

PM GATI SHAKTI GUJARAT :

TOWARDS VIKSIT BHARAT @ 2047

A Compendium







Industries & Mines Department
Government of Gujarat

A ROADMAP FOR FUTURE PM GATI SHAKTI GUJARAT

A JOURNEY OF TWO YEARS FROM INCEPTION TO IMPLEMENTATION







Shri Narendra Modi

Hon'ble Prime Minister

Infrastructure has always been important in the sustainable development of any country. Those who study the history of infrastructure know this very well. Gati Shakti Master Plan will rejuvenate India's multi-modal infrastructure. The results of the PM Gati Shakti Master Plan are becoming visible.



Message

Shri Bhupendrabhai Patel

Hon'ble Chief Minister, Gujarat



Bhupendra Patel

Chief Minister, Gujarat State

Message

"Alone we can do little, together we can do much"

- Anonymous

The purpose to launch **PM Gati Shakti** initiative is to bring in more holistic and integrated planning and execution of projects with an aim to achieve multi-modal and last-mile connectivity. It is a visionary effort by our **Honourable Prime Minister Shree Narendrabhai Modi** to accelerate infrastructure development and enhance connectivity across the Nation. Recognizing the pivotal role of efficient connectivity in fostering economic growth and development, our government has wholeheartedly embraced this transformative initiative.

Gujarat has been a pioneer in implementing this ambitious programme, symbolizing our commitment to process and prosperity. Through concerted efforts, we have strived to create seamlessly integrated network of roads, railways, ports, and airports across the state. I am much pleased to learn that a compendium is being brought out by **PM Gati Shakti Gujarat** that reflects the extraordinary achievement of our collective endeavor. It is heartening to learn that this compendium exemplifies our commitment to ensuring smoother movement of goods, reducing transportation costs, and facilitating seamless trade and commerce in Gujarat. I express my heartfelt gratitude to every individual and organization that has contributed to the success of the PM Gati Shakti initiative in Gujarat and for a bright future ahead.


(Bhupendra Patel)



Message

Shri Balvantsinh Rajput

Hon'ble Minister (Industries),
Government of Gujarat



BALVANTSINH RAJPUT



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MESSAGE

PM Gati Shakti Gujarat stands as a testament to proactive governance and strategic planning. This initiative has been pivotal in revolutionizing infrastructure development, encouraging economic growth, and ensuring inclusive progress across the State. The focus on interlinking various sectors, optimizing resources, and leveraging cutting-edge technology exemplifies an unprecedented approach towards holistic and sustainable development of Gujarat.

The collaborative efforts of our Government, industry leaders, and local communities have been instrumental in driving this initiative forward. It's heartening to witness the convergence of ideas, resources, and expertise to expedite projects, enhance connectivity, and create an ecosystem conducive to innovation and growth. This collective synergy has not only expedited infrastructure projects but has also laid the groundwork for long-term economic prosperity and social advancement.

As we navigate the path towards a more resilient and progressive future, the PM Gati Shakti Gujarat initiative stands as an inspiration of proactive governance, nurturing an ecosystem for investment, employment generation, and overall socio-economic development. Its impact reverberates far beyond infrastructure, laying the foundation for a robust, interconnected, and prosperous Gujarat.

(Balvantsinh Rajput)



Message

Shri Harsh Sanghavi

Hon'ble Minister of State (Industries),
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Harsh Sanghavi



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Gram Rakshak Dal, Civil Defense, Jail,
Border Security (All Independent Charge),

Government of Gujarat

Message

The PM Gati Shakti Gujarat initiative is a visionary endeavor that has redefined the landscape of infrastructure and economic progress of Gujarat. At its essence, PM Gati Shakti Gujarat embodies a transformative approach to infrastructure development. It stands as a beacon of innovation, seamlessly integrating sectors and leveraging cutting-edge technology to create a robust framework for sustainable growth. By prioritizing connectivity and resource optimization, this initiative has laid the groundwork for a more resilient and interconnected Gujarat.

The synergy driving PM Gati Shakti Gujarat, among various Government departments, industries and local communities through a unified front is highly appreciated, these entities have pooled their resources and expertise, propelling forward various projects critical to the PM Gati Shakti Gujarat initiative. This collaborative determination has not only accelerated infrastructural advancements but has also ignited an economic momentum, creating a ripple effect that extends to employment generation and inclusive growth across diverse sectors.

The impact of the PM Gati Shakti Gujarat initiative extends far beyond infrastructure enhancement. It signifies a paradigm shift, fostering an environment conducive to innovation, entrepreneurship, and inclusive progress. As Gujarat propels towards a future marked by economic resurgence and social advancement, this initiative remains a cornerstone for sustainable development and prosperity.

(Harsh Sanghavi)

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Message

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Raj Kumar, I.A.S.
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MESSAGE

The PM Gati Shakti initiative, envisioned by our Hon'ble Prime Minister, is a monumental step towards the integrated planning and execution of infrastructure projects. It aims to transcend departmental boundaries and bring about a holistic approach to infrastructure development, thereby catalysing economic growth and creating a multitude of job opportunities.

PM Gati Shakti has been implemented in Gujarat through a "whole-of-government-approach". As a result of this approach, a number of significant projects have already been completed or are underway. To name a few, Area Development Planning for doubling cropped area in Dahod District will enhance the substantial increase in agricultural productivity and rural prosperity. Integrated area planning for South Coastal Corridor, Ambaji City Bypass, Mobile Connectivity are models of sustainable development, harmonizing the goals of sustainable and futuristic economic planning.

The Compendium captures the numerous success stories and milestones achieved during the implementation of PM Gati Shakti in Gujarat. It provides an in-depth process of the various projects planned, highlighting the significant positive impact due to uses of PM Gati Shakti and overall social development. Furthermore, it serves as a valuable guide for other states and stakeholders as model of inclusive planning and sustainable development through PM Gati Shakti Gujarat.

I would like to congratulate to all the dedicated individuals, government officials, and stakeholders who have played a pivotal role in the successful execution of PM Gati Shakti in Gujarat.

Let us continue to work together with renewed vigour and dedication to ensure that PM Gati Shakti becomes a catalyst for the holistic progress of Gujarat.

[Raj Kumar]

Email : chiefsecretary@gujarat.gov.in



Message

Smt. Sumita Dawra, IAS

Special Secretary, Logistics
Government of India




सुमिता डावरा, भा.प्र.से.
विशेष सचिव (लॉजिस्टिक्स)
SUMITA DAWRA, IAS
Special Secretary (Logistics)



भारत सरकार
वाणिज्य एवं उद्योग मंत्रालय
सद्योग संवर्धन एवं आंतरिक व्यापार विभाग
Government of India
Ministry of Commerce & Industry
Department for Promotion of Industry & Internal Trade

Message

I congratulate the Government of Gujarat for exemplary implementation of PM Gati Shakti in integrated planning of social and economic infrastructure in the State. Indeed the State has set a reassuring precedent for efficient governance at the grassroots level.

India has achieved remarkable progress in its economic growth during the past decade and is now poised to embark on a new phase in its development journey. India is steadily progressing towards the realization of the visionary goal set by the Hon'ble Prime Minister, with the objective of transforming India into a developed nation with a USD 32.8 trillion economy by 2047. To achieve this ambitious goal, the development of state-of-the-art modern infrastructure is of paramount importance, as it serves as the driving force behind India's growth and is an essential prerequisite for integrating with global supply chains.

PM GatiShakti National Master Plan (NMP) is a GIS based transformative approach to develop next generation infrastructure, launched on 13th October, 2021, to ensure multi-modal, first and last mile connectivity for seamless movement of people and goods, improving "Ease of Living" as well as "Ease of Doing Business". This platform enables comprehensive planning for multimodal logistics. In the past two years, remarkable progress in terms of planning of infrastructure development on NMP has been seen, which has become more efficient due to its data backed decision making process

Gujarat's successful implementation of the PM Gati Shakti platform underscores the potential for profound positive change. By adopting this platform, the State is able to expedite decision-making and paving the way for a future marked by improved infrastructure and enhanced governance, ultimately benefitting the lives of the citizens.


(Sumita Dawra)



Foreword

Shri S J Haider, IAS

Additional Chief Secretary,
Industries & Mines Department
Government of Gujarat



S. J. Haider, IAS
Additional Chief Secretary



Industries & Mines Department
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Foreword

Under the visionary guidance of our Hon'ble Prime Minister Shri Narendra Modi, Gujarat has emerged as a beacon for good governance, inclusive growth and sustainable development. Recognized as India's Growth Engine, the State is known for its robust industrial base, smart infrastructure and business-friendly environment. Progress spans across diverse sectors—from trade, commerce, and industries to agriculture, automobiles and pharmaceuticals.

The PM Gati Shakti - National Master Plan (PMGS-NMP), tailored for effective governance, reinforces Gujarat's position as a premier investment destination, prioritizing ease of living and conducting business. Aligned with the vision of Viksit Bharat @ 2047, PMGS leverages technology to unify Departments, serving citizens, businesses and infrastructure development.

While commemorating two years of implementation of PMGS in Gujarat, it is a matter of honour for me to present this Compendium showcasing its pivotal role in planning physical and social infrastructure projects, crucial in identifying gaps and showcasing our steadfast commitment to good governance and nurturing a robust ecosystem. I believe this Compendium will serve as a valuable repository providing insight into the catalytic impact of PM Gati Shakti Gujarat (PMGS-G) on good governance and holistic development.

Last but not the least, I would be failing in my duty if I don't gratefully acknowledge the overall guidance of Hon'ble Chief Minister Shri Bhupendrabhai Patel, Hon'ble Minister (Industries) Shri Balvantsinh Rajput, Hon'ble Minister of State (Industries) Shri Harsh Sanghavi, Hon'ble Minister of State (MSME) Shri Jagdishbhai Panchal and Chief Secretary Shri Raj Kumar as also the cooperation and support from Heads of Administrative Departments for their pivotal roles in deploying the versatile tool of PMGS-G for the service to the State and the Nation.


(S. J. Haider)

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Acknowledgement

Shri Banchhanidhi Pani, IAS

Chief Executive Officer
Gujarat Infrastructure Development Board



Acknowledgement

This compendium brings together the hard work and dedication of all the departments and its leadership in making PM Gati Shakti initiative a successful platform. On Behalf of Gujarat Infrastructure Development Board (GIDB), I express my deepest gratitude to Ministry of Commerce and Industries and Department for Promotion of Industries and Internal Trades (DPIIT) for their unwavering support. The wisdom they shared, and the encouragement provided by them have been instrumental in our journey toward success.

I am extremely grateful for the visionary guidance and mentorship by Hon'ble Chief Minister Shri Bhupendrabhai Patel in this endeavour. I am also grateful to Hon'ble Minister (Industries) Shri Balvantsinh Rajput, Hon'ble Minister of State (Industries) Shri Harsh Sanghavi for their continuous guidance. I extend my gratitude to Shri Raj Kumar, IAS, Chief Secretary, Government of Gujarat for his commendable leadership in successfully implementing this initiative.

I am obliged to Shri S. J. Haider, IAS, Additional Chief Secretary, Industries & Mines Department for his invaluable insights, continuous support, and constructive feedback that have been pivotal in refining the trajectory of PM Gati Shakti Gujarat. I wish to sincerely thank Shri M K Das, IAS, Additional Chief Secretary, Ports & Transport Department & Revenue Department, for his support in the core work of the PM Gati Shakti Gujarat and his continued support in integrating layers.

I would like to acknowledge Smt. Avantika Singh, IAS, Secretary to Hon'ble Chief Minister of Gujarat for her efforts in onboarding all departments onto the PM Gati Shakti platform, integrating departmental endeavours for synergistic action. Additionally, I express gratitude to Shri T. P. Singh, Director General, Bhaskaracharya National Institute for Space Applications and Geoinformatics (BISAG-N) for development of portal, training, capacity building and providing overall facilities for the success of PM Gati Shakti Gujarat.

I extend my sincere gratitude to the officers of GIDB, and to every individual involved in PM Gati Shakti Gujarat initiative for their support, which is crucial to the success of this platform. Their collective expertise, encouragement, and commitment have not only significantly influenced its outcome but have also been instrumental in shaping its direction. I am profoundly thankful for their involvement and steady belief in this endeavour.



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EXECUTIVE SUMMARY

Executive SUMMARY

Under the visionary leadership of Hon'ble Prime Minister Narendra Modi, the Government of India has embarked on a historic mission to reshape the nation's infrastructure landscape. The 'PM Gati Shakti National Master Plan,' unveiled on India's 75th Independence Day, signifies an unwavering commitment to building a future where comprehensive infrastructure underpins growth and prosperity. This national master plan, guided by a holistic vision and a seven-engine approach, encompasses roads, railways, airports, ports, public transport, waterways, and logistical infrastructure. The overarching objective is to revitalise India's connectivity, reduce logistics costs, stimulate economic growth, and usher in a brighter future.

In alignment with this national endeavour, the Government of Gujarat has entrusted the Gujarat Infrastructure Development Board (GIDB), a nodal agency responsible for implementing the PM Gati Shakti State Master Plan within the state. In November 2021, a western regional zonal conference was convened at Mahatma Mandir, followed by a series of five regional workshops held in Ahmedabad, Vadodara, Surat, Rajkot, and Bhavnagar in collaboration with BISAG-N. These events were instrumental in disseminating critical insights and details of the PM Gati Shakti National Master Plan to district-level officials, catalysing momentum for this transformative initiative.



Key Achievements and Features of PM Gati Shakti Gujarat:



Comprehensive Infrastructure Mapping :

PM Gati Shakti Gujarat facilitates meticulous mapping of diverse infrastructure assets, spanning roads, railways, airports, ports, government logistics infrastructures and more. The mapping of Social Infrastructures like Public Health Centres (PHCs), Hospitals, Primary Schools, Secondary Schools, Industrial Training Institutes (ITIs), Aanganwadis and the like helps the departments in identifying infrastructure gaps and planning for providing integrated infrastructures, thus promoting an inclusive approach to development.

Respective departments have developed Mobile Applications for mapping Government Buildings, Panchayat Assets, Urban Assets, MSMEs and large industries, and social infrastructure assets for data integration and regular updates.



Robust Security Framework :

In the digital era, data security is paramount. A comprehensive security framework has been established to ensure the confidentiality of information. Standard Operating Procedures (SOPs) are in place to maintain data integrity and protect against breaches.



Quality and Accuracy of Data :

The PM Gati Shakti Gujarat platform operates dynamically, necessitating regular data updates and validation by respective stakeholders. A data validation mechanism of Maker-Checker-Approver mechanism has been developed to ensure data accuracy and authenticity.



Cutting-Edge Tools for Infrastructure Planning :

The PM Gati Shakti Gujarat platform incorporates systematic advanced tools. These tools cover navigation, land identification, site suitability, query builders, and more, empowering departments in their infrastructure planning endeavours.



Mobile Applications for Empowering Departments :

Mobile Applications like Know Your Permissions and Solid Waste Complaint Registration developed in PM Gati Shakti Gujarat empower the departments in undertaking decision-making and enabling transparency to civic services.





NOCs and Permissions Made Easy :

The streamlined process for obtaining No Objection Certificates (NOCs) and permissions from various government departments marks a significant leap in ease of business. This initiative drastically reduces processing times, ensuring faster and more efficient decision-making.



Physical Infrastructure Planning :

By using PM Gati Shakti Gujarat, departments have undertaken Physical Infrastructure Planning, some of them are South Coastal Corridor Planning, Mobile Connectivity in Tribal Areas, Planning for EV Charging Stations, and City Bypass/ Ring Road Planning, thus saving departments' time and cost.



Logistics Planning :

As part of implementation of Gujarat Integrated Logistics and Logistics Parks Policy, 2021 for reduction of Logistics Cost, State Integrated Logistics Master Plan, City Logistics Plans for 08 Cities, namely Gandhinagar, Ahmedabad, Vadodara, Surat, Rajkot, Jamnagar, Bhavnagar and Junagadh are being prepared using PM Gati Shakti Gujarat following integrated planning approach. Mapping of private Freight Infrastructures have been initiated for identifying infrastructure gaps and enhancing integrated logistics and transportation infrastructures.



Social Infrastructure Planning :

Going beyond the physical infrastructure planning, the Social Infrastructure departments have initiated integrated planning for identifying suitable locations for Aanganwadis operating on rental premises to provide better infrastructure facilities and better accessibility for children and pregnant women, identifying suitable locations for Godowns with better connectivity and accessibility, optimum resources planning for ITIs, skill gap analysis for Dholera Special Investment Region (SIR) and Statue of Unity, to name a few.



Area Development Planning :

Area Development Planning have been undertaken by Departments at District/ Taluka/ Village level. This helps in the economic development of the District level as well as addressing the challenges at ground level in an effective manner. Planning for Bulk Drug Park in Jambusar, Doubling Cropped Area in Dahod, Flood Disaster Management, Cyclone Disaster Management, Infrastructure Gap analysis for MSMEs and Large Industries, and Development Plan preparation for Area Development, to name a few examples of Area Development Planning using PM Gati Shakti Gujarat.



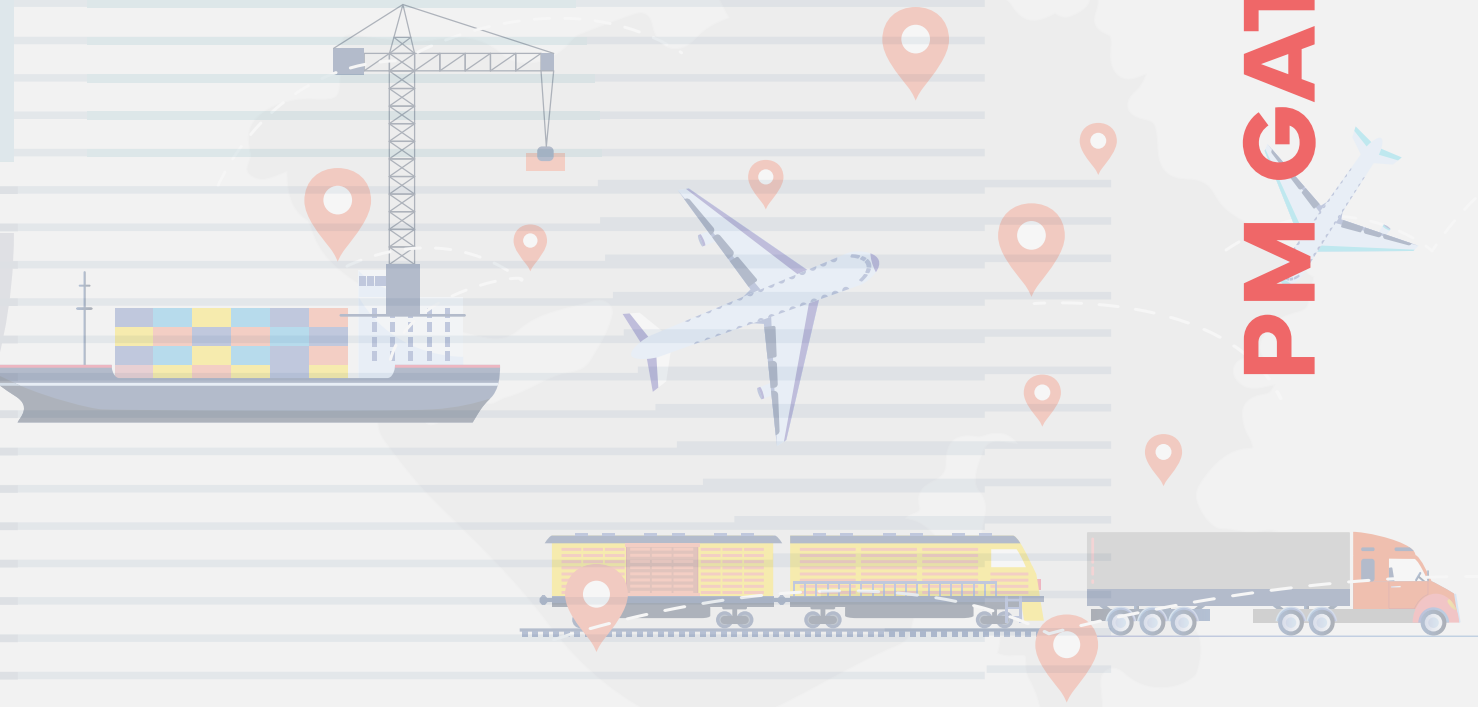
Innovative Future Roadmap :

The future roadmap of PM Gati Shakti Gujarat is rich with innovative ideas. It includes quality enhancements, expanded usage, district-centric development, area development planning, socio-economic empowerment, advanced project monitoring, predictive planning, and improved interfaces for citizens and investors. It aims to minimize logistics costs, promote sustainability, and propel India into a future where infrastructure is the cornerstone of progress.

Moreover, the government actively encourages wider adoption of PM Gati Shakti Gujarat at the district, taluka, and village levels. This is achieved by enhancing the skills and knowledge of its officers through expert lectures, tutorials, and dedicated helpdesks. Districts are envisioned as engines of economic growth and job creation, with district administrators taking on the responsibility of planning and monitoring infrastructure development at various levels within the district, encompassing both rural and urban areas. The initiative emphasises area-specific projects and the integration of socio-economic indicators, improving living conditions, skill development, and employment opportunities for residents. It also incorporates advanced project monitoring, citizen and investor interfaces, and a whole-of-society approach, fostering multi-sectoral growth, transparency, and faceless governance. This comprehensive approach aligns with the broader goal of achieving sustainability and facilitating efficient infrastructure project planning across all levels of governance and society.

PM Gati Shakti Gujarat is an unwavering platform of innovation, inclusive growth, and a brighter future to achieve the vision of Viksit Bharat by 2047. It paves the way for the nation to emerge as a global leader, where infrastructure fuels prosperity, and dreams transform into reality. PM Gati Shakti Gujarat will be instrumental in aiding investors in identifying ideal locations for their industrial ventures in the state, furnishing comprehensive information on upcoming connectivity projects, business hubs, industrial zones, and the surrounding landscape. Furthermore, it simplifies the approval process, streamlining regulatory clearances and providing real-time data for well-informed decision-making.





PM GATI SHAKTI : AN OVERVIEW

OT



PM Gati Shakti

AN OVERVIEW

ABOUT PM GATI SHAKTI

In the last decade, the Government of India, under the leadership of Hon'ble Prime Minister Narendra Modi, has launched various initiatives such as Swachh Bharat Mission, Make in India, Digital India, Smart City Mission, AMRUT Mission, Hriday and Jal Jeevan Mission and many others across sectors. To further propel the growth of New India, Hon'ble Prime Minister Narendra Modi, on 75th Independence Day, announced the beginning of a revolutionary initiative known as 'PM Gati Shakti National Master Plan' with an aim to build 'holistic infrastructure' throughout the country. The National Master Plan is proposed to lay the foundation for the 'Amrit Kaal - next 25 years of India' and provide the power of speed to the development plans of the 21st century and ensure their timely completion. The National Master Plan will help India realise its dream of becoming the business capital of the World.

The plan aims to break down the inter-ministerial silos as well as integrate project planning and design with a unified and holistic vision, boosting India's global competitiveness through next-generation infrastructure and multi-modal connectivity. This would facilitate the smooth movement of commodities and people, improving the country's ease of living and ease of doing business.

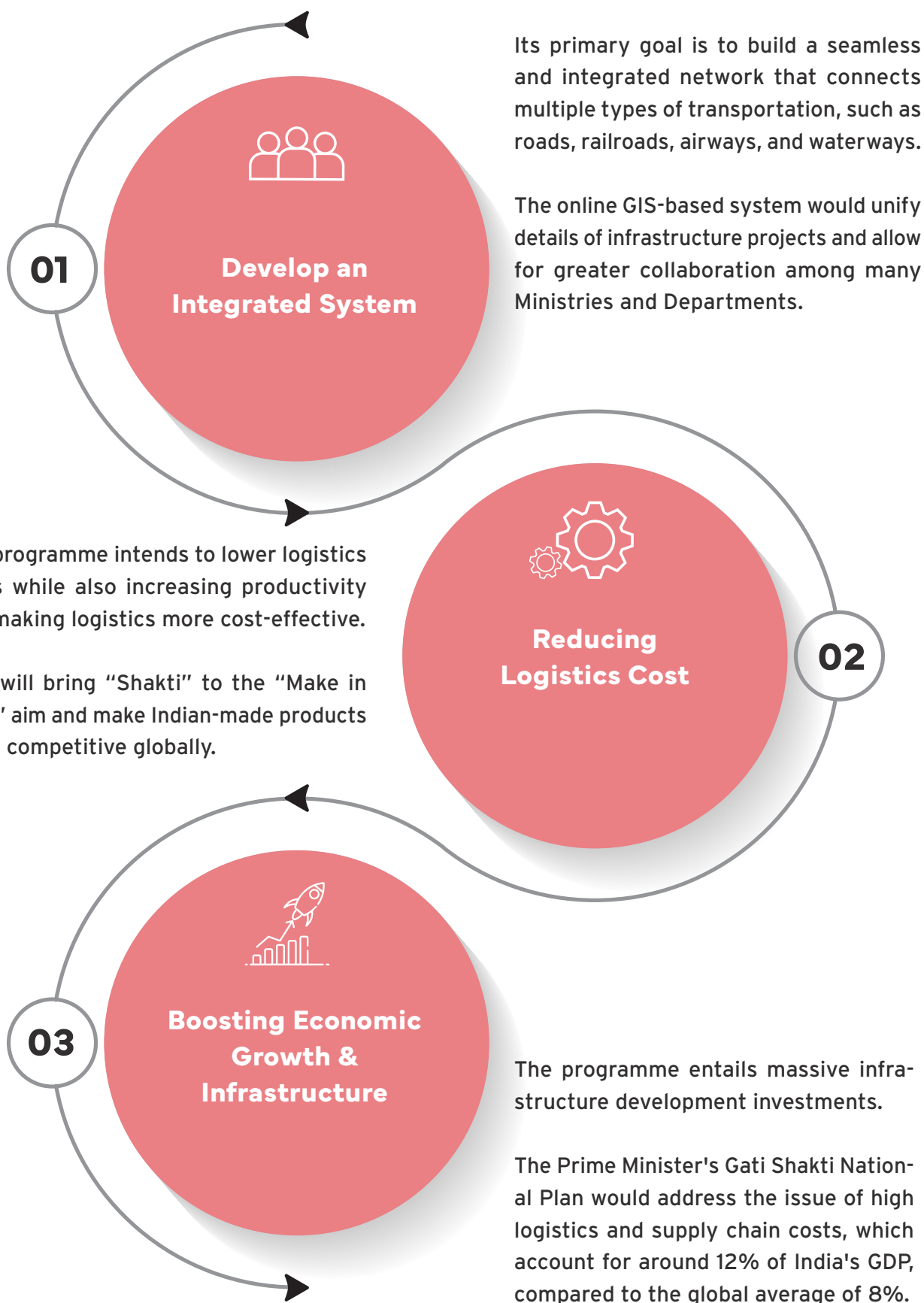


THE CONCEPT

The PM Gati Shakti National Master Plan is backed by seven infrastructure engines: roads, railroads, airports, ports, public transport, waterways, and logistical infrastructure. It aspires to create a multi-modal network with thorough planning, funding, innovation, and technology support.

PM Gati Shakti is a transformative initiative in India that integrates infrastructure efforts at both central and state levels, utilising a hub and spoke model to optimise transportation and connectivity planning. It encompasses a wide range of schemes, including Bharatmala, Sagarmala, inland waterways, and more, while also focusing on the development of economic zones such as textile clusters, pharmaceutical clusters, and defence corridors to enhance business competitiveness. The initiative emphasises the use of technology, including spatial planning tools with ISRO imagery from BISAG-N, to streamline inter-state infrastructure projects and boost connectivity, making it a pivotal step towards fostering economic growth and development across the nation.







PILLARS OF PM GATI SHAKTI



COMPREHENSIVENESS

PM Gati Shakti will incorporate all existing and planned initiatives from various Central Ministries and State Departments into a single, centralised portal. This approach will provide enhanced collaboration and data sharing among different departments, offering critical information for the comprehensive planning and execution of projects. It promises to streamline the coordination of efforts and facilitate a more integrated approach to infrastructure development in India.

PRIORITISATION

Through PM Gati Shakti, different departments will have the capability to prioritise their projects by engaging in cross-sectoral interactions. Therefore, all the departments can work together, considering each other's goals and projects, to determine the most effective and coordinated approach to infrastructure development, ultimately leading to more efficient and well-planned projects.

OPTIMISATION

PM Gati Shakti will assist various Central Ministries and State Departments in project planning by identifying critical gaps in infrastructure. When it comes to transporting goods from one location to another, the initiative will contribute to selecting the most optimal routes, taking into account factors like time and cost efficiency. This approach will improve the overall logistics and transportation landscape, making it more streamlined and cost-effective for the movement of goods.

SYNCHRONISATION

PM Gati Shakti facilitates holistic coordination among various Government Departments, optimising project planning and execution. It ensures synchronisation between different layers of governance, preventing duplication of efforts. This initiative aims to enhance efficiency and effectiveness in infrastructure development across India.

ANALYTICAL

PM Gati Shakti aims to consolidate data into a single platform, offering spatial planning and analytical tools. This approach enhances visibility for executing agencies, facilitating more informed and efficient decision-making in infrastructure projects.

DYNAMIC

All Central Ministries and State Departments will be able to visualize, review, and monitor the progress of cross-sectoral projects using the PM Gati Shakti platform. This tool will periodically provide on-ground progress updates, ensuring regular project updates on the portal. This approach will be instrumental in identifying critical interventions to enhance and update the master plan as needed.



NATIONAL LAUNCH OF PM GATI SHAKTI PROGRAMME AND FRAMEWORK

PM Gati Shakti National Master Plan aims to achieve various targets for infrastructure development in India. These targets include:

- Expansion of the national highway network to increase the capacity of roadways and touch the 2 lakh-km mark.
- Creation of around 200-220 new airports, heliports, and water aerodromes to boost aviation.
- The capacity of railways to transport cargo will be increased to around 1,600 tonnes by FY25.
- The transmission network for electricity will be expanded to 454,200 circuit km to ease access to electricity.
- The plan aims to increase renewable capacity to 225 GW by FY25 and complete around 17,000 km of gas pipelines.
- Villages in India to have access to 4G connectivity.
- The plan includes the creation of 20 new mega food parks, 11 industrial corridors and other sectoral industrial parks.



Figure 1.1 : Launch Event of the PM Gati Shakti National Master Plan

IMPLEMENTATION OF PM GATI SHAKTI NATIONAL MASTER PLAN

For the implementation of PM Gati Shakti National Master Plan, the Government of India has constituted three different groups:



Empowered Group of Secretaries (EGoS):

39 Central Ministries/Departments have been synchronised through EGoS. The committee is headed by the Cabinet Secretary. EGoS consists of Secretaries of Ministries as members.

Network Planning Group (NPG):

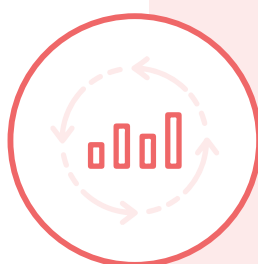
An integrated multi-modal Network Planning Group (NPG) has been formed with heads of all concerned ministries and departments as members.

This group is responsible for unified planning and integration of the proposals as well as connectivity projects with an estimated cost of over INR 500 Crore. As of October 2023, 57 NPG meetings have been conducted wherein more than 110 projects pertaining to different States are discussed and monitored.



Technical Support Unit (TSU):

This unit includes domain experts from various infrastructure sectors and subject matter experts. Bhaskaracharya Institute for Space Application and Geo-informatics (BISAG-N) is the nodal agency to provide all the technical support to the NMP.



PM Gati Shakti National Master Plan ensures synchronised planning for Inter-State projects, promoting efficient coordination and infrastructure development.



National Monetisation Pipeline (NMP):

PM Gati Shakti National Master Plan is in synergy with the National Monetisation Pipeline. It aims to unlock value in brown-field projects by engaging the private sector, transferring revenue rights and not ownership in the projects to them, and using the funds generated for infrastructure creation across the country.

National Infrastructure Pipeline (NIP):

The NMP will run in synchronisation with the INR 100 lakh crore National Infrastructure Pipeline (NIP). NIP includes economic and social infrastructure projects. Through this, NIP Projects will also be linked with PM Gati Shakti National Master Plan. Further, to complement the PM Gati Shakti NMP, the National Logistics Policy (NLP) was launched in September 2022 by the Hon'ble Prime Minister.

Collaboration for PM Gati Shakti:

To give boost to the PM Gati Shakti National Master Plan, the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry and Gati Shakti Vishwavidyalaya (GSV) entered into a collaboration in October 2023. Under this collaboration, GSV will be the nodal agency across India to design, develop and deliver the courses and curriculum related to PM Gati Shakti National Master Plan and Logistics Policy. This collaboration will bring together three important aspects of PM Gati Shakti implementation, i.e., smarter planning and implementation, structured specialised development and capacity building.

Mapping on PM Gati Shakti National Master Portal:

39 Central Ministries/Departments, such as Ministry of Power, Department of Telecommunications, Ministry of Indian Railways, Ministry of Road, Transport and Highways, etc., are mapped on the PM Gati Shakti National Master Portal. Also, more than 1450 layers, such as Road Network, Rail Network, etc., pertaining to these Ministries/Departments are mapped. 36 States/Union Territories have created their Portal (State Master Plan and State Portal) and integrated them with the National Master Portal.



The upcoming projects pertaining to Central Ministries and State Departments with an estimated cost of more than INR 500 Crores were planned through PM Gati Shakti.

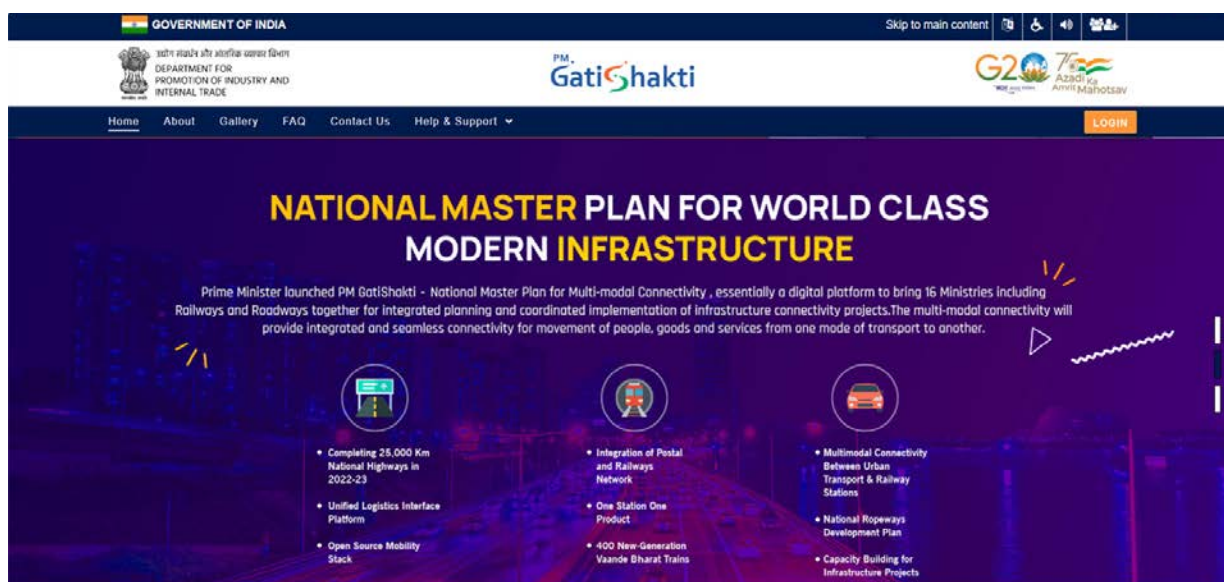


Figure 1.2 : PM Gati Shakti National Portal View

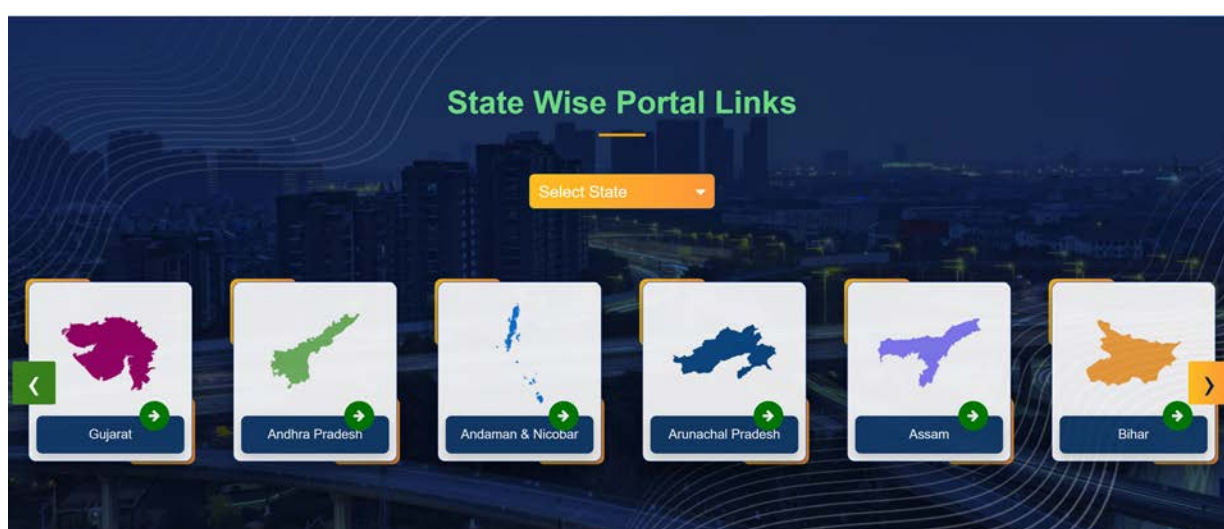
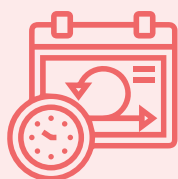


Figure 1.3 : Integration of State Gati Shakti Portals with National Master Plan



Some case studies of planning projects, such as inter-state express highways and missing railway links, are presented.



CASE STUDY — A

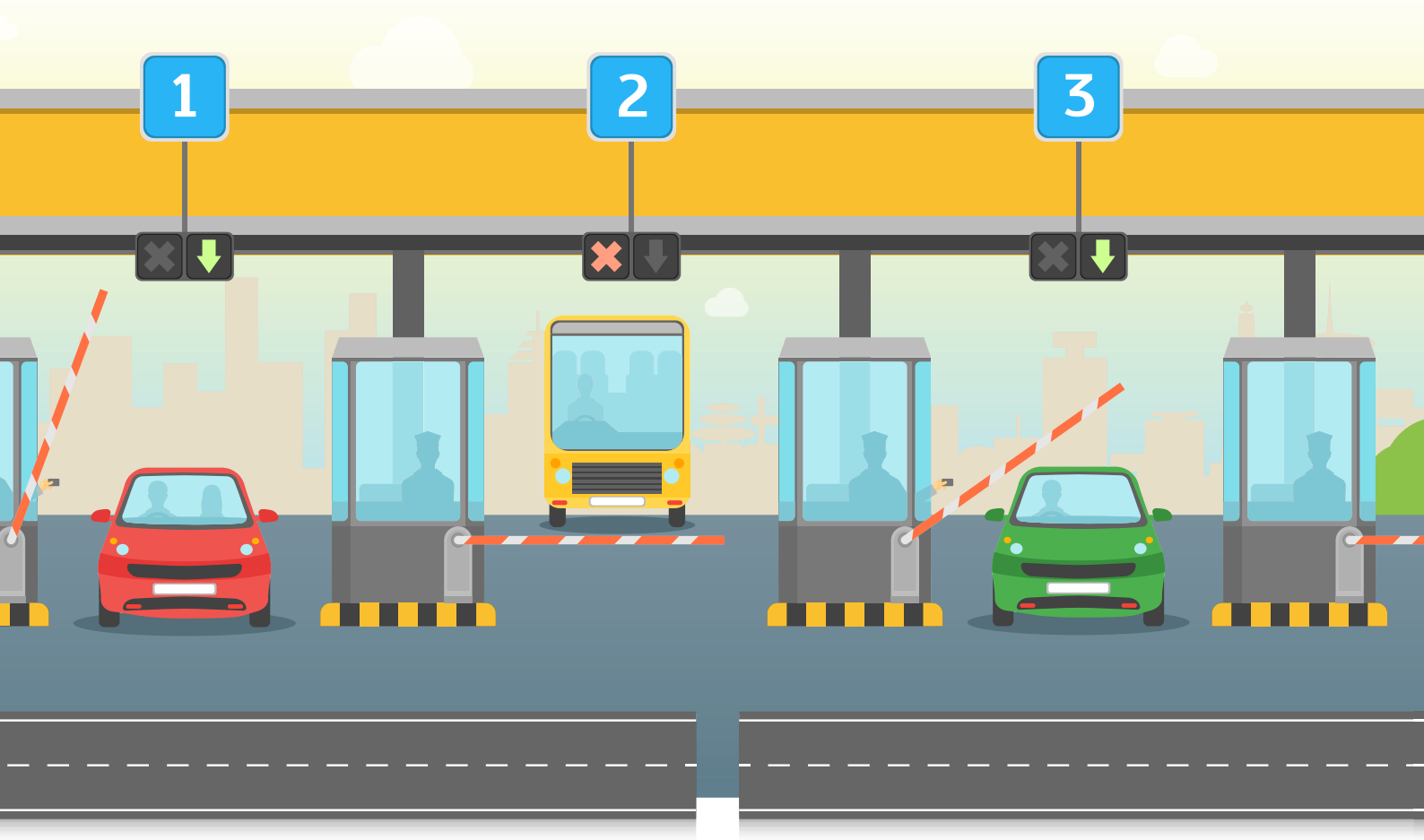
CONSTRUCTION OF SIX-LANE ACCESS CONTROLLED GREENFIELD INTER STATE HIGHWAY



The establishment of this Greenfield highway marks a significant milestone in improving interstate connectivity among the states of Gujarat, Maharashtra, and Karnataka.

Furthermore, it promises to enhance vehicle speed, leading to a substantial reduction in travel time compared to the existing network by 6 hours.

- The project corridor is efficiently segmented into 16 construction packages.
- Across most of its length, a 70m right of way is designated, except at the tunnel location, where it extends to 150m. This strategic division optimises construction and transportation efforts.



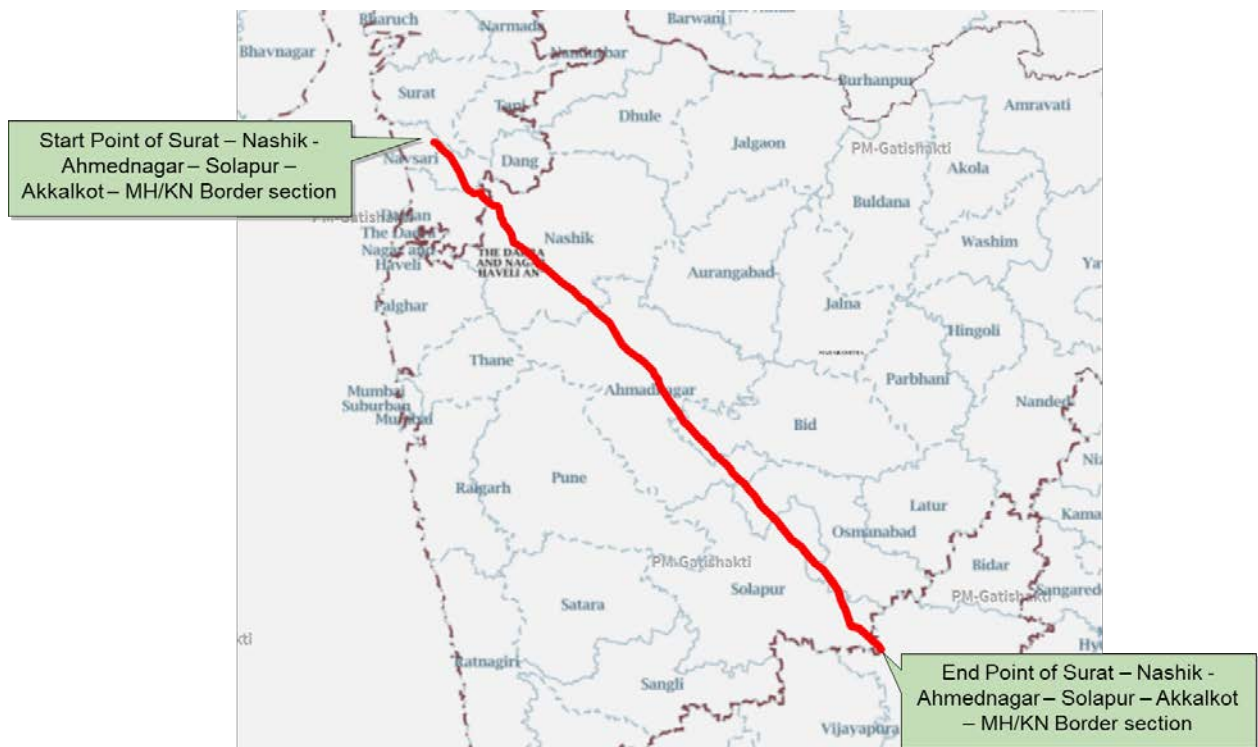


Figure 1.4 : Construction of Six-Lane Access Controlled Greenfield Highway

PROSPECTIVE IMPLICATION

This corridor provides connectivity to the economic nodes of Gujarat and Maharashtra, such as Surat, Bharuch, Navsari, Solapur, Nashik, and Ahmednagar.

The project will generate 2,05,09,440 person-days of indirect employment and 19,22,76,000 person-days of direct employment.

A total of 40 road projects with a total investment of INR 3.65 lakh crore, 40 railway projects worth INR 95,704 crore and eight urban development projects valued at INR 79,016 crore have been planned through PM Gati Shakti and approved by Network Planning Group.



Length: 233.312 km



CASE STUDY — B

DOUBLING BETWEEN TURAVUR AND AMBALAPUZHA



रेल मंत्रालय
MINISTRY OF
RAILWAYS

The proposed doubling of the railway line is not merely an infrastructure upgrade but a strategic move to enhance the efficiency of the existing railway network in South India. It comes as a response to the existing challenge of a saturated single line, which has long been a bottleneck in the operation of both passenger and goods trains within the section.

This expansion is a solution aimed at unblocking the current operational limitations, providing a clear path for the seamless movement of trains. With the removal of this bottleneck, a significant reduction in the time required for train operations is anticipated. The streamlined rail network will minimise the detention of trains, resulting in more punctual services and, ultimately, greater convenience for passengers and improved logistics for the transportation of goods.



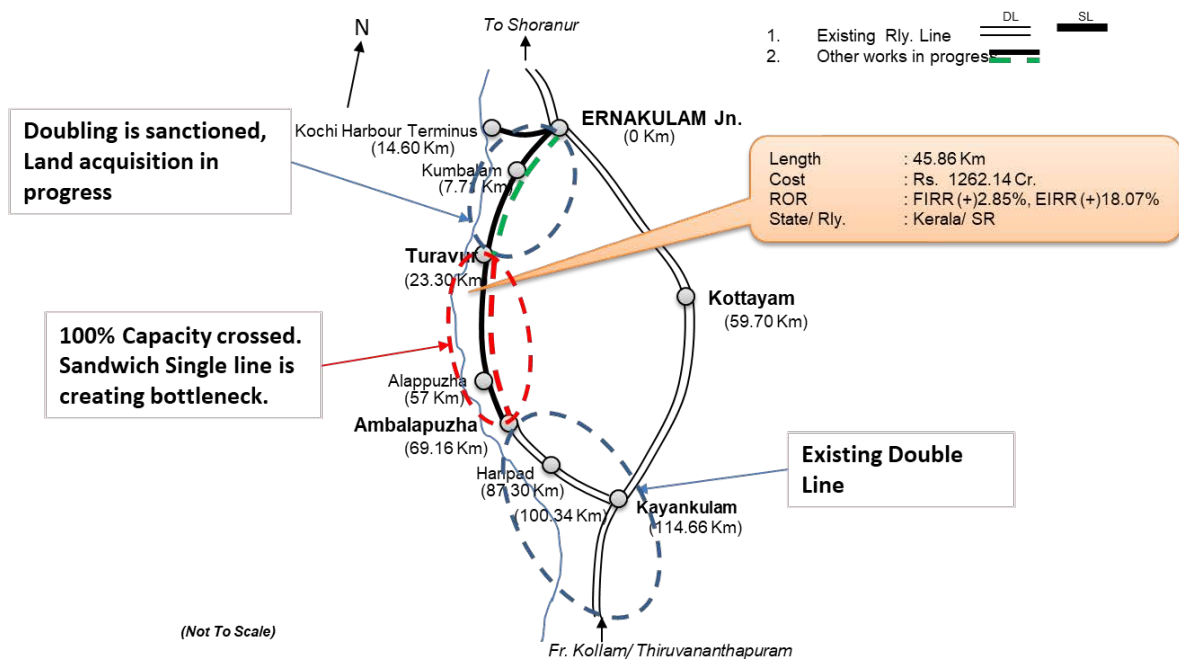


Figure 1.5 : Doubling between Turavur and Ambalapuzha

PROSPECTIVE IMPLICATION

This project represents a strategic catalyst poised to revolutionise the landscape of rail transportation in South India. With the promise of expedited travel, augmented cargo capacity, and the infusion of industries like coir exports and tourism, the project offers new opportunities and drives economic growth.

The investment from the Central Government underscores the profound significance of this venture, affirming its potential to sculpt a legacy of sustained prosperity in the Turavur-Ambalapuzha region.



To spur economic growth and job creation

Project Cost: INR 1,262.15 Crores

Length: 45.86 km



PATH-BREAKING INITIATIVES OF GUJARAT



02



Path-Breaking INITIATIVES OF GUJARAT

VISION FOR NEXT-GENERATION INFRASTRUCTURE

In line with our Hon'ble Prime Minister's vision, the PM Gati Shakti Gujarat - Integrated Master Plan has set its sights on a revolutionary transformation. It seeks to build next-generation infrastructure that enhances both Ease of Living and Ease of Doing Business. A monumental undertaking, this comprehensive master plan unites a staggering 22 departments and 67 agencies of the State Government, bringing them together under a single roof. This collaborative approach ensures that information and data pertaining to all infrastructure projects and their interconnected elements can be readily shared, facilitating a harmonious synergy among various stakeholders.

In a groundbreaking and revolutionary development, the PM Gati Shakti National Master Plan, encompassing 39 Central Ministries/Departments, has seamlessly integrated with Gujarat, providing a transformative platform designed to revolutionise infrastructure planning and governance. This platform is poised to fundamentally reshape how infrastructure projects are envisioned and executed, placing a strong emphasis on holistic socio-economic development.



Historically, infrastructure planning has been hindered by persistent delays, operational inefficiencies, and substantial resource wastage due to the absence of a comprehensive, unified data repository. PM Gati Shakti marks a transformative shift in this narrative. It optimises the process, enabling the expeditious identification of ideal project locations in stark contrast to the protracted timelines previously endured. This platform undertakes the formidable task of amalgamating existing infrastructure assets from both State and Central Government departments into a user-friendly decision-making platform. This pioneering approach lays the groundwork for integrated planning and development of new infrastructure projects, ensuring the seamless and efficient transportation of both goods and passengers. Furthermore, it fosters interdepartmental collaboration, cultivating a harmonious environment to achieve shared objectives. One of the most salient advantages of PM Gati Shakti is its capacity to provide up-to-the-minute, precise information on the status and intricacies of mega projects.

All relevant departments engaged in these projects have real-time access to this information. This transparency is set to revolutionise project management, accountability, and cooperation. The success of this platform hinges on leveraging state-of-the-art technology and digitisation. It empowers evidence-based decision-making, ensuring that the most effective and efficient strategies are employed in infrastructure planning and development. The shift from traditional approaches to embracing modern, data-driven methods marks a paradigm shift that will leave an indelible mark on infrastructure development in India.



Figure 2.1 : PM Gati Shakti Gujarat Portal View

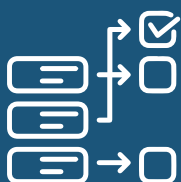


FEATURES OF PM GATI SHAKTI GUJARAT



Comprehensiveness

Comprehensive infrastructure planning and management through PM Gati Shakti Gujarat is crucial due to the state's rapid urbanisation and economic growth. The system can provide a centralised platform where all State Government Departments, especially those involved in urban development and industrial sectors, can access critical data. This is particularly important as Gujarat is a major industrial and manufacturing hub, and efficient infrastructure is essential for these sectors to thrive. The system can integrate information on existing and planned initiatives in areas like industrial parks, transportation networks, and smart city projects.



Prioritisation

Gujarat has a diverse economic landscape encompassing agriculture, manufacturing, and services. Prioritising projects through cross-sectoral interactions can be especially beneficial in Gujarat to ensure that projects align with the state's development goals. For example, it can help in coordinating projects related to agricultural infrastructure in rural areas and industrial infrastructure in urban centers, ensuring that resources are allocated based on the state's priorities.



Optimisation

Gujarat's extensive coastline and large industrial base necessitate optimal transportation and logistics planning. PM Gati Shakti Gujarat can assist in optimising transportation routes and infrastructure, helping industries reduce costs and improve supply chain efficiency. This is particularly valuable given the state's reliance on ports and export-import activities.



Synchronisation

Gujarat has a multi-tier governance structure, with urban and rural local bodies in addition to state-level departments. Synchronising the activities of these various layers is vital, especially in ensuring that urbanisation is well-planned and that rural areas receive the necessary infrastructure. For example, coordinating land use planning between urban development authorities and rural local bodies can help manage urban sprawl and protect agricultural land.



Analytical

The use of advanced spatial planning and analytical tools can be beneficial in Gujarat for land-use planning, disaster management, and environmental conservation. The state's diverse geography, including arid regions and coastal areas, requires detailed spatial analysis for effective infrastructure planning and resource management.



Dynamic

Given the state's rapid development and urbanisation, a dynamic approach is essential. The satellite imagery and real-time project updates can help in monitoring projects such as the development of smart cities and industrial corridors. This ensures that Gujarat can adapt and respond to changing development needs promptly.



Transparency/ Faceless Governance

Gujarat's efforts to attract investment can benefit from a transparent and efficient system for obtaining NOCs and permissions. This approach eases the path for businesses and aligns with the state's reputation for ease of doing business.



Empowerment to the Public

Gujarat's urban and rural population can actively engage with PM Gati Shakti Gujarat for their infrastructure needs. This includes applying for permissions and tracking applications. Empowering the public in decision-making aligns with the state's emphasis on inclusive development and local participation.





E'S OF PM GATI SHAKTI GUJARAT

EASE OF OPTIMUM PLANNING

Integrated planning is a holistic approach to coordinating various projects and initiatives within a region or organisation. It ensures that these projects work together synergistically instead of conflicting or duplicating efforts. This approach offers several benefits, including cost reduction, as resources are used more efficiently. It also leads to faster project implementation, reducing the time it takes to complete these initiatives. Additionally, integrating projects can reduce the carbon footprint, promoting sustainability by minimising waste and optimising resource usage.

EASE OF PROJECT MONITORING

Online real-time tracking of budget allocation and project implementation is a modern approach to ensuring that infrastructure projects stay on course and within budget. This system allows for instant updates on how resources are being used and whether projects are meeting their milestones. It offers transparency and accountability, which is essential for good governance.

EASE OF GOVERNANCE

“Minimum Government, Maximum Governance” is a principle that suggests Governments should intervene in citizens’ lives only, when necessary, but when they do, they should provide effective and efficient services. Online tracking of application and approval processes streamlines bureaucracy, making it easier for both Government Departments and applicants or investors. This transparency and efficiency align with the goal of improving governance.

EASE OF PERMISSION

Online map-based permission processes make it simpler for investors to obtain necessary approvals or permits. This modern approach can significantly reduce the time and effort required to secure permissions, facilitating faster and more streamlined business activities.

EASE OF DOING BUSINESS

Faster approval processes, reducing the time from months or years to days, are highly attractive to businesses. It allows them to operate more efficiently and with reduced uncertainty. Real-time fact-based site suitability analysis benefits both Government Departments and investors, as it ensures that projects are more likely to succeed due to informed decision-making.

EASE OF LIVING

Improvement in services provided by the Government, generating information for evidence-based policymaking, assess and compare the outcomes achieved from various urban policies and schemes, improved well-being of citizens, improved liveability, improved quality of life and impact of various initiatives on the public.



NATIONAL LAUNCH OF PM GATI SHAKTI GUJARAT: GUJARAT'S TRAILBLAZING INITIATIVE

On the 6th of October 2022, Shri Bhupendrabhai Patel, the Hon'ble Chief Minister of Gujarat, unveiled a momentous development—the National Launch of PM Gati Shakti Gujarat. This launch not only symbolises progress but also signifies a significant stride toward a brighter future for the state of Gujarat.

Gujarat, with its visionary approach, proudly stands as the first state to embrace the Comprehensive PM Gati Shakti Master Plan. Through this transformative digital portal, it's poised to usher in a new era of **'Ease of Doing Business', 'Effortless Permissions', 'Optimal Planning', 'Seamless Project Monitoring', 'Efficient Governance',** and **'Enhanced Quality of Life'** for its citizens.



Figure 2.2 : PM Gati Shakti Gujarat Launch Event



Figure 2.3 : Exchange of NOC Certificate between Directorate of Petroleum and Gujarat State Petroleum Corporation

APPROACH BY STATE GOVERNMENT FOR IMPLEMENTATION OF PM GATI SHAKTI GUJARAT



Appointment of Nodal Agency & Officers

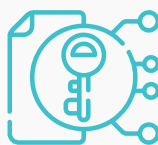
The State Government nominated Gujarat Infrastructure Development Board (GIDB) as the Nodal Agency. PM Gati Shakti Gujarat Nodal Officers representing Departments were notified by each department as a single point of contact for coordination with GIDB, BISAG-N and within the departments.



Creation of Integrated Portals for State Departments

The State has integrated data layers pertaining to Departments having a role in the State's Infrastructure Development.

It is integrated with PM Gati Shakti National Master Plan, having 39 Central Ministries/Departments on board to ensure sector-specific developments in a holistic manner.



Data Layer creation and access to departments

Gujarat has integrated more than 1100 data layers on 89 Departments/Agencies on PM Gati Shakti Gujarat Portal, and concerned departments have validated these layers. Gujarat has also integrated 1450 data layers of more than 39 Central Ministries/Departments.



infrastructure projects, prepare Integrated Master Plan and investment ready shelf of infrastructure projects.

Gati Shakti Gujarat Coordination Cell [Equivalent to Technical Support Unit (TSU)] Develops protocols & guidelines, prepares road maps, coordinates for integration, and develops data formats and meta-data requirements for seamless implementation of PM Gati Shakti Gujarat.

The Gujarat Infrastructure Development Board (GIDB)

Serves as the nodal agency for PM Gati Shakti Gujarat for facilitating integrated infrastructure planning, data quality improvement, and bottleneck resolution. This role is pivotal in ensuring efficient, data-driven, and transparent infrastructure development across Gujarat, a state with diverse economic sectors and ambitious projects.

PM Gati Shakti Gujarat Nodal Officers

Representing Departments were notified by each department as a single point of contact for coordination with GIDB, BISAG-N and within the departments for providing data, ensuring the quality of data identification of challenges, resolving bottlenecks and seamless implementation of PM Gati Shakti Gujarat.

DPIIT Review Meetings

Representing Special Secretary, DPIIT undertakes reviews periodically and provides suitable directions for the implementation of PM Gati Shakti National Master Plan.

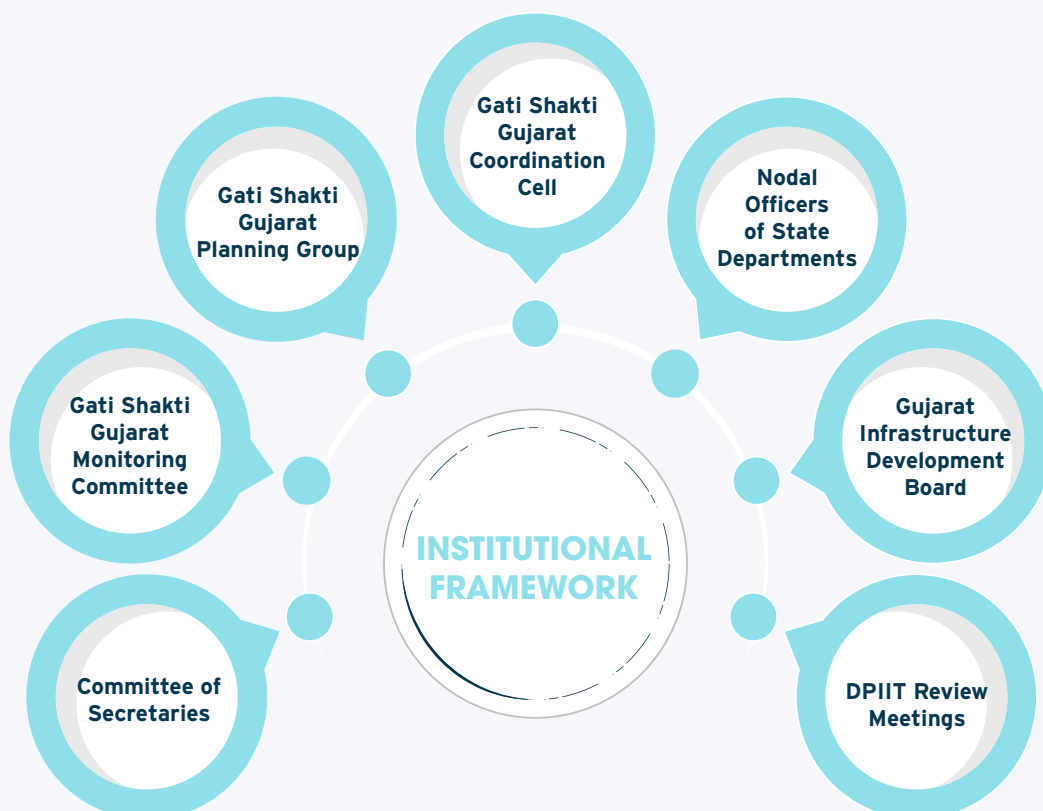


Figure 2.5 : Institutional Framework



KEY MILESTONES

1. INFRASTRUCTURE ASSETS MAPPING

The establishment of 89 dedicated portals for stakeholders across various State Government Departments, coupled with the seamless integration of more than 1,100 data layers from State Departments and an additional 1450 data layers from over 39 Central Ministries/Departments, represents a groundbreaking achievement.

This robust infrastructure not only fosters unparalleled inter-agency collaboration and data-driven insights but also transforms PM Gati Shakti Gujarat into an indispensable, highly efficient governance tool, propelling Gujarat's integrated infrastructure development to new heights of excellence and precision. Respective departments have diligently undertaken data validation.

Synchronised Planning

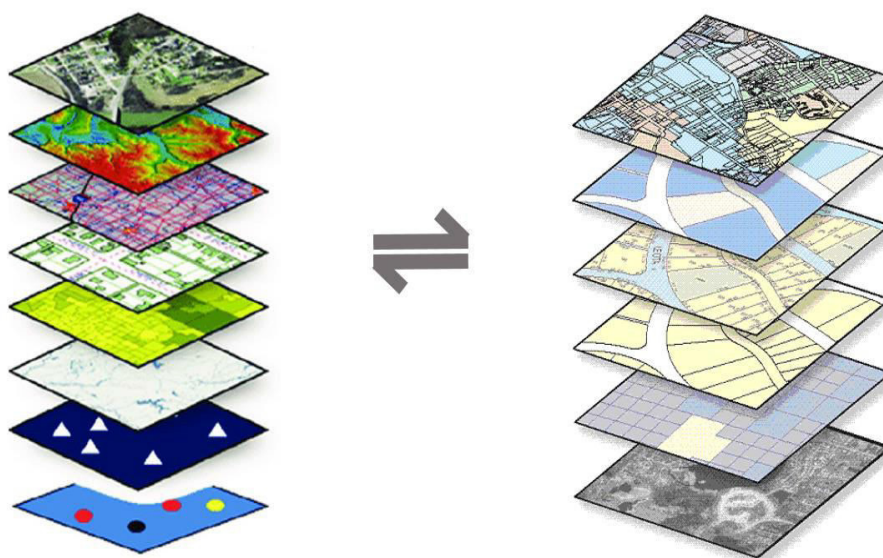


Figure 2.6 : Synchronised Planning using PM Gati Shakti Gujarat

PM Gati Shakti Gujarat
89 Departments/Board/Agencies
Integration of more than 1100 layers
of data

PM Gati Shakti National Master Plan
39 Central Ministries/Departments
Integration of more than 1450 layers
of data

PHYSICAL INFRASTRUCTURE ASSETS INTEGRATION

Physical infrastructure elements, such as roads, railways, ports, civil aviation, irrigation canals, gas/water pipelines, urban infrastructures, etc., are integrated with PM Gati Shakti Gujarat. Some of the salient features are:

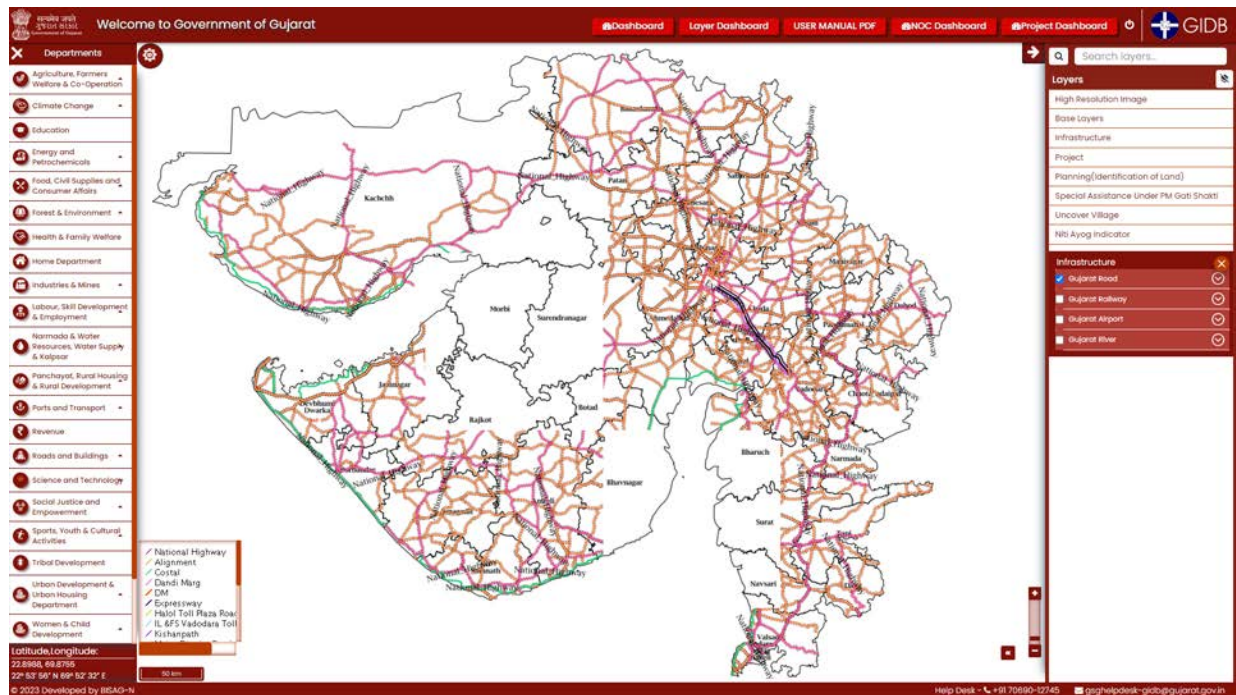


Figure 2.7 : Road Network

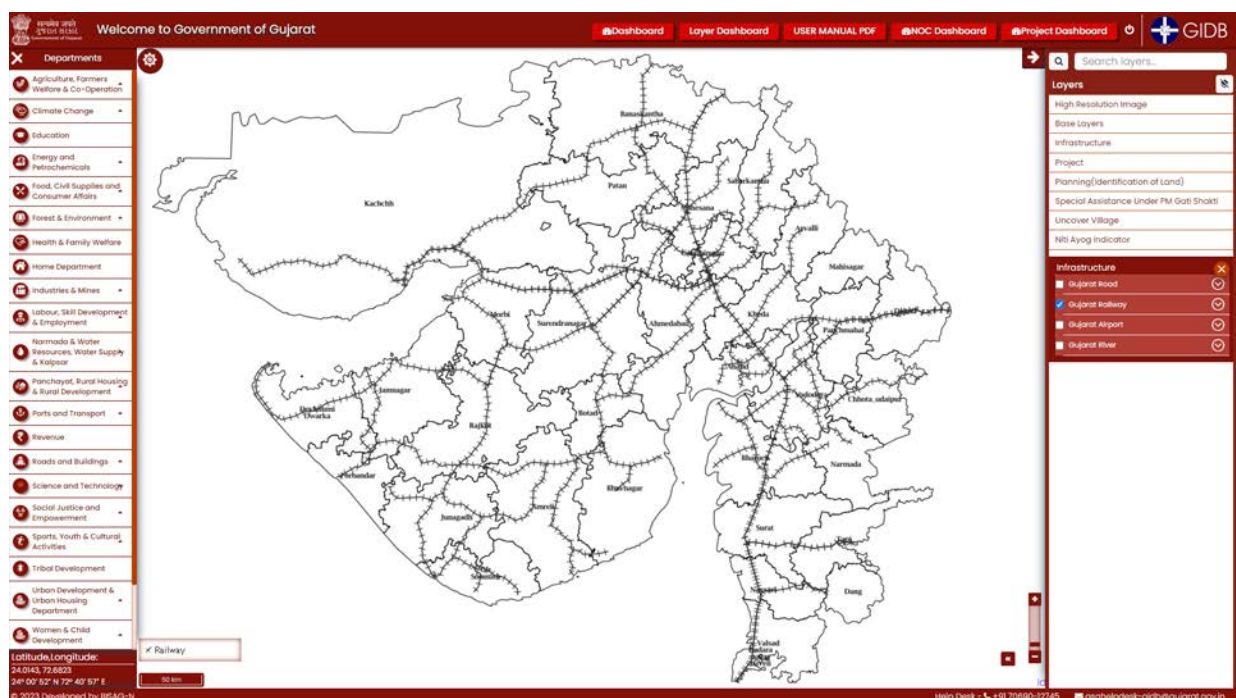


Figure 2.8 : Railway Network

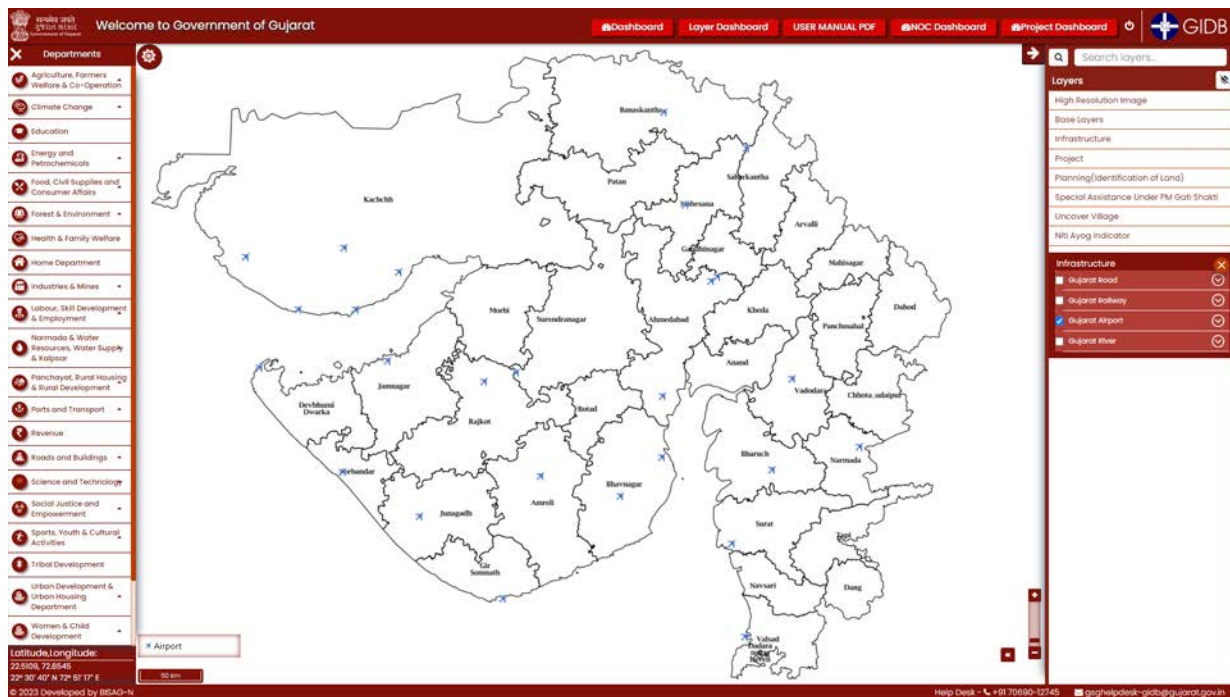


Figure 2.9 : Civil Aviation Infrastructure

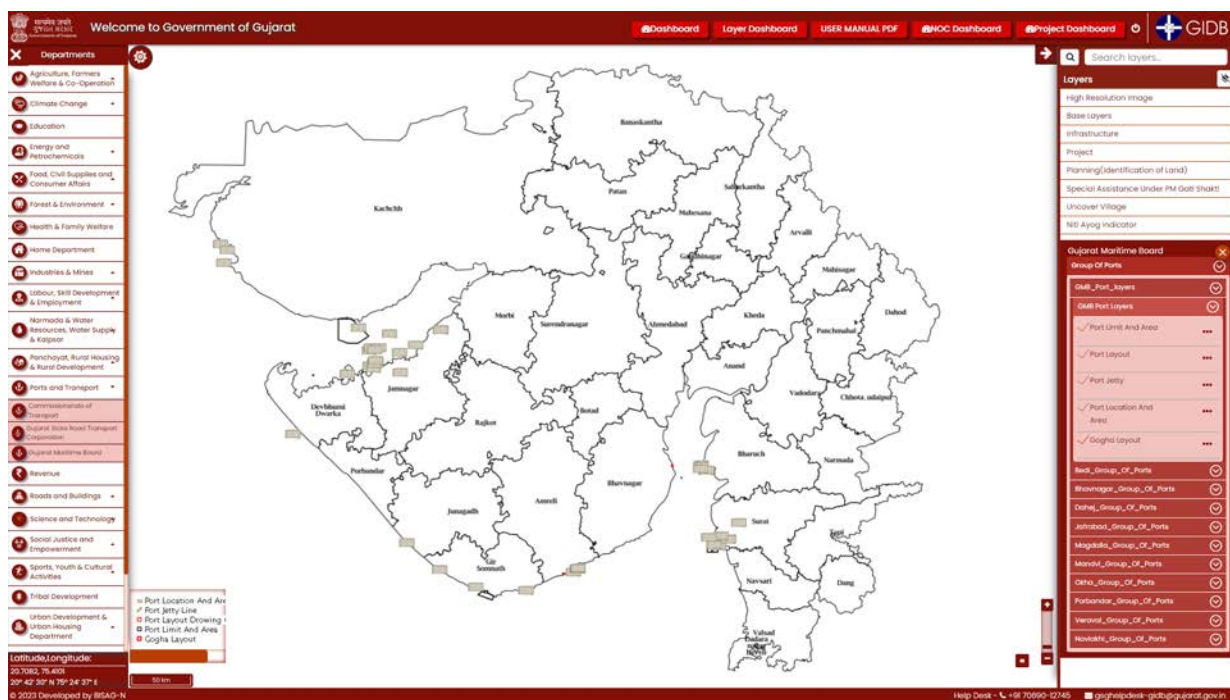


Figure 2.10 : Ports

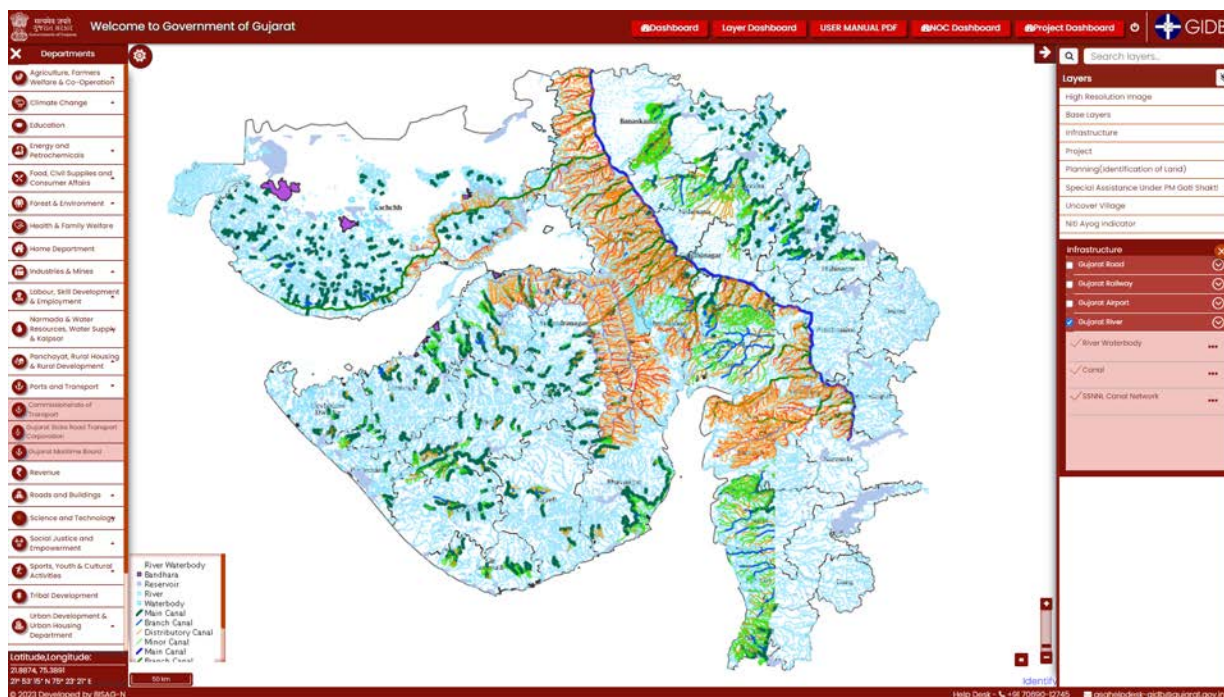


Figure 2.11 : Canal Network

SOCIAL INFRASTRUCTURE ASSETS INTEGRATION

Social infrastructure elements, such as health facilities, educational institutions, aanganwaadis, police stations, tribal schools, hostels, and panchayat buildings, are currently in the process of integration with PM Gati Shakti Gujarat.

Some notable examples include:



Figure 2.12 : Health Infrastructure

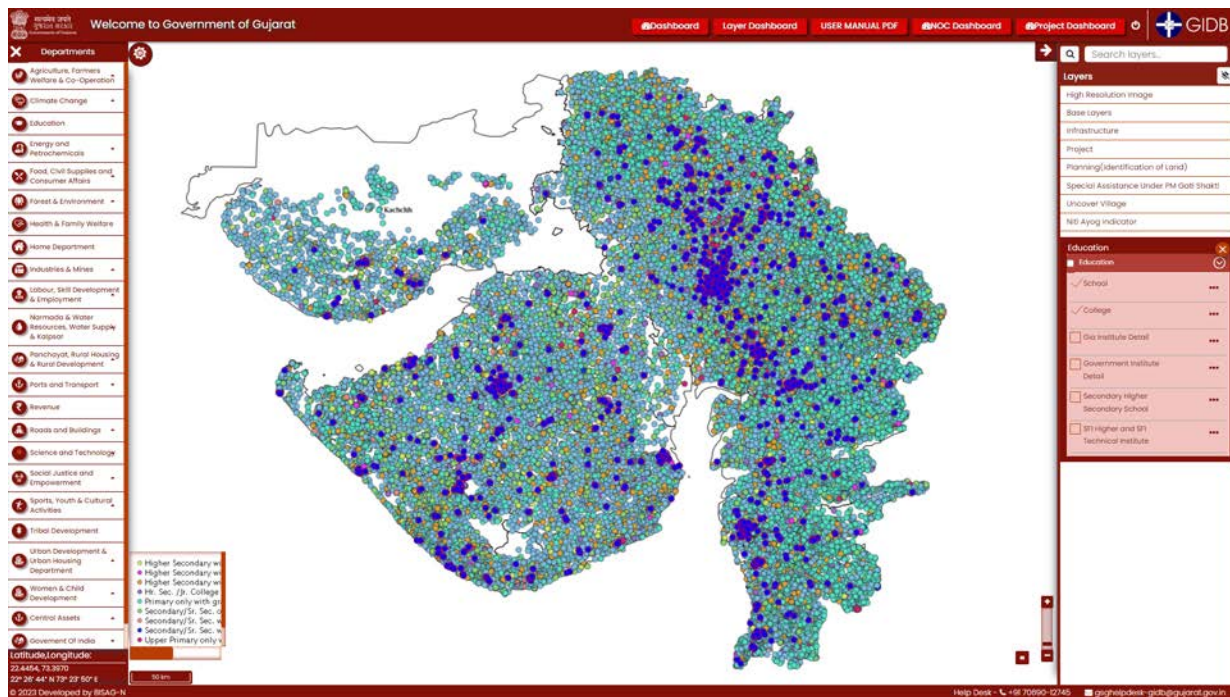


Figure 2.13 : Education Infrastructure



Figure 2.14 : Aanganwaadis

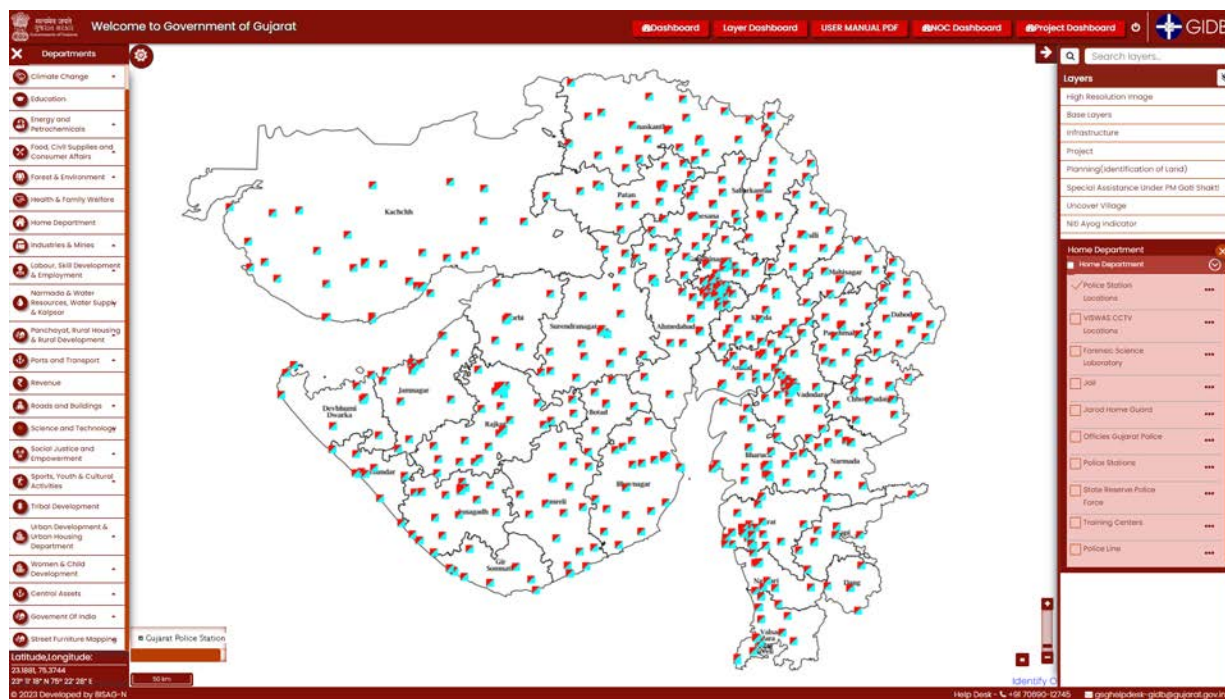


Figure 2.15 : Police Stations

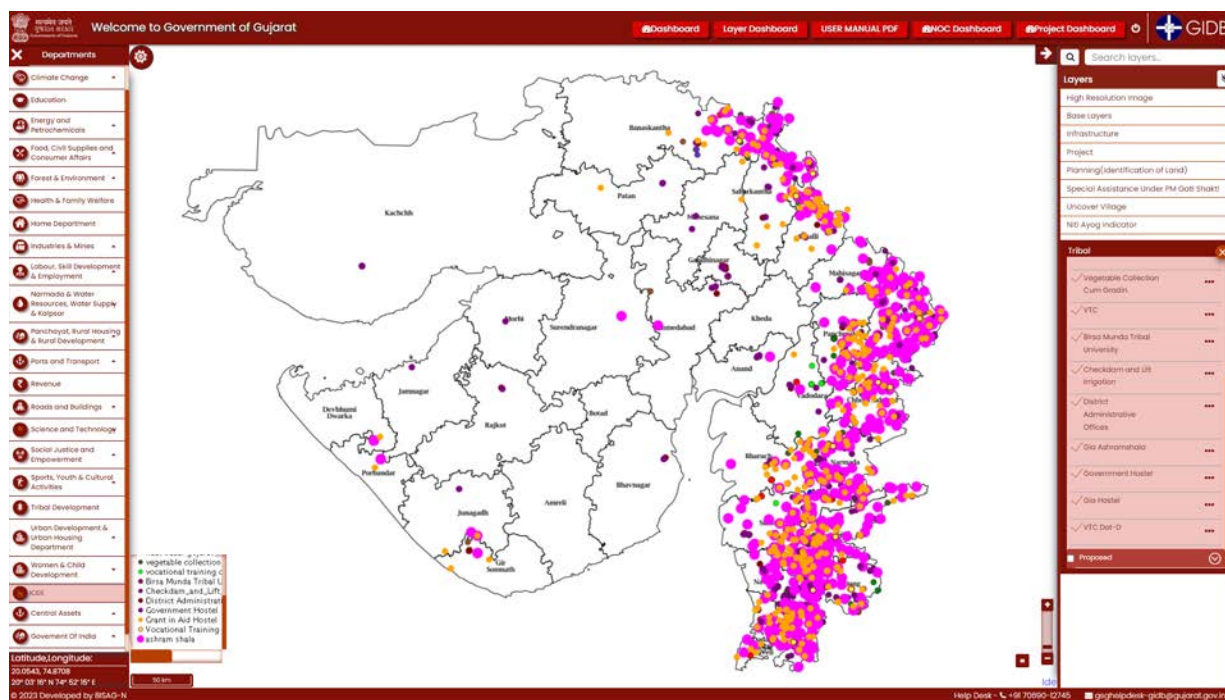


Figure 2.16 : Tribal Schools and Hostels

DATA SECURITY

A robust and comprehensive security framework has been diligently established for the login procedure on the PM Gati Shakti Gujarat Portal. This initiative has been meticulously designed to uphold the highest standards of data security and privacy. Recognizing the critical importance of safeguarding sensitive information, this framework has been extended to all relevant Government Departments. To bolster the data security, Standard Operating Procedures (SOPs) have been meticulously crafted and implemented. These SOPs serve as detailed guidelines, offering best practices and a structured approach to maintaining the security of the portal and its confidential data. They ensure that the access and usage of the portal are conducted with utmost adherence to security protocols.

Furthermore, a multi-faceted approach to authentication has been instituted, including OTP-based access. This provides an additional layer of security, ensuring that access to the respective portals is not only based on credentials but also requires a one-time password (OTP) for heightened data security. These measures collectively reinforce the trustworthiness of the PM Gati Shakti Gujarat Portal, assuring the integrity and confidentiality of the data it hosts.

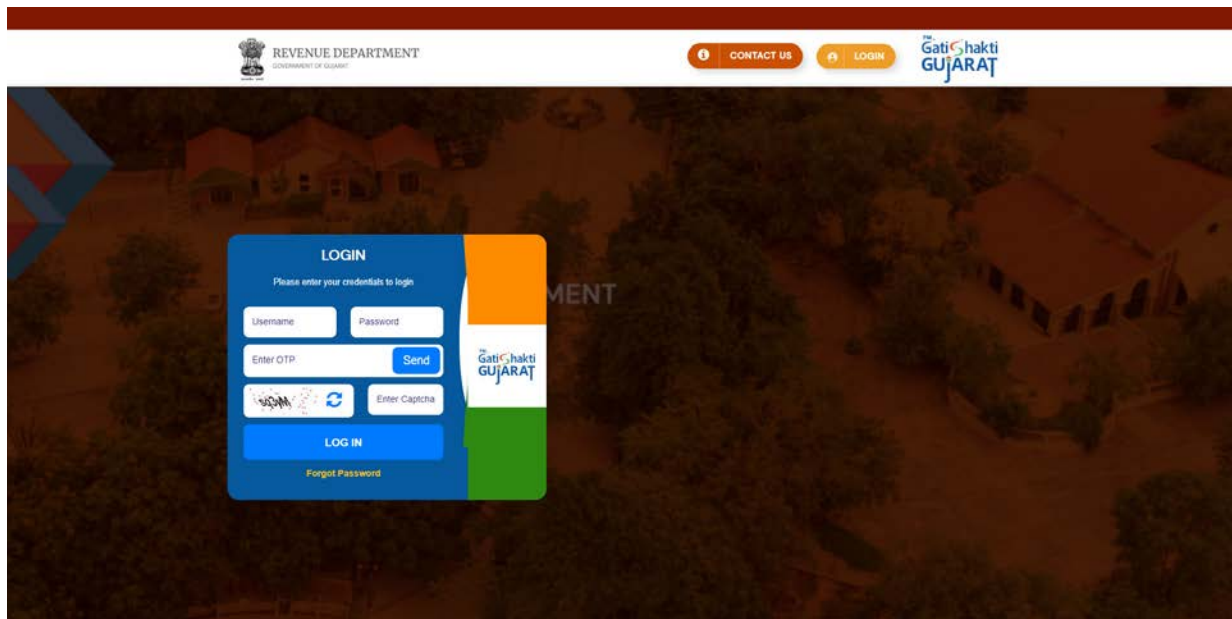
The image is a screenshot of the PM Gati Shakti Gujarat Portal's login interface. At the top, there is a dark red header bar. Below it, the page features the 'REVENUE DEPARTMENT' logo on the left, a 'CONTACT US' button in the center, and a 'LOGIN' button on the right. The main content area has a dark, textured background with a faint image of a village. Overlaid on this is a blue and white login form. The form is titled 'LOGIN' and includes the instruction 'Please enter your credentials to login'. It contains fields for 'Username', 'Password', and 'Enter OTP'. There is a 'Send' button next to the OTP field. Below the OTP field is a CAPTCHA section with a 'Enter Captcha' field and a 'Send' button. At the bottom of the form is a large blue 'LOG IN' button and a 'Forgot Password' link. The 'Gati Shakti GUJARAT' logo is visible on the right side of the login form.

Figure 2.17 : OTP Based Login to PM Gati Shakti Gujarat

2. TOOLS & APPLICATIONS DEVELOPMENT

An array of essential tools and applications, including navigation, land identification, measurement, intersection/extraction, buffer, query builder, location search, multi-buffer, heat map, and dynamic gap analyser, have been developed and are in the process of integration. These tools provide immense support to various departments during infrastructure planning.



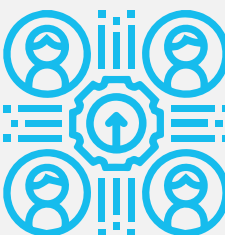
Suitable Land Identification Tool



Know Your Permission Application



Aanganwaadi Mapping Application



MSME & Large Industries Mapping Application

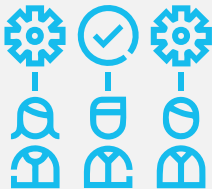




Panchayat Assets Mapping Application



Government Building Mapping Application



Maker-Checker-Approver Mechanism for Data Validation



Solid Waste Complaint Registration Mapping Application

SUITABLE LAND IDENTIFICATION TOOL

The Suitable Land Identification Tool developed in PM Gati Shakti is a game-changer for departments engaged in infrastructure planning. It offers dynamic parameters at the district, taluka, and village levels.

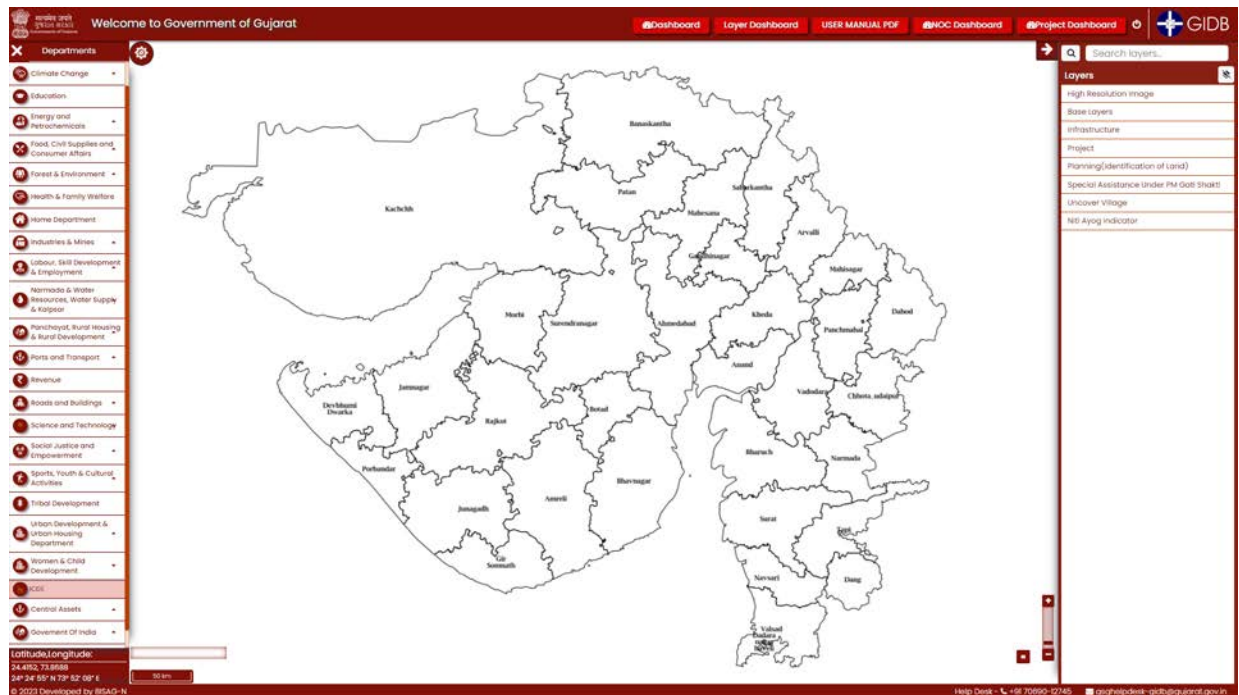


Figure 2.18 : Home Screen of PM Gati Shakti Gujarat Portal

Departments can customise these parameters, specifying distances from key reference points like highways, industry zones, water bodies, electric lines, and more. Leveraging Artificial Intelligence, this tool swiftly shortlists suitable sites, presenting them in both reports and on maps. Based on the shortlisted sites, the departments undertake joint site verification with the respective Collector's Officers and finalise the site.

In contrast to the traditional method, which could take months, this tool empowers decision-makers to pinpoint project sites within minutes. It not only accelerates the process but also ensures the selection of the most preferable sites, a feat unattainable through conventional means.



Government of Gujarat

Government Land Identification Tool

District: Taluka: Village:

Search Land	Range	Land(sq.mtr)	Distance From	Operator	Distance(km)
☒ Govt. Land			☐ National Highway		
			☐ State Highway		
			☐ MDR		
			☐ Industry		
			☐ Railway		
			☐ Waterbody		
			☐ Electric Line		
			☐ Petroleum Pipeline		

Figure 2.19 : Suitable Land Identification Tool

Government of Gujarat

Search:

Slid	District	Taluka	Village	Survey no.	Area(sq. mtr)	Category	View on Map
5237	Anvalli	Modasa	Sabalpur	2	90	Government Westland	View
23420	Banaskantha	Dhanera	Lawara	690	76	Government Westland	View
26426	Banaskantha	Deesa	Ratanpura	11	90	Gaouchar	View
38235	Banaskantha	Palanpur	Kotda_Chand Gadhi	227	21	Government Westland	View
54244	Bharuch	Anklesvar	Divi	2076	24	Gaouchar	View
64115	Chhota udepur	Bodell	Khodiya	39	36	Government Westland	View
66894	Chhota udepur	Chhota udaipur	Dhandhoda	114	84	Government Westland	View
84918	Dang	Ahwa	Ahwa	111	100	Government Westland	View
84921	Dang	Ahwa	Ahwa	17	85	Government Westland	View
84922	Dang	Ahwa	Ahwa	18	85	Government Westland	View

Showing 1 to 10 of 103 entries

Figure 2.20 : Report Generated from Suitable Land Identification Tool

KEY BENEFITS :

The Suitable Land Identification Tool offers customised parameters, accelerates site selection through AI, and promotes cost-effective, environmentally conscious infrastructure planning, a stark improvement over traditional methods.

UNLOCKING PERMISSION INSIGHTS

The “Know Your Permission” application, harnessed through PM Gati Shakti Gujarat, empowers stakeholders to identify the necessary permissions from Government Departments swiftly. This vital tool accelerates decision-making and synchronised planning, resulting in substantial time, cost, and resource savings for the departments. Departments simply mark their project sites on the map. Leveraging Artificial Intelligence, the application automatically suggests the necessary permissions by analysing integrated data within PM Gati Shakti Gujarat. Departments can apply online to get these permissions and track the approval process on their PM Gati Shakti Gujarat dashboard. This seamless process optimises resource management and expedites decision-making.

KNOW YOUR PERMISSION

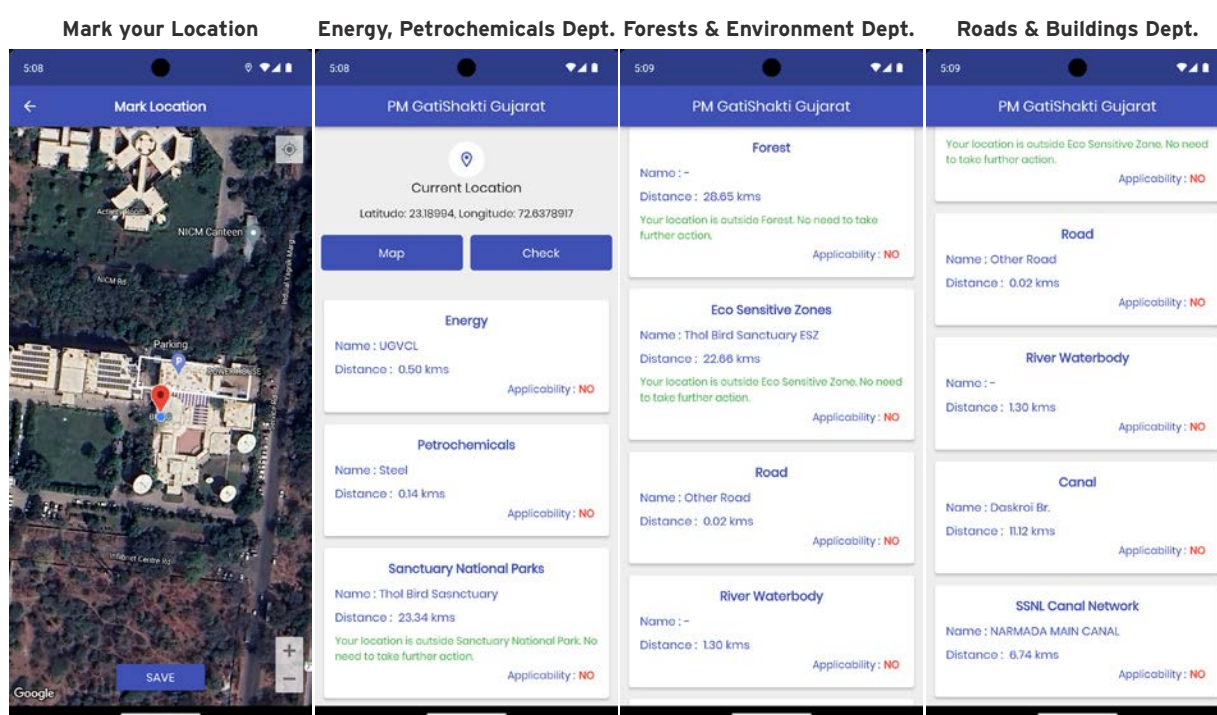


Figure 2.21 : Know Your Permission

KEY BENEFITS :

The “Know Your Permission” application, integrated into PM Gati Shakti Gujarat, is a technological solution that significantly streamlines the process of obtaining necessary permissions. It harnesses artificial intelligence, offers online application and tracking features, and ultimately leads to substantial time, cost, and resource savings for all stakeholders involved.



URBAN INFRASTRUCTURE MAPPING

The Urban Infrastructure Mapping Application within PM Gati Shakti Gujarat is a robust tool supporting 157 Nagarpalikas in Gujarat. The mobile application facilitates the mapping of 30 diverse infrastructure assets, providing essential planning information.

By integrating Nagarpalikas and ward boundaries with PM Gati Shakti Gujarat, the application covers assets ranging from community halls, civic centres, municipal offices, and schools to fire stations, crematoriums, parking facilities, streetlights, water supply networks, sewerage systems, and more.

URBAN INFRASTRUCTURE MAPPING

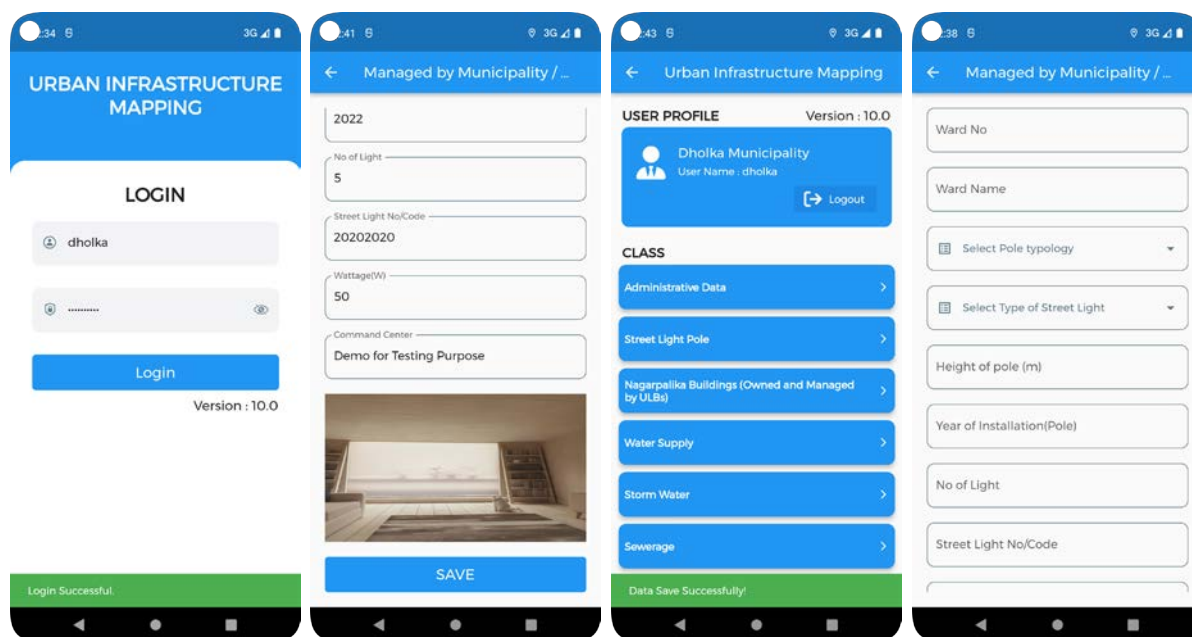


Figure 2.22 : Urban Infrastructure Mapping

KEY BENEFITS :

Data undergoes a rigorous process before integration into PM Gati Shakti Gujarat. Makers submit data, which is meticulously checked and validated by Checkers and finally approved by Approvers before uploading to the portal. Once uploaded into the system, Nagarpalikas harness PM Gati Shakti Gujarat for maintaining existing assets and planning new infrastructure assets such as sewerage and water supply lines, ensuring precision and efficiency.

AANGANWAADI MAPPING APPLICATION

The Aanganwaadi Mapping Application facilitates the comprehensive mapping of Aanganwaadi assets and their associated infrastructure throughout Gujarat. This helps the department in determining the infrastructure deficiencies of Aanganwaadi along with identification of deteriorating Aanganwaadis, and locating those Aanganwaadis that are operating from rented premises.

Additionally, it also aids in identifying Aanganwaadis with essential utilities such as water, electricity, and sanitation, ensuring effective planning and resource allocation.

AANGANWAADI MAPPING

The application interface consists of four main screens:

- Nandghar Information Tracking Application:** Features buttons for adding, editing, and deleting Aanganwaadi information. It includes a list of instructions in Gujarati and a version number (1.0.0).
- Online Form:** A form for entering district, block, sector, and AWC details. It includes a 'Save and Next' button.
- સેજા કચેરી (Seja Kachari):** A form for entering specific AWC details, including district, block, sector, and AWC name. It includes a 'Select Field' button.
- View Submitted Data:** A screen displaying a list of submitted AWC records. The table below shows the data displayed on this screen.

Latitude	Longitude	જીલ્લો	બ્લોક	સેક્ટર	સેજા કચેરી
23.19040646	72.63789274	GANDHINAGAR RURAL	DEHGAM-1	BAHIYAL	BAHIYAL-1

Figure 2.23 : Aanganwaadi Mapping

KEY BENEFITS :

The Aanganwaadi Mapping Application in PM Gati Shakti Gujarat streamlines infrastructure assessment, empowering efficient resource allocation and improved services for pregnant women and children.



MSME AND LARGE INDUSTRIES MAPPING APPLICATION

The MSME and Large Industries Mapping Application helps the departments in identifying MSME clusters across Gujarat. This provides an analytical perspective on availability of product-wise MSME and facilitates the planning of schemes to promote MSMEs in line with Gujarat's Industrial Policy.

Beyond this, the application helps identify critical gaps in physical infrastructure, including roads, water, sewerage, electricity, and gas pipelines. It also uncovers social infrastructure gaps like schools, healthcare centres, banking facilities, and skill development centres. Furthermore, data analysis is conducted to determine industry-specific skill gaps, opening doors for targeted skill development courses and bolstering employment opportunities, thereby contributing to the state's economic growth.

MSME AND LARGE INDUSTRIES MAPPING

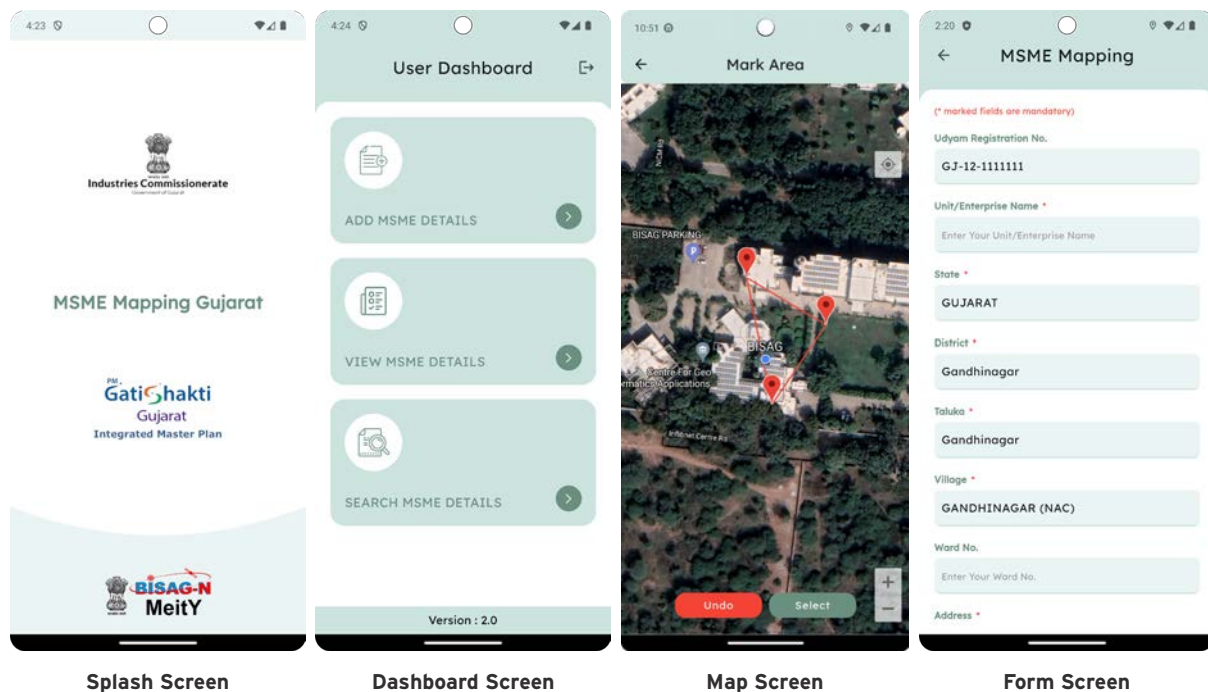


Figure 2.24 : MSME and Large Industries Mapping

KEY BENEFITS :

This application helps in the facilitation of data-driven planning for MSME, infrastructure development, and skill enhancement, ultimately bolstering Gujarat's economic growth.

PANCHAYAT ASSETS MAPPING APPLICATION

Within PM Gati Shakti Gujarat, the Panchayat Assets Mapping Application assists the department to comprehensively map assets of Gram Panchayat, Taluka Panchayat, and District Panchayat. This includes assessing the infrastructure within these Panchayat Assets. This efficient tool allows for quick evaluation of asset conditions, identifying dilapidation, and assessing infrastructure provisions like water connections, electricity connections, internet facilities, sanitation facilities and more. It facilitates planning for the replacement or upgrade of existing assets, ensuring efficient asset management and allocation.

PANCHAYAT ASSETS MAPPING

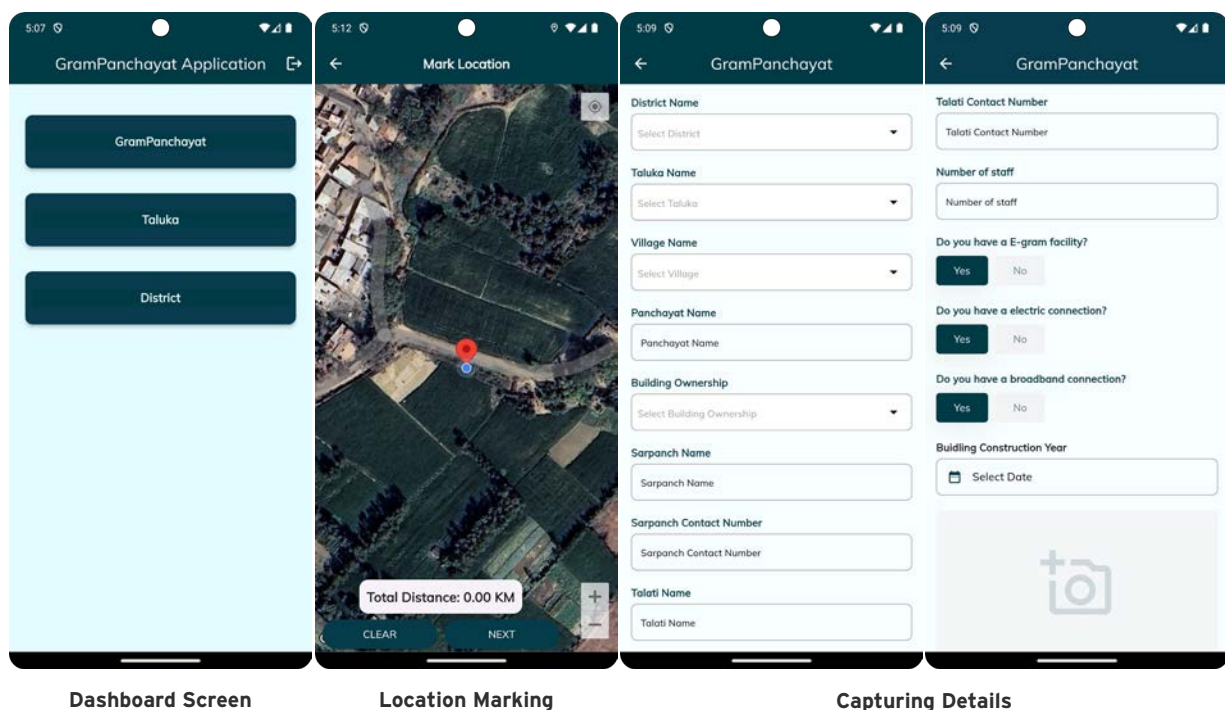


Figure 2.25 : Panchayat Assets Mapping

KEY BENEFITS :

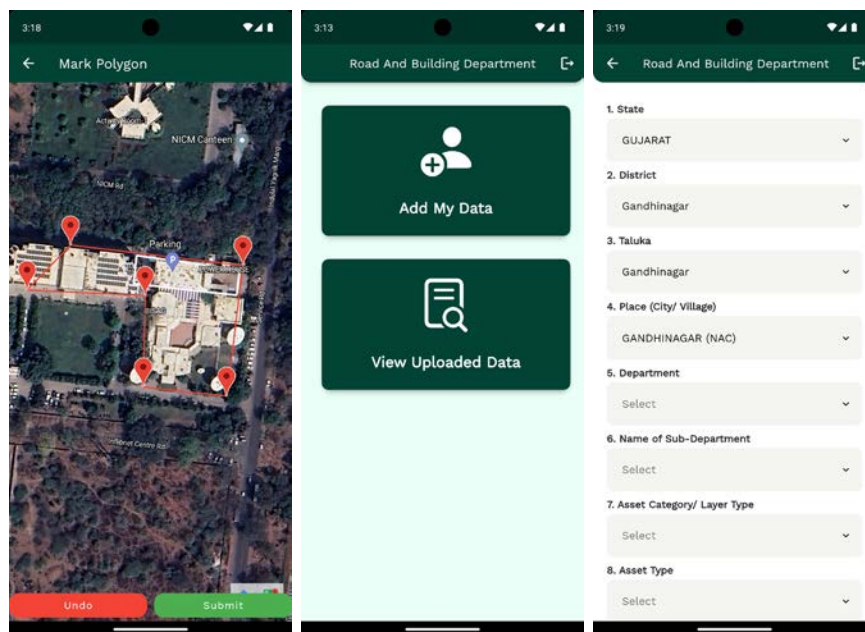
The Panchayat Assets Mapping Application in PM Gati Shakti Gujarat provides the benefit of comprehensive asset mapping, efficient assessment of asset conditions, and informed planning for infrastructure upgrades, ensuring effective asset management and allocation.



GOVERNMENT BUILDING MAPPING APPLICATION

Within PM Gati Shakti Gujarat, the Government Building Mapping Application helps the department comprehensively identify government buildings across Gujarat. It also facilitates the swift assessment of these buildings, discerning whether they are in good condition, require repairs, or are in a dilapidated state unsuitable for use. This information is invaluable for implementing 5G technology across the state. Additionally, the application helps pinpoint infrastructure deficiencies within these buildings, including water, sewerage, electricity connections, and rainwater harvesting structures, ensuring comprehensive planning and resource allocation.

GOVERNMENT BUILDINGS MAPPING



Location Marking

Capturing Details of Government Buildings

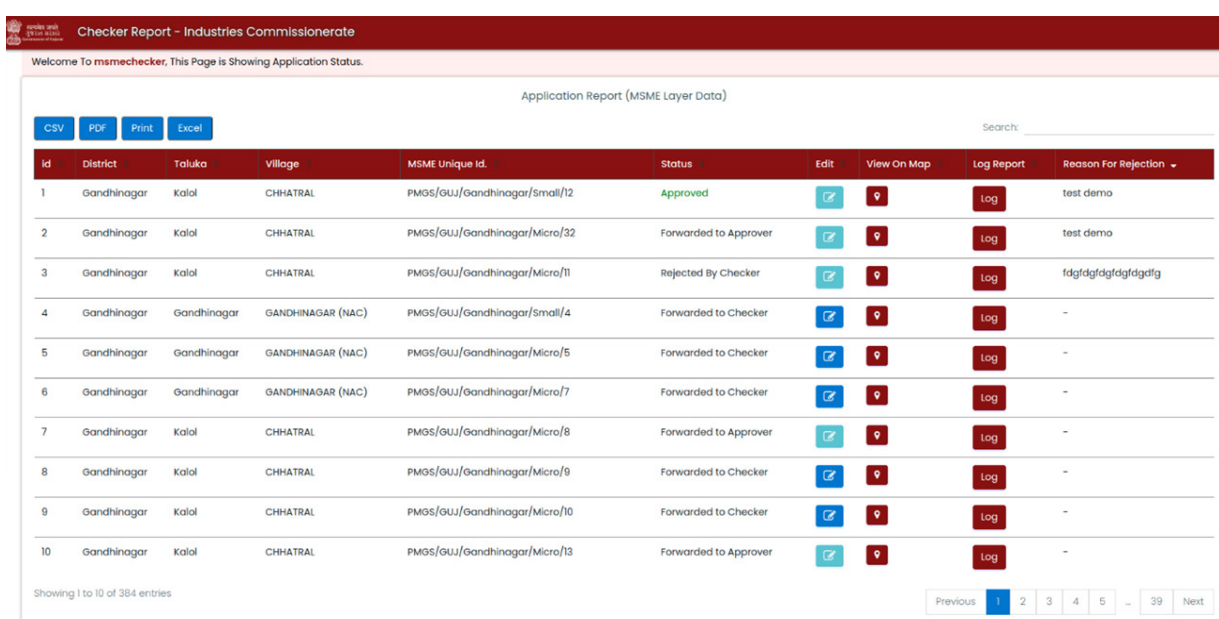
Figure 2.26 : Government Building Mapping

KEY BENEFITS :

The Government Building Mapping Application in PM Gati Shakti Gujarat offers the benefit of comprehensive identification and assessment of Government buildings, that are dilapidated, not in use or in poor condition. The application aids in implementing 5G technology and enables efficient infrastructure planning and resource allocation.

DATA VALIDATION: A DYNAMIC CHAIN OF RESPONSIBILITY

In the ever-evolving landscape of PM Gati Shakti Gujarat, regular data updates and validation are essential. To ensure this, a robust Maker-Checker-Approver Mechanism has been implemented in Gujarat. The Maker is tasked with mapping the asset and its attributes, then submitting the data for validation by the Checker. The Checker's role is to validate and approve the data from the Maker and then pass it to the Approver. The responsibility of the Approver is to verify and approve the data received from the Checker for integration into PM Gati Shakti Gujarat. Also, if the Approver rejects the data, the rejection must be accompanied by clear justifications for modification by the Maker. This dynamic process enables the departments to seamlessly track and manage modifications made by Makers, Checkers, and Approvers.



The screenshot displays the 'Checker Report - Industries Commissionerate' interface. It includes a welcome message, a search bar, and a table of application statuses. The table has columns for Id, District, Taluka, Village, MSME Unique Id., Status, Edit, View On Map, Log Report, and Reason For Rejection. The data shows various applications with statuses like 'Approved', 'Forwarded to Approver', 'Rejected By Checker', and 'Forwarded to Checker'. The interface also includes buttons for CSV, PDF, Print, and Excel, and a pagination bar at the bottom.

Id	District	Taluka	Village	MSME Unique Id.	Status	Edit	View On Map	Log Report	Reason For Rejection
1	Gandhinagar	Kalol	CHHATRAL	PMGS/GUJ/Gandhinagar/Small/12	Approved				test demo
2	Gandhinagar	Kalol	CHHATRAL	PMGS/GUJ/Gandhinagar/Micro/32	Forwarded to Approver				test demo
3	Gandhinagar	Kalol	CHHATRAL	PMGS/GUJ/Gandhinagar/Micro/11	Rejected By Checker				fdgfdgfdgfdgfdg
4	Gandhinagar	Gandhinagar	GANDHINAGAR (NAC)	PMGS/GUJ/Gandhinagar/Small/4	Forwarded to Checker				-
5	Gandhinagar	Gandhinagar	GANDHINAGAR (NAC)	PMGS/GUJ/Gandhinagar/Micro/5	Forwarded to Checker				-
6	Gandhinagar	Gandhinagar	GANDHINAGAR (NAC)	PMGS/GUJ/Gandhinagar/Micro/7	Forwarded to Checker				-
7	Gandhinagar	Kalol	CHHATRAL	PMGS/GUJ/Gandhinagar/Micro/8	Forwarded to Approver				-
8	Gandhinagar	Kalol	CHHATRAL	PMGS/GUJ/Gandhinagar/Micro/9	Forwarded to Checker				-
9	Gandhinagar	Kalol	CHHATRAL	PMGS/GUJ/Gandhinagar/Micro/10	Forwarded to Checker				-
10	Gandhinagar	Kalol	CHHATRAL	PMGS/GUJ/Gandhinagar/Micro/13	Forwarded to Approver				-

Figure 2.27 : Maker-Checker-Approver Mechanism for Data Validation

KEY BENEFITS :

The Maker-Checker-Approver Mechanism in PM Gati Shakti Gujarat ensures regular data updates and validation through a structured process, allowing for maintaining a proper log of modifications while promoting data quality and accountability.



SOLID WASTE COMPLAINT REGISTRATION MAPPING APPLICATION

The Patan district has introduced a cutting-edge Solid Waste Management application, allowing officers and citizens to report waste-related issues in Patan. Complaints are directed to the respective Solid Waste Collection Officer for prompt action. Currently, this application is being implemented in a few of the Nagarpalikas on a pilot basis, which will be expanded to other towns. The complaint registration includes a tracking feature, escalating complaints when not addressed within the stipulated timeframe, and ensuring an efficient resolution.

SOLID WASTE COMPLAINT REGISTRATION

Version : 2.0

Figure 2.28 : Solid Waste Complaint Registration

KEY BENEFITS :

The Solid Waste Complaint Registration Application in District Patan offers the benefit of streamlined waste issue reporting and resolution, with a tracking system that ensures prompt action and efficient complaint resolution, ultimately enhancing the cleanliness and liveability of the area.

3. NOCS, LAND ACQUISITION & LAND ALLOTMENT

NO OBJECTION CERTIFICATES (NOCs) AND PERMISSION FOR INFRASTRUCTURE USING PM GATI SHAKTI GUJARAT

In a leading-edge move, various State Government Departments have seamlessly integrated over 46 No Objection Certificates (NOCs) and permissions into PM Gati Shakti Gujarat. This initiative significantly expedites the approval process, eliminating the arduous task of tracking NOCs and permissions. Gujarat stands as the pioneering state, setting a precedent for providing these vital approvals for infrastructure assets through PM Gati Shakti Gujarat.

The PM Gati Shakti Gujarat Portal, driven by Artificial Intelligence, offers applicants automatic, real-time guidance on the number and types of infrastructure NOCs and permissions required for their projects from various Government Departments. This remarkable innovation simplifies the approval journey and ensures a seamless experience for all stakeholders.

Through PM Gati Shakti Gujarat, applicants can submit their applications online and track their application status and timeline. The reviewer departments also utilise the same platform to assess these online applications. This streamlines and modernises the entire process for geographical location-based assessment of permissions.

Welcome to Agriculture, Farmers Welfare and Co-Operation Department

Project Timeline

AHMEDABAD METRO RAIL PROJECT
GSG/2023/AFWCD/P10926 : GSG/2023/AFWCD/P10926/KML1

Project Description:
Test 181223

KML Description:
Test 181223

Project Type	Main Budget File Number	Sanctioned Budget Grant (in Lakh ?)	Administrative Approved File Number	Total Grant Approved (in Lakh ?)
Infrastructure	6515	1050	4595	89489

NOCs Applicable on the Project

Department: NOC/Permission:

Sr No.	Department : NOC / Permission	NOC ID	Days Left	Status	Apply/Details
1	Gujarat Urja Vikas Nigam Limited : Line clearance/shifting/foie shifting		0	Pending for Apply	Apply
2	Sabarmati Gas Limited : Pipeline crossings - Fiber and Steel		0	Pending for Apply	Apply
3	Roads and Buildings Department : Road Crossing/ Cutting Application		0	Pending for Apply	Apply
4	Revenue Department : Revenue Private Land Acquisition	GSG/2023/AFWCD/P10926/KML1/KD/PV1/N3862	0		Preview

Layers Intersecting the Project Boundary

Project Boundary

Project Supported Documents

Sr No	Download	Upload Date
1	certi.pdf	18/12/2023

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Help Desk : +91 79990-12745 | gsghelpdesk-gsb@guprot.gov.in

Figure 2.29 : Automatic Suggestions of NOCs/ Permissions

NO OBJECTION CERTIFICATES (NOCs) AND PERMISSION FOR INFRASTRUCTURE USING PM GATI SHAKTI GUJARAT

Following approval within the PM Gati Shakti Gujarat Portal, NOC/Permission Certificates are promptly issued and downloaded by the applicant. The authenticity of these certificates can be seamlessly confirmed by scanning the embedded QR code, ensuring transparency and credibility in the process upon approval of NOC/ Permission.




Permission Letter NO.: 1022
 Executive Engineer Name: Executive Engineer,
 Date: 11/12/2023

To,
 Mitul
 Gandhinagar
 test@gmail.com
 8657546457

Subject :- Permission for:

Project ID: GSG/2023/AFWCD/P5444/KML1

Asset ID: GSG-IMP/WaterAsset/drainage_gcs/67832

You are requested for: wtr_11_12_23 is given as under:

At Location

Latitude: 22.947232229189797

Longitude: 72.53240353838012

District: Ahmedabad

Taluka: Ahmedabad City,Daskroi

Village: Pipraj,Vanzar



As per drawing submitted by you

Sl. NO./સર	Condition detail/શરતો વિગત	
1	The work shall have to abide by Gujarat PWD rules and relevant resolution and circular for the same.	yes
2	You will have to abide by the agreement made on date	Application Date: 11/12/2023 Agreement Date: 11/12/2023
3	You have to put up a display board at the crossing, mentioning the details of the Project	yes
4	The depth of pipeline shall be as per government resolution enforce	yes
5	As per Agreement, any subsequent action requiring protection, operation / maintenance shall be	yes

This is a System generated document. No signature is required.

Figure 2.30 : NOC Permission Certificate

BENEFITS OF NOCS/ APPLICATIONS THROUGH PM GATI SHAKTI GUJARAT

Timely Approvals

The State Departments are committed to meeting clear approval timelines. Adhering to approval timelines ensures that NOCs and approvals are issued promptly, fostering efficiency and dependability.

Faster Approvals

By implementing business process re-engineering, the steps for the application approval process have been reduced significantly, which has resulted in faster approvals.

Effortless Accessibility

The online system is designed for universal accessibility, accommodating applicants from both the private and government sectors while maintaining high-security standards. With the assistance of user manuals and instructional videos, applicants can effortlessly submit their applications online, eliminating the need for physical visits to Government offices.

Streamlined Online Approvals

The entire application review, processing, and approval procedure is conducted online. The relevant department generates the final approval letter directly, and applicants can conveniently download their approval orders. This eliminates any manual intervention within the system.

Enhanced Efficiency

All documents are submitted online, and comprehensive logs are maintained with comments from all relevant officers during the approval process. This elevates the efficiency of application evaluation and approval.

Real-time Application Tracking

Both applicants and government officials can monitor the real-time status of applications through their respective dashboards, ensuring transparency and accountability.

Online Monitoring by Senior Government Officials

Department heads have the ability to monitor all applications online and conduct regular reviews with concerned officers, facilitating a faster and smoother approval system.

Efficient Query Resolution

The query raise module facilitates straightforward communication with applicants regarding any missing information or details, reducing compliance time.

Online Inspection Scheduling

Departments can conveniently schedule inspections online when necessary. Both applicants and departments can communicate through the system to arrange these inspections, and inspection reports are submitted electronically.

Email Alerts

Throughout the application process, notifications regarding application status are sent to the applicant and the relevant officers, ensuring clear communication and transparency at every stage.

The utilization of PM Gati Shakti Gujarat in application submission and review greatly enhances the department's operations. It fosters transparency, expedites decision-making and ensures faceless approval processes. The system provides online monitoring of application and approval processes to the departments.



AGEING ANALYSIS

The integration of PM Gati Shakti Gujarat into the application and review of NOCs/ Permissions represents a transformative leap, championing transparency, expediting decision-making through its decision support system, and facilitating faceless approvals. This dynamic platform empowers departments with real-time application and approval tracking, affording invaluable insights into their operations.

The Ageing Analysis tool, a standout feature, enables reviewing departments to closely monitor application statuses while Departmental Heads (HoDs) gain a comprehensive view to oversee ongoing application approvals efficiently.

At its core, the PM Gati Shakti Gujarat system provides not just transparency but also the agility and data-driven support needed to enhance decision-making and streamline approval processes. This heralds a significant advancement towards an efficient, accountable system that ensures swifter decisions while upholding the highest standards of transparency.

State and Central Departments utilise the PM Gati Shakti Gujarat platform to apply for NOCs and permissions from State Departments.

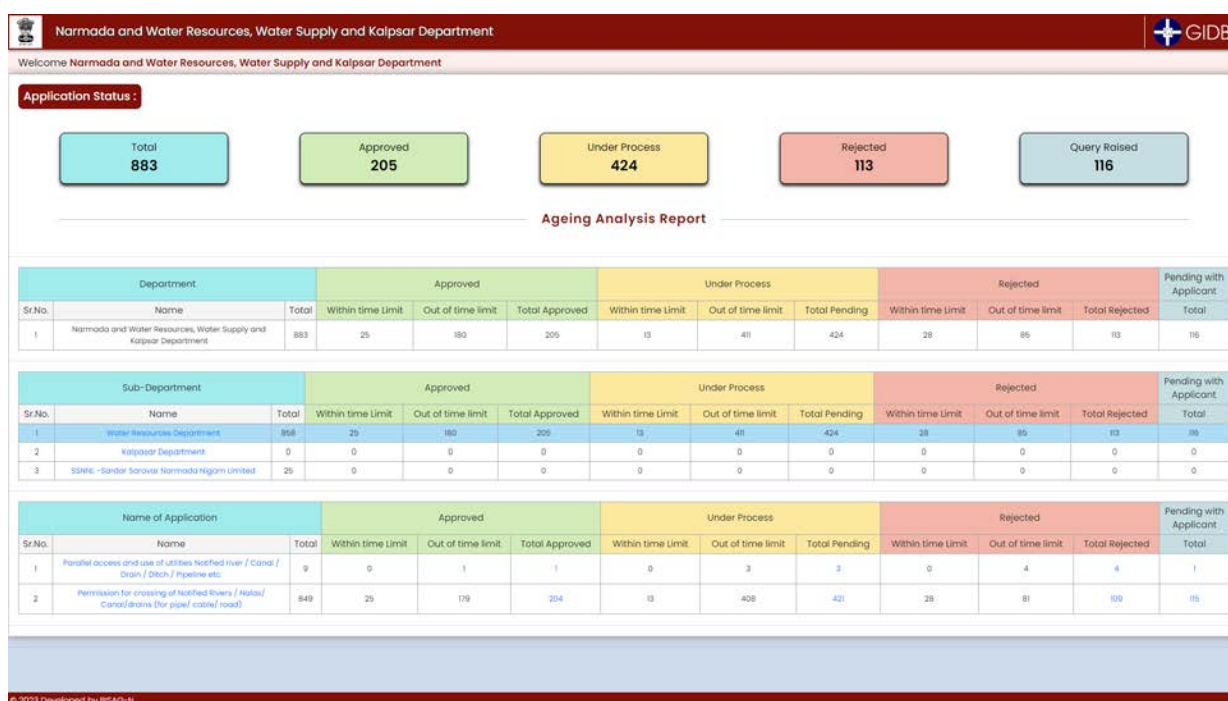


Figure 2.31 : Ageing Analysis Dashboard of NOCs/ Permissions on PM Gati Shakti Gujarat

PRIVATE LAND ACQUISITION AND GOVT LAND ALLOTMENT USING PM GATI SHAKTI GUJARAT

Under various statutes, the state has mandated to process Private Land Acquisition Applications exclusively through PM Gati Shakti Gujarat, which signifies a significant step toward enhancing efficiency and transparency in infrastructure development. Applicants benefit from a streamlined and user-friendly process by using the platform for these applications. Simultaneously, the authorities can efficiently review and monitor these applications, ensuring that private land acquisition under various acts, including the Railway Act 2008, NHAI Act 1956, and Land Acquisition Act 2013, adheres to transparent and standardised procedures. This approach not only simplifies the land acquisition process but also reinforces the broader objectives of PM Gati Shakti in promoting integrated and accountable infrastructure development.

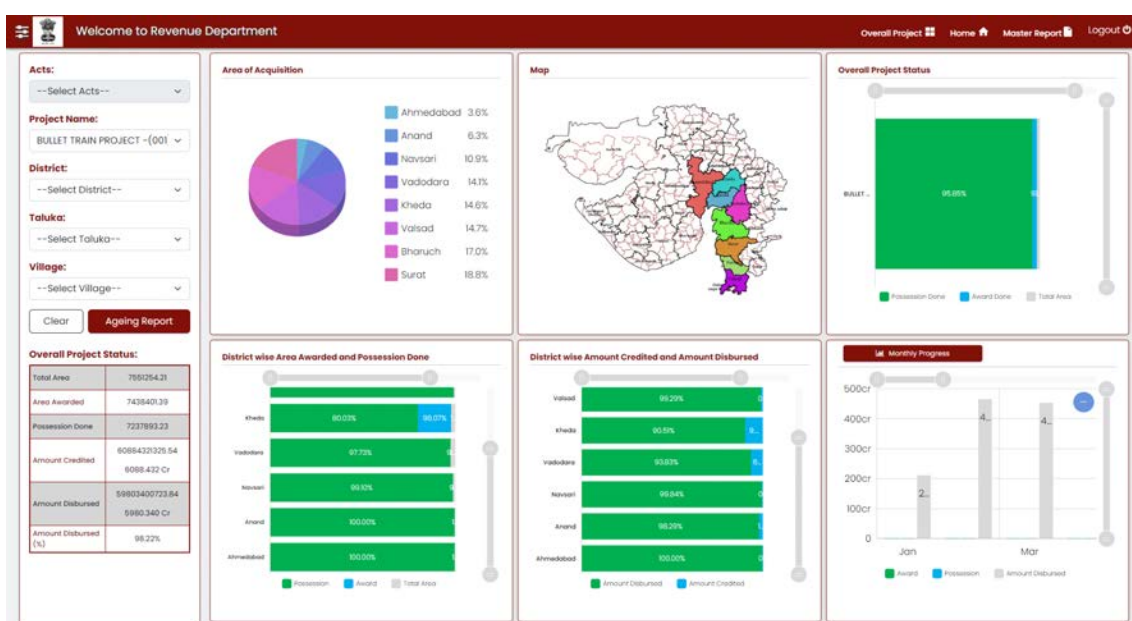


Figure 2.32 : Land Acquisition Monitoring Dashboard for Ahmedabad - Mumbai High Speed Rail Corridor

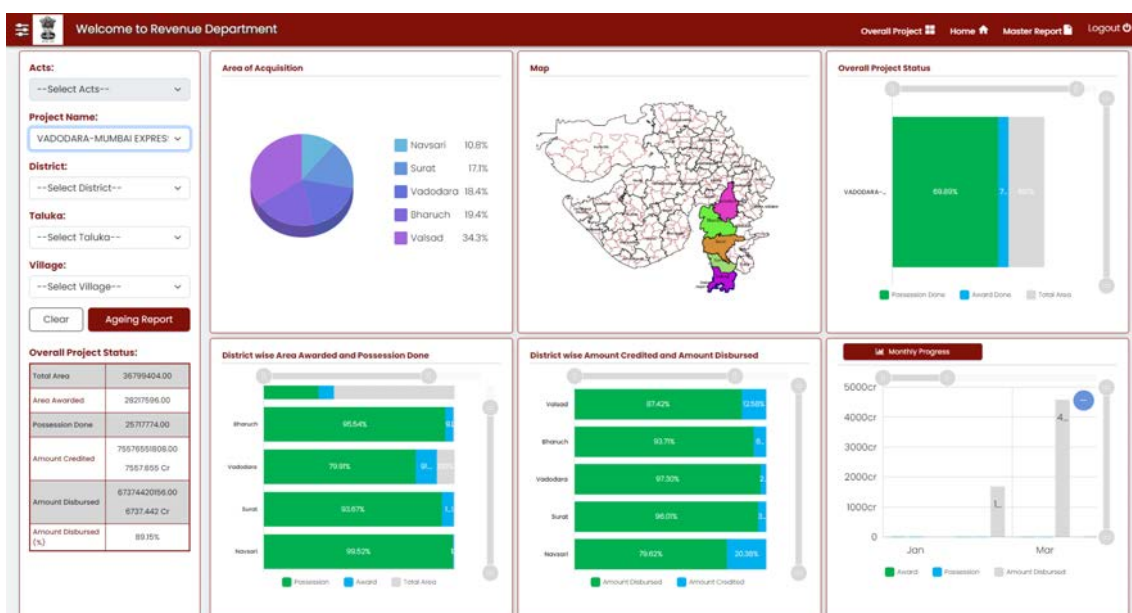


Figure 2.33 : Land Acquisition Monitoring Dashboard for Vadodara - Mumbai Expressway



LAND REVENUE RECORDS VERIFICATION USING PM GATI SHAKTI

Government and Private Revenue records identification of a land parcel has been integrated with PM Gati Shakti Gujarat. The land record details, such as 7/12, 8A, and Revenue Court cases, are integrated with each land survey number so the stakeholder can get the validated land record of the identified land parcel in a single click using PM Gati Shakti Gujarat.

The Government Land Allotment are also being carried out by the Government Stakeholders through PM Gati Shakti Gujarat.

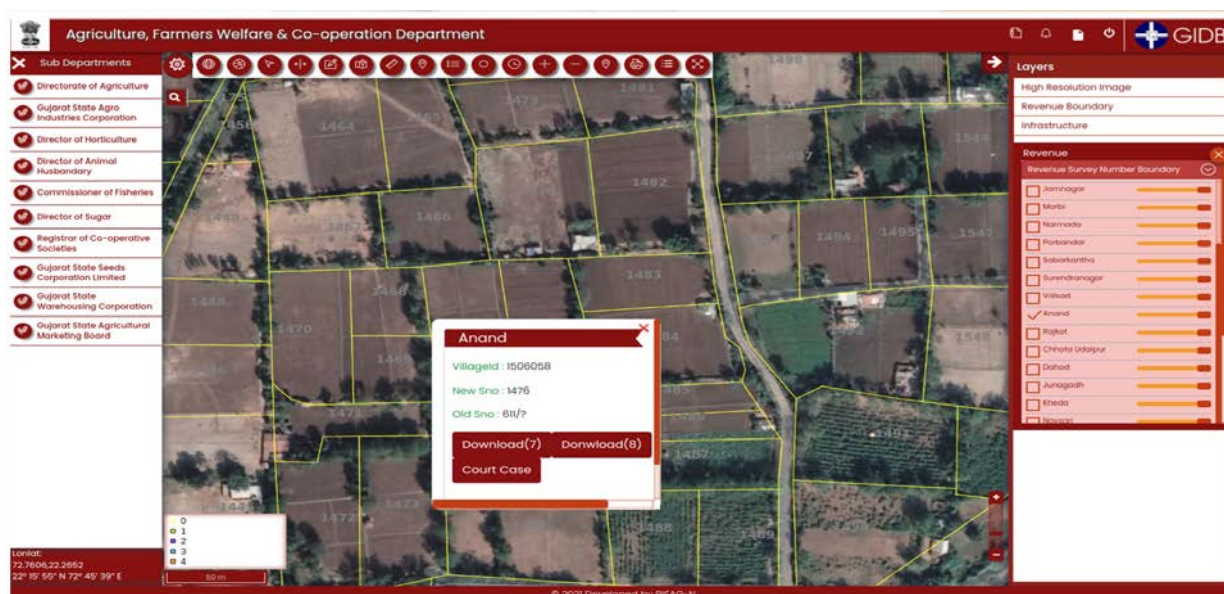


Figure 2.34 : Revenue Records Identification

4. INFRASTRUCTURE PROJECTS INTEGRATION

SEAMLESS INTEGRATION OF BUDGETARY APPROVAL FOR INFRASTRUCTURE PROJECTS

The integration of Budgetary Approval of the Finance Department is in place to monitor the effective utilisation of funds allocated by the Finance Department during the execution of departmental infrastructure projects. The e-file management software (e-Sarkar) has been seamlessly integrated with PM Gati Shakti Gujarat to facilitate the planning and monitoring of new projects, ensuring a cohesive and efficient process.

MAPPING OF PROJECTS

Departments have embarked on mapping projects categorised as "Under Implementation" and "Upcoming Projects," enhancing their visibility and impact while facilitating planning by other departments considering such future projects.

Welcome to Government of Gujarat

ENTER INFRASTRUCTURE PROJECT DETAILS

Project Name: Description: Upload Supportive Documents: No file chosen

Proposed Project Financial Year:

Budget Head: Scheme Head:

Sanctioned Budget Grant (in Lakh ₹): E-sarkar Verification: ☐ Physical ☒ E-sarkar File Number: Main Budget File Number:

Total Grant Approved (in Lakh ₹):

Figure 2.35: Budgetary Approval of Finance Department

Welcome to Government of Gujarat

Project Aging Dashboard

Long-Term Projects (No.) **24** Upcoming Projects (No.) **186** Upcoming Projects Cost (in Lakh ₹) **80414.09** Under Implementation Projects (No.) **259** Under Implementation Projects Cost (in Lakh ₹) **159693.82**

All Projects Mapped

Show 10 entries

Sr.No.	DEPARTMENT	SUB DEPARTMENT	SUB SUB DEPARTMENT	PROJECT NAME	DESCRIPTION	PROJECTED	PROJECT TYPE	STATUS	PROPOSED PROJECT FINANCIAL YEAR	BUDGET HEAD	SCHEME HEAD	BUDGET IN LAKHS	PROJECT COST IN LAKHS	CREATED DATE	View On Map
145	Narmada and Water Resources, Water Supply and Kolkapur Department	Water Resources Department		VALASANA BARRAGE	Valasana Barrage on Sabarmati river	05/01/2023/NW/88942/1862/P/5145	Infrastructure	Upcoming	2018-19	Capital Outlay on Minor Irrigation	18/098/4/02/03/01/02 - Minor Irrigation	30866.15	21248	08/09/2023	View On Map
233	Roads and Buildings Department			FOUR LANE OF PADARA-BHADRA BHAVNAGAR STATE HIGHWAY	FOUR LANE OF PADARA-BHADRA BHAVNAGAR STATE HIGHWAY	05/01/2023/RBD/RBDV/P5242	Infrastructure	Under Implementation	2018-19	Capital Outlay on Roads and Bridges	22/085/5054/03/207/11 - RBD-2(a) Original Works	200	20681.04	04/10/2023	View On Map
144	Roads and Buildings Department			FOUR LANE OF PADARA-BHADRA BHAVNAGAR STATE HIGHWAY	FOUR LANE OF PADARA-BHADRA BHAVNAGAR STATE HIGHWAY	05/01/2023/RBD/RBDV/P5242	Infrastructure	Upcoming	2023-24	Capital Outlay on Roads and Bridges	22/085/5054/03/207/11 - RBD-2(a) Original Works	2000	14500	05/09/2023	View On Map

Figure 2.36 : Infrastructure Projects Ageing Dashboard

The project dashboard empowers departments to monitor the progress of their projects closely. The district collectors also gain the capability to oversee the implementation of infrastructure projects within their districts, fostering better control and oversight.

Department-wise Projects Mapped

Show 100 entries

Sr.No.	DEPARTMENT	SUB DEPARTMENT	SUB SUB DEPARTMENT	Upcoming Projects (No.)	Under Implementation Projects (No.)
1	Narmada and Water Resources, Water Supply and Kolkapur Department	Water Supply Department		18	30
2	Forest and Environment Department			0	1
3	Roads and Buildings Department			19	45
4	Industries and Mines Department	Tourism Corporation of Gujarat Ltd.		0	1
5	Energy and Petrochemicals Department	Energy Sector	Gujarat Unjia Vikas Nigam Limited	4	0
6	Urban Development and Urban Housing Department	Municipal Corporation		21	17
7	Urban Development and Urban Housing Department	Town Planning And Valuation Department		4	10
8	Energy and Petrochemicals Department	Energy Sector	Gujarat State Petronet Limited	3	1
9	Energy and Petrochemicals Department	Petrochemicals Sector	Sabarmati Gas Limited	1	9
10	Industries and Mines Department	Gujarat Industrial Development Corporation		0	1
11	Industries and Mines Department	Commissioner of Geology and Mining		1	0
12	Energy and Petrochemicals Department	Petrochemicals Sector	Gujarat State Petronet Limited	0	1

Figure 2.37 : Department Wise Infrastructure Projects Mapping

VERIFIED PROJECT INTEGRATION CERTIFICATE

Upon successful integration of a project with PM Gati Shakti Gujarat, a Project Integration Certificate is generated for the department with a unique project ID. The authenticity of the certificate can be easily confirmed by scanning the embedded QR code, ensuring transparency and credibility.

For ensuring the release of funds for departmental infrastructure projects, the submission of a Project Integration Certificate to the Finance Department is a mandatory and pivotal step in PM Gati Shakti Gujarat.



Figure 2.38 : Project Integration Certificate

SPECIAL ASSISTANCE PROJECTS

The Gati Shakti Terminal, strategically located in Rafaleshwar near Morbi, will bring substantial cost advantages to Gujarat's ceramic, paper, and related industries. This transformative project facilitates rail-based transportation with integrated customs clearance, offering significant benefits such as cost savings, reduced transit times, proximity to production hubs, and provision for industrial storage space. The estimated cost of the project is INR 280 Crores, and around INR 112 Crores have been granted by the Ministry of Finance, Government of India, as an interest-free 50-year loan under the Special Assistance Scheme for Capital Investment for 2022-23 (Part II - PM Gati Shakti related Investment).

GATI SHAKTI CARGO TERMINAL IN RAFALESHWAR, NEAR MORBI

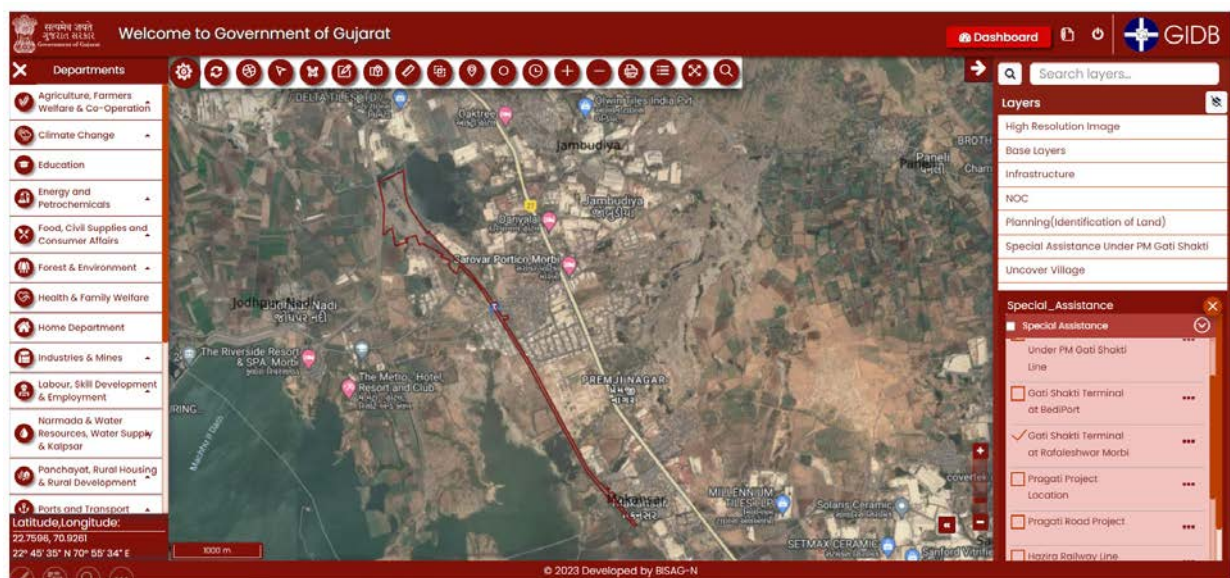


Figure 2.39 : Gati Shakti Terminal in Rafaleshwar near Morbi

KEY BENEFITS :

The Key Benefits of the Project are Savings in Logistics Costs, Reduction in Transit time, Custom Clearance Provision near the production hub and Provision for storage space for industrial units.





Figure 2.40 : Gati Shakti Terminal in Rafaleshwar near Morbi

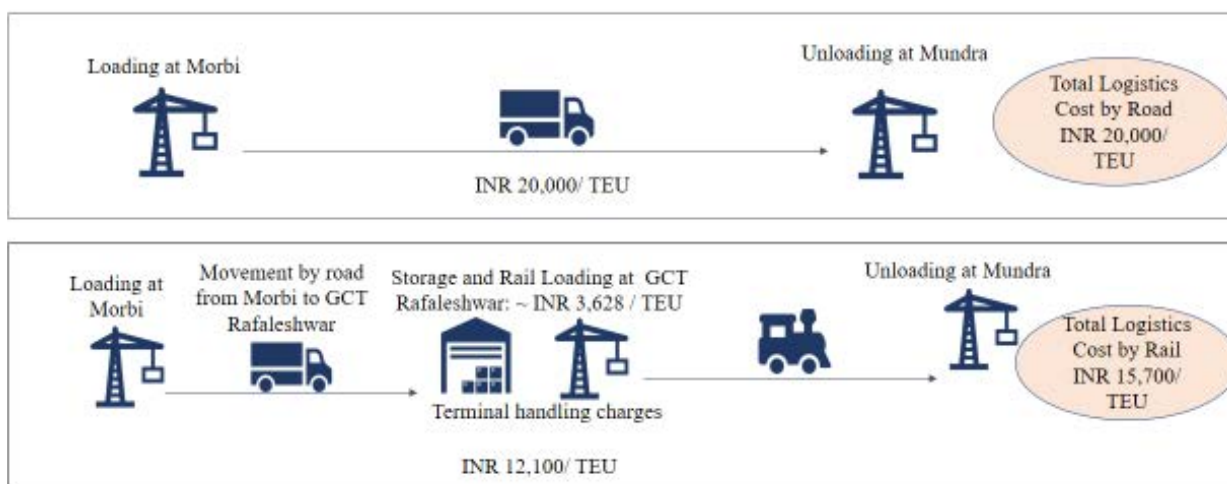


Figure 2.41 : Existing v/s Proposed Goods Movement leading to save Logistics Cost at Gati Shakti Terminal in Rafaleshwar near Morbi

Gati Shakti Terminal in Rafaleshwar can save logistics cost around INR 2000-4000/TEU.

SPECIAL ASSISTANCE PROJECTS

The Gati Shakti Cargo Terminal, strategically located at Old Bedi Port, is poised to revolutionise logistics for port users, opening new avenues for freight operations. This visionary project offers a range of key benefits, including cost savings in logistics, the creation of new freight opportunities, enhanced supply chain efficiency, and a Hub & Spoke model for decongestion.

With an estimated project cost of approximately INR 150 Crores, it has received a grant of INR 60 Crores from the Ministry of Finance, Government of India. This funding, provided as an interest-free 50-year loan, falls under the Special Assistance Scheme for Capital Investment for 2022-23 (Part II - PM Gati Shakti related Investment).

GATI SHAKTI CARGO TERMINAL AT BEDI PORT

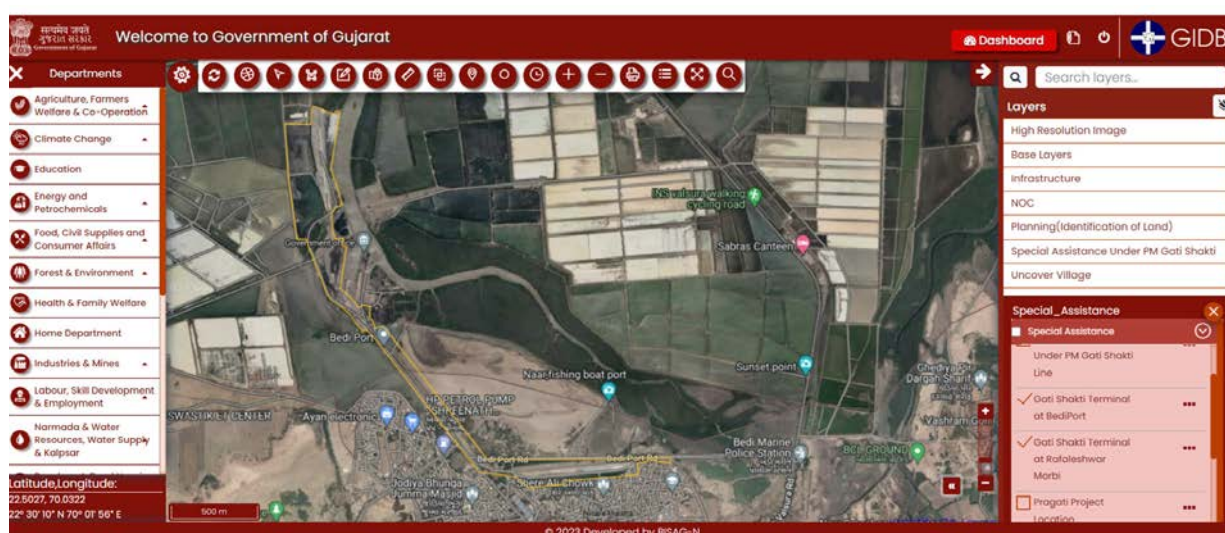


Figure 2.42 : Gati Shakti Cargo Terminal at Old Bedi Port

KEY BENEFITS :

The Key Benefits of the Project are Savings in Logistics Costs, Creation of new avenues for freight, Efficiency in supply chain and Hub & Spoke model for decongestion.





Figure 2.43 : Gati Shakti Cargo Terminal at Old Bedi Port

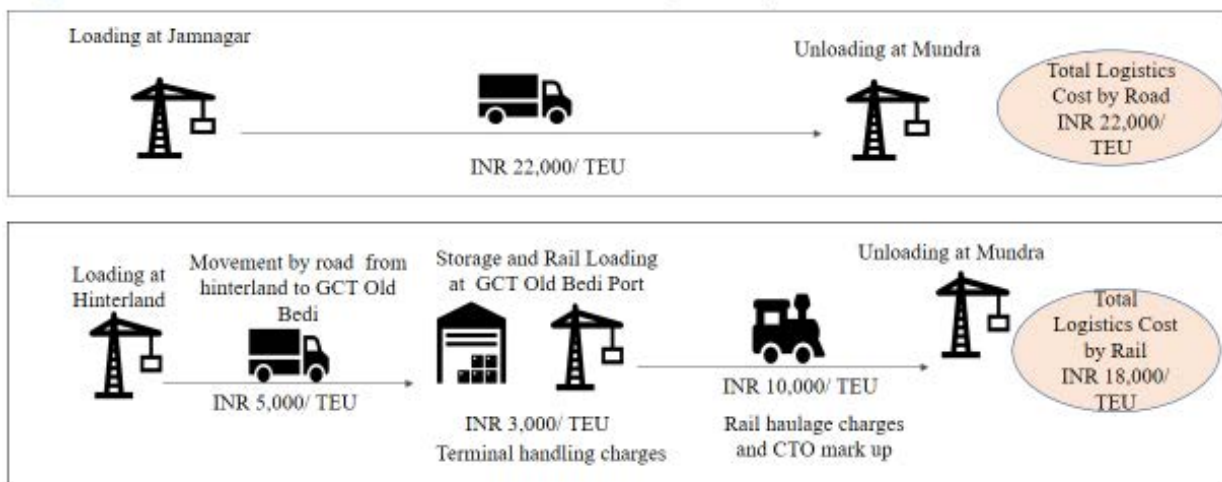


Figure 2.44 : Existing v/s Proposed Goods Movement leading to save Logistics Cost at Gati Shakti Cargo Terminal at Old Bedi Port

Gati Shakti Cargo Terminal at Old Bedi Port can save logistics cost around INR 4000/ TEU.

Gati Shakti Cargo Terminal at Old Bedi will increase the coal traffic from current 1 million tonnes per annum to around 2-3 million tonnes per annum.

5. CAPACITY BUILDING

EMPOWERING STATE GOVERNMENT OFFICERS

Regular capacity-building sessions are being conducted to ensure the seamless implementation of PM Gati Shakti Gujarat. To date, over 4,100 government officers across a range of State Government Departments have been trained to use PM Gati Shakti Gujarat. These sessions were conducted for various departments, including Agriculture, Education, Energy & Petrochemicals, Health & Family Welfare, Industries and Mines, Revenue, Roads & Buildings, and many more. This comprehensive training effort equips officers with the necessary skills to effectively utilise PM Gati Shakti Gujarat, fostering a more empowered government workforce.



Figure 2.45 : Capacity Building on PM Gati Shakti Gujarat

EMPOWERING THROUGH REGIONAL AWARENESS WORKSHOPS

A series of five regional awareness workshops were held in key cities across Gujarat, including Ahmedabad, Vadodara, Surat, Rajkot, and Bhavnagar. These workshops served as a platform for raising awareness about PM Gati Shakti Gujarat and providing valuable hand-holding assistance to officers at the district, taluka, and village levels. Their focus was on identifying and mapping infrastructure and social infrastructure assets, ultimately empowering regions with the knowledge and tools they need for effective implementation.





Figure 2.46 : Regional Awareness Workshops in Ahmedabad, Vadodara, Surat, Rajkot and Bhavnagar

LEARNING REPOSITORY ON PM GATI SHAKTI GUJARAT

An extensive learning repository has been curated to equip users with comprehensive knowledge of PM Gati Shakti Gujarat. It includes a collection of tutorial videos covering various aspects, such as department login procedures, an overview of PM Gati Shakti, navigation and tool utilisation, layers usage, buffer tool application, use of query builder tool, converting AutoCAD files to GIS formats, and land identification tools. These tutorial videos, available in Hindi, Gujarati, and English, are a valuable resource designed to empower users with the skills and insights required to efficiently use the diverse tools integrated within PM Gati Shakti Gujarat.

Learning Repository on PM Gati Shakti Gujarat

In addition to tutorial videos, the user manual on the portal provides a step-by-step process to apply for NOC/permission and details required to fill out the form. This enables the applicant to understand the process and required details to make online applications.

Help Desk for PM Gati Shakti Gujarat

A dedicated helpdesk has been established by GIDB at BISAG-N to ensure a seamless experience for State Departments at the district, taluka, and village levels. This help desk is committed to swiftly resolving any issues encountered and facilitating training sessions for government officers to effectively utilise PM Gati Shakti Gujarat.

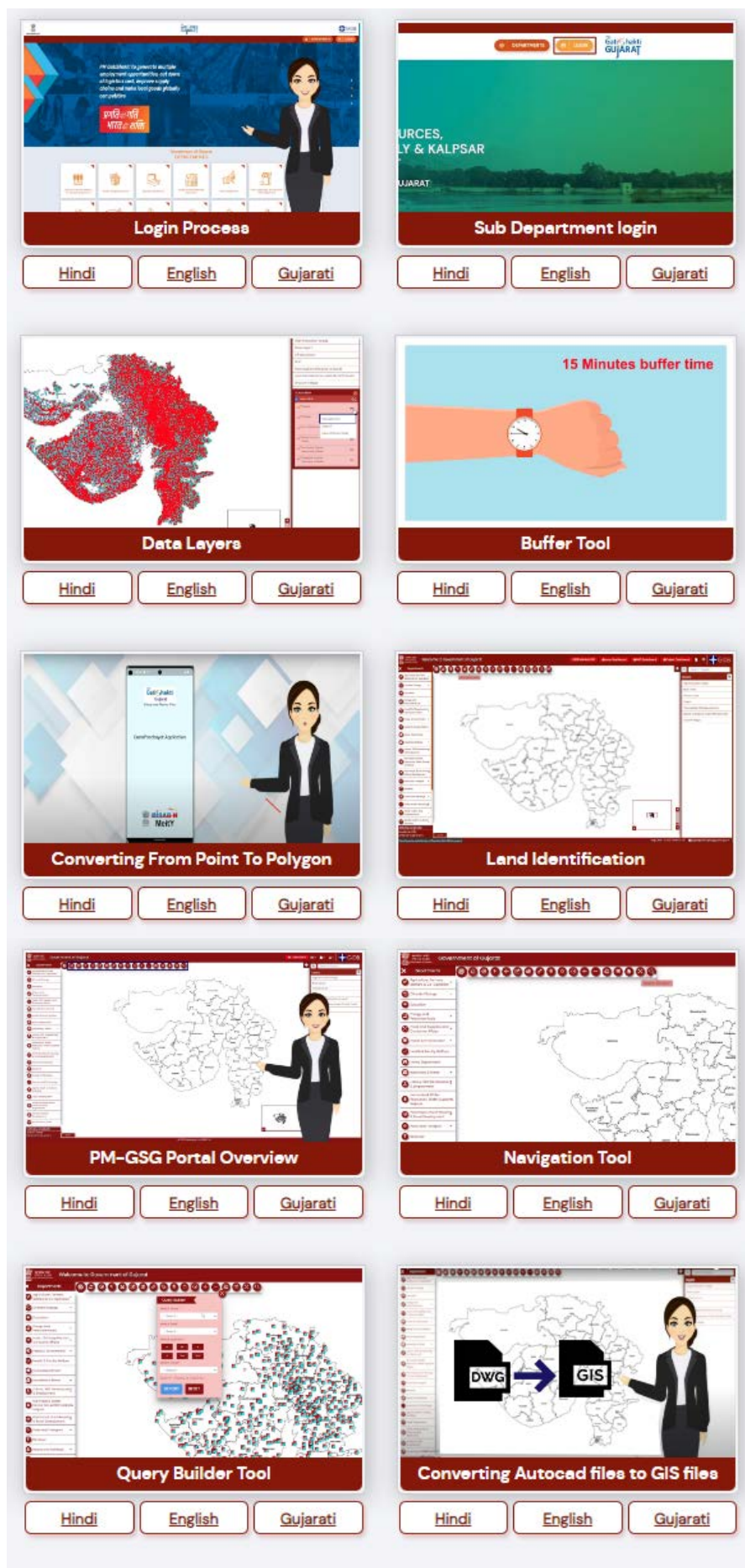


Figure 2.47 : Learning Repository on PM Gati Shakti Gujarat

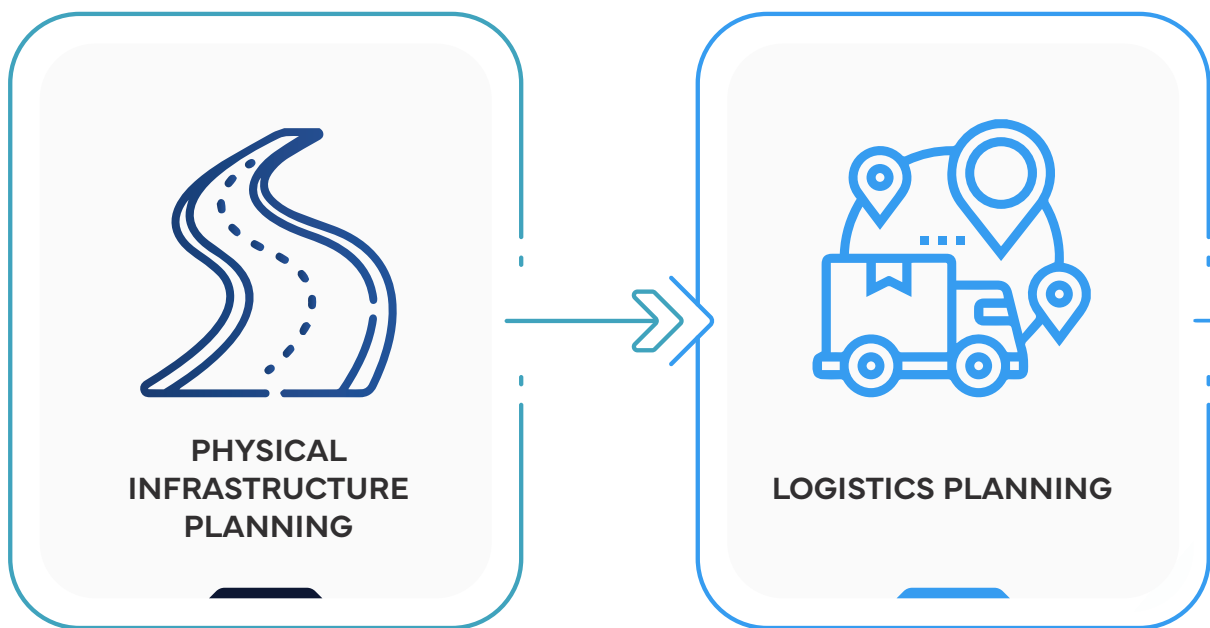


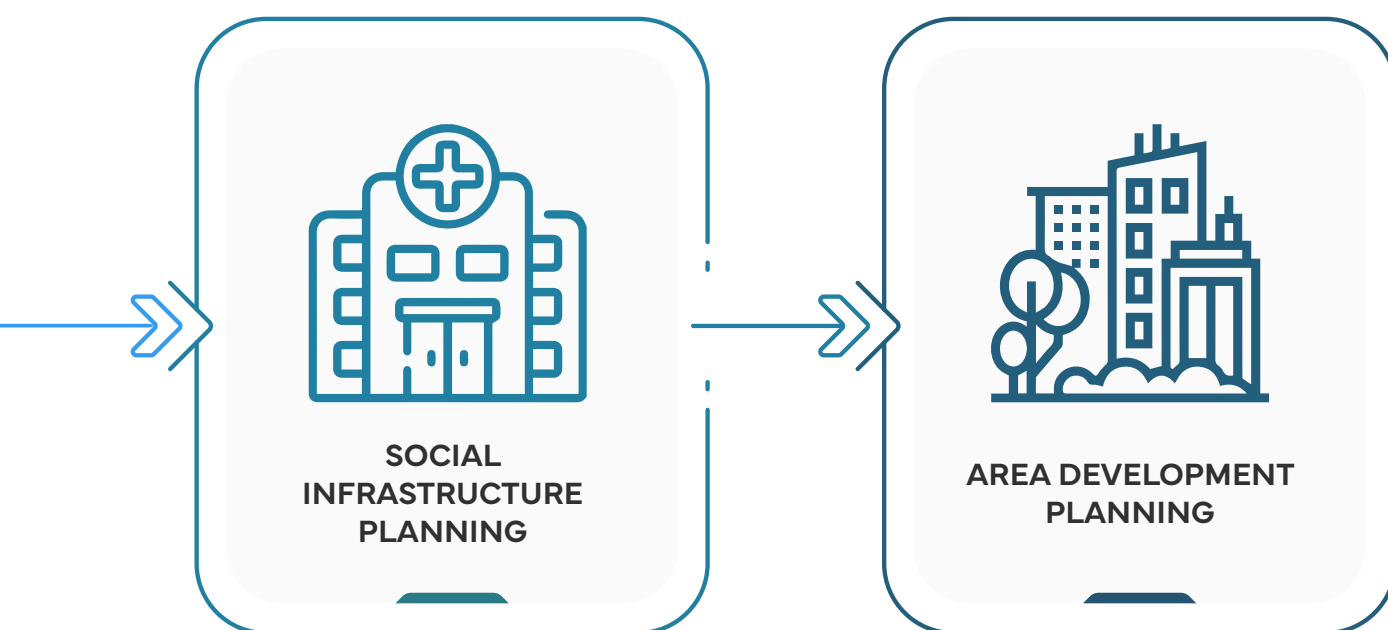
BEST PRACTICES IN PLANNING & GOVERNANCE



03

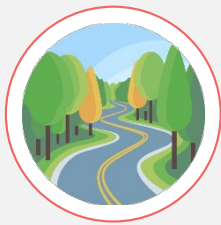
PM GATI SHAKTI GUJARAT PLATFORM





USE OF PM GATI SHAKTI STATE MASTER PLAN





South Coastal Corridor Planning



Mobile Connectivity Planning in Tribal Areas



City Bypass Planning



Planning for EV Charging Station



USE CASE I : PHYSICAL INFRASTRUCTURE PLANNING



USE CASE : PHYSICAL INFRASTRUCTURE PLANNING

01 - SOUTH COASTAL CORRIDOR PLANNING (ROADS & BUILDINGS DEPARTMENT)

The 350 km long South Coastal Corridor is part of the proposed 1761 km corridor of the Government of Gujarat from Umargam in South Gujarat to Narayan Sarovar in the Kachchh District.

The corridor passes through 04 districts (Bharuch, Surat, Navsari, Valsad) and covers tourist places like Dandi, Ubhrat and Tithal. It will also provide connectivity to the ports of Dahej and Hazira for faster cargo evacuation.

The South Coastal Corridor planning was undertaken to provide additional linkages to Industries and connectivity areas with good potential for tourism development. It is being developed by strengthening existing links and constructing missing links so as to improve connectivity to the coastal belt of Gujarat.

During planning, the GO (desired) criteria like connecting National Highways, State Highways, Railway Lines, Ports, Tourist Places and Industries, along with the NO-GO (not-desired) criteria like Forest Land, Sanctuary, Eco-sensitive Zones, Coastal

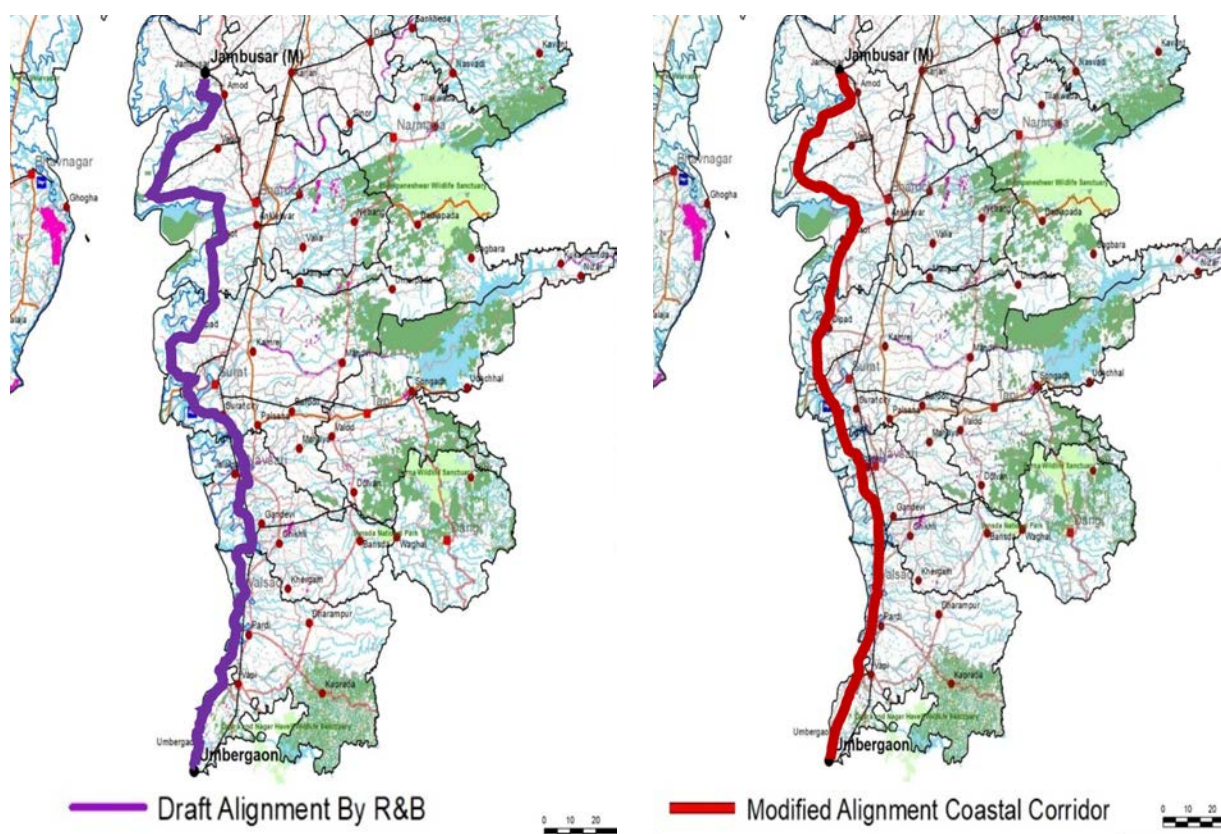


Figure 3.1 : South Coastal Corridor: Planning Road Alignment

Regulation Zone, Mining Areas and Wetlands, were considered. The road alignment was also planned so as to minimise private land acquisition for the project.

The data layers available on PM Gati Shakti Gujarat were used to integrate the planned corridor with National Highways, State Highways, Railway Lines, Airports, Ports, Tourist Places, and Industries.

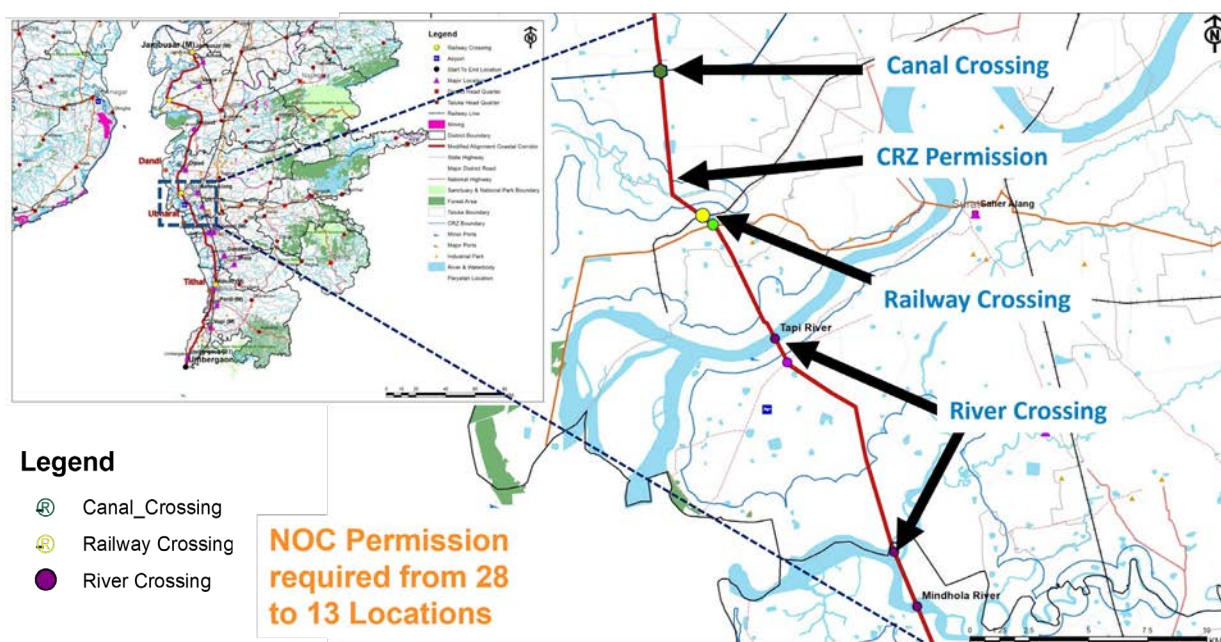


Figure 3.2 : South Coastal Corridor: Permissions Required



Figure 3.3 : South Coastal Corridor: Tree Cutting Calculation

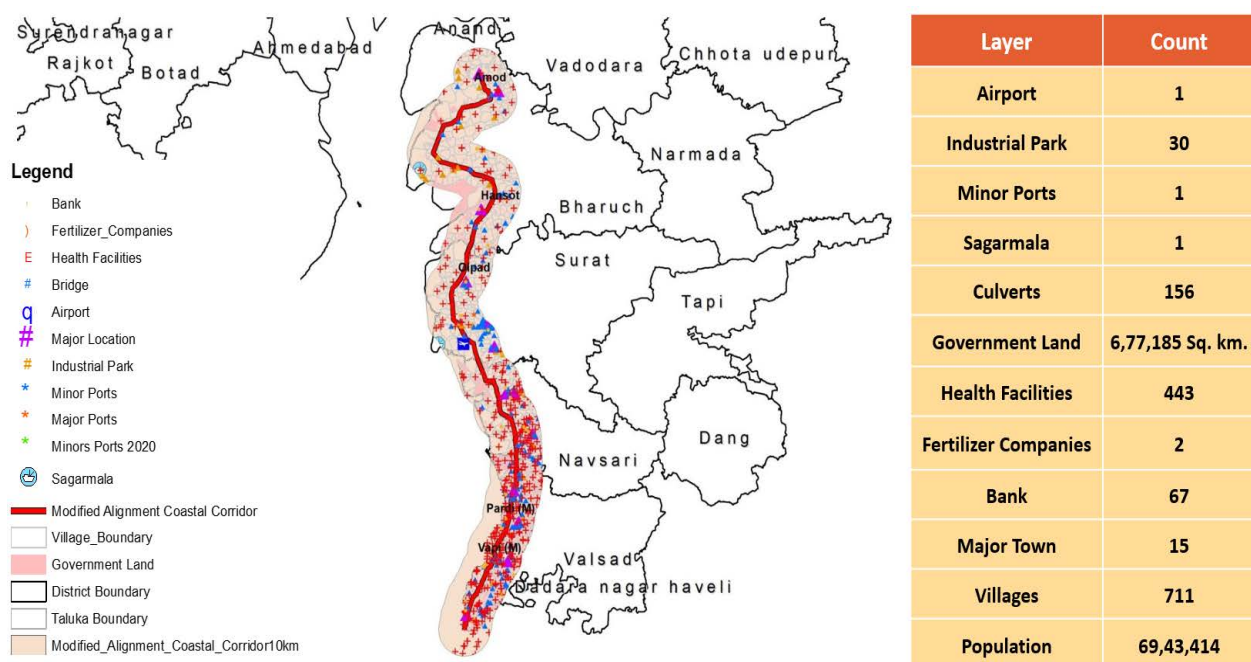
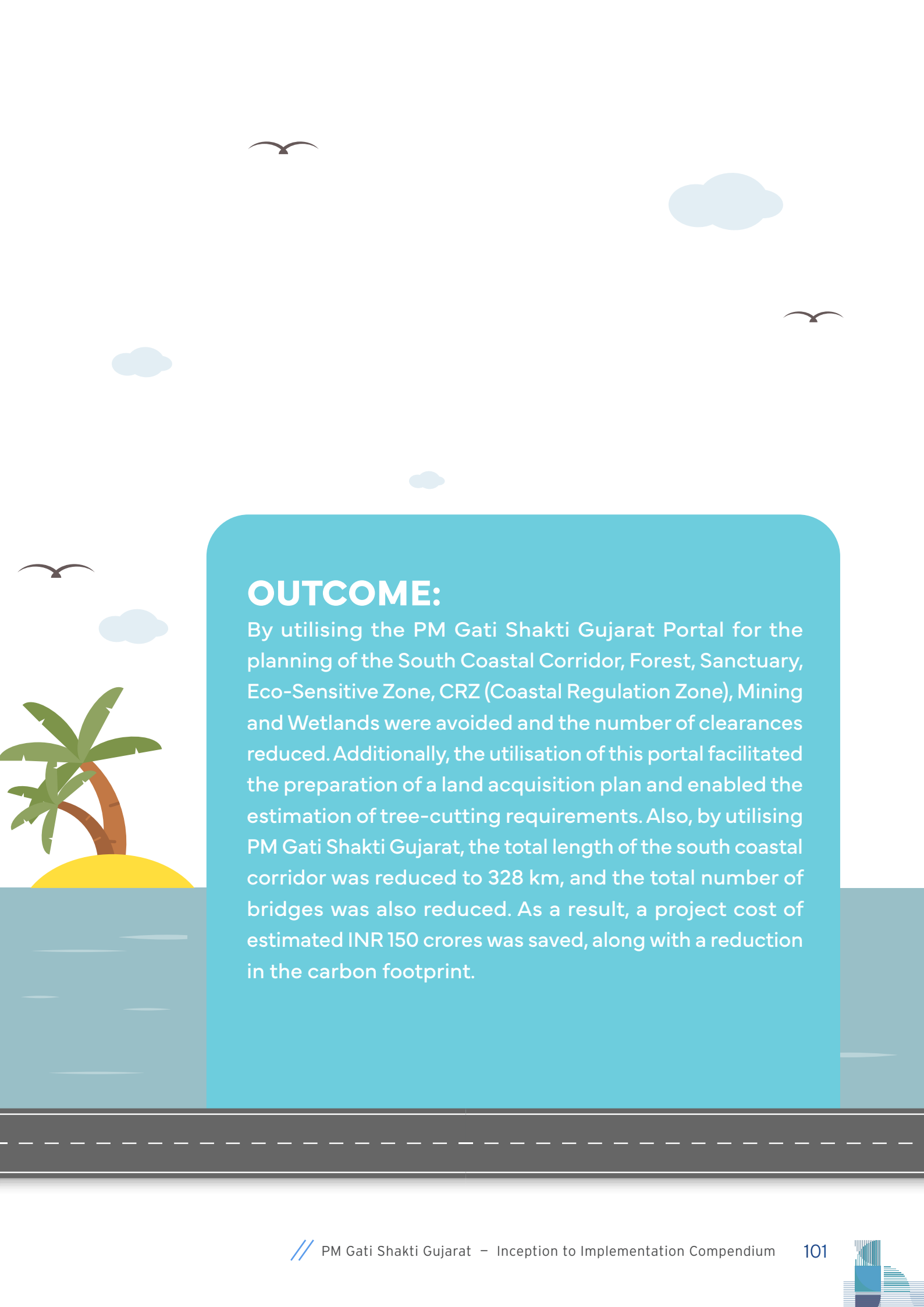


Figure 3.4 : South Coastal Corridor: Nearby Infrastructure Identification





OUTCOME:

By utilising the PM Gati Shakti Gujarat Portal for the planning of the South Coastal Corridor, Forest, Sanctuary, Eco-Sensitive Zone, CRZ (Coastal Regulation Zone), Mining and Wetlands were avoided and the number of clearances reduced. Additionally, the utilisation of this portal facilitated the preparation of a land acquisition plan and enabled the estimation of tree-cutting requirements. Also, by utilising PM Gati Shakti Gujarat, the total length of the south coastal corridor was reduced to 328 km, and the total number of bridges was also reduced. As a result, a project cost of estimated INR 150 crores was saved, along with a reduction in the carbon footprint.



USE CASE : PHYSICAL INFRASTRUCTURE PLANNING

02 - MOBILE CONNECTIVITY PLANNING IN TRIBAL AREAS (SCIENCE & TECHNOLOGY DEPARTMENT)

PM Gati Shakti Gujarat was pivotal in planning mobile connectivity for previously underserved tribal villages in Dahod District, Gujarat. These villages with no voice and/or data coverage were identified using this platform.

The process involved evaluating:

- Location of existing towers.
- Areas and populations lacking mobile network coverage.
- Regions with voice mobile network availability but no data connectivity.



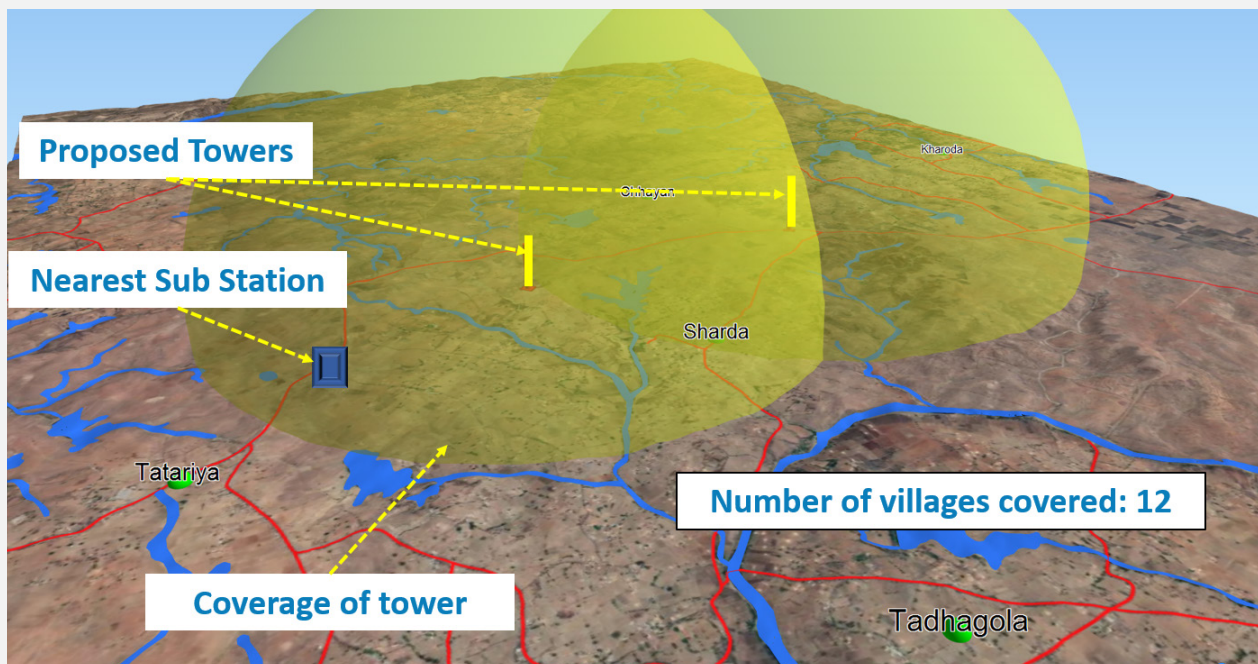


Figure 3.5 : Tower Location Optimisation for Providing Mobile Connectivity in Tribal Areas of Dahod

OUTCOME:

PM Gati Shakti Gujarat was used to assess the undulated topography of Dahod district to determine the optimal locations for installing new towers. This strategic analysis sought to achieve optimum coverage to maximise population coverage while minimising the number of required towers. The process involved identifying suitable tower locations and determining the required number of installations.

Additionally, the PM Gati Shakti platform identified the nearest substations to fulfil the power needs of these towers. Thanks to the planning efforts facilitated by PM Gati Shakti Gujarat, the department successfully optimised the project's capital costs. This led to significant savings in departmental resources, finances, and time.



USE CASE : PHYSICAL INFRASTRUCTURE PLANNING

03 - AMBAJI CITY BYPASS PLANNING IN BANASKANTHA DISTRICT (ROADS & BUILDINGS DEPARTMENT)

Ambaji's religious significance draws a large number of pilgrims annually. A strategic framework for city capacity enhancement was developed through the PM Gati Shakti platform to accommodate this influx.

The Ambaji Bypass project was initiated under PM Gati Shakti, covering 5.3 km, connecting industrial areas and a state highway, and passing through five villages.

A comprehensive approach is applied, considering crucial criteria. The “NO-GO” criteria are employed to avoid areas and activities with environmental, social, or regulatory concerns. The priorities are preserving natural ecosystems, compliance with eco-sensitive zone guidelines, and minimising development in the mining and forest areas. Land acquisition, especially within forested regions, is minimised to reduce social and environmental impacts. Soil analysis guides engineering decisions.

Within the PM Gati Shakti Gujarat framework, the project includes elements like a truck lay bay, two major bridges, seven minor bridges, and nine box culverts, essential for efficient transportation infrastructure.

This approach underscores a commitment to sustainable, responsible development, prioritising both environmental conservation and infrastructure planning.

OUTCOME:

Operating under the framework of PM Gati Shakti Gujarat, the project integrates essential elements like truck lay bays, major and minor bridges, and box culverts to facilitate efficient transportation. The outcome is a model of sustainable and conscientious development, harmonising the goals of environmental preservation and infrastructure progress.

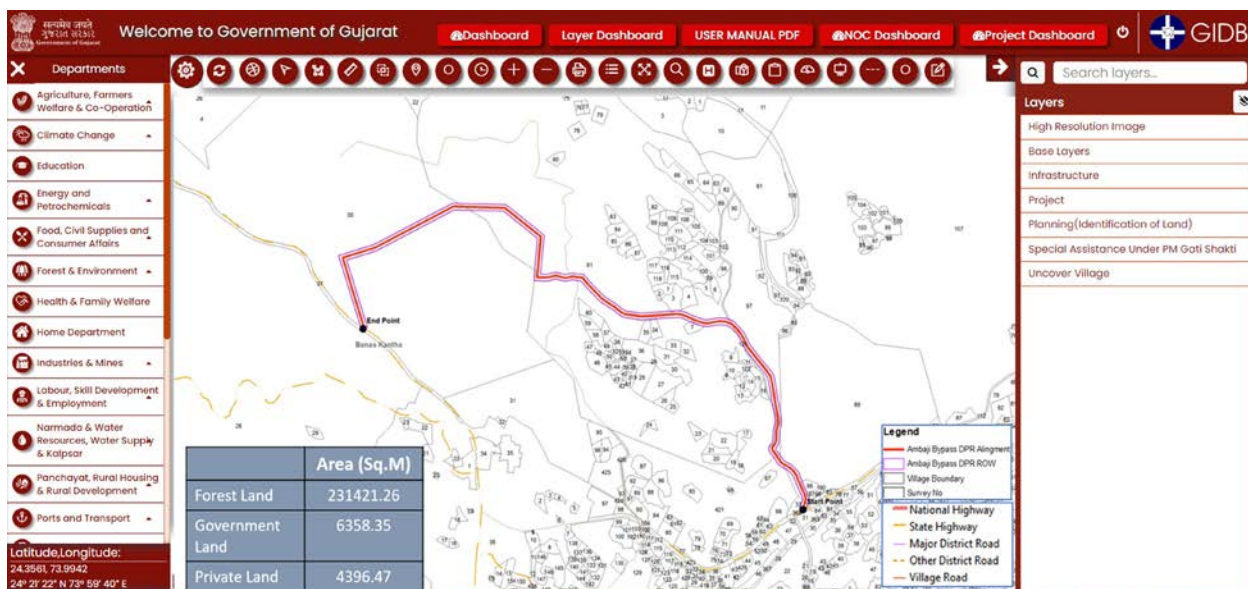


Figure 3.6 : Land Acquisition Plan of Ambaji Bypass Alignment

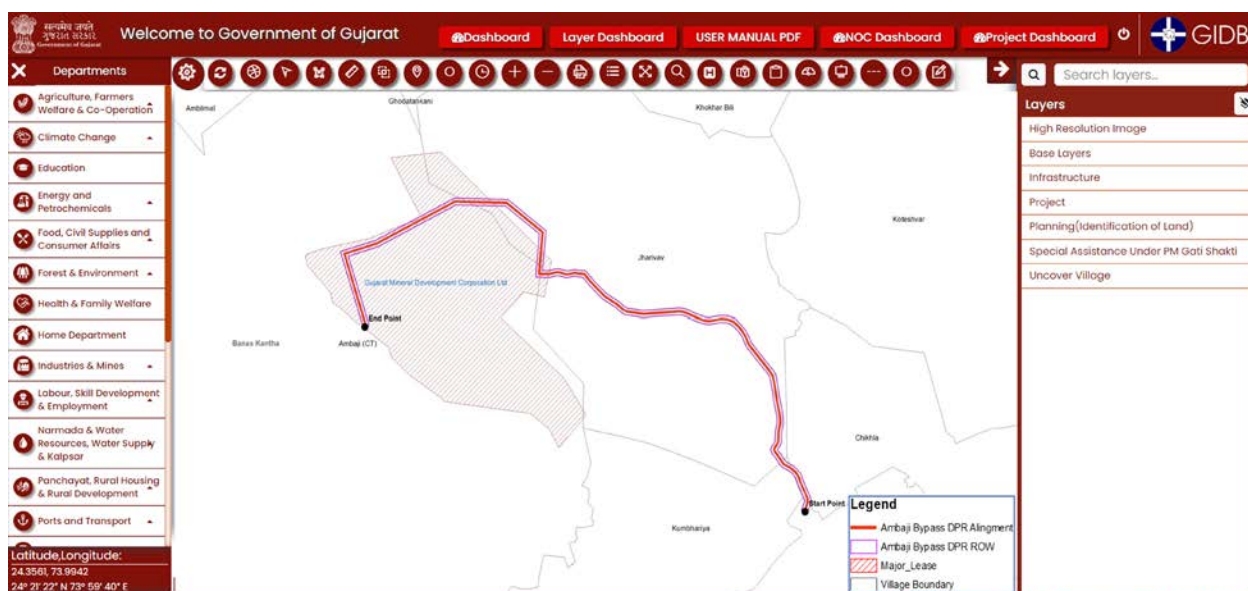


Figure 3.7 : Minimising Mining Area During Planning for Ambaji Bypass Alignment

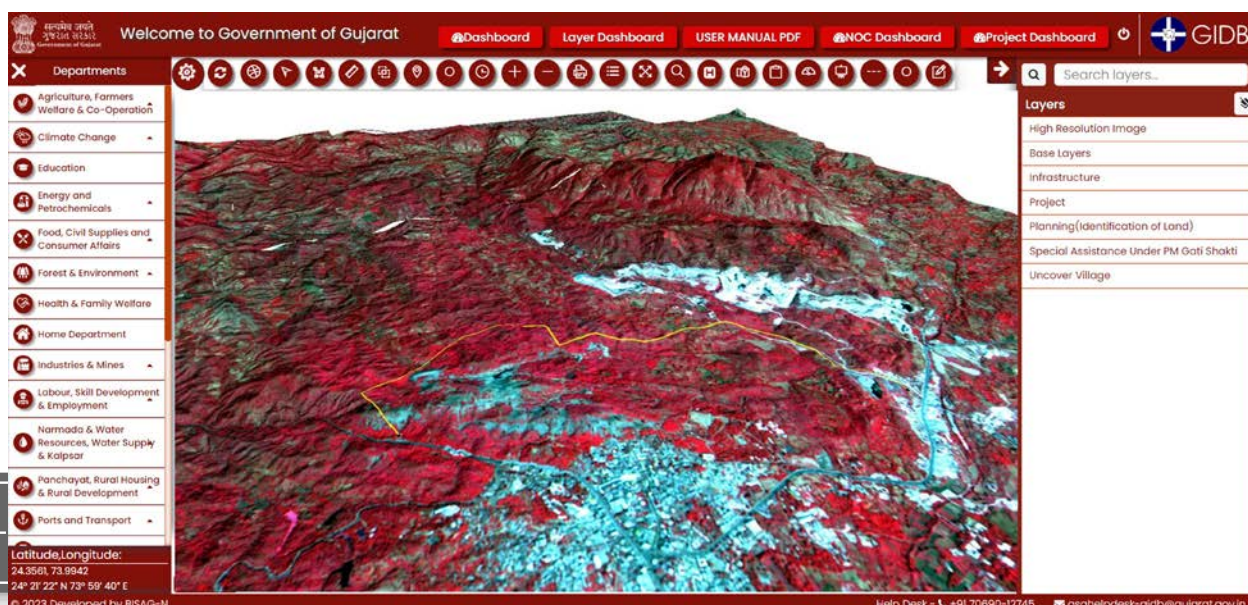


Figure 3.8 : 3D Visualisation of Ambaji Bypass Alignment

USE CASE : PHYSICAL INFRASTRUCTURE PLANNING

04 - PLANNING FOR EV CHARGING STATIONS ACROSS GUJARAT (ENERGY & PETROCHEMICAL DEPARTMENT)

With the increasing demand for Electric Vehicles (EVs) vehicles in urban areas, there is a need for creating a robust network of EV charging infrastructure for both private as well as commercial vehicles in a sustainable manner, thus reducing carbon equivalent emissions towards meeting one of the key Sustainable Development Goals (SDG). One of the challenges is identifying the optimum location for setting up EV charging stations so that maximum users can benefit from the charging stations.

Using PM Gati Shakti as a tool and based on NO-GO and GO Criteria, maximum locations were shortlisted in urban areas as well as along State Highways and National Highways.

One of the key considerations is the provision of two stations every 50 kilometres of the road network. To further enhance convenience, a thoughtful approach was taken, where these stations are placed alternatively on the left and right sides of the road every 25 kilometres. This alternating sequence provides travellers with options on both sides of the road, making it easier to access the services they need during their travels.

OUTCOME:

Using PM Gati Shakti Gujarat, a significant milestone has been achieved in Gujarat's infrastructure development. A total of 250 Electric Vehicle (EV) Charging Stations have been identified and strategically positioned across the state. These stations are distributed in 8 Municipal Corporations and 18 Nagarpalikas, covering both urban and semi-urban areas, as well as along 16 National Highways and State Highways. PM Gati Shakti has been instrumental in optimising the utilisation of charging stations by a maximum number of consumers in a cost-effective manner and aligning with the core objectives of the Gujarat State Electric Vehicle Policy, 2021.



AHMEDABAD - VADODARA NH 64 ELECTRIC CHARGING STATION DISTRIBUTION

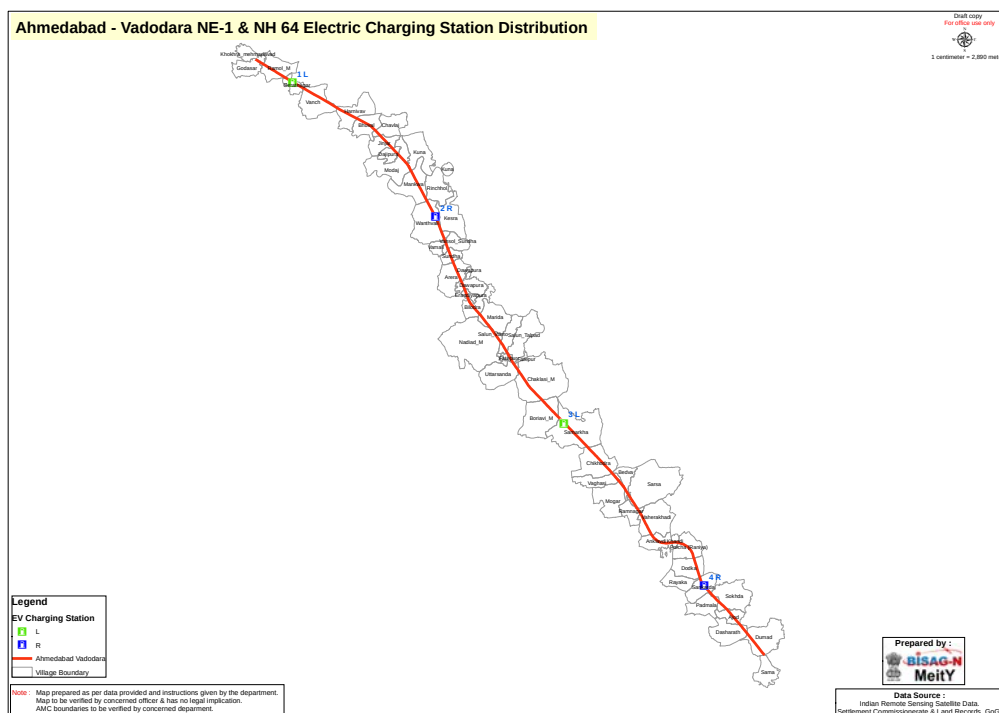


Figure 3.9 : Electric Vehicle Charging Station Planning along National Highways

VADODARA - STATUE OF UNITY GJ SH 11 AND GJ SH 63 ELECTRIC CHARGING STATION DISTRIBUTION

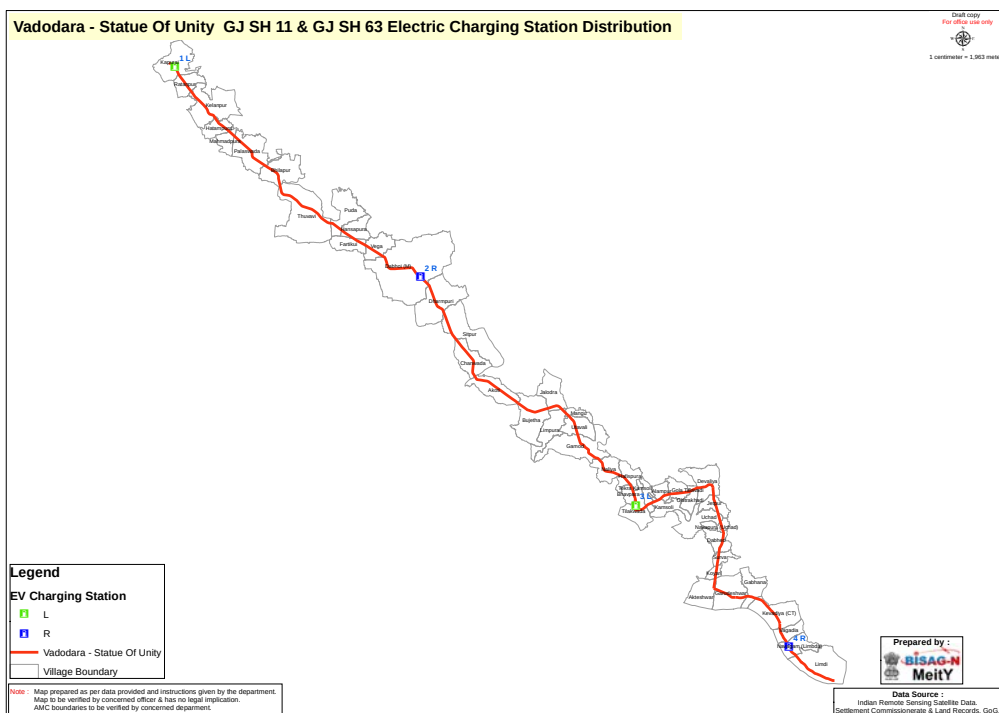


Figure 3.10 : Electric Vehicle Charging Station Planning in Nagarpalika Areas



AHMEDABAD MUNICIPAL CORPORATION ELECTRIC CHARGING STATION DISTRIBUTION

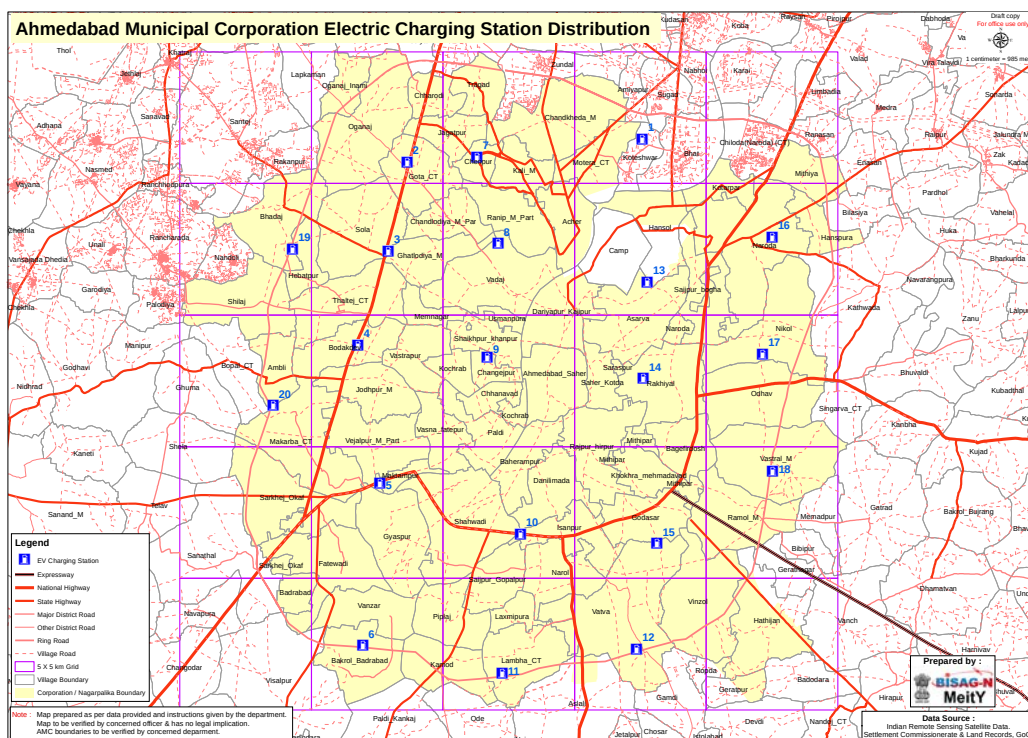


Figure 3.11 : Electric Vehicle Charging Station Planning in Municipal Corporation Areas

ANAND NAGARPALIKA ELECTRIC CHARGING STATION DISTRIBUTION

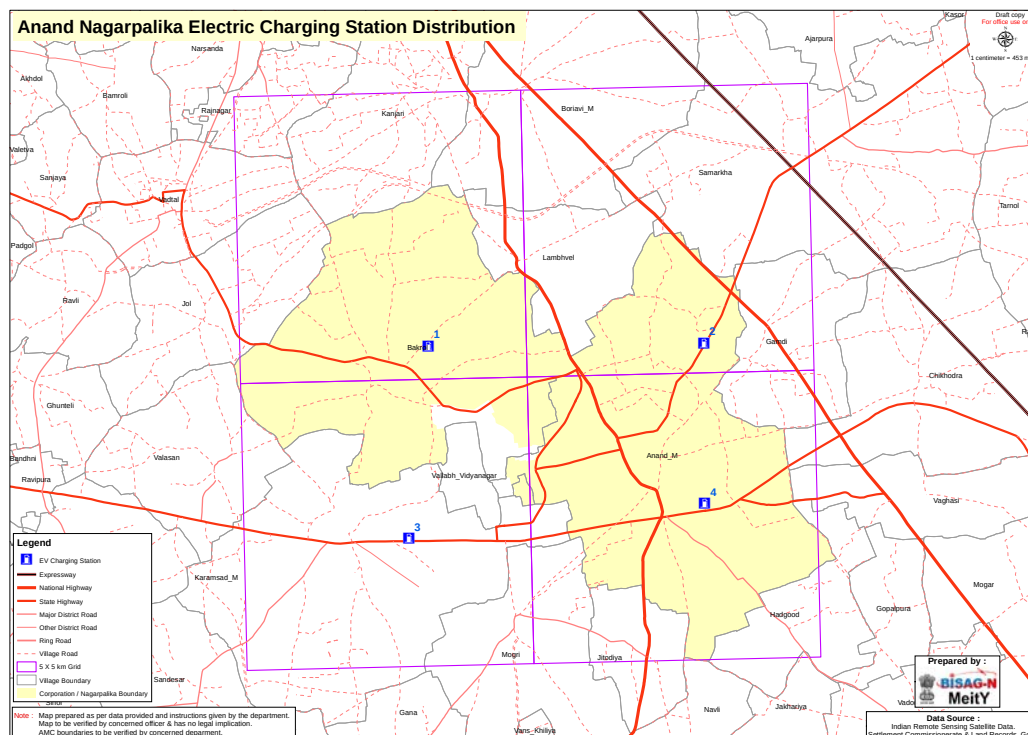
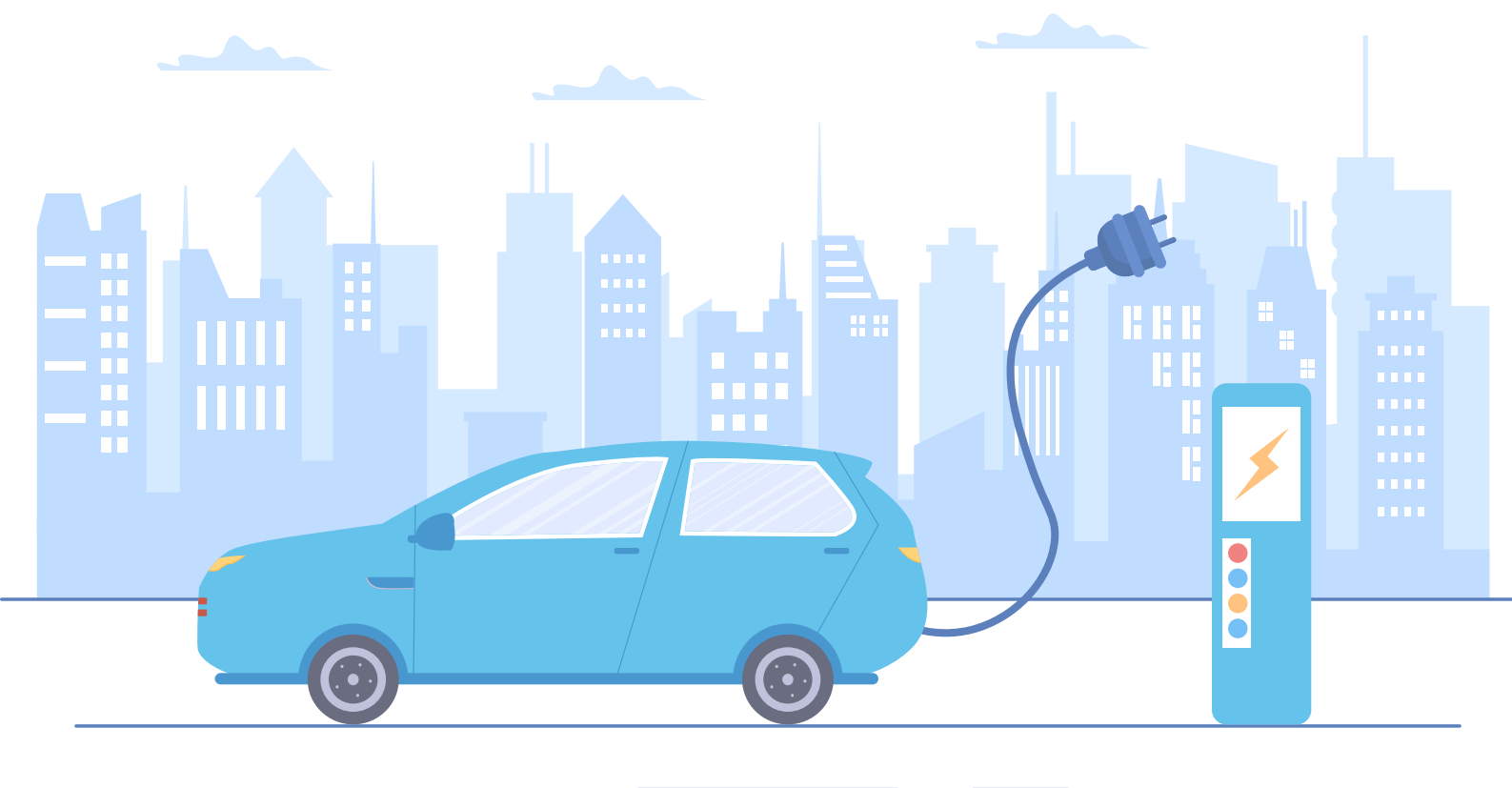


Figure 3.12 : Electric Vehicle Charging Station in Nagarpalika Areas





State Integrated Logistics Master Plan



City Logistics Plan



Freight Infrastructure Mapping



USE CASE II : LOGISTICS PLANNING



USE CASE : LOGISTICS PLANNING

01 - STATE INTEGRATED LOGISTICS MASTER PLAN OF GUJARAT (INDUSTRIES AND MINES DEPARTMENT)

Gujarat's unique position in the country as a gateway for logistics and shipping to the northern hinterland has ensured the state's consistent demand for logistics services and infrastructure. Being at the forefront of the industry and sector, Gujarat has instituted the development of a state-level integrated logistics master plan using PM Gati Shakti Gujarat. With an aim to reduce logistics costs and tackle insufficient capacities and missing links, the state hopes to save both time and money by integrating different transport modes and improving infrastructure related to logistics, which makes freight movement seamless and efficient. Currently, the project has completed its first two stages, which include a number of primary surveys - traffic, parking, operator and speed and consultations with multiple stakeholders, both government and private.

Additional analysis through PM Gati Shakti Gujarat and multi-modal modelling simulations has helped in the identification of strategic projects to alleviate congestion, delays, and inefficiencies in logistics services.

The overarching goals of the project are to reduce logistics costs by efficient multi-modal integration, capacity augmentation in existing projects with high demand (ports & rail), recommendations of policy and administrative reform, and creation of systems and databases for ease of access, to name a few. Based on the analysis of data, a number of possible future projects of different scales have emerged for implementation; some of them are listed below:

1. Freight villages/Transport hubs at peripheries of large urban cities - Ahmedabad, Surat, Rajkot, etc.
2. Rail capacity upgradation in the Kachchh region.
 - Rail connectivity from Mundra Port to New Chatodar
3. Upgradation and customisation of logistics facilities at Ahmedabad and Surat airports. i.e. ease of use for certain goods that are a majority at the airport (Pharmaceuticals and Precious stones)
4. Improved customs infrastructure to increase clearance speed at port of entry/exit
5. Addition of freight-only lanes/corridors on certain NH and SH. The state master plan will integrate the recommendations and goals of the eight City Logistics Plans (CLP) with a focus on traffic management strategies, policies and specific logistics infrastructure that can reduce the demand for logistics services on urban infrastructure.



Figure 3.13 : State Integrated Logistics Master Plan of Gujarat

OUTCOME:

Using PM Gati Shakti Gujarat, the integrated master plan will encompass multiple projects for the growth of the economy of the state, along with the integration of different modes of logistics like roads, railways, aviation, ports, industrial areas, DMIC, DFC, and expressways.

With implementation of these shelf of projects and policy interventions, logistics challenges will be reduced and ensure last-mile connectivity.



USE CASE : LOGISTICS PLANNING

02 - CITY LOGISTICS PLAN FOR 8 CITIES OF GUJARAT (INDUSTRIES AND MINES DEPARTMENT)

Gujarat, a highly industrialised state contributing 8.4% to India's GDP, has witnessed an impressive Compounded Annual Growth Rate (CAGR) of over 13% in the last fiscal year. Logistics plays a pivotal role in sustaining and driving this growth. With a 1,600 km coastline housing one major and 48 non-major ports, Gujarat manages 40% of the country's cargo, totalling over 514 million metric tons. The state boasts an extensive road network, eliminating check posts on state highways to ensure seamless transportation.

The objective of the city logistics plan is to enhance cities freight performance, aligning with the Gujarat State Integrated Logistics & Logistics Parks Policy, Gujarat Integrated Logistics Master Plan, and Gati Shakti Gujarat-Integrated Master Plan, Government of Gujarat.

Using PM Gati Shakti Gujarat, City Logistics Plans are under development for eight cities: Gandhinagar, Ahmedabad, Vadodara, Surat, Rajkot, Jamnagar, Bhavnagar, and Junagadh. The Ministry of Finance, Government of India, granted INR 2 Crores for the study.

To support the integration, development, enhancement, and upgrade of logistics facilities, the State Government has established committees, including the State Logistics Coordination Committee, State Logistics Cell, and City Logistics Coordination Committees, coordinating with various stakeholders.

OUTCOME:

The planning of City Logistics Plans using PM Gati Shakti Gujarat will benefit in identifying the bottlenecks in the seamless movement of freights in the cities as well as proposing measures for improving the freight movement, reducing city traffic congestion, and reducing logistics costs.

The State Government will be preparing short term and long term logistics management plans for all 8 municipal corporations. The cities will also prepare local logistics handling schemes to ease the pressure on city infrastructure.

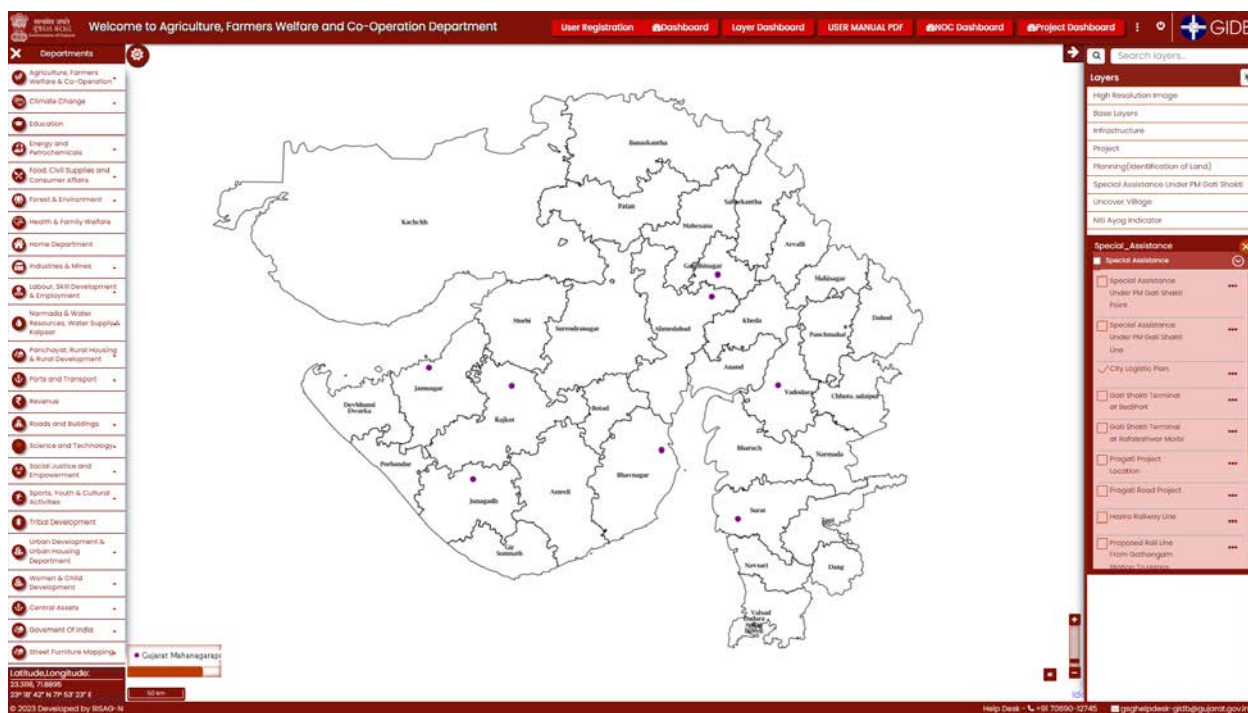


Figure 3.14 : City Integrated Logistics Master Plan of Gujarat



USE CASE : LOGISTICS PLANNING

03 - FREIGHT INFRASTRUCTURE FACILITIES MAPPING IN GUJARAT (INDUSTRIES AND MINES DEPARTMENT)

As part of the State Unified Logistics Infrastructure Plan (ULIP) integrated within the National ULIP framework using a Hub & Spoke Model, Gujarat is taking progressive steps in mapping private Freight Infrastructure Facilities through the PM Gati Shakti Gujarat initiative. This endeavour begins with mapping private Freight Infrastructure Facilities located within a 30-kilometre radius beyond the Urban Development Authority Boundary of eight major cities in Gujarat. This strategic effort aligns with City Logistics Plans and includes identified areas delineated in the State Logistics Master Plan, marking a concerted effort to enhance logistics and transportation infrastructure in the state.

FREIGHT INFRASTRUCTURE MAPPING

The figure displays four mobile application screens for freight infrastructure mapping in Gujarat:

- Location Marking:** Shows a satellite map with a red location pin and a 'Mark Polygon' button. The interface includes 'Undo' and 'Select' options at the bottom.
- Capturing Details of Godowns:** A form for entering facility details. Fields include: Date of Data Capture (19-12-2023), Mark Polygon button, State, District, Taluka, Village, Pin Code, Name of Facility, Ownership, Complete Address, Logistics Facility Type, Commodity Market Catering (Domestic, Import, Export), Commodity Type, Commodities handled, and Total Storage Capacity/ Day (in Metric Ton).
- Recorded by:** A section for officer details: Name of Officer (Pranab Nanda), Designation (Senior Manager), Organization (CIDB), and Mobile No (9824735068).
- Image Capture:** A section with a camera icon and the instruction 'Click below to capture image.' Below this are 'Save as Draft' and 'Submit' buttons.

Labels below the screenshots identify the first two as 'Location Marking' and 'Capturing Details of Godowns'.

Figure 3.15 : Freight Infrastructure Facilities in Gujarat

OUTCOME:

PM Gati Shakti Gujarat will help in mapping the freight infrastructure and identification of challenges faced by it. The development of world-class freight infrastructure facilities around key locations in DMIC and with high-quality connectivity to ports, DFC and economic centres would generate a significant economic development unseen before.





Suitable Location Identification Planning for Aanganwaadi



Suitable Location Identification Planning for Godowns



Resource Planning for ITIs



Skill Gap Analysis for Dholera SIR



Skill Gap Analysis for Statue of Unity

USE CASE III : SOCIAL INFRASTRUCTURE PLANNING



**GOING BEYOND THE ORIGINAL
PURPOSE OF PLANNING
INFRASTRUCTURE PROJECTS, THE
GOVERNMENT OF GUJARAT WENT
AHEAD AND INCLUDED SOCIAL SECTOR
PLANNING AS WELL ON THE PM GATI
SHAKTI GUJARAT PLATFORM.**

The tools developed under PM Gati Shakti in Gujarat have played a pivotal role in the planning and development of various critical social and public infrastructures. These include Aanganwadis, Godowns, Community Health Centers (CHCs), schools, Industrial Training Institutes (ITIs), libraries, police stations, and sports facilities. By providing effective planning and coordination capabilities, these tools ensure that these essential facilities are strategically located, adequately resourced, and readily accessible to the communities they serve. This multifaceted approach highlights the comprehensive impact of PM Gati Shakti Gujarat, which extends beyond physical infrastructure development to encompass a wide range of social and public amenities that are crucial for the well-being and progress of the citizens.



USE CASE : SOCIAL INFRASTRUCTURE PLANNING

01 - SUITABLE LOCATION IDENTIFICATION PLANNING FOR AANGANWAADIS (WOMEN & CHILD DEVELOPMENT DEPARTMENT)

The utilisation of PM Gati Shakti Gujarat has played a pivotal role in improving the development and management of Aanganwaadis, with a particular focus on addressing critical gaps. This includes the establishment of new Aanganwaadis as well as the relocation of existing ones from rented buildings to new locations with improved infrastructure.

Under PM Gati Shakti, the planning and implementation of new Aanganwaadis are guided by a set of well-defined GO (desired) criteria. These criteria ensure that the Aanganwaadis are strategically positioned to best serve the needs of the community. In urban and rural areas, the population criteria dictate that there should be at least 800 persons, while in tribal, hilly, and desert areas, a population of 400 persons is the minimum threshold. The ownership of land by the Government, access to electricity, and proximity to a water supply connection are additional GO (desired) criteria that enhance the suitability of the selected locations.

Conversely, NO-GO (not desired) criteria are carefully applied to safeguard the children, pregnant women and the purpose of Aanganwaadis. To ensure the well-being of the communities they serve, it is mandated that the identified sites should be at least 500 metres away from roads, railways, rivers, water bodies, and crematoriums. These restrictions are in place to uphold safety, accessibility, and the overall quality of service delivery at Aanganwaadis.

This serves as an exemplary model of how the PM Gati Shakti framework can be employed for the development of Aanganwadis, providing a template for success. Importantly, this approach is not limited to a single department but is being embraced by various other departments across the state.

It exemplifies the adaptability and potential of the PM Gati Shakti framework to streamline and enhance various development initiatives, creating a ripple effect that promotes efficiency and effectiveness in a wide range of public service endeavours.



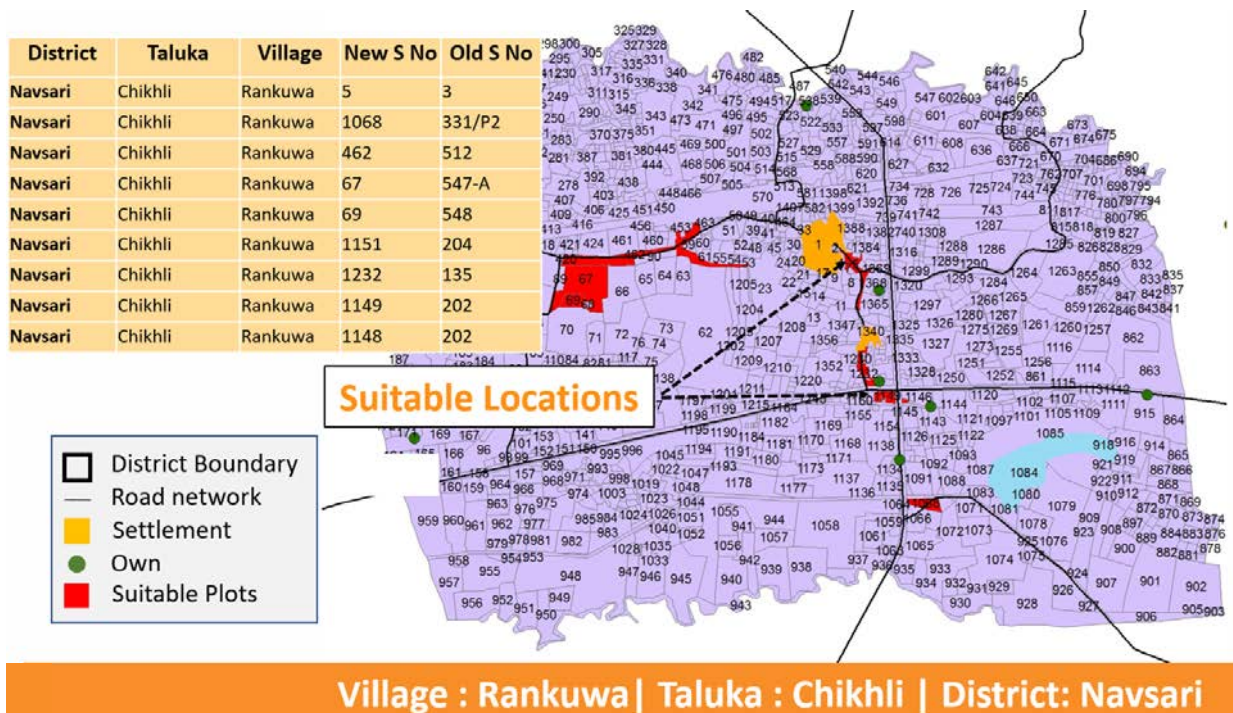


Figure 3.16 : Suitable Location Identification for Aanganwaadis

OUTCOME:

PM Gati Shakti Gujarat helped in identification of the suitable locations for the new Aanganwaadi development so that it is easily accessible as well as safe for pregnant women and children. Due to PM Gati Shakti Gujarat platform, the Women & Child Development department of Gujarat was able to save resources and time.



USE CASE : SOCIAL INFRASTRUCTURE PLANNING

02 - SUITABLE LOCATION IDENTIFICATION PLANNING FOR GODOWNS (FOOD CIVIL SUPPLIES & CONSUMER AFFAIRS DEPARTMENT)

The development of new Godowns is a critical necessity to effectively facilitate the procurement, storage, and distribution of essential commodities, particularly for the Public Distribution System. This essential service ensures that vital food supplies reach fair price shops for distribution to the public.

However, the initial challenge of limited data access hindered the process, leading to the allocation of sites that lacked the necessary connectivity. Moreover, the issue of low-lying areas compounded the problem, making it extremely challenging to store food grains in the Godowns, especially during the rainy seasons when water logging was prevalent.

The identification of suitable sites for Godown development now adheres to a structured framework of NO-GO and GO criteria. This approach ensures that the selected locations are not only well-connected but also address the issue of low-lying areas. The result is more strategically positioned Godowns that can efficiently serve the purpose of procurement, storage, and distribution, even during adverse weather conditions. PM Gati Shakti Gujarat has thus optimised the process, improved the accessibility and functionality of these crucial facilities and strengthened the overall Public Distribution System.

This stands as an exemplary model of how the PM Gati Shakti framework can be effectively utilised for the development of Godowns.



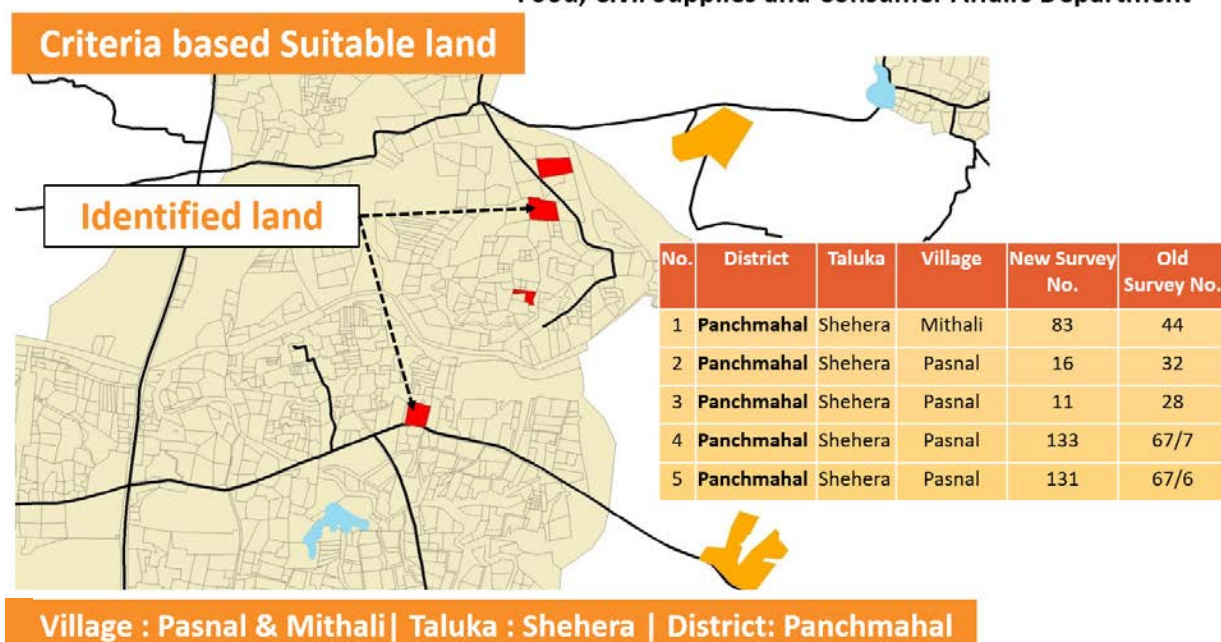


Figure 3.17 : Suitable Land Identification for Godowns

OUTCOME:

By using PM Gati Shakti Gujarat, the Department saved its resources, finances and time in identifying the most suitable sites. The sites were shortlisted where National Highways, State Highways and Major District Roads are available within 500 Meters, the industry is within 01 km, where the Surface of Land have less than 5% uneven terrain, and the Habitation is available within 500 Meters GO Criteria and the NO-GO Criteria such as the Government Land where Court Cases/ Encroachment is not there, high tension electric lines, water supply lines, drainage line, gas pipelines, Railway line are not passing, and land falling under Kans, Forest area and Water logging areas are avoided. The shortlisted sites having last-mile road connectivity were selected for site verification.



USE CASE : SOCIAL INFRASTRUCTURE PLANNING

03 - RESOURCES PLANNING IN INDUSTRIAL TRAINING INSTITUTES (ITIs) IN GUJARAT (LABOUR & EMPLOYMENT DEPARTMENT)

The implementation of PM Gati Shakti in Gujarat is making significant strides in the planning and management of Industrial Training Institutes (ITIs) and the allocation of resources, including teachers, students, and equipment, for various trades. This innovative approach empowers the department to have a clear, data-driven understanding of the enrollment and available seats for trainees, the status of manpower and staff availability, and the current inventory and the needs for machinery, tools, and equipment for each trade at every ITI.

PM Gati Shakti Gujarat is a testament to innovative, data-centric planning, ensuring that the state's vocational education system is robust and aligned with the evolving needs of the industry and job market.

OUTCOME:

By using PM Gati Shakti Gujarat, the department optimized the resources considering geographical presence, teachers and students, and suitability of equipment for specific trade training requirements of the region.

This comprehensive resource allocation and management system ensures that ITIs are equipped to provide high-quality training and education, leading to a skilled and capable workforce.



ITI DAHEGAM



Figure 3.18 : Assessment of ITI Wise Teacher, Student & Equipment Resources at ITI Dahegam

ITI KUBERNAGAR

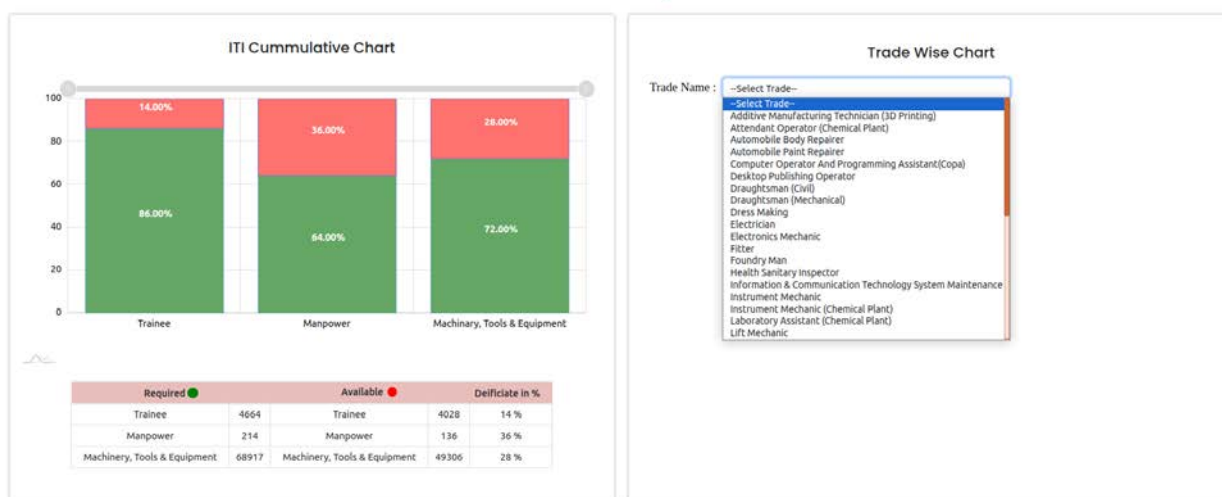


Figure 3.19 : Assessment of ITI & Trade Wise Teacher, Student & Equipment Resources at ITI Kurnagur



USE CASE : SOCIAL INFRASTRUCTURE PLANNING

04 - SKILL GAP ANALYSIS ARE BEING IDENTIFIED IN GUJARAT FOR DHOLERA SIR AND AREA NEAR STATUE OF UNITY (LABOUR & EMPLOYMENT DEPARTMENT)

Using PM Gati Shakti Gujarat, the planning process has been marked by comprehensive district-level engagements involving productive discussions with industries, vocational training providers, and government officials.

In a dedicated effort to align with the aspirations of the youth regarding employment opportunities, focused group discussions were organised. Furthermore, the pursuit of excellence is evident through the incorporation of global and Indian best practices in skill training. These practices have been thoughtfully applied in the assessment of skill gaps within a 50-kilometer radius of the Dholera Special Investment Region (SIR) and the Statue of Unity, ensuring a well-rounded and informed approach to skill development and employment enhancement in these areas.

This stands as an exemplary model of how the PM Gati Shakti framework can be effectively utilised for reducing the skill gap, setting a blueprint for success.

Significantly, this approach transcends the boundaries of a single department, as various other departments across the state are embracing it.

Skill Gap Identification in Dholera SIR Region		
Sr. No.	Required Sectors	Courses
1	Construction	Draughtsman (Civil)
2		Painter General
3		Surveyor
4		Mason (Building Constructor)
5		Plumber
6	Automobile	Mech. Repair & Maintenance of Light Vehicles
7		Driver Cum Mechanic
8	Capital Goods and Manufacturing	Advanced CNC Machining Technician
9	Capital Goods and Manufacturing	Hospital House Keeping
10		Food & Beverages Services Assistant

Table 3.1 : Skill Gap Identification in Dholera SIR Region

Skill Gap Identification in Statue of Unity Region		
Sr. No.	Required Sectors	Courses
1	Tourism and Hospitality	Hospital House Keeping
2		Food & Beverages Services Assistant
3	Construction	Building Maintenance
4		Painter General
5		Mason (Building Constructor)
6		Carpenter
7	Automobile	Mech. Repair & Maintenance of Light Vehicles

Table 3.2 : Skill Gap Identification in Statue of Unity Region

DHOLERA SIR

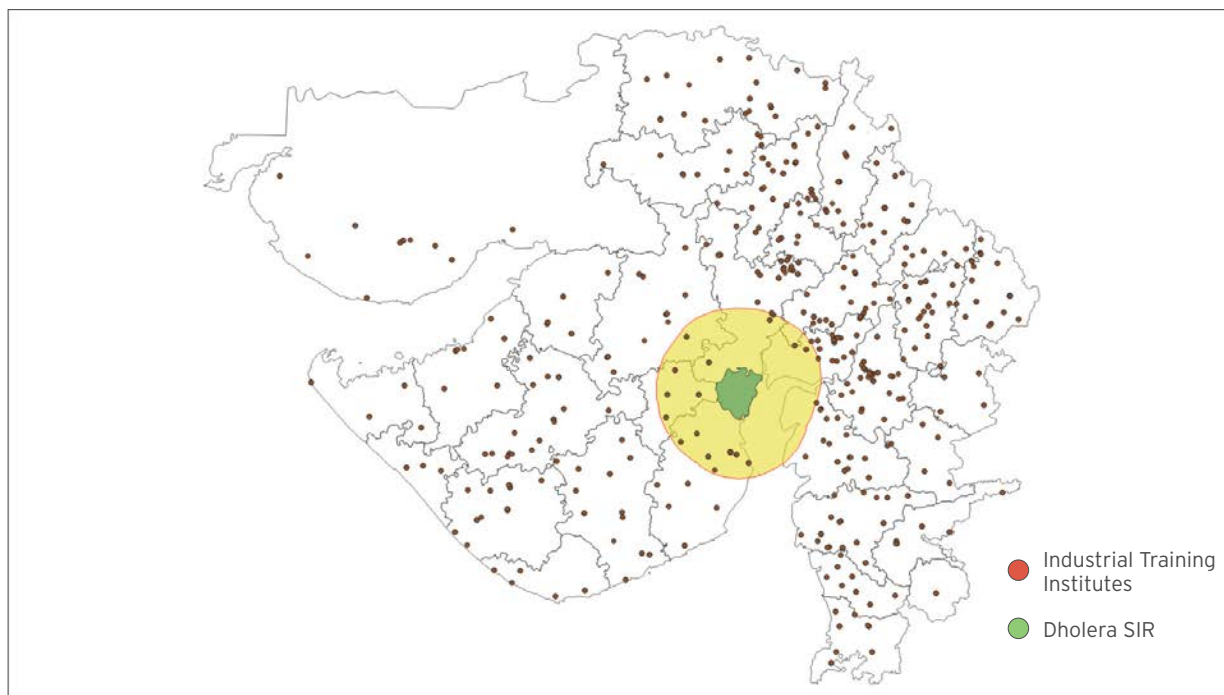


Figure 3.20 : Skill Gap Identification in Dholera SIR Region

STATUE OF UNITY

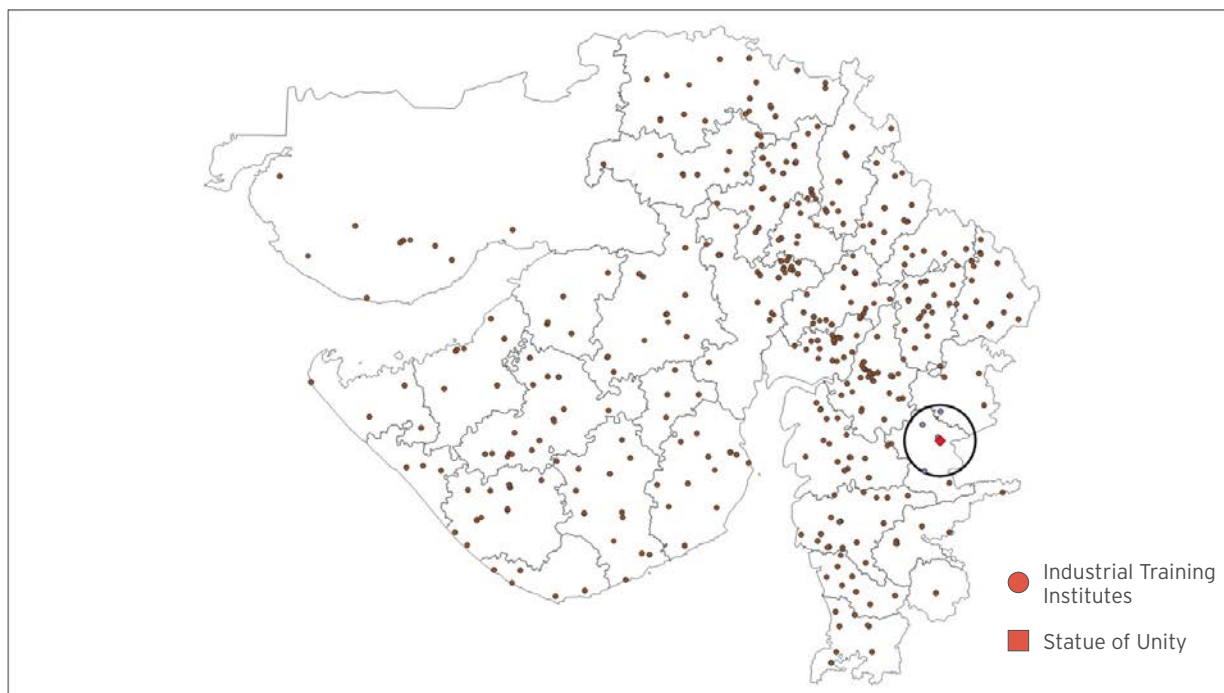


Figure 3.21 : Skill Gap Identification in Statue of Unity Region



OUTCOME:

Through the utilisation of the PM Gati Shakti platform, a comprehensive analysis of the required skill gap at the Dholera Special Investment Region (SIR) was conducted. This analysis revealed skill gaps in various sectors, including construction, automobile, capital goods, and manufacturing. Similarly, an assessment at the Statue of Unity identified skill gaps in the tourism, construction, and automobile sectors.

The PM Gati Shakti Gujarat platform serves as a valuable tool for identifying and quantifying the gaps, enabling the state department to devise targeted strategies for addressing and mitigating these skill deficiencies, ultimately contributing to a more skilled and well-prepared workforce to meet the demands of these specific sectors.



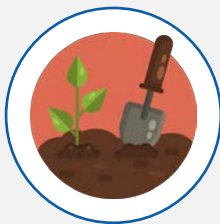




Area Development Approach - District Portals on PM Gati Shakti Gujarat



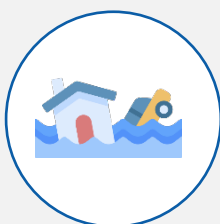
Area Development Planning for Bulk Drug Park



Area Development Planning for Doubling Cropped Area



Infrastructure Gap Analysis for MSMEs



Area Development Planning for Flood Disaster Management





**Area Development Planning for
Cyclone Disaster Management**



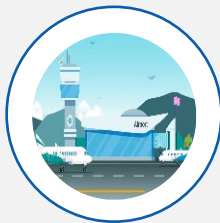
**Preparation of Development Plan for
Area Development Authority**



**Revision of Development Plan for
Regional Development Authority**



Planning of Ring Road Development around City



**Area Development Planning around
International Airport**

USE CASE IV : AREA DEVELOPMENT PLANNING



USE CASE : AREA DEVELOPMENT PLANNING

01 - AREA DEVELOPMENT APPROACH - DISTRICT PORTALS ON PM GATI SHAKTI GUJARAT

The Area development approach represents an innovative and tech-driven method for optimising infrastructure development and citizen services, underscoring its significance in advancing the social development of specific regions. District collectors in Gujarat have adopted PM Gati Shakti as a valuable tool for area development planning within their districts. By utilising this platform, they can efficiently target and coordinate infrastructure projects and citizen-centric services, ensuring that development efforts are focused and tailored to meet the unique needs of each area.

As part of the “Area Development Approach”, the district portals have been developed and integrated into the PM Gati Shakti Gujarat portal with a single sign-on functionality. 33 District Portals have been integrated with the PM Gati Shakti Gujarat Portal, helping the district administrators initiate socio-economic development projects in their District. These activities benefit the local communities, address the local requirements and act as a catalyst for improvement in quality of life at the village, taluka and district levels.

This approach not only enhances the effectiveness of governance but also aligns with the overarching objectives of PM Gati Shakti, which aims to drive inclusive and accountable infrastructure development across the nation, fulfilling the objective of Viksit Bharat @ 2047.



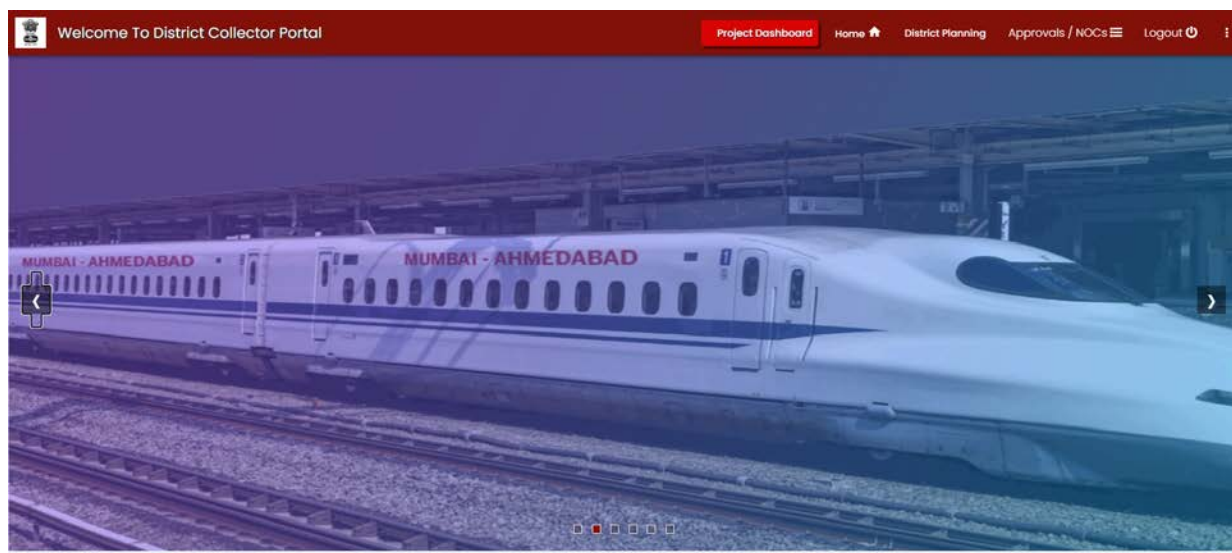


Figure 3.22 : District Portal on PM Gati Shakti Gujarat

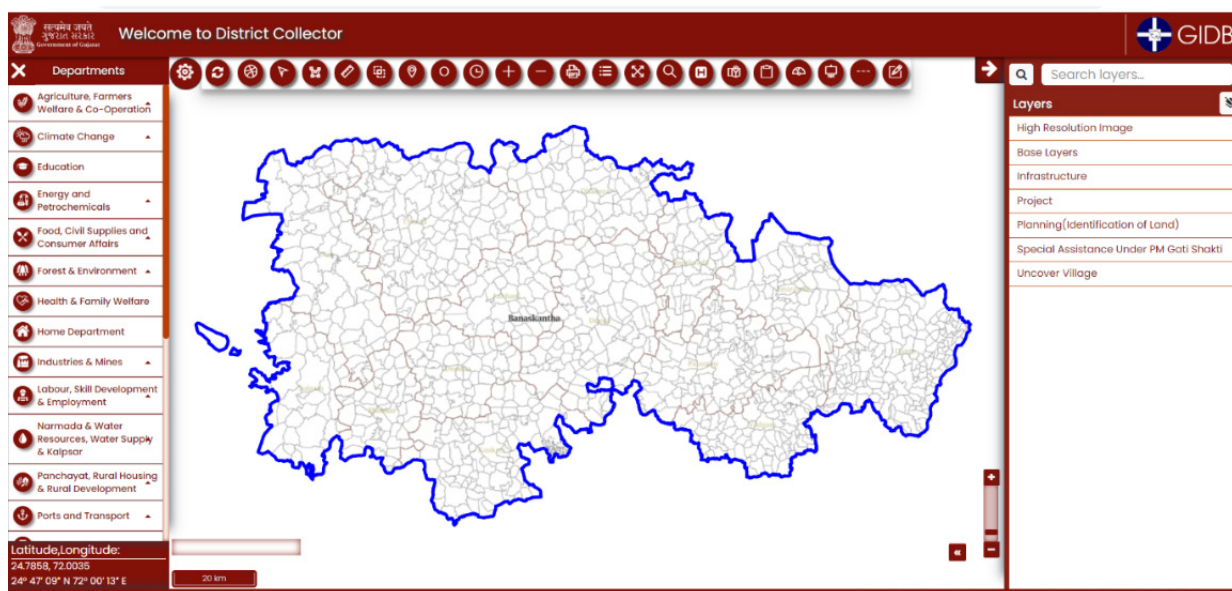


Figure 3.23 : District Portal on PM Gati Shakti Gujarat



USE CASE : AREA DEVELOPMENT PLANNING

02 - AREA DEVELOPMENT PLANNING FOR BULK DRUG PARK IN JAMBUSAR (INDUSTRIES & MINES DEPARTMENT)

The objective of the project is to establish a cutting-edge industrial park with a primary focus on bulk drug manufacturing. This multifaceted initiative encompasses tasks ranging from land acquisition and infrastructure development to environmental sustainability measures and the creation of state-of-the-art research and development facilities. Its overarching goal is to attract pharmaceutical companies, cultivate self-sufficiency in drug production, and invigorate innovation within the pharmaceutical sector. This, in turn, is expected to make a substantial contribution to economic growth and the self-reliant production of vital medicines.

Incorporating the Area Development approach, the project exemplifies an innovative method to leverage technology for precise infrastructure development and the provision of citizen services, underpinning the socio-economic advancement of the area.

The utilisation of PM Gati Shakti Gujarat, in this context, enables a comprehensive assessment of essential infrastructures, such as transport connectivity through State Highways, National Highways, railway lines, airports, and ports, ensuring the optimal support for the Bulk Drug Park's growth and success

The availability of physical infrastructures within a 15 km area, like power transmission and distribution networks, gas pipelines, telecom networks, CNG networks, fuel stations, water supply networks, eco-sensitive zones, and coastal regulation zones, were also analysed. The availability of social infrastructures for the workforce within a 15 km area like ITIs, vocational training facilities, educational facilities, and health care facilities were carried out.

OUTCOME:

Through the PM Gati Shakti Gujarat platform, a forward-looking strategy has been formulated for the establishment of a Bulk Drug Park in Jambusar, which is poised to become a pharmaceutical hub of significance. This ambitious project is expected to serve as a magnet for investments, laying the foundation for a self-reliant drug manufacturing ecosystem.



EDUCATION FACILITIES

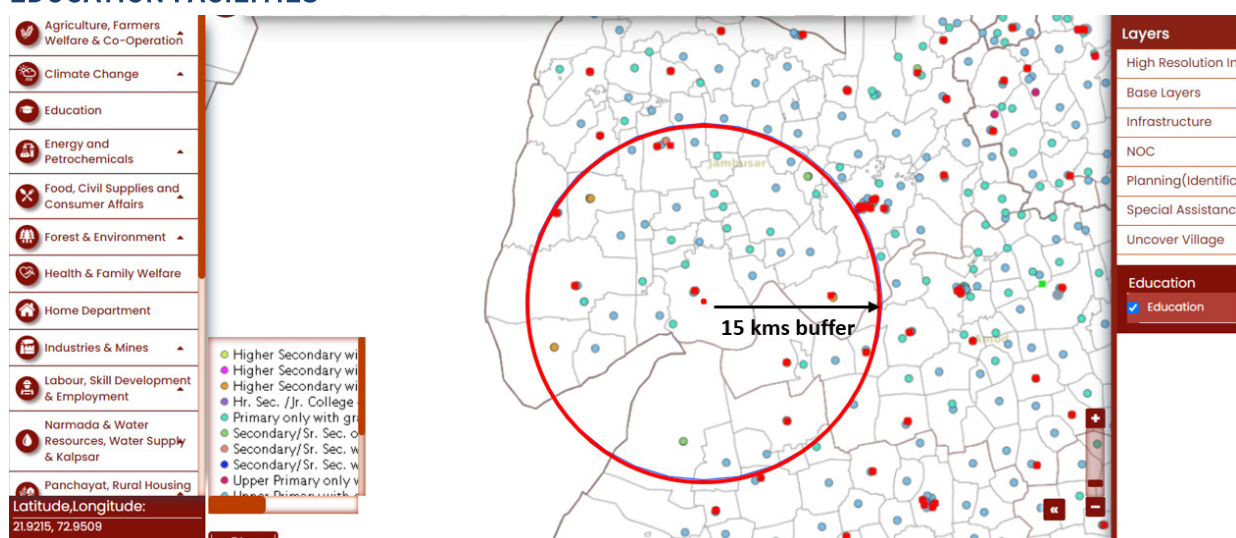
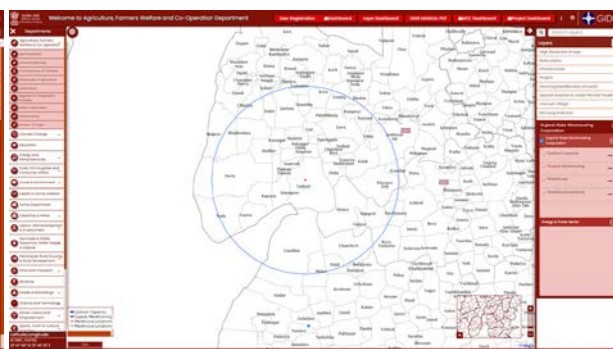


Figure 3.24 : Assessment of Educational Facilities around Proposed Bulk Drug Park in Jambusar

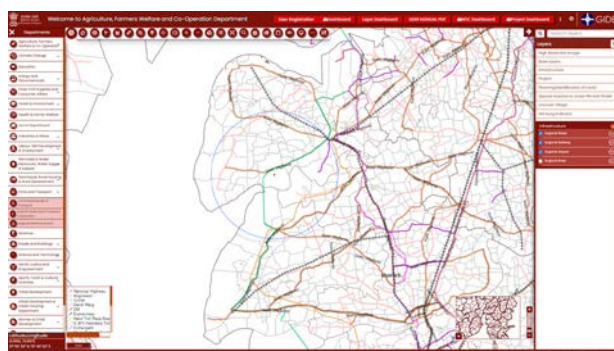
CRZ AND ECO-SENSITIVE AREA



WAREHOUSE AVAILABILITY



ROAD, RAIL, AIR AND PORT CONNECTIVITY



POWER TRANSMISSION AND DISTRIBUTION

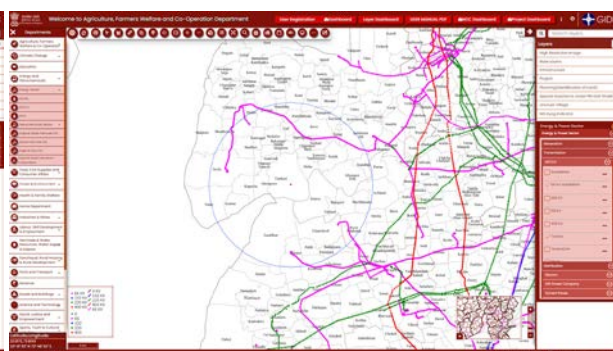


Figure 3.25 : Assessment of Infrastructure such as CRZ & Eco Sensitive Zones, Warehouses, Railroad Connectivity, Industrial Parks, Power Transmission Network, Gas Pipelines, etc. around Proposed Bulk Drug Park in Jambusar

Based on the assessment of existing infrastructures, infrastructure gaps were identified in terms of providing last-mile connectivity and improvement in the road network to ease the movement of goods, extending the gas pipeline network, increasing the fuel stations, upgradation of telecom network, improving the optical fibre connectivity, provision of schools, health care centres, additional skill development centres, developing recreational areas, increasing the number of warehouses were identified and proposed.



USE CASE : AREA DEVELOPMENT PLANNING

03 - AREA DEVELOPMENT PLANNING FOR DOUBLING CROPPED AREA IN DAHOD DISTRICT (REVENUE DEPARTMENT : DISTRICT COLLECTOR, DAHOD)

The “Area Development Planning for Doubling Cropped Area in Dahod District” project, under the PM Gati Shakti Gujarat initiative, aims to enhance agricultural productivity and rural livelihoods. This comprehensive endeavour involves land development, irrigation infrastructure improvement, modern farming techniques, and capacity building for local farmers. By doubling the cropped area, the project seeks to address food security, boost farmers’ income, and promote sustainable agriculture, thereby driving socio-economic growth and resilience in the Dahod District.

The state has identified the available water sources and unirrigated lands in Dahod District. Based on the data input, the water spread area of reservoirs was identified for the months of October, March, and May.

Based on the available data analysis, the water requirement for the double cropping and areas to be irrigated were identified, low-cost solutions were developed, constraints were identified, and interventions required were proposed.

The least cost path algorithm and back-end logic algorithm were used on 3-dimensional data available on the PM Gati Shakti Gujarat platform to connect reservoirs with 142 circles and 3450 hectares of unirrigated land.

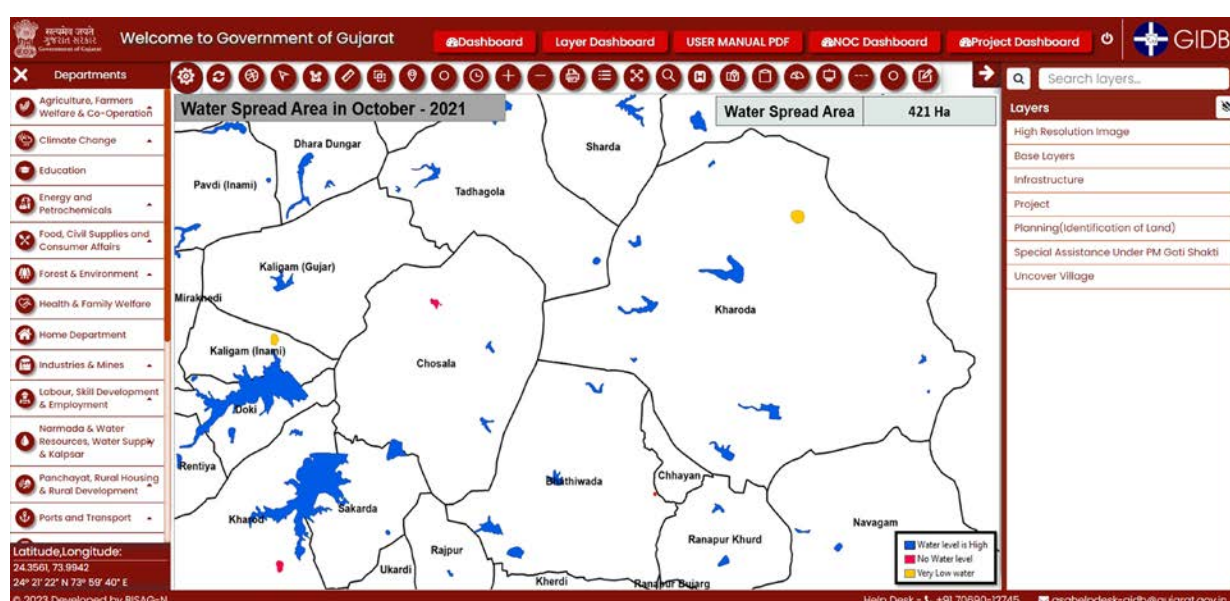


Figure 3.26 : Water Spread Area in October 2021 in Dahod District

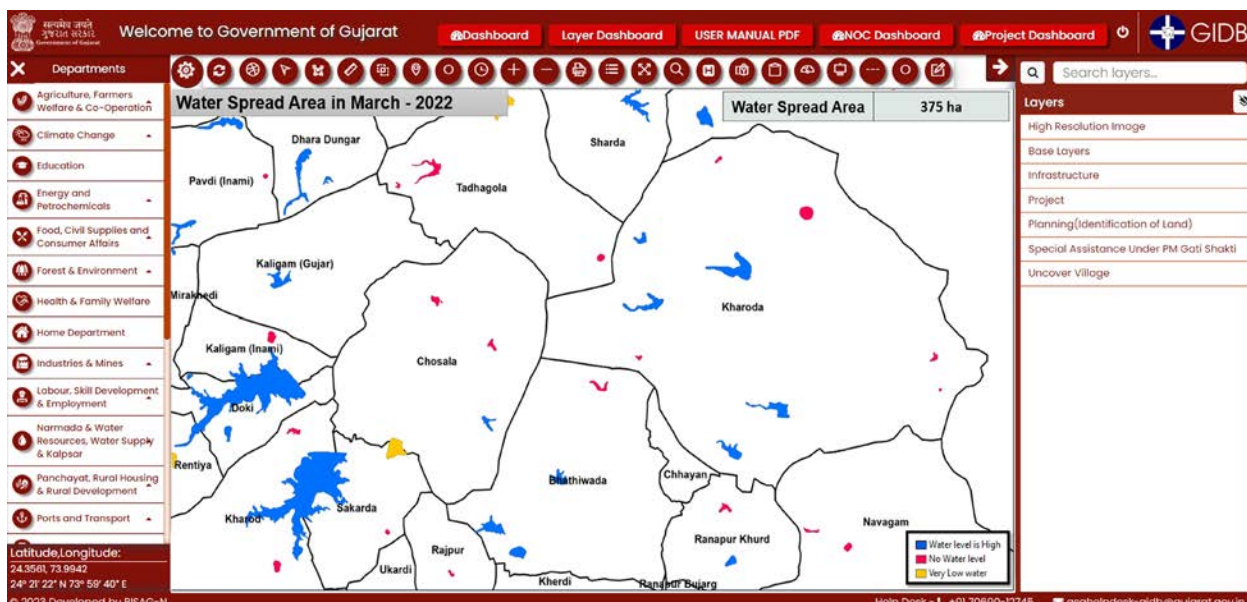


Figure 3.27 : Water Spread Area in March 2022 in Dahod District

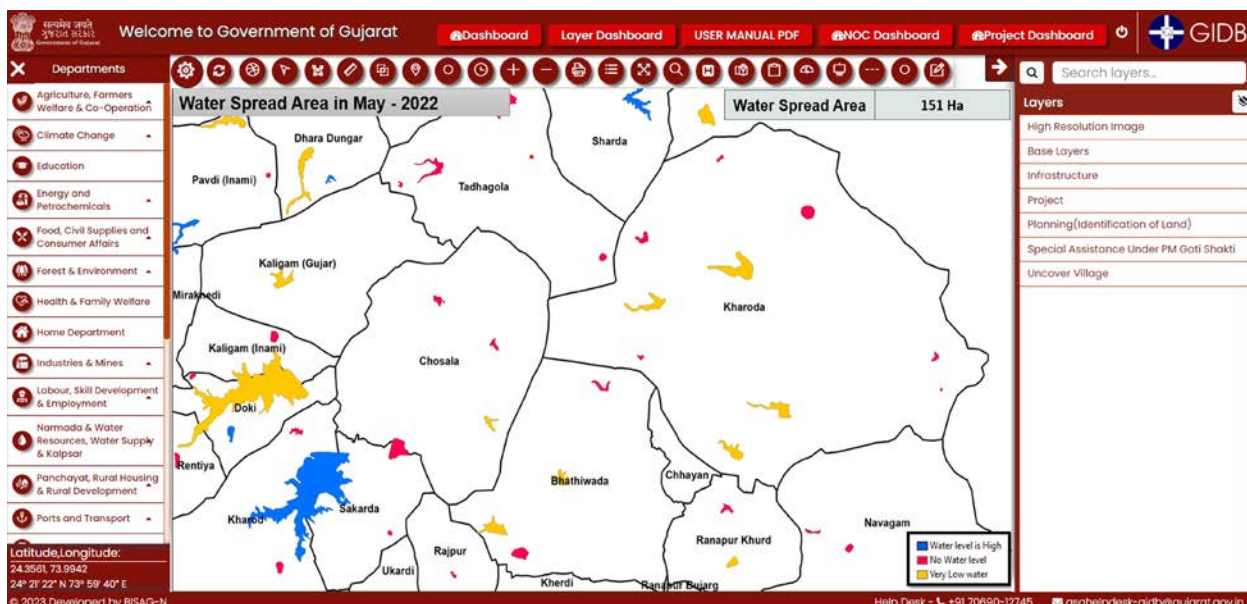


Figure 3.28 : Water Spread Area in May 2022 in Dahod District

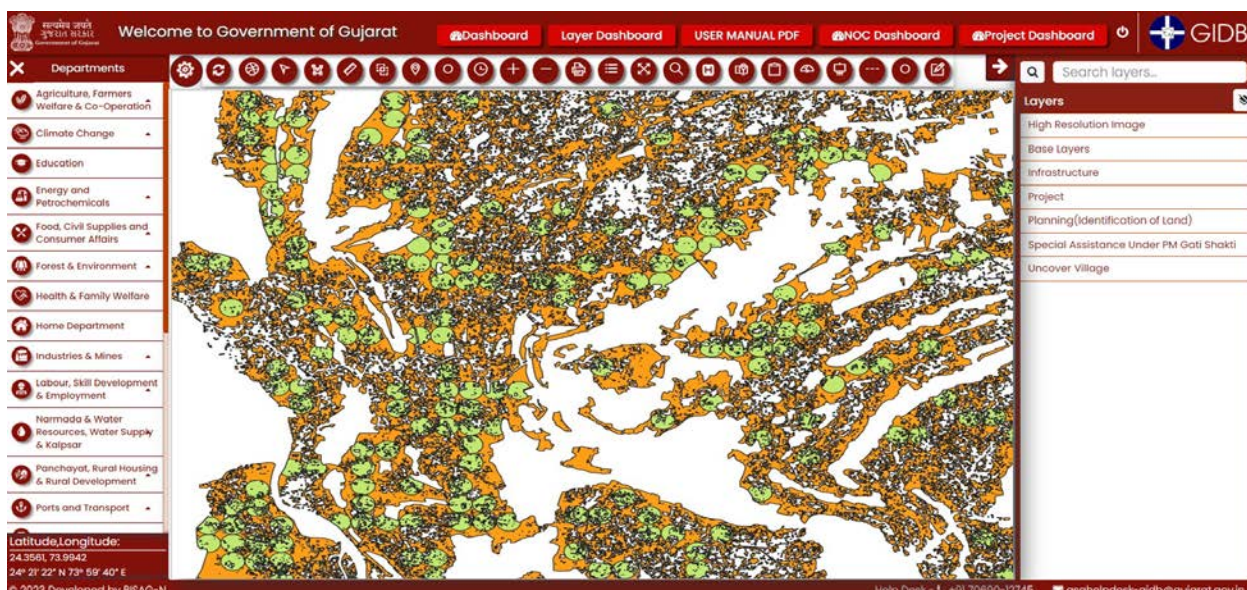


Figure 3.29 : Irrigated and Unirrigated Areas Identified in Dahod District



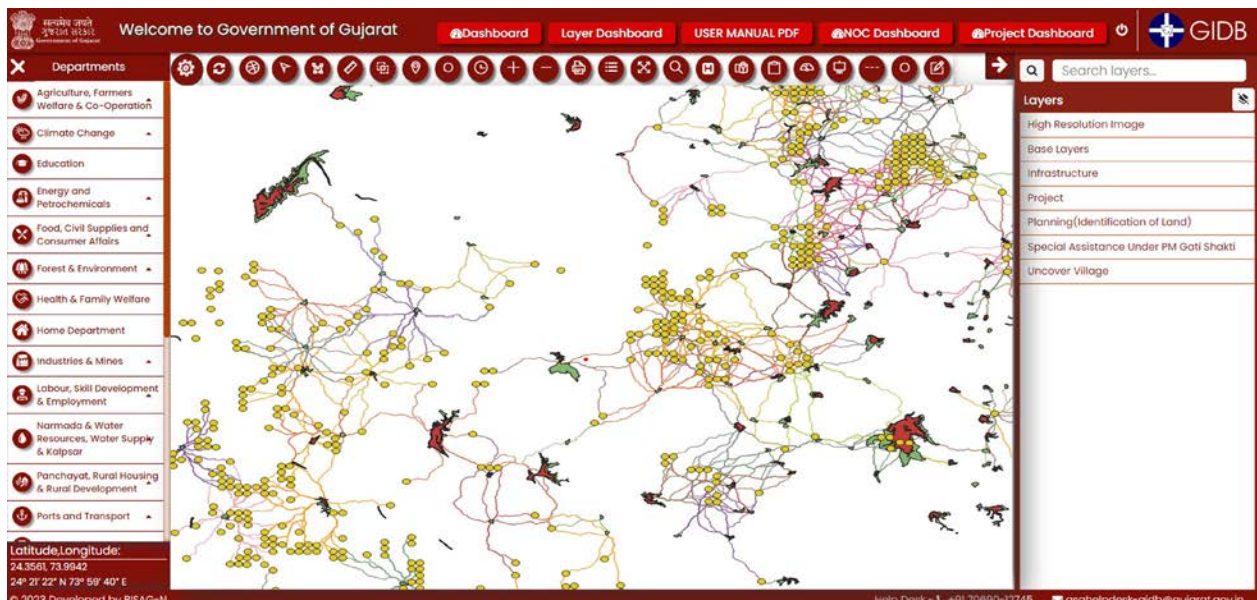


Figure 3.30 : Proposed Pipeline Network Connecting nearest Water Source to Unirrigated Areas in Dahod District

OUTCOME:

Using PM Gati Shakti Gujarat, this project will enhance the substantial increase in agricultural productivity and rural prosperity. The project will successfully double the cropped area by implementing modern farming techniques, enhancing irrigation systems, and providing vital training and support to local farmers.



USE CASE : AREA DEVELOPMENT PLANNING

04 - INFRASTRUCTURE GAP ANALYSIS FOR MSME FOR CHHATRAAL CLUSTER (INDUSTRIES AND MINES DEPARTMENT)

The manufacturing sector in Gujarat has contributed around 36.7% to the overall GSDP in FY 2021-22. The MSME sector will play a crucial role in achieving the vision of 'Atmanirbhar Bharat'. The MSME sector of the State has been an important contributor to India's GDP growth. It has given a fillip to employment generation and entrepreneurship. Mapping of MSMEs along with large Industries was undertaken in Gujarat for identification of challenges such as institutional gap, skill development, inadequate basic infrastructure facilities, etc., and taking on a priority basis as part of "Ease of Business" and "Ease of Logistics Movement".

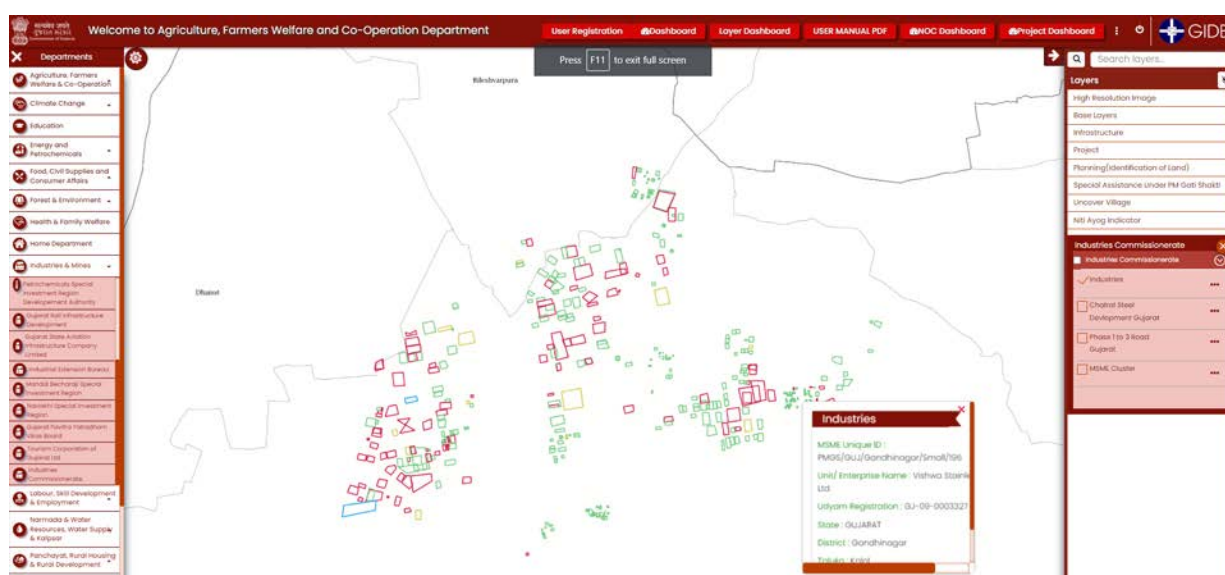


Figure 3.31 : MSMEs and Large Identified in Gandhinagar District

OUTCOME:

In line with the 'Ease of Business' and 'Ease of Logistics Movement' initiatives under PM Gati Shakti, Gujarat has taken proactive steps to map MSMEs alongside large industries, identifying and prioritizing challenges such as the requirement of basic infrastructure facilities, skill development, internet connectivity, etc. This strategic move aims to create a more conducive business environment, streamline operations, and optimize logistics, further fueling the growth of Gujarat's manufacturing and MSME sectors in alignment with PM Gati Shakti's transformative vision for self-reliant India.



USE CASE : AREA DEVELOPMENT PLANNING

05 - FLOOD DISASTER MANAGEMENT IN BANASKANTHA DISTRICT (REVENUE DEPARTMENT : DISTRICT COLLECTOR, BANASKANTHA)

In disaster management planning, the utilisation of the Flood Tracking Tool within PM Gati Shakti Gujarat has proven to be invaluable. The District Collector of Banaskantha is leveraging this tool for real-time assessment and preparedness. Specifically, this tool aids in the identification of villages that may face the risk of flooding or submersion when a substantial discharge of water occurs from the Dantiwada Dam.

This proactive approach empowers officials to make informed decisions and take timely actions to mitigate the impact of potential flooding, safeguard communities, and efficiently allocate resources in disaster-prone areas. It's a testament to the effective integration of technology and data-driven decision-making within disaster management, ultimately enhancing the resilience and safety of vulnerable regions.

OUTCOME:

Using PM Gati Shakti Gujarat, an efficient and organised system for disaster management has been established. This system allows for the identification of the nearest flood evacuation centres, including schools, colleges, health centres, and aanganwadis, which can be rapidly activated for the safe evacuation and relocation of flood-affected individuals.



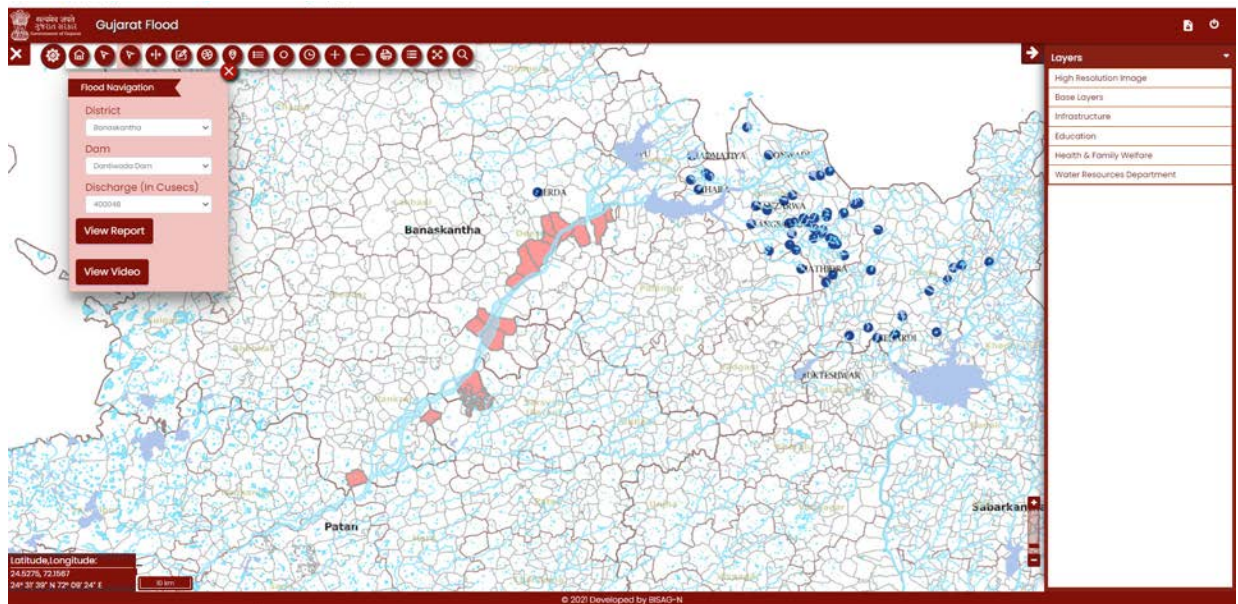


Figure 3.32 : Flood Tracking Tool for Banaskantha District

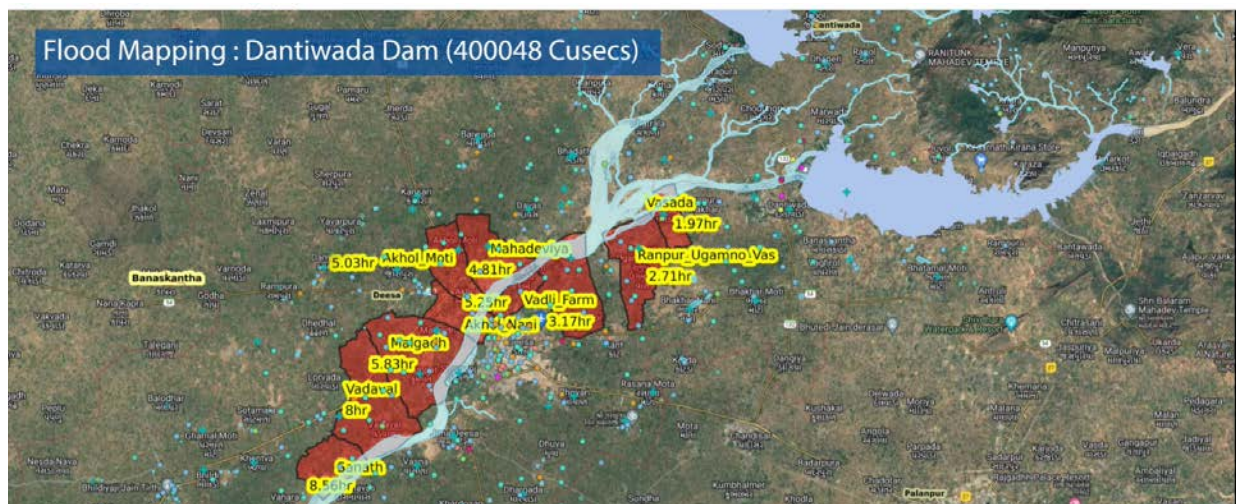


Figure 3.33 : Mapping and Monitoring the Approximate Time taken for the Flood to Reach Villages along its Path



USE CASE : AREA DEVELOPMENT PLANNING

06 - CYCLONE DISASTER MANAGEMENT IN GIR-SOMNATH DISTRICT (REVENUE DEPARTMENT : DISTRICT COLLECTOR, GIR-SOMNATH)

The Cyclone Tracking Tool developed as part of PM Gati Shakti Gujarat has emerged as a crucial resource for district collectors, particularly in regions like Gir-Somnath, Amreli, Bhavnagar, Botad, Ahmedabad, Surendranagar and few others. This tool equips them with the capability to map the path of cyclones, enabling advanced planning for disaster management. One key aspect of this planning involves the identification of the nearest cyclone evacuation centres.

District collector teams strategically plan and prepare for effective evacuation and disaster response in these critical zones. This proactive and data-driven approach empowers authorities to enhance preparedness and resilience in the face of cyclones, safeguarding the lives and well-being of communities in these high-risk areas. It showcases the power of technology in strengthening disaster management efforts and ensuring the safety of residents.

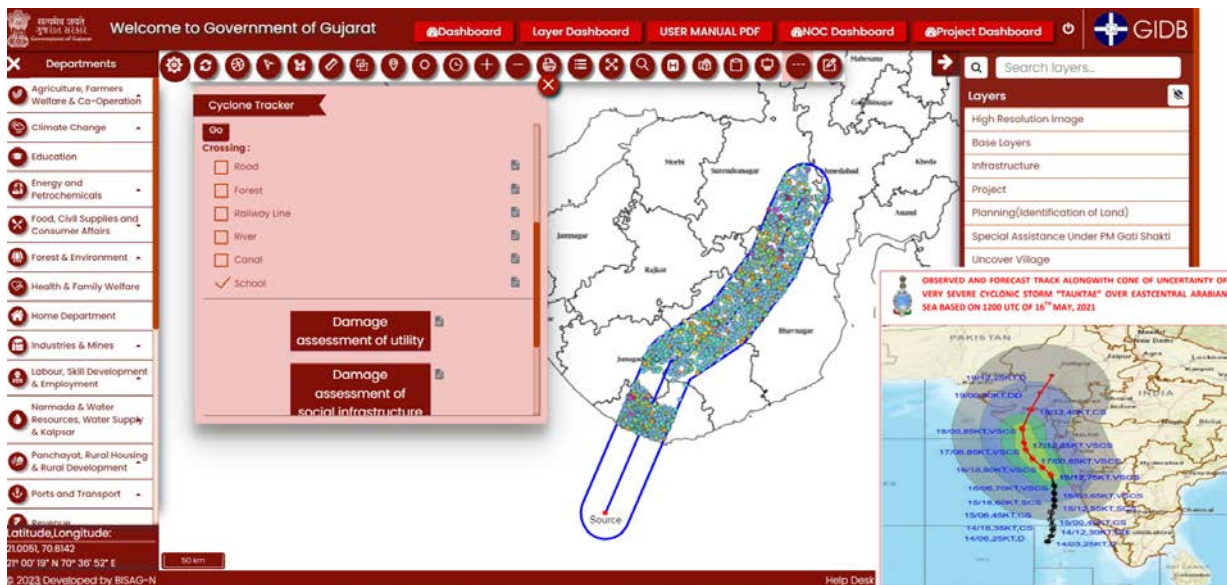


Figure 3.34 : Cyclone Tracking Tool

OUTCOME:

Using PM Gati Shakti Gujarat, the cyclone tracking tool was developed that helps the authority in mapping the path of the cyclone and thus empowers the authority to make informed decisions for evacuation and disaster responses. This technology is invaluable for enhancing preparedness, minimising risks, and safeguarding lives and property. It also supports the preparation of the damage assessment report, which is generated through the effective use of data and technology and plays a pivotal role in the post-disaster phase. It provides invaluable insights into the extent of damage and destruction in a particular area, enabling the strategic mobilisation of resources.

This data-driven approach optimises the allocation of resources for post-disaster response and recovery efforts. It allows authorities to prioritise areas that need immediate attention and allocate resources efficiently, ensuring that aid, relief, and support reach the affected areas swiftly and effectively. The utilisation of such reports reflects a proactive and well-coordinated disaster management strategy that ultimately minimises the impact of disasters and aids in the recovery and rebuilding process.



USE CASE : AREA DEVELOPMENT PLANNING

07 - DEVELOPMENT PLAN PREPARATION FOR AMBAJI TOURISM DEVELOPMENT AREA (URBAN DEVELOPMENT & URBAN HOUSING DEPARTMENT)

The “Development Plan Preparation for Ambaji Tourism Development Area” project aims to create a comprehensive strategy for the sustainable development and enhancement of the Ambaji region as a tourist destination. This project includes the assessment of current infrastructure, natural attractions, and cultural heritage sites. It involves the identification of areas for development, such as transportation infrastructure, accommodation, sanitation, and visitor services.

Additionally, the project incorporates environmental sustainability measures and community engagement to ensure the preservation of the area’s natural beauty and cultural heritage while fostering economic growth through tourism. The goal is to create a vibrant and well-planned tourism destination that benefits the local community, visitors, and the overall region.

The proposed Development Plan was prepared for the Ambaji Pilgrimage Tourism Development Area by Ambaji Area Development Authority considering the upcoming Railway project, proposed bypass road, existing road network, water bodies and the other existing infrastructure data available for the area.

The implementation of the “Development Plan for Ambaji Tourism Development Area” will result in a successful transformation of Ambaji into a thriving and sustainable tourism destination. Through meticulous planning, infrastructure development, and

OUTCOME:

By using PM Gati Shakti Gujarat, physical, social as well as environmental layers of State and Central Government departments were integrated, and it helped the Ambaji Area Development Authority in preparing the proposed Development Plan within weeks, which would have taken months/years for undertaking such a complicated planning process.



environmental preservation, the project has improved accessibility, accommodation options, and visitor services. This will lead to a significant increase in tourist arrivals, providing economic opportunities for the local community, creating jobs, and boosting the overall economy. Ambaji's natural beauty and cultural heritage have been preserved while becoming a source of pride and prosperity for the region, exemplifying Gati Shakti's role in fostering tourism-driven socio-economic growth and development.

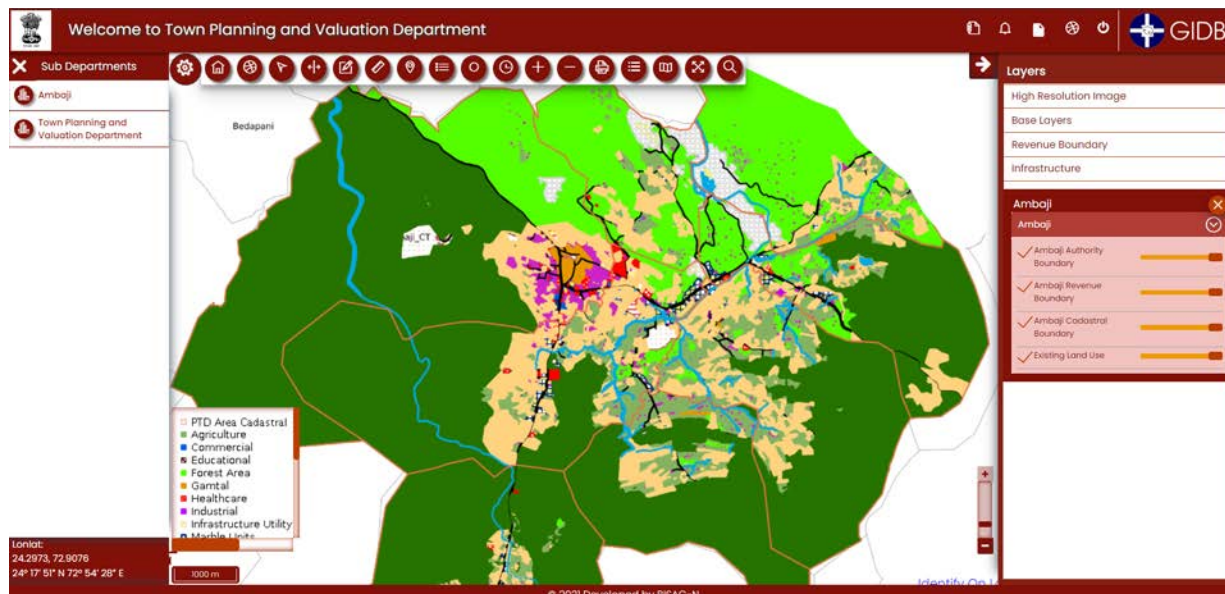


Figure 3.35 : Ambaji Area Development Plan Proposal using PM Gati Shakti Gujarat

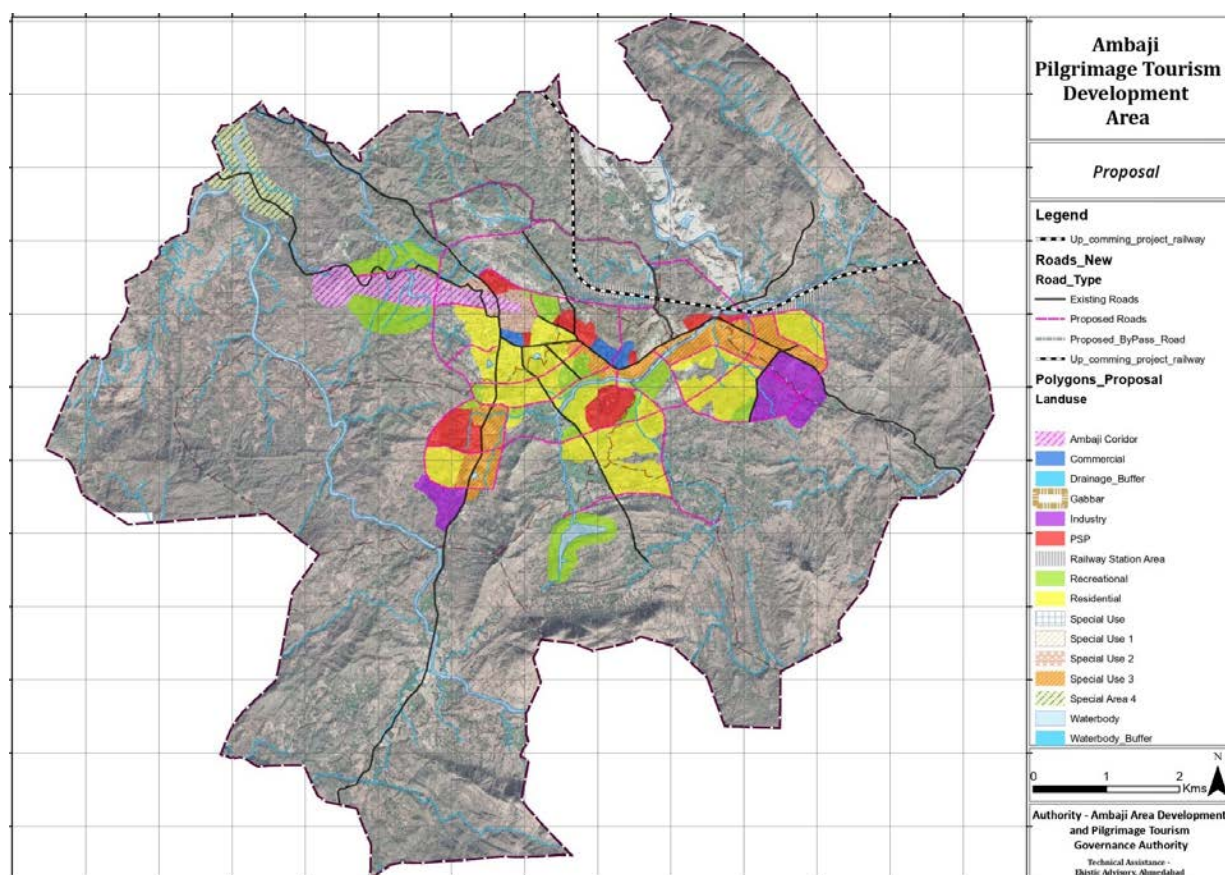


Figure 3.36 : Ambaji Area Development Plan Proposal



USE CASE : AREA DEVELOPMENT PLANNING

08 - REVISION OF DEVELOPMENT PLAN FOR GPCPSIRDA (INDUSTRIES AND MINES DEPARTMENT)

The Gujarat Petroleum, Chemicals, and Petrochemicals Special Investment Region Development Authority (GPCPSIRDA) is currently in the process of revising its Development Plan, and PM Gati Shakti Gujarat is playing a key role in this endeavour. This revision involves a comprehensive analysis of existing infrastructure connectivity, including road networks, rail networks, gas pipelines, electricity networks, and water supply pipelines.

Additionally, the analysis takes into account factors such as the presence of existing industrial parks, land availability, and upcoming projects within the area. All this data is being meticulously reviewed and assessed for the preparation of a revised Development Plan. This data-driven approach ensures that the Development Plan is aligned with the current and future needs of the region, ultimately promoting sustainable growth and development within the Gujarat Petroleum, Chemicals, and Petrochemicals Special Investment Region.

OUTCOME:

Using PM Gati Shakti Gujarat, the ongoing revision of the Development Plan for the Gujarat Petroleum, Chemicals, and Petrochemicals Special Investment Region by GPCPSIRDA aims to yield an optimised and responsive plan for the region.

This entails improved infrastructure planning, enhanced industrial development, efficient resource allocation, and sustainable growth, underpinned by data-driven analysis of existing and future infrastructure.

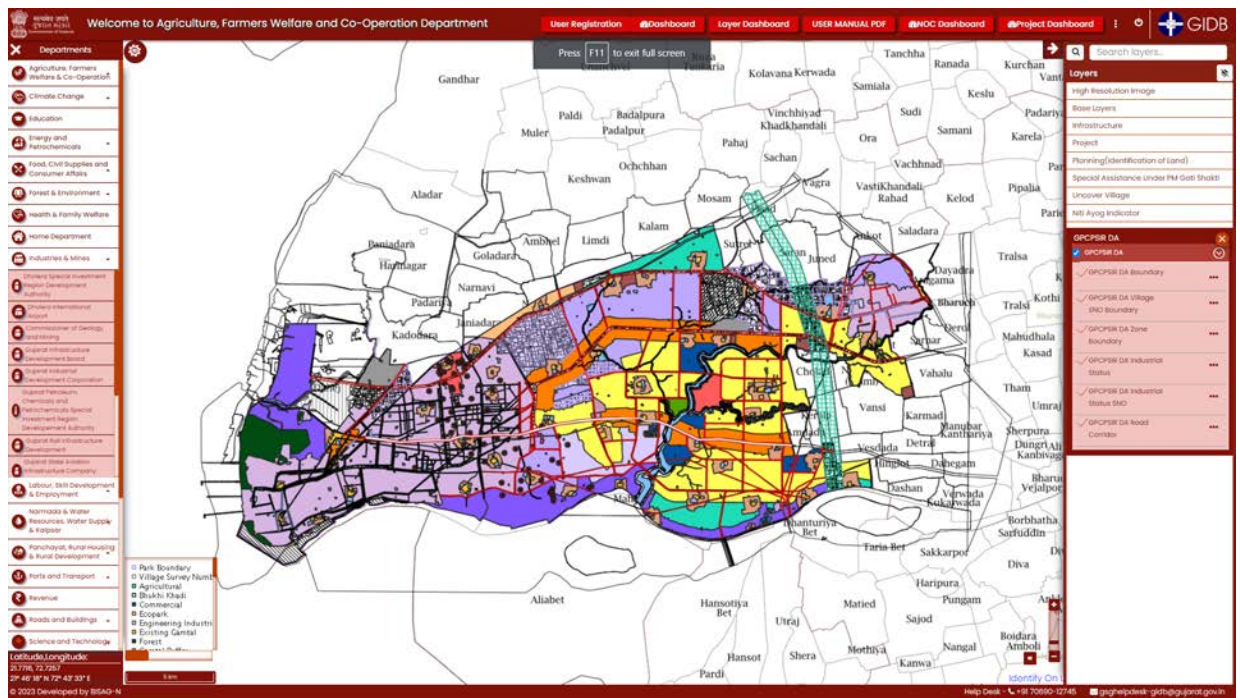


Figure 3.37 : Preparation of Revised Development Plan of GPCPSIRDA



USE CASE : AREA DEVELOPMENT PLANNING

09 - RING ROAD PLANNING AROUND PATAN CITY (ROADS & BUILDINGS DEPARTMENT)

The planning of a Ring Road encircling Patan City has been initiated with the primary objective of alleviating travel times for local traffic. This strategic infrastructure project aims to provide an alternative route that diverts vehicles away from the most congested areas within Patan City, especially during peak traffic hours. By doing so, the Ring Road intends to enhance transportation efficiency, reduce congestion, and offer residents and commuters a more seamless and expedited travel experience while bypassing traffic bottlenecks within the city. This project ultimately contributes to improved mobility, convenience, and reduced congestion within Patan City.

OUTCOME:

Using PM Gati Shakti Gujarat, this project aims to address the critical need to reduce travel times for local traffic, all while diverting vehicles away from congested urban areas during peak hours. This strategic endeavour is expected to significantly enhance transportation efficiency, alleviate congestion, and offer an overall improved travel experience for both residents and commuters. Moreover, the introduction of the Ring Road is poised to bring about transformative changes in the land use pattern of Patan City. This shift is anticipated to have a positive ripple effect on the socio-economic sector surrounding the Ring Road, thereby fostering economic development, attracting investments, and uplifting the socio-economic well-being of the region.



Figure 3.38 : Planning of Ring Road around Patan City Using PM Gati Shakti Gujarat

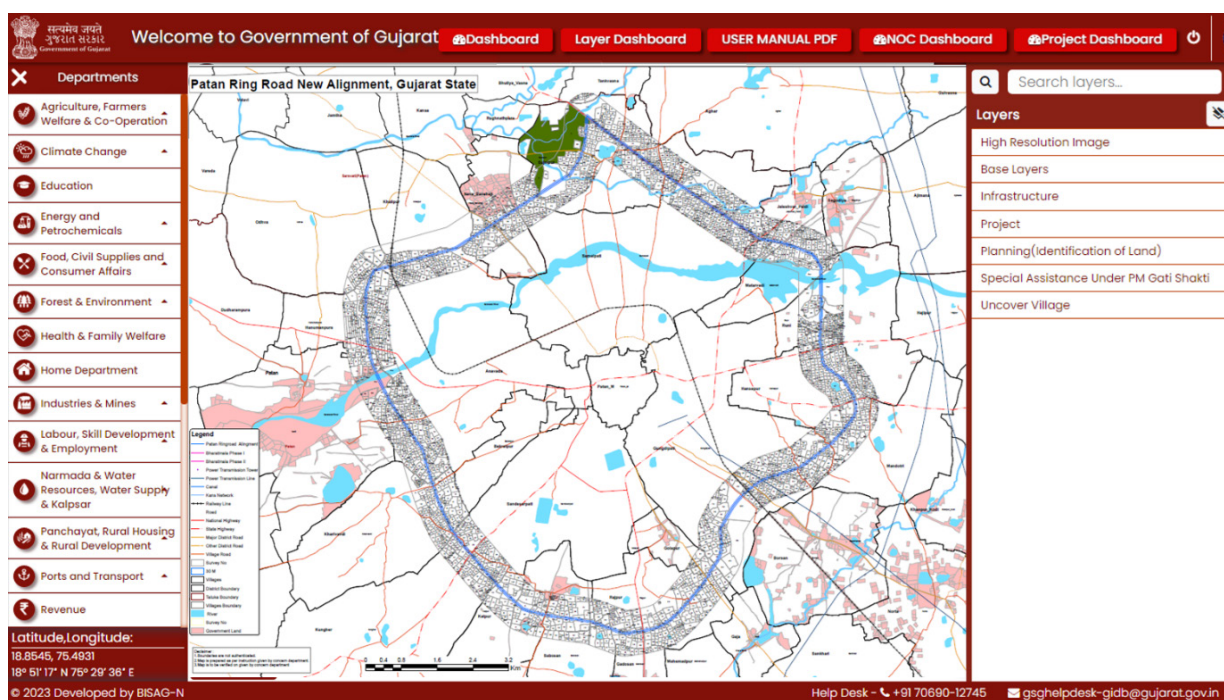


Figure 3.39 : Planning of Ring Road around Patan City along with Planning Infrastructure

USE CASE : AREA DEVELOPMENT PLANNING

10 - AREA DEVELOPMENT PLANNING AROUND HISAR INTERNATIONAL AIRPORT IN RAJKOT (REVENUE DEPARTMENT : DISTRICT COLLECTOR, RAJKOT)

Rajkot District, as a prominent hub in the Saurashtra region, is embarking on a comprehensive development agenda with the aim of equitably distributing major projects, fostering new economic activities, expanding urban peripheries, facilitating affordable housing, and fortifying service sectors within Rajkot.

To realise this multifaceted goal, Rajkot has initiated Area Development Planning in the vicinity of the Greenfield International Airport in Hisar. This strategic planning approach has yielded several benefits, including the identification of new areas suitable for the relocation of Windmills and the optimisation of the placement of existing mobile towers around the Hisar International Airport. By leveraging this data-driven planning, Rajkot is working towards a more balanced and prosperous development that supports both economic growth and enhanced urban living standards.

OUTCOME:

The utilisation of PM Gati Shakti Gujarat has significantly expedited and optimised the identification of existing infrastructures, such as Windmills, Mobile Towers, and High Mask Towers. This efficient process has allowed for the swift identification of new areas for the relocation of windmills.

This approach is a powerful catalyst for boosting the local economy by promoting effective and strategic development, resulting in a well-organised and resourceful landscape that supports economic growth and prosperity.



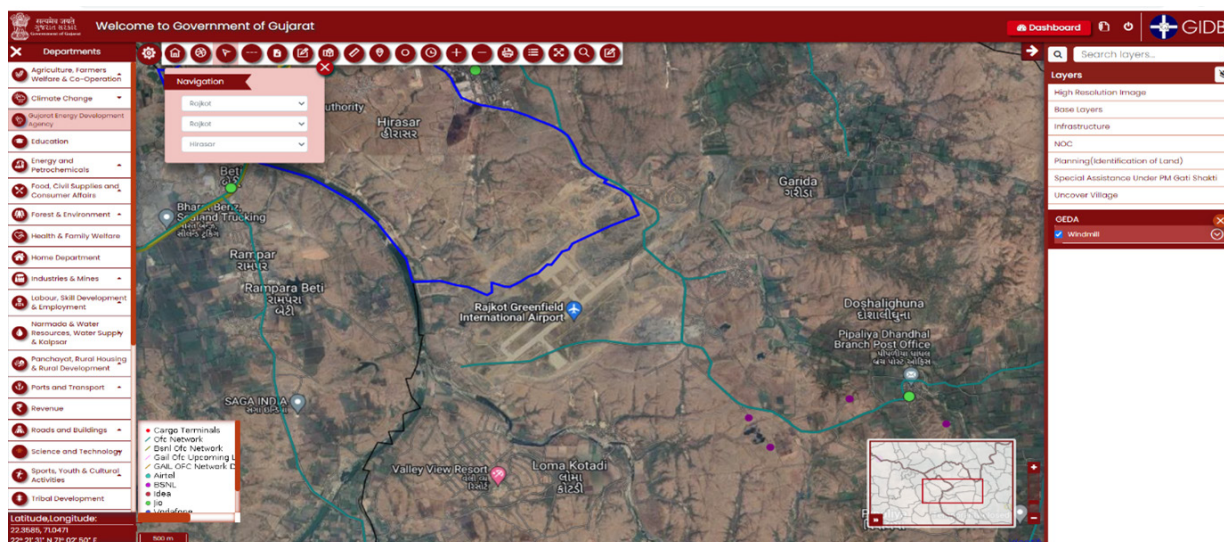


Figure 3.40 : Area Planning around Hisar International Airport along with Planning of Infrastructure

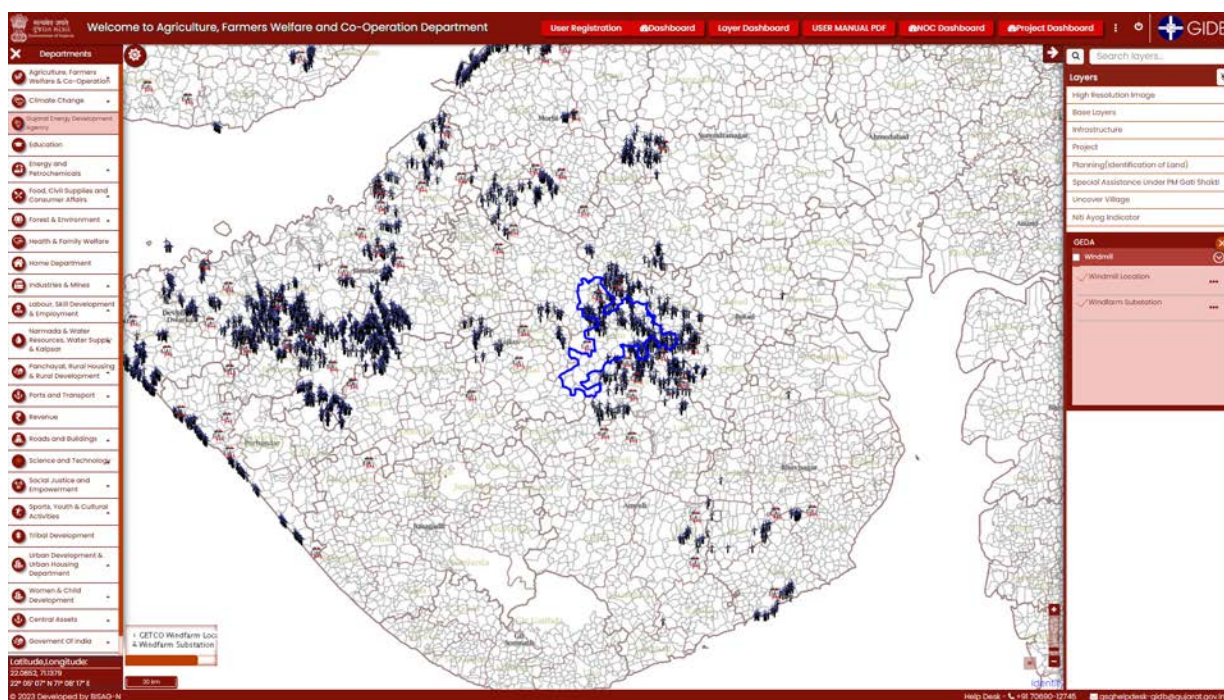
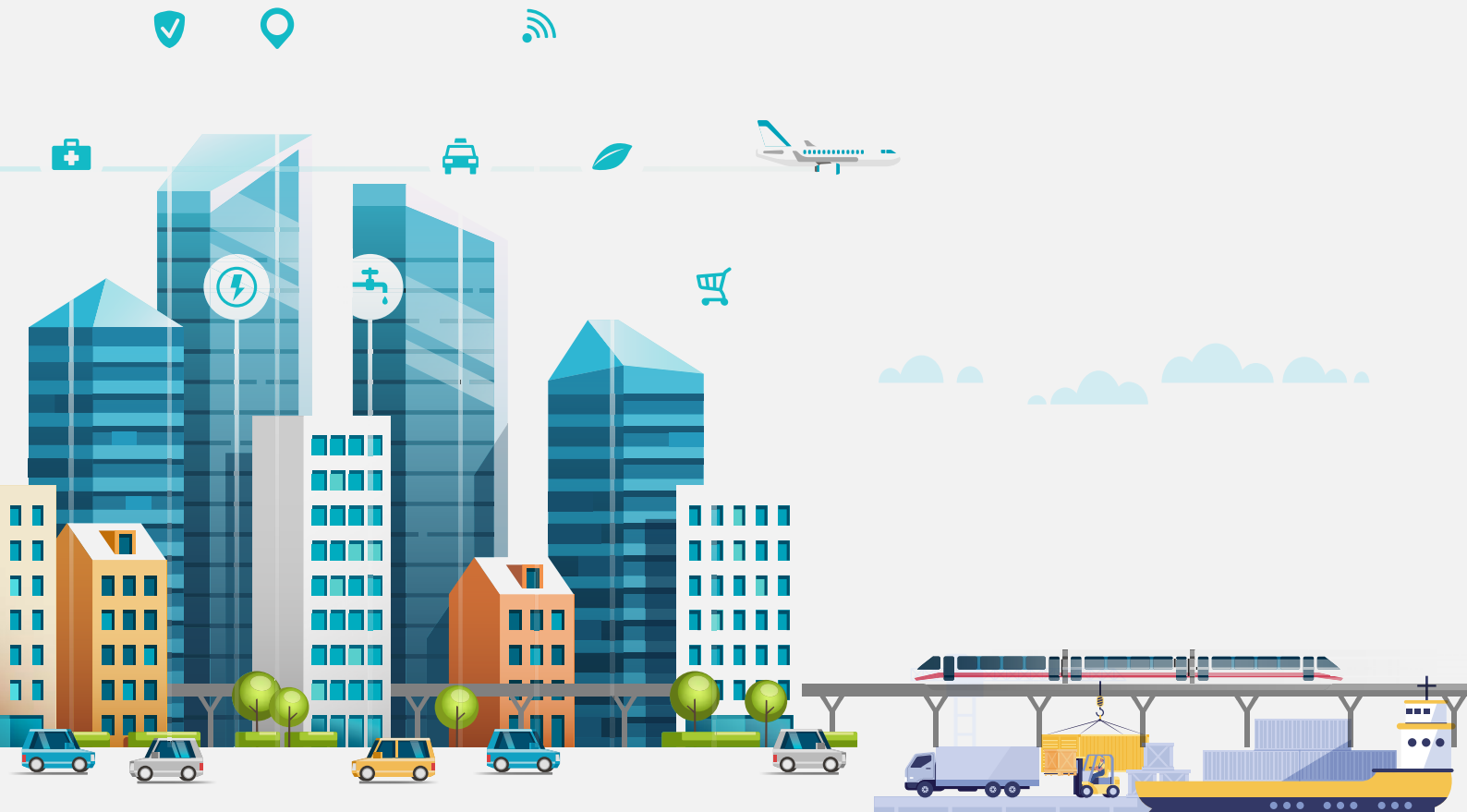


Figure 3.41 : Identification of Windmills Clusters in Jasdan, Rajkot District

THE WAY FORWARD



04



The Way FORWARD

Gujarat intends to further expand this innovative initiative of PM Gati Shakti to plan all initiatives and priorities of the Government with a “Whole of Government” approach. Originally conceived as an infrastructure planning Programme, PM Gati Shakti Gujarat has evolved to focus on socio-economic planning and development. PM Gati Shakti will be a comprehensive planning tool for the creation of infrastructure and socio-economic development for the vision of Viksit Bharat@2047.

Under PM Gati Shakti Gujarat’s vision for the future, it will play a pivotal role in assisting investors in selecting the most advantageous locations for their industrial ventures within the state. It will offer comprehensive information on upcoming connectivity projects, business hubs, industrial areas, and the surrounding environment. Furthermore, it will streamline the approval process, reducing the complexities of regulatory clearances and providing up-to-date data for informed decision-making.

THE ROAD MAP FOR THE FUTURE INCLUDES:





DATA QUALITY IMPROVEMENT

This involves refining decision-making processes by identifying key attributes necessary for infrastructure planning. The use of symbology, colour-coding, and asset categories will expedite decision-making. Data integration through Web Feature Service (WFS) and data validation via a Maker-Checker-Approver mechanism will enhance data accuracy, a critical factor in decision-making.



INCREASING USAGE

To encourage the utilisation of PM Gati Shakti Gujarat at the district, taluka, and village levels, the Government aims to enhance the capacity of its officers. This will involve expert lectures, tutorial videos, and practical training, contributing to more efficient planning processes.



DISTRICT AS FULCRUM OF DEVELOPMENT

Districts are envisioned as engines of economic growth and employment generation. Through PM Gati Shakti Gujarat, district administrators will take on the responsibility of planning and development of socio-economic initiatives, thereby identifying economic potential at various levels within the district. This comprehensive approach extends to both rural and urban areas, encompassing social and economic development initiatives such as sanitation, healthcare, education, and more. The goal is to make economic growth, job creation, and infrastructure development top priorities at the district level.



AREA DEVELOPMENT PLANNING

PM Gati Shakti Gujarat will drive socio-economic development by initiating area-specific projects, enhancing the living conditions of residents, improving their skills, and enhancing income.



SOCIO-ECONOMIC PLANNING

The integration of socio-economic indicators with infrastructure planning will significantly enhance the quality of life for citizens. This integration will help identify last-mile connectivity gaps and foster overall development.



PROJECT MONITORING

To ensure efficient project monitoring at different implementation stages, the existing project monitoring software will be integrated using APIs, and new monitoring software will be developed. Real-time project monitoring, including CCTV surveillance, will be part of this streamlined process.



PREDICTIVE PLANNING

Artificial Intelligence will be leveraged within PM Gati Shakti Gujarat to predict future infrastructure demands, enabling advanced planning for long-term projects.



CITIZEN INTERFACE

As part of the Ease of Living initiative, citizens will be able to apply for NOCs and permissions online through a mobile application integrated with PM Gati Shakti Gujarat. This application will improve the quality of life for citizens by providing information such as the nearest hospitals, schools, police stations, city civic centres, etc.



INVESTOR'S INTERFACE

Decision-making tools will be provided to investors, enabling them to identify optimal locations for their investments while considering upcoming infrastructure projects, like electricity and water connections. Applying for NOCs and permissions online through IFP integrated with PM Gati Shakti Gujarat will simplify the process and reduce logistics costs. Investors will also have access to information regarding the availability of skilled manpower near their investments.



REDUCTION IN LOGISTICS COST

Project planning will be approached holistically, with alignments and locations discussed in the Gati Shakti Gujarat Planning Group (State NPG) to optimise alignment finalisation. This will optimise state resources as well.



ACHIEVING SUSTAINABILITY

By using PM Gati Shakti Gujarat for infrastructure project planning, departments will be better positioned to finalise optimal alignments, ultimately reducing carbon emissions and advancing sustainability efforts. PM Gati shakti will also be used for avoiding eco-sensitive zones and for disaster preparedness and management.



WHOLE OF SOCIETY APPROACH

The ultimate aim of PM Gati Shakti Gujarat is moving beyond the Government to Government (G2G) approach and engaging the private sector, investors and civil society in economic planning using PM Gati Shakti Gujarat. This will help in achieving 'multi-sectoral', 'inter-sectoral' or 'cross-sectoral' growth, thus providing transparent and participative governance.



ABBREVIATIONS

AI	Artificial Intelligence	IFP	Investor Facilitation Portal
AMRUT	Atal Mission for Rejuvenation and Urban Transformation	ISRO	Indian Space Research Organisation
API	Application Programming Interface	ITI	Industrial Training Institute
BISAG-N	Bhaskaracharya National Institute for Space Applications and Geo-informatics	MSME	Micro, Small and Medium Enterprises
CAGR	Compounded Annual Growth Return	NH	National Highway
CHC	Community Health Centre	NHAI	National Highway Authority of India
CLP	City Logistics Plan	NIP	National Infrastructure Pipeline
COS	Committee of Secretaries	NLP	National Logistics Policy
CRZ	Coastal Regulation Zone	NMP	National Master Plan
DFC	Dedicated Freight Corridor	NMP	National Monetisation Pipeline
DMIC	Delhi-Mumbai Industrial Corridor	NOC	No Objection Certificate
DPIIT	Department for Promotion of Industry and Internal Trade	NPG	Network Planning Group
EGoS	Empowered Group of Secretaries	OTP	One-time Password
ERP	Enterprise Resource Planning	PHC	Public Health Centre
EV	Electric Vehicle	PMG	Project Monitoring Group
GDP	Gross Domestic Product	PMGS-G	PM Gati Shakti Gujarat
GIDB	Gujarat Infrastructure Development Board	PMGS-NMP	PM Gati Shakti National Master Plan
GIS	Geographic Information system	SDG	Sustainable Development Goals
GoG	Government of Gujarat	SEZ	Special Economic Zone
GPCSIRDA	Gujarat Petroleum, Chemicals and Petrochemicals Special Investment Regional Development Authority	SH	State Highway
GSDP	Gross State Domestic Product	SIR	Special Investment Region
GSV	Gati Shakti Vishwavidyalaya	SOP	Standard Operating Procedure
HoD	Head of Department	TSU	Technical Support Unit
		ULIP	Unified Logistics Infrastructure Plan
		WFS	Web Feature Service



About GIDB

The Gujarat Infrastructure Development Board was set up to facilitate higher flow of funds into infrastructure sectors, to promote the private sector participation and to ensure coordination among various Government agencies in the State of Gujarat. Gujarat Infrastructure Development Board itself does not develop infrastructure services but acts as a catalyst for their development.

Key Activities of GIDB are:

- Nodal agency for PM Gati Shakti Gujarat Master plan
- Monitoring high impact projects for timely implementation in Gujarat
- Convener of Island Development Authority
- Nodal agency for Gujarat Integrated Logistics and Logistic Parks Policy 2021
- Planning of initiatives and projects under State PPP as per the requirement of DEA, Ministry of Finance
- Coordinating body for the development of projects taken up under Delhi Mumbai Industrial Corridor (DMIC)
- Apex authority under SIR act for Town and Regional Planning of:
 - Dholera SIR
 - Dahej SIR
 - Mandal Bechraji SIR



About BISAG-N

Visions : Bhaskaracharya National Institute for Space Applications and Geo-informatics (BISAG-N) is an autonomous scientific society functioning under the Ministry of Electronics and Information Technology, Government of India.

Aim : To empower and serve the Nation through the development of Space and Geo-spatial Technologies, its applications/solutions/services in accordance to governance principles for socio-economic welfare of the Society.

Objectives :

- To develop, integrate and achieve excellence in various emerging technologies such as remote sensing, image processing, GNSS, Spatial Computing, AI,ML,Mobile,IoT, Big-data Analysis, Database Systems Management, ERP, etc. through advance research and development.
- To Create and organise authenticated, compatible, standardised, large scale, Multipurpose Geo-spatial data bases in collaboration with Government Ministries, National/State organisations and agencies.
- To integrate Governance processes in an integrated technology based system to provide holistic solution as per regulations/guidelines etc.
- To establish upgrade and maintained and operational TV broadcast and Satellite based communication as National facility for education, capacity building, empowerment, training, skill development etc.
- Capacity Building to support startups and entrepreneurs in Geo-spatial technologies, to establish a finishing school in advance Geo-spatial and also to support International community in development and application of Geo-spatial technologies through a Government approved programme.

Role of BISAG-N :

- Multi -technology based services for different sector
- Satellite DTH TV based educational telecast programme
- In-house technology development through R&D
- Capacity building programme
- Skill development training through virtual reality

BISAG-N assists Ministries/Departments of the Central as well as State Governments in applying Geo-Spatial and other emerging technologies in an innovative manner, to improve the effective roll out of e-governance services for the common citizens.

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e-COMPENDIUM



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