life and access to clean and affordable public commons.

Distributed development: 8-10 major city agglomerations contributing >2/3rd of the economy

**Inclusive development:** Access to essential and quality services for all (slum free city agglomerations).

Leading examples of livability: At least 2 cities among top 100 EIU global livability index.

**Sustainability at the core:** Urban planning to drive preservation of green spaces, reduced carbon footprint.



#### Exhibit 4: Potential city of the future



01

## **Resilient Infra & Operations**

- Real-time data tracking & surveillance of city operations.
- Climate-smart infra: resilient to extreme weather changes.

02

## **Urban Sustainability**

- Green mobility & public transport.
- Open green spaces & vertical farms.
- Low-carbon ecosystem.

03

## **Inclusive City**

- Increased affordable housing.
- Equitable access to key services.

04

## 15-Minute Neighborhood

- Hyperlocal concept using mixed-use real estate & agile infrastructure.
- Basic needs within a 15-min radius via walking or micro-mobility.

05

#### **Increased Outdoor Orientation**

Outdoor & leisure spaces as new city centers; work & other activities organized around them.

06

#### Digital public services

- City services online, with enhanced cybersecurity.
- City uses real-time data for transparent decision-making.

07

#### **Connected Suburban Cities**

- Stronger digital connection between suburb and main city.
- Burgeoning local economy, with availability of key services.

## 4.1.3 Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

Social Infrastructure	Metrics	Current status	Target (2030)	Target (2047)	Benchmarks / References
	Percentage of households having access to piped drinking water - all cities <sup>1</sup>	86%	100%	-	Puri, Odisha (100%)- States at 100% - Goa, Telangana, Haryana <sup>2</sup>
	Per capita water supply (municipal corporations) <sup>3</sup>	>135 LPCD	>150 LPCD	-	-
	Percentage of population living in slums - all cities	-	0	-	-
Sustainability	Average AQI across all major cities <sup>4</sup>	Ahmedabad: 111	<80	<50	Chicago (13), Perth (14), San Francisco (22)
	Percentage of wastewater recycled or reused - all cities	28%	-	100%	Orange County, California and Singapore (100%) <sup>5</sup>
conomic ontribution	Major city agglomerations contribution in GSDP	Not tracked	1+ city with GDP > \$150 Bn 5+ city agglomerations with GDP > \$50 Bn	2+ city agglomerations with GDP >\$500 Bn; 3+ city agglomerations with GDP > \$250 Bn; 5+ city agglomerations with GDP > \$50 Bn	US with a ~\$23 Tn economy has 2 cities with \$1 Tn+ GDP, ~20 cities with \$250 Bn+ and ~50 cities with \$50 Bn+

<sup>3.</sup> Water Supply Department, Government of Gujarat; 4. AQI 2022 average; 5. World Economic Forum.

## 4.1.4 Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

Economic vision and development of major city agglomerations Ensuring distributed social infrastructure development

Establishing sustainable development practices in city agglomerations Strengthening urban governance



Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:



Action agenda to achieve 2030 goals and ensure readiness for 2047

Reforms agenda for 2030-2047

#### Economic vision and development of major city agglomerations

- Long term economic vision and planning for each major city agglomeration (identification of key sectors, potential demand, anchors, etc.)
- Identification and planning for specific infrastructure requirements for economic growth (e.g., airport upgradation, center of excellences, etc.)
- Implementation of the longterm vision of all major city agglomerations.

#### Distributed social infrastructure development

- Establish affordable and quality housing for all with access to piped water, sewer connection, etc.
- Establish urban transport within city agglomerations and for inter-city travel (e.g., Rapid metro, cycle lanes, footpath, etc.)
- Implement comprehensive water management system for sustainable supply of water.
- Transit oriented development with hyperlocal neighbourhoods to establish easy access to basic amenities (e.g., 15 minute neighbourhoods) with presence of all livability infrastructure.

#### Sustainable development practices in city agglomerations

- End to end solid and liquid waste management in each city agglomeration.
- Establish post disaster response mechanisms (e.g., community engagement, specific plans in disaster prone areas such as flood, drought, heatwave etc.)
- Establish best in class infrastructure and practices to enhance sustainability (e.g., green transport, efficient buildings, retrofit disaster resilient city infrastructure, etc.)

## Strengthened urban governance

- Ensure 100% capacity in urban local bodies with mainstreaming skill development by leveraging Urban Development Centre of Excellence (CoE).
- Establish end-to-end e-governance for all essential services under e-Nagar project.
- Establish self-sufficiency in urban governing bodies (leverage digital to enhance revenue sources, establish alternate monetizing mechanisms such as congestion pricing integrated with behavioral changes in society).

# **Key enablers**

4.2

Transport and Logistics Infrastructure



## Transport and Logistics Infrastructure

## 4.2.1 Context

Robust infrastructure serves as the foundation for achieving economic growth. Drawing inspiration from success stories like Singapore, South Korea and Germany, Gujarat aims to become a global trade and investment hub by strategically investing in best-in-class transportation and logistics infrastructure.

#### Key trends shaping the sector

#### The green shift

Increasing focus on sustainability driving the adoption of eco-friendly practices such as electric vehicles, alternative fuels, and sustainable logistics solutions.

#### **Digital transformation**

The integration of advanced technologies, such as artificial intelligence, machine learning, and automation, is streamlining logistics operations. This includes autonomous vehicles, smart warehouses, predictive analytics, etc. leading to more efficient systems.

Gujarat's transport landscape is a testament to its strategic focus on fostering connectivity and facilitating economic growth. The state's expansive rail network, stretching across 4,809 kms, forms a crucial backbone for freight movement¹. Ambitious projects such as the Ahmedabad Metro, Vande Bharat and the Mumbai-Ahmedabad High-Speed Rail project are on the horizon, promising to redefine railway infrastructure. Notably, Gujarat also hosts 38% of the Western Dedicated Freight Corridor¹. In addition, the state boasts a vast road network covering 2.5 lakh km², achieving road density of 1,271 per 1000 sq. km.³ Key projects like the Delhi-Mumbai Industrial Corridor, Ahmedabad-Dholera Expressway and the 'Parikrama Path' scheme underscore Gujarat's commitment to achieving 100% connectivity in border villages through the development of five high-speed corridors.

Gujarat's maritime prowess is evident with a 1,600 km<sup>1</sup> long coastline and 49 ports, including major ones like Deendayal and Mundra, each boasting capacities exceeding 260 MMT<sup>4</sup>. The state has a robust airport infrastructure comprising 19 airports, including international airports in Ahmedabad and Surat.



1. Gujarat Infrastructure Development Board; 2. Roads & Building Department, Government of Gujarat; 3. CMIE; 4. Adani Ports & SEZ & Logistics and Deendayal Port Authority.

#### Gujarat's Transport and Logistics Infrastructure Transit Odyssey: A Pathway to Sustainable Development.











Boosting India's Trade

Mainstay of freight movement

Air Connectivity and Expansion

Vast network of Connectivity

Sustainability Hub

Gujarat's portcentric economy spearheads India's trade, handling more than 40%<sup>5</sup> of the nation's cargo.

Deendayal Port poised to become a Mega port with **300** MTPA capacity<sup>6</sup>. Ports managing **532.4 Mn Tons** (2020-21)<sup>7</sup>, vital for seamless freight movement.

Non-major ports capacity at **70.2%** in FY23<sup>8</sup>.

Gujarat's 19 Airports catered to 135.6 lakh passengers and 1 lakh tonnes of cargo in FY237.

Greenfield Airports coming up in Ankleshwar & Dholera and religious tourism destinations like Dwarka, Ambaji, and Palitana<sup>9</sup>. **5 Multi-modal** Logistic Parks enhancing logistics network<sup>10.</sup>

**9 Inland Container Depots** (ICDs)
strengthening inland efficiency<sup>11</sup>.

19 Container Freight Stations (CFS) streamlining freight operations<sup>11</sup>. Gujarat holds 98% of India's recycling capacity and contributing 32.3% to global ship recycling volume<sup>8</sup>.

Alang yard dominates ship recycling by recovering 4.5 Mn
Tons annually and recycling about 400 ships annually<sup>8</sup>.

To sustain its competitive edge and fortify the sector, the Government of Gujarat has proactively undertaken measures to enhance transport and logistics infrastructure. These initiatives include:

- Implementation of the Gujarat Integrated Logistics and Logistics Parks Policy 2021 to strengthen the entire
  value chain by increasing the state's competitiveness across industries and creating job opportunities for
  the youth. This policy encompasses logistic parks, warehousing, cold storages, air freight stations, jetties,
  and seaports.
- Granting industry status to the infrastructure sector, which will enhance the appeal of the logistic industry for private sector participation by making it easier to do business.
- Introduction of skill development programs such as Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 2.0 and 3.0 to address skill gaps and providing training in new-age job roles.
- Upgrading roads across the state to facilitate smoother movement of goods and people, thereby improving overall efficiency.
- PM Gati Shakti Gujarat to effectively integrate infrastructure initiatives at both state and central levels.
   Utilizing a hub and spoke model, it optimizes transportation and connectivity planning, streamlining intrastate and inter-state infrastructure projects to enhance overall connectivity.

The state has made significant progress in enhancing Transportation and Logistics Infrastructure. In the current landscape, there are three key areas that warrant focused consideration.

#### **Enhancing connectivity**

Need for additional railway and road links, notably for ports like Navlakhi, Bhavnagar, Pipavav, and Bedi (Jamnagar) requires capacity expansion. Current draft and cargo capacity at ports may hinder larger vessel arrivals, impacting future international trade aspirations. Additional air connectivity and expressways between major hubs would be needed, coupled with wide public transport services.

#### Optimizing operational costs

Considerable dependence on roads (65% of the modal mix<sup>12</sup>) contributes to higher costs and environmental concerns. Operational inadequacies are reflected in slower rail and truck freight speeds compared to global benchmarks, prolonged dwell times for ship & air cargo and inadequate logistic services. Further, rising congestion issues, and a need for integration between physical and digital infrastructure would be areas to focus.

#### Reducing Environmental Impact

India's transportation sector faces a daunting environmental challenge. With current growth rates, there is a potential increase of 65% in transport sector emissions by 2030 and 197% by 2050, relative to 2020 levels at the national level. Specific emission reduction targets are imperative to address the gap in green infrastructure and supporting EV infrastructure, alternate fuel, etc. within the sector.



12. Roads & Building Department, Government of Gujarat.

## Transport and Logistics Infrastructure@2047

Vision

Gujarat as International Maritime Hub and India's logistics gateway for Middle East & Europe, with safe, on-time, high-speed and sustainable transport infrastructure.

World-class multi-modal and reliable infrastructure, enabling high-speed passenger and freight movement.

A **top-tier**, **inclusive public infrastructure** that citizens prefer over private alternatives (>99% on time performance of public transportation systems).

**Highest standards of safety:** Zero-tolerance for accidents (<1 fatalities due to road / rail accidents per 100,000 population per year).

Role model for the nation in sustainability: Cleaner modes, alternate fuels, and best-in-class energy efficiency standards (<0.3 tCO<sub>2</sub>e carbon emissions per registered vehicle on road).



## 4.2.3 Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

	Metrics	Current status	Target (2030)	Target (2047)	Benchmarks / References
	Total state highway length (km)	16,746¹	19,537²	-	Maharashtra¹ (32,005 km)
	Villages/towns within 50 km from trunk road	95%³	100%	-	-
Capacity and connectivity	Metro line (km) in major cities	40 <sup>4</sup>	>125⁴	-	Seoul <sup>5</sup> (382 km), New York City <sup>5</sup> (380 km
	Share of Cargo handling in India	38.6% <sup>6</sup>	>45%	>50%	-
	Ports with >18m draft	1 <sup>6</sup>	2	4	Rotterdam <sup>7</sup> (24m), Hamburg <sup>a</sup> (16.5m)
Cost efficiency	# Gujarat ports in Top 20 global ports	0	1	2	China <sup>9</sup> (10)
	Container dwell time - exports (hours)	~120°	<70	<20	32 hours (Top 25 ports of USA) <sup>10</sup>
Speed and convenience	Average freight truck speed (Kmph)	50³	>65	>80	US <sup>10</sup> (80)
	Average Vessel Turnaround time (hours)	~706	50	<40	Singapore <sup>12</sup> (<12)
Safety	Road accident fatalities per 100 km road length	~3 <sup>14</sup>	<0.5	0.00	Canada <sup>15</sup> (0.16), US <sup>15</sup> (0.52)
Carbon intensity	Modal freight share of rail & road	~35% <sup>17</sup>	-	>45%	EU <sup>18</sup> (72%), US <sup>16</sup> (53%)

<sup>1.</sup> CMIE; 2. Gujarat Infrastructure Development Board; 3. Roads and Buildings Department, Government of Gujarat; 4. Gujarat Metro Rail Corporation (GMRC) Limited; 5. World Metro Database; 6. Gujarat Maritime Board; 7. Port Information Guide, Rotterdam Port Authority; 8. Port of Hamburg; 9. World Shipping Council; 10. Bureau of Transportation Statistics, US; 11. Federal Railroad Administration; 12. Maritime and Port Authority of Singapore; 14. Ministry of Road Transport and Highways, 2022; 15. United Nations Economic Commission for Europe 2021; 16. Bureau of Transportation Statistics, US; 17. Modal freight share of roads: 65%, Roads and Buildings Department, Government of Gujarat; 18. Eurostat.

## 4.2.4 Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

**Transforming Gujarat into** a leading hub for national and regional transportation and logistics.

**Ensuring best in** classconnectivity across the state

Leveraging technology for transforming mobility

Ensuring sustainability at the core of all development

**Facilitating** policy enablement through institutional reforms



Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:

#### Exhibit 2: Roadmap 2023-2047: Key interventions and strategic reforms (I)



Action agenda to achieve 2030 goals and ensure readiness for 2047

Reforms agenda for 2030-2047

#### Gujarat as 'National' & 'Regional' Transportation Hub

- Develop at least 1 strategically located logistics corridor around integrated port clusters & free trade zones (featuring world-class logistics cities, cargo terminals, logistics parks, business hubs, parking facilities and supporting infrastructure).
- Establish new ecosystems such as Shipbuilding, MRO ecosystem, air freight hubs, etc.
- Leverage GIFT as a pivotal financial center for global shipping and logistics enterprises (e.g., attracting and sustaining international companies, flexible legislation, streamlined regulatory compliance, etc.)
- Establish a Transport and Logistic Centre of Excellence spearheading skill development and fostering innovation (e.g., skill mapping, research programs, adapting safety measures, etc.)

- Significantly higher global share in cargo transhipment and bridge between East & West.
- Emerge as one of the International Maritime Hubs (robust shipping industry; top destination for Ship Building, Repair & Recycling in India).
- Establish Gujarat as Sea farer's capital with a well-established skilling ecosystem.

#### Best in class connectivity

- Enhance the ports infrastructure with multi terminal mega ports, transshipment ports, etc.
- Adequate rail and road connectivity to each port, industrial cluster, etc.
- Establish dedicated road network connecting major tourist & economic hubs (e.g., expressway, highway airstrips), air connectivity, mass transit systems metro rail, BRT, etc, networks in all major cities.
- Access-controlled high-speed multi-modal infrastructure e.g., highspeed rail corridors, MMLPs, export gateways, expressways, etc.
- Establish significantly higher capacity catering to all cities, towns and villages.

#### Technology led development

- Create smart mobility system to integrate various modes of transportation (e.g., Mobility as a Service, tech driven safety measures, etc.)
- Establish a digital logistic / supply chain platform for real time visibility, enabling identification of potential risks.
- Advanced technology to enable real time action on public and logistics transport.

#### Sustainability as the core focus

- Accelerate modal share shift towards cleaner modes such as rail and waterways.
- Prioritize fast-tracked transition to clean energy sources, led by adoption of renewable sources, alternate fuels and climate friendly practices.
- Extensive and quality public and non-motorized transport with extensive bike and pedestrian infrastructure (including inbuilt planned infra in greenfield projects).
- Establish climate resilient infrastructure.



Action agenda to achieve 2030 goals and ensure readiness for 2047

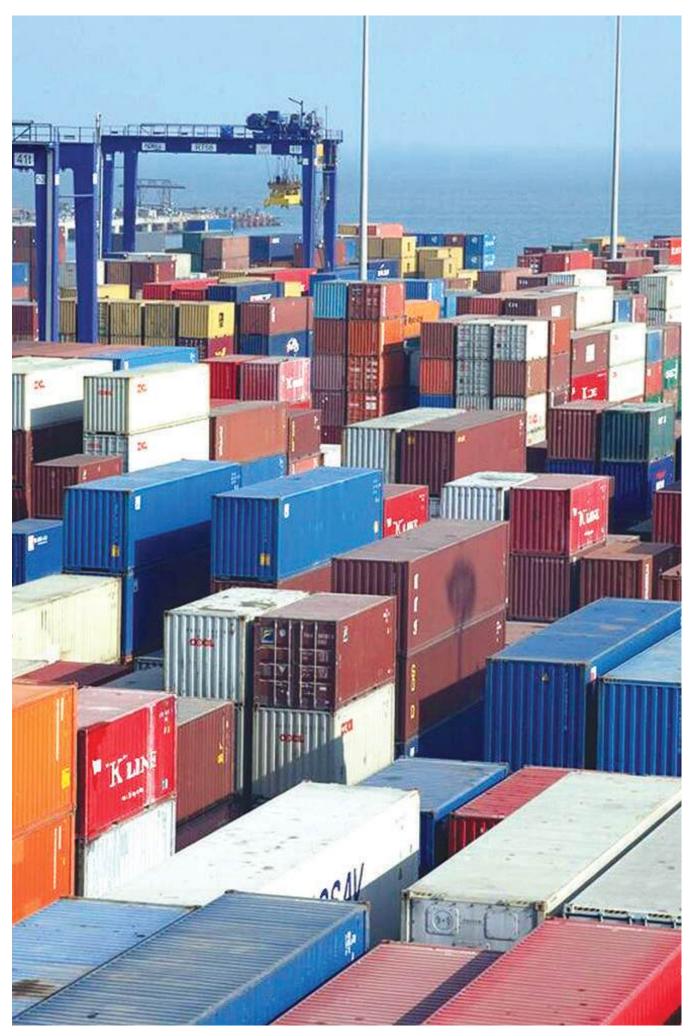
Reforms agenda for 2030-2047

## Policy enablement

- Establish a unified planning and coordination body.
- Establish institutional mechanisms such as single window, dispute resolution mechanisms and standardization of land acquisition & usage norms.
- Enhance public- private infra financing ecosystem for all infrastructure projects.

Innovative financing models to be implemented with diversified funding sources to accelerate project implementation





# **Key enablers**

4.3

Governance 2.0: Reform, Perform and Transform



## Governance 2.0: Reform, Perform and Transform

## 4.3.1 Context

As per the World Bank, governance, involves managing a nation's resources for development through the exercise of power. Good governance means efficiently implementing government policies, engaging citizens, and optimizing institutions, data, digital services, and internal operations to achieve goals effectively.

#### Key trends shaping the sector

#### Integration of Artificial Intelligence in governance

Transforming decision-making, offering data-driven insights for more effective policy planning, enabling governments to predict trends, optimize resource allocation, and respond swiftly to public needs with precision.

#### **Enhanced Citizen participation**

Democratic processes such as participatory budgeting where community members propose and vote on how to allocate public funds, fostering civic engagement and ensuring budget decisions reflect local priorities. This approach enhances transparency, allowing citizens to directly impact the funding of projects in their neighborhoods.

The "Gujarat" model of governance has been recognized as an exemplary and efficient approach, winning both national and international accolades such as the United Nations Public Service Award, 2010 and the National E-Governance Award 2017. Gujarat's remarkable performance in various governance-related indices, including the following:

#### NITI Aayog's Good Governance Index

This index evaluates states across 10 sectors and 68 key indicators, facilitating comparative assessments for Indian States. Gujarat stands out with the highest overall composite score of 5.642 among Group A states. It has shown remarkable progress, with a 12.3% improvement since 2019, the most significant among all states. The state performs exceptionally well in commerce & industry (2<sup>nd</sup>), economic governance (1<sup>st</sup>), and citizencentric governance (2<sup>nd</sup>).

#### Sustainable Development Goals Index 3.0

This index analyses progress across 17 goals which offer insights into how well a government is pursuing its developmental objectives, encompassing areas from poverty reduction to environmental sustainability. Gujarat ranks 10th across all states based on composite scores, with a score of 69, above the Indian average of 66. The state does exceedingly well in the areas of Industry, Innovation and Infrastructure (1st), Sustainable Cities (3rd), Peace & Institutional Strength (2nd) and Climate (4th).

## NITI Aayog's Good Governance Index Rankings 2021

Rank: 01

5.662

Gujarat

Rank: 02

5.425

Maharashtra

Rank: 03

5.348

Goa

Rank: 04

5.327

Haryana

Rank: 05

5.216

Kerala

Rank: 06

5.109

Karnataka

Rank: 07

5.052

Tamil Nadu

Rank: 08

4.971

**Punjab** 

Rank: 09

4.842

Telangana

Rank: 10

4.470

Andhra Pradesh

Key initiatives taken by Gujarat to establish its governance model as an exemplar for the rest of India, includes the following:



#### **Digital Gujarat**

Digital Gujarat initiative, a comprehensive digital repository for citizen and businessrelated services, has made Gujarat a leader in e-governance in India. This initiative involved establishing infrastructure like e-Sarkar and Gujarat Statewide Area Network (GSWAN), promoting e-governance policies, ensuring transparent and efficient delivery of government services.



#### Jan Seva Kendras

Citizen service centers called Jan Seva Kendras have been set up across the state to provide various government services under one roof, enhancing accessibility and efficiency in public service delivery.



## E-Gram Vishwagram Society

This project aims to provide broadband connectivity to all 14,181 Village Panchayats in Gujarat. It enables village-level computer operators to offer government services to residents, contributing to decentralized service integration and 24/7 availability.

The state has made laudable progress in various domains; however, continued and targeted efforts in following areas are crucial for achieving improved outcomes.

#### Improving digital service delivery quality

The state will focus on advancing its digital infrastructure, particularly the state portal and the service delivery portal, which are currently ranked 10th and 5th among 'A' category states, respectively. A consolidated approach to integrate various ministry websites will significantly augment user experience and streamline governance processes.

#### **Empowering local governance units**

Gujarat stands to benefit from bolstering its local governance structures by enhancing the autonomy and financial support of local bodies. Aligning with the methods of devolution observed in aspirant economies will substantially improve the efficacy of local administration.

#### Enhancing citizen centricity and engagement

Enhancing the state's governance quality necessitates a greater emphasis on transparency and citizen involvement. Facilitating more accessible legislative information and incorporating extensive public input through consultations will be pivotal steps towards fostering an engaged and informed citizenry.



## 4.3.2 Vision for 2047

A Viksit Gujarat in 2047 would have an efficient and responsive governance, fostering empowered citizens through transparent and accessible public services. In the coming years, Gujarat is to transcend local boundaries, and become a global model of effective administration and participatory governance.

## Governance 2.0: Reform, Perform and Transform@2047

Vision

Gujarat as a role model for people-centric, proactive, responsive and accountable governance.

Position citizens at the forefront of government decision-making, embracing the ethos of Minimum Government, Maximum Governance.

Affordable, transparent, efficient and inclusive public service delivery driven by digital and technological innovation, minimizing human interaction.

Strengthened and empowered local institutions to achieve truly decentralized governance enabling sustainable community-driven progress.

Collaborative decision making with coordination among all government departments, private sector and citizens.



## 4.3.3 Macro goals for 2030 and 2047

In line with above-mentioned aspirations, following major goals have been set for 2030 and 2047:

Metric	Current Status	Target (2030)	Target (2047)	Benchmarks/ references
Good Governance ndex Rank (within group A)¹	Overall: Rank 1 1 <sup>st</sup> in 1/10 areas (economic governance)	-	Overall: Rank 1 1 <sup>st</sup> in >3 areas	Kerala and Telangana 1 <sup>st</sup> in 2 areas
SDG Index Performance Rankings <sup>2</sup>	10	1	-	Kerala: 1
National E-service delivery ranking within group A) <sup>3</sup>	10	Top 5	1	Kerala: 1

## 4.3.4 Key thrust areas and plan of action

The future roadmap to achieve these goals is defined based on the following thrust areas of growth:

**Enabling and** promoting digital and data-led governance

**Implementing** institutional and talent reforms

**Fostering transparent** and accountable institutional practices

**Ensuring future** ready governance



Within these thrust areas, Gujarat shall undertake the following interventions to achieve outlined aspirations:

#### Exhibit 3: Roadmap 2023-2047: Key interventions and strategic reforms



Short term interventions to achieve 2030 goals and ensure readiness for 2047

Long term interventions for 2030-2047

#### **Digital and Data Led Governance**

- Statistical Strengthening at district-levels and Setup of Business Economic Registry.
- Develop a **one stop digital portal** for all services for citizens and businesses with human intervention only in exceptional cases (e.g., enhancing Investor Facilitation Portal with areas such as logistics).
- Appoint a Digital Officer and team in each department / line ministry.
- Integrate advanced technologies such as ML and AI for predictive decision making.
- Enhanced data availability for efficient service delivery

#### **Institutional and Talent Reforms**

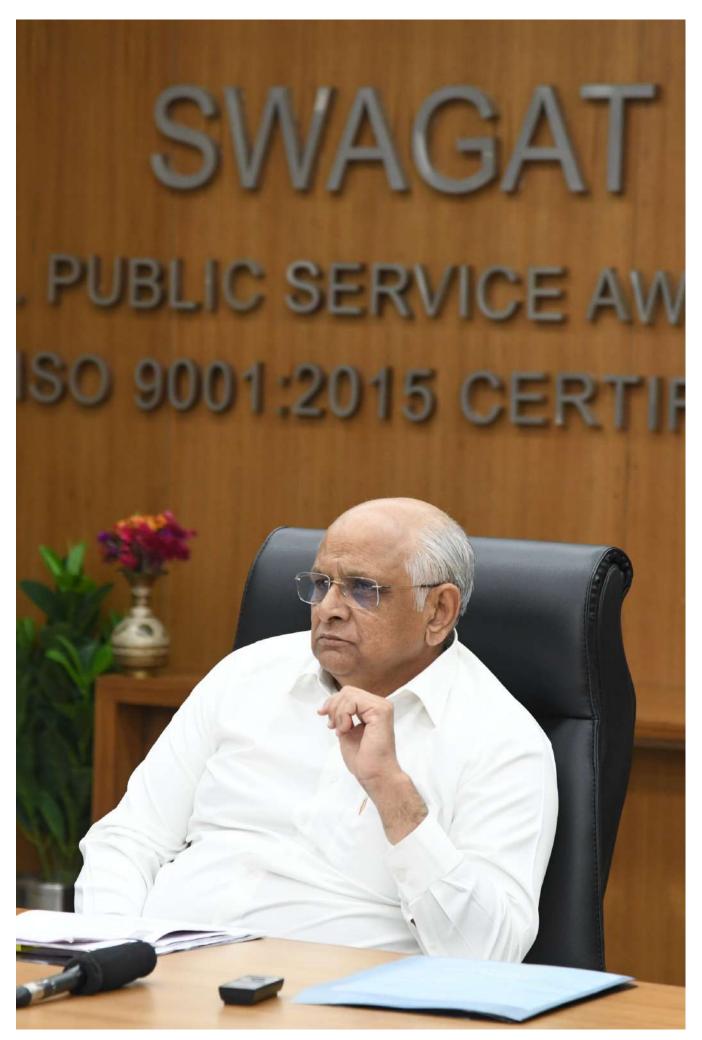
- Establish new bodies / missions for specific sectoral vision (e.g., Health and Nutrition Mission, Gujarat Digital Culture body, Unified Transport Planning and Implementation body, etc.)
- Talent strategy to have 'right person for the right job'; mainstreamed skilling and specialized skill.
- Empower panchayats by expanding the range of devolved subjects with consistent. adequate budgetary allocations.
- Enhance share of social and development expenditure; augment essential social infrastructure.
- Institutionalize legal reforms to decrease litigation and court backlog through the use of alternative dispute resolution mechanism, including mediation and arbitration.
- Implement comprehensive police reforms to guarantee transparent and impartial investigations, facilitate streamlined complaint registration, and enhance public accessibility for assistance.

#### Transparency and Accountability

- Create an Outcome Oriented Framework equivalent for each department and have best-in-class IT-enabled project management.
- Facilitate active citizen participation and engagement through institutional measures (e.g: townhalls, surveys, etc.)
- Establish transparent mechanisms to enhance accountability (e.g., publishing / streaming key legislative debates, etc.)
- Ensure goal-driven excellence driven by individual departmental KPIs, citizen needs and performance-based incentives.

#### **Future Ready Governance**

- Implement Government process re- engineering measures such as automation, workflows for streamlined internal coordination, SOPs, etc.
- Augment and establish additional sources of non-tax revenues (e.g., strategic leasing and renting state assets, etc.)



## Conclusion

Ushering in the auspicious phase of 'Amrit Kaal', the Viksit Gujarat@2047 vision document aims to encapsulate the aspirations of every citizen, guiding towards a future where individuals will not only be 'Earning Well' but also 'Living Well,' contributing to a society that is both 'valued' and 'valuable.' Across the eleven themes covered in this document to achieve these aspirations, three common elements stand out.

#### **Technology and Innovation**

The world today is heading towards a technology driven future. Over the next 25 years, Gujarat would need to leverage technology, and drive research and innovation across primary, secondary, and tertiary sectors to continue to grow ahead of national average. Investments in cutting-edge agricultural technologies could revolutionize farming for higher sustainability and productivity. The industrial sector will undergo a shift towards automation and smart manufacturing to enhance efficiency and global competitiveness. In the services sector, technological advancements will drive innovative solutions in healthcare, education, and finance, extending the reach of quality services globally.

Many thrust areas across all themes - including physical classrooms, remote healthcare, digitallyenabled citizen services, or next-gen transport require a strong focus on leveraging technology for driving higher efficiency and achieving the targeted outcomes.

#### Sustainable and climate resilient growth

In the next 25 years, addressing climate change impact will be a top priority globally. Gujarat aims to be a key player in India's net-zero commitments through widespread sustainable development. The state is already driving sustainable agricultural practices like natural and organic farming and plans to further expand their footprint. The industries and services sectors will need to pivot to green growth, embracing renewable energy, a robust recycling ecosystem, and adopting clean technologies (such as Green Hydrogen, Carbon Capture, Utilization and Storage, Biofuels). Sustainable practices will be central in the state's infrastructure, urban, and rural development.

## Sharp execution focus, with high agility

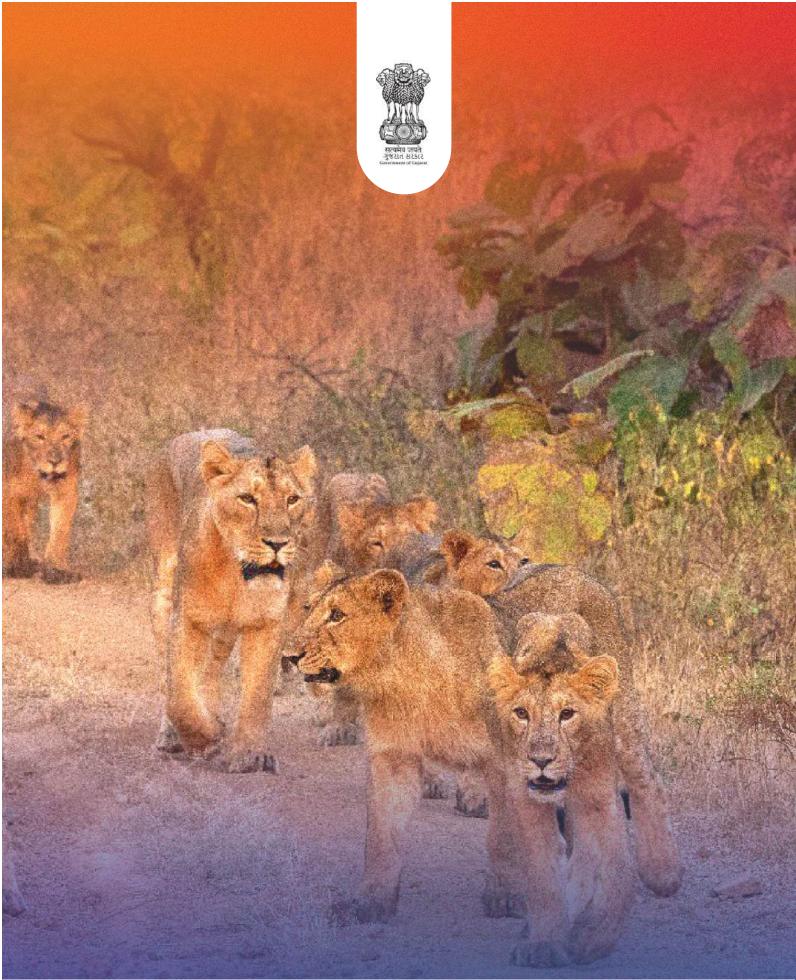
Gujarat has been a shining beacon of development across India, growing significantly faster than India average over the last two decades. Maintaining such high growth on a much higher base, and at the same time delivering on the aspirational social outcomes envisaged in this document will require execution par excellence. This would also require extensive collaboration across all stakeholders including government, citizens, industry, academia and institutions.

While this document captures the state's aspirations and some priority interventions, it is crucial to acknowledge that over the two-and-a-half-decade timeline, with the anticipated and unforeseen uncertainties ahead, the state needs to adapt to market dynamics and maintain flexibility in the implementation plan, while sticking to the broader aspirations and direction set by this vision document.

The vision for *Viksit Gujarat*@2047 is clear and ambitious – to emerge as a state that leads not just in terms of economic indicators but as a beacon of social development, environmental sustainability, and cultural richness. This vision report is a commitment to the future generations, that the Gujarat they inherit will be far more prosperous, resilient, and vibrant than ever before.

Jai Jai Garvi Gujarat!

# **Notes**





**General Administration Department, Government of Gujarat**Planning Division