



Ministry of Coal
Government of India



Shri Raosaheb Patil Danve
Hon'ble MoS for Rail,
Coal & Mines, Govt. of India

Shri Pralhad Joshi
Hon'ble Minister of Coal,
Mines & Parliamentary Affairs,
Govt. of India

East Zonal
CONFERENCE
PM
GatiShakti
National Master Plan for
Multi-Modal Connectivity

NATIONAL LOGISTIC POLICY

Odisha | Jharkhand | Bihar | West Bengal

16TH OF FEBRUARY, 2023



Shri Narendra Modi
Prime Minister of India



Conference Report

Key Highlights

- PM Gatishakti National Master Plan (NMP), a transformative approach for improving logistics efficiency and reducing logistic costs, was launched for integrated infrastructure development in the country. The objective is to bring different Ministries/States/Departments/Industries together for integrated planning and coordinated implementation of infrastructure connectivity Projects.
- The Hon'ble Prime Minister has launched National Logistic Policy. It aims to reduce cost of logistics & enhance logistic efficiency. The National Logistic Policy envisage at digitization of logistic processes and systems. A unified logistic interface platform has been launched by integrating over 30 different digital platforms across several Ministries.
- East Zonal Conference organized to provide an opportunity for different stake holders to understand in-depth the component of National Logistic Policy.
- The Ministry of Coal with conference was looking to bring efficiency in production and allocation of coal in Eastern Zonal States. Ministry focused on discussion on coal logistic with special focus on digitization of difference systems. There was in-depth interaction leading to working together with national perspective among all the stake holders.
- The conference was attended by 80 Delegates from different ministries (Coal, Steel, Power, PNG, Mines, Railways, DPIIT, Shipping Port and Inland Waterways) and East Zonal States- Odisha, West-Bengal, Jharkhand & Bihar and other delegates from Industries (Tata steel, Vedanta, WBPDCIL Hindalco, JPL, CIL, NLCIL, NICDC) along with institutes BISAG-N.
- Bringing various departments and ministries on a single platform will greatly address the huge volume of transportation of minerals and materials across the country

EAST ZONAL CONFERENCE ON PM GATI SHAKTI NATIONAL LOGISTICS POLICY – TO BE HELD ON
16.2.2023, 10 A.M TO 5:15 P.M AT Bhubneshwar, Odisha.

Venue: Mayfair Convention Center at Bhubneshwar, Odisha.

Minute to Minute Programme

Registration of Participants: 9.00 AM onwards.
<p style="text-align: center;">Inaugural Session. 9:30 AM – 11.15 AM.</p> <ul style="list-style-type: none">• Reception of the Guests. 9.00 AM – 9.30 AM.• Invite Dignitaries on Dias and Deep Prajwalan. 9:30 AM-9:45 AM• Welcome address by Advisor Projects, MOC. 9:45 AM-9:55AM• Showcasing Movie on PM-Gati Shakti 9:55 AM – 10:05 AM.• Address by Chairman, NLCIL.10:05-10:10• Address by Secretary Mines, Government of Jharkhand. 10.10-10:20 AM• Address byAdditional Secretary& NA, Ministry of Coal. 10:20-10:35 AM.• Address by Secretary, Steel, Government of India. 10:35-10:45 AM.• Address by Chief Secretary, Government of Odisha- Chief Guest-10.45-11:00 AM• Vote of thanks by Director Personnel, MCL.11:00-11:10 AM
Tea Break – 11.10 to 11.40 AM
CEO's Conclave (11:40 AM-12:20 PM)
Interaction with 5 CEO's with Additional Secretary & Nominated Authority for Infrastructure development of East Zone.
Technical Session: 1 (12:20 AM to 1:30 PM)
<p>Moderator- Secretary Mines , Jharkhand</p> <ul style="list-style-type: none">• Presentation by Department for Promotion of Industry & Internal Trade• Presentation by Ministry of Coal• Presentation by BISAG• Presentation by NICDC• Presentation by Railways• Presentation by Ministry of Mines•
Lunch Break (1:30 PM to 3:00 PM.) at Conference Venue.

Technical Session:2
(3:00PM to 4:30 PM)

Moderator- Additional Secretary & NA, MOC

- Presentation by Ministry of Steel
- Presentation by Paradip Ports Ltd
- Presentation by Inland Waterways
- Presentation by DDG, MOC.
- Presentation by WBPDC
- Presentation by CMPDI

Wrap up Session – 4:30 PM. To 5:00 PM.

- Presenting the learning of both Technical Sessions together.
- Vote of Thanks.

High Tea (5:00 PM to 5:30 PM.) at Conference Venue.

I. Inaugural Session

Session Highlights

- For any Country to progress economic development is important, the era is where efficiency is the key of success. Hence, First Mile connectivity, Last mile connectivity and well coordinated logistics connectivity is important for success.
- Issue was Million of tonnes of raw material moving over country from East Zone (Odisha, Jharkhand, West Bengal & Bihar) rich in mineral reserve (Coal, Iron, Aluminum etc.) to other part of country through rail, Port, Road corridors .
- Growth of mineral is flat from 40-50 years, and planned to show sustainable growth in upcoming years Coal production planned to be double by FY30. Hence, it is extremely critical for entire country to enhance infrastructure and reduce Logistic cost to get competitive with other countries Gati Shakti Portal will facilitate in obtaining Clearance in one platform.
- Robust futuristic plan needs to be put in place and executed in the sector of Logistic infrastructure development in terms of modern railways, highways, Ports and to avoid wastage in building infrastructure.
- Currently India is having 80 KG per capita consumption of steel as against about 700 Kg in the developed countries, even when we join the middle ranking countries the demand for logistics will go up, thereby calling for significant reduction in logistic cost.
- We need think about newer modes of transportation in country like 100km of slurry pipelines already in construction by Steel sector.
- Ministry of Coal drafted coal logistic policy and National Coal evacuation plan in consultation with private sector with vision to develop a smart, integrated, optimized, resilient, sustainable and trusted Coal logistics ecosystem for accelerated and inclusive growth.
- Coal Logistic Policy Objective- Ensure availability of adequate coal evacuation infrastructure, Optimization of the total logistics cost of coal, Promote Integration of multimodal network of transport infrastructure, Modernization: Greater adoption of information communication technology, Promote Inclusivity by addressing the needs of logistics supply and user side.
- Jharkhand Industrial Park and Policy is being developed for creating robust infrastructure for industries in state for their sustainable development and promote private investment in state.
- Ministry of Coal populated data as Layers on NMP Portal (Coal Blocks, Forest, Land Asset Data, Washeries, FMC, Coalfields etc.) to develop Multi-Model Connectivity.

II. CEO's Session

Key Highlights – Industry growth

- Indian Steel Production is every High in Eastern Part of country especially Jharkhand & Odisha,
- Movement of materials are many fold high , which will need a logistic push to bring down cost from 14% to less than 10%
- NTPC is generation of 1billion unit power generation and requires More than 170 rakes of coal per day and being transportation so country needs transformation through various logistic mechanisms.
- Green Logistics (long distant Pipe conveyors) to be promoted for cleaner environment. Entire truck transportation will be avoided which will require huge investment.
- Existing Ports are currently ~30 % Capacity only, turn-around of ships time and berthing time is high. This needs to be corrected primarily by larger capacities at ports and simplified pre-berthing process required.
- Railway network is the key to entire ecosystem as 90% of raw material moves by rail. They need to forecast demand along with increase in rake supply.
- It is suggested that rail projects to be dovetailed with expansion plan of the companies/ mines and meet timelines for evacuation of mineral.
- India at present is in lag to utilize inland waterways for material movement which needs to be enhanced.
- Railway to look into and re-structure tariffs to reduce transportation cost of material for consumers.
- Multi-modal Connectivity of Road, Rail, Inland, Ports, Pipe Conveyors to be exercised and developed in country for better infrastructure
- Private entity to be involved in developing rail network. Railway has introduced schemes like GPWIS – General purpose Wagon incentive scheme to ease out rake availability.
- Gati-Shakti focused on Efficiency gains, productivity gains, cost saving, movement of materials and private to induce capital to achieve

III. Technical Session I

Key Highlights

- DPPIT Presented National logistic plan and policy - parameters, logistic vision, logistics parameter index ranking and CLAP outline implementation and progress.
- Ministry of Coal Presented the coal production growth and subsequent development of coal logistic policy indicating strategy with reduce transportation cost, green transportation evaluation of rail tariff, smart coal corridor, sea route of evacuation. Also presented different layer created by ministry of coal on NMP portal to help other ministry to develop multi-modal.
- BISAG highlighted Gati Shakti Principles, Features of NMP portal, Applications, Technology, layers available & key tools. In terms of use cases BISAG gave various use cases in Ministry of Coal., Ministry of Railways. Gap analysis tool also helps skill development ministry. PM going to launch app call before you dig. Which give notification to all departments before digging?
- NICDC highlighted the way India is progressing. Digitization is the key. The entire process if master planning now becoming easier day by day. As example of Gujarat Dholera village 6 lane expressway has been built. Other projects such as Rajpura Patiala in Punjab infrastructure gap assessment is done using pm Gati Shakti. NICDC also gave the examples of Greenfield industrial cities. NICDC tracked 55M+ container using RFID. NICDC also highlighted the various features of ULIP.
- East Coast Railway gave insight of railway project for coal evacuation. In 2022-23 248 km of railway has been built. 6 new lines have been sanctioned. Energy Corridor of New connectivity's and capacity enhancement for which 45000 cr. allotted in current budget.
- Indian Bureau of Mines stated Integration with existing and forthcoming mineral blocks. Gave overview of PMGS national master plan with MoM tools. 4 major grouping of data layers. Almost 3000 records are available on portal. He apprised that sharing data on portal not only help other ministries, it will help integration of inter department also. IBM also gave the insight that how the portal contributed to Nation Logistic Policy.

IV. Technical Session II

Key Highlights

- Ministry of Steel presented
- Paradip Ports Trust highlighted presently capacity of Port, Commodity Wise Break-Up of Traffic Handled, Cargo volume being handled at port. He added the future demand growth projection of commodity wise coastal cargo potential. Facilities Extended by Paradip Port for Thermal Coal Coastal Shipping along with cost of transportation via costal shipping and by rail. National Coastal Mission for thermal Coal as development of 100 MTPA capacity for coastal shipping of thermal coal, out of the proposed 400 MTPA capacity expansion planned by 2030.
- Inland Waterways presented challenges and opportunities for National Waterways in Odisha. Development of NW-5 and NW-64- action plan and activities planned for FY 2022-23
- Ministry of Coal presented role of Coal controller in Gati-Shakti in planning and approval of coal mines integrated with logistics. Also, it has been highlighted that Gati-Shakti portal will serve in expediting clearance and operationalisation of coal blocks.
- WBPDCI stated the growth projection of Power and coal mining in west Bengal through captive blocks. Railway Connectivity for coal evacuation being focused upon in presentation.
- CMPDI presented Coal India Production Projection and Projected Rail Despatch in 25-26 (1 BT). Coalfield-wise coal production along with evacuation programme being highlighted as growth projection.









NATIONAL LOGISTICS POLICY











Ministry of Commerce & Industry
Government of India



National Logistics Policy

Zonal Conference

East Zone

(Bihar, Jharkhand, Odisha, West Bengal)

PM GatiShakti

Transformative approach for reducing logistics cost and improving logistics efficiency.

National Master Plan

For integrated infrastructure and network planning.

National Logistics Policy

For efficiency in services and human resource

Logistics efficiency - a function of infrastructure, services (digital systems / processes / regulatory framework) and human resource.

• ————— •••

Parameters of National Logistics Policy

**Infrastructure / Inter
Modality**

**Resilience /
Sustainability**

**Logistics clusters -
Corridors/
Multimodal Hubs**

**Modernization/
Digitization**

**Harmonization and
standardization**

**Key industries/
stakeholders**

**Skill Development
Human Capacity**

**Trade and transport
facilitation**

**Internationalization /
EXIM Logistics**



Logistics

“Logistics describes the process of efficient coordinating and moving resources - people, materials, inventory, and equipment - from one location to storage at the desired destination.”

National Logistics Policy - Vision

‘To develop a technologically enabled, integrated, cost efficient, resilient, sustainable and trusted logistics ecosystem in the country for accelerated and inclusive growth.’

National Logistics Policy - Targets



Reduce cost of logistics in India to be comparable to global benchmarks by 2030.

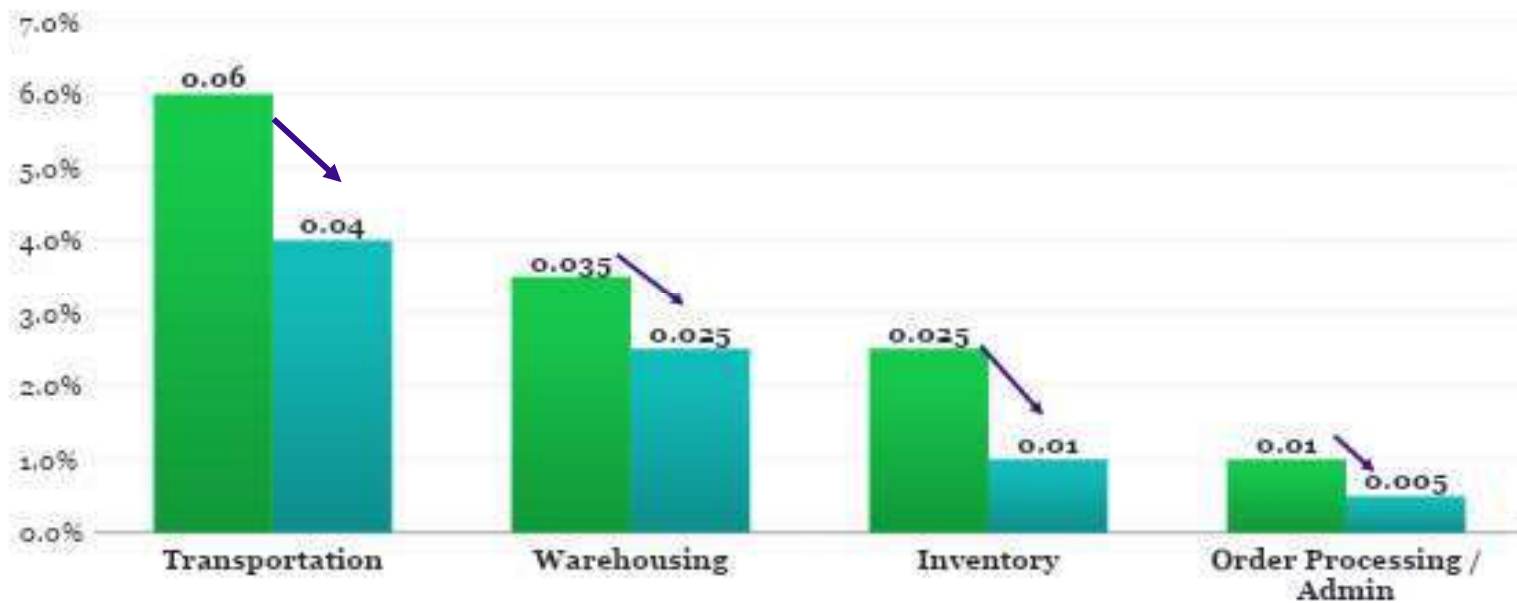


Logistics Performance Index ranking – endeavor to be among top 25 countries by 2030.



Create data driven decision support mechanism for an efficient logistics ecosystem.

Targets for Reduction in Logistics Costs



Logistics Performance Index - Parameters

1. **Customs** - The efficiency of customs and border management clearance.
2. **Infrastructure**- The quality of trade and transport infrastructure.
3. **Ease of arranging shipments** - The ease of arranging competitively priced shipments.
4. **Quality of logistics services**- The competence and quality of logistics services—trucking, forwarding, and customs brokerage.
5. **Tracking and tracing**- The ability to track and trace consignments.
6. **Timeliness**- The frequency with which shipments reach consignees within scheduled or expected delivery times .

Logistics Performance Index and Logistics Cost

Country	LPI Rank (Score) - 2018	Logistics Cost (as a % of GDP)- 2017
Germany	1 (4.20)	8.2
United States	14 (3.89)	8.2
Korea, Rep.	25 (3.61)	8.3
China	26 (3.61)	14.1
India	44 (3.18)	13
Indonesia	46 (3.15)	23.1

LPI Parameters

NCAER Logistics Cost estimates

Source: World Bank LPI Ranking, 2018, available at <https://lpi.worldbank.org/international/global/2018> , Global and Regional Infrastructure, Logistics Costs, and Third-Party Logistics Market Trends and Analysis, Armstrong & Associates Inc., 2017, IMF WEO Apr 2022 ,

Monitoring and Coordination

Centre

State / U. T.

Empowered Group of Secretaries (PM GatiShakti)
To monitor and review implementation of NLP.

Services Improvement Group (SIG)
Set up by EGoS for resolution of user issues.

Institutional framework at State/UT
PM GatiShakti mechanism to be used.



Ministry of Commerce & Industry
Government of India



Comprehensive Logistics Action Plan

Outline

*Aligned with the National Logistics Policy, a Comprehensive Logistics Action Plan has been developed, including **8 action items and 17 sub-actions.***

The framework adopted for each action item includes stating the problem statement, proposed solution, assignment of role to ministries/stakeholders, an institutional mechanism for monitoring and evaluation, feedback-based impact assessment.

Comprehensive Logistics Action Plan



Integrated Digital Logistics Systems



Standardization of Physical Assets & Benchmarking service quality



Logistics Human Resources Development & Capacity Building



State Engagement



EXIM (Export-Import) Logistics



Service Improvement Framework



Sectoral Plan for Efficient Logistics



Facilitation of Development of Logistics Parks

CLAP Implementation & Progress

CLAP – I

Integrated Digital Logistics Systems

ULIP launched on 17.09.22.

**Integration of 30 digital systems of
7 Ministries/Departments
completed since launch.**

**Over 90 Use cases/Applications
developed**

CLAP Implementation & Progress

CLAP – II

**Standardization of physical
assets and benchmarking
of service quality standards**

**e-handbook Warehousing
Standards launched on 17.09.22**

**A Study on Gap assessment in
existing standards affecting
secondary packaging in progress**



CLAP Implementation & Progress

CLAP – III

Logistics Human Resource Development and Capacity Building



5 Qualification Packs for job roles in the logistics sector approved



Online training programme on PM GatiShakti and logistics for civil servants on iGot platform



102 universities identified for delivering courses on logistics.

CLAP Implementation & Progress

CLAP – IV

States Engagement



State logistics policy has been notified for 16 States/UTs and 13 in the draft stage.




LEADS 2022-23 development in advanced stages.


CLAP Implementation & Progress

CLAP – V

EXIM Logistics



An action plan including mapping of issues with concerned line ministries / departments has been developed under NCTF.



A Compendium of reforms has been developed.

CLAP Implementation & Progress

CLAP – VI

Service Improvement Framework

E-LogS: Ease of Logistics Services portal launched for industry associations

30+ major national logistics and trade associations on boarded since launch

Dedicated E-LogS Cell in Logistics Division for quick resolution of issues/suggestions

CLAP Implementation & Progress

CLAP – VII

Sectoral Plans for Efficient Logistics (SPEL) to be developed by line ministries, including monitorable targets.



Comprehensive Port Connectivity Plan developed and notified.



Draft SPEL for coal developed by the Ministry of Coal.



SPEL for Steel & Fertilizer in advanced stages of development.

CLAP Implementation & Progress

CLAP – VIII

Facilitation of Development of Logistics Parks.



Framework guidelines to facilitate development of logistics parks developed by DPIIT.



Network of Logistics Parks being mapped on PM GatiShakti NMP portal.



NMP being used by States to bridge last-mile connectivity to Logistics Parks.



Ministry of Commerce & Industry
Government of India

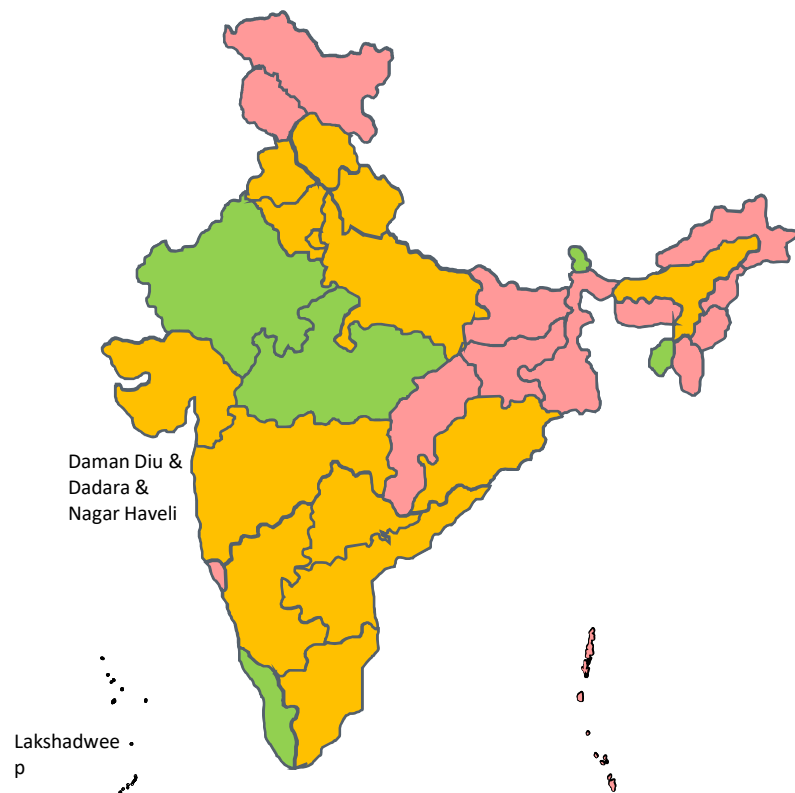


Logistics Ease Across Different States

LEADS 2022

LEADS 2022

GRADING OF STATES/UTS



Achievers (90%-100%)

Achievers
Andhra Pradesh
Assam
Chandigarh
Delhi
Gujarat
Haryana
Himachal Pradesh
Karnataka
Maharashtra
Odisha
Punjab
Tamil Nadu
Telangana
Uttar Pradesh
Uttarakhand

Fast Movers (80%-90%)

Fast Movers
Kerala
Madhya Pradesh
Puducherry
Rajasthan
Sikkim
Tripura

Aspirers (less than 80%)

Aspirers
Andaman & Nicobar
Arunachal Pradesh
Bihar
Chhattisgarh
Daman Diu & Dadara and Nagar Haveli
Goa
Jammu & Kashmir
Jharkhand
Ladakh
Lakshadweep
Manipur
Meghalaya
Mizoram
Nagaland
West Bengal



Thank you



Coal Logistic Policy, Action Plan & NMP portal of Ministry of Coal

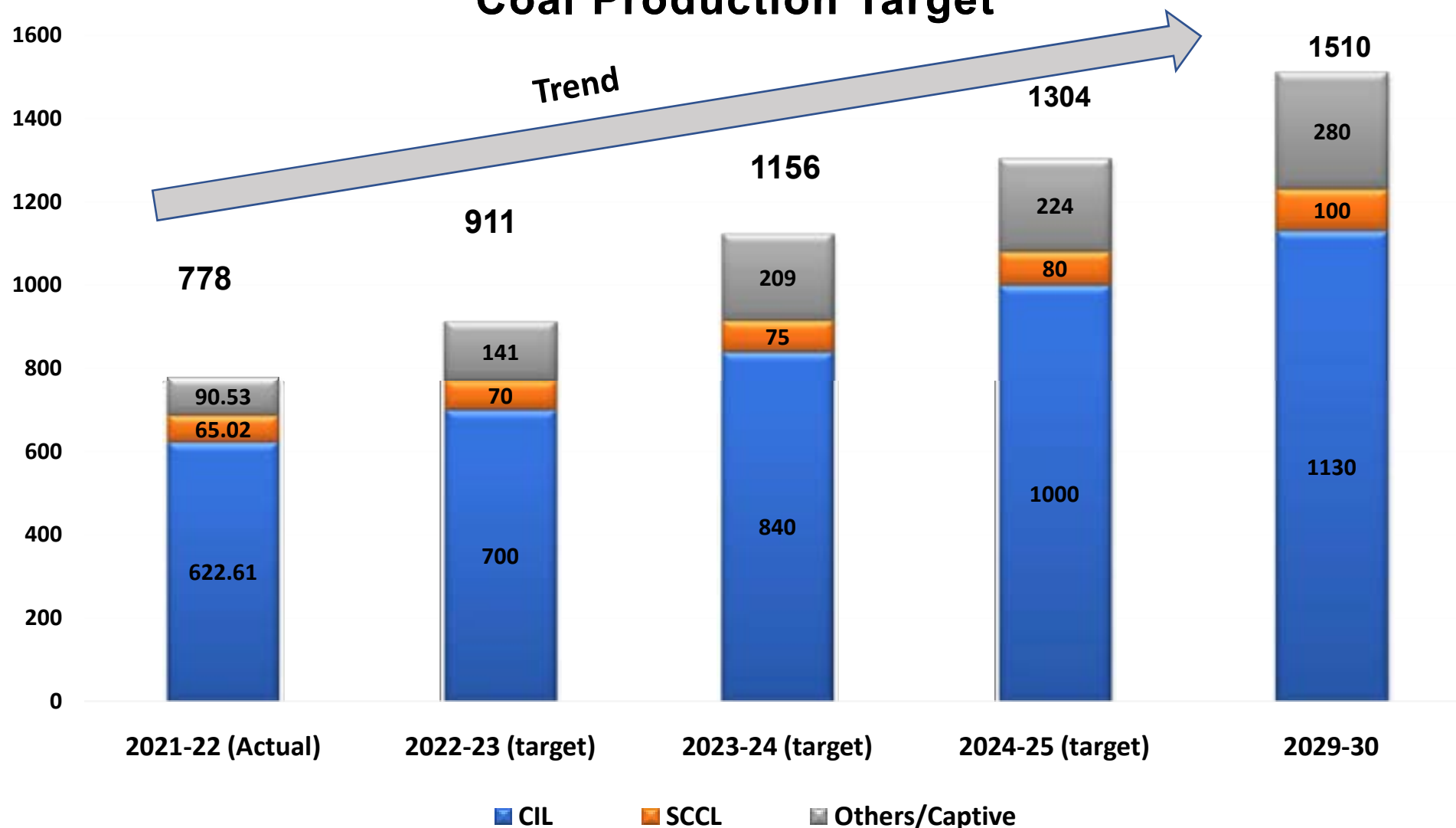
16th February



Vibrant Coal Market

Coal Production Target

All figures in MTs



PM GatiShakti

Transformative approach for reducing logistics cost and improving logistics efficiency.

National Logistics Policy

For efficiency in services and human resource

Coal Logistic Policy

For optimizations of coal logistics by the creation of optimal, eco-friendly, multimodal transport infrastructure

Coal Logistics Policy - Vision

‘To develop a smart, integrated, optimized, resilient, sustainable and trusted Coal logistics ecosystem for accelerated and inclusive growth.’

Coal Logistics Policy - Objectives

Ensure availability of adequate coal evacuation infrastructure.

Optimization of the total logistics cost of coal.

Promote Integration of multimodal network of transport infrastructure.

Modernization: Greater adoption of information communication technology

Promote Inclusivity by addressing the needs of logistics supply and user side

Coal Logistics Policy – Strategies (1/2)

ROW of rail, roads & First Mile as part of the mine allocation process.

Relevant business models for the formation of FMC & LMC.

Common user facilities like Railway Siding for multiple mines close to each other.

State Government carries out land acquisitions & block allocates to make investments.

Compensation to the original investor in case the railways allow siding usage or build another facility by connecting the siding with another siding or handling facility.

Planning for construction, use of shared infrastructure, as part of the mine allocation

CMPDIL/ISM/other agencies to assist Mine Owners in Developing FMC.

Smart Coal Logistics Corridors for ensuring complete oversight on every tonne.

Coal Logistics Policy – Strategies (2/2)

Reduce Transportation Cost - Railway freight rates for Coal, Overall TLC, Ocean Freight.

Green transportation initiatives to focus on modal shift to conveyors/railways/waterways

Linkage Consolidation: Multiple/long-term FSAs for single location. (large consumers)

Timely execution of the optimized infrastructures including solving Forest, Land, R&R.

Evaluation of Rail Tariff in RSR route to make it competitive as compared to ARR

IWT route , NW-1 to be more suitable mode for specific O-D pairs for imported coal. Like wise NW-5 & NW-64 for Domestic

Monitoring and Coordination

Inter-ministerial Committee (IMC)

Network Planning Group (NPG)

Technical support unit (TSU)

State Governments

Coal Logistic Action Plan

Integrated Coal Evacuation Plan for CIL & Non –CIL Blocks

Coalfield-wise production & Consumer details upto 2040

Provide details of consumers with their location, coalfields. from where they will get coal on minimum transportation cost.

Movement of coal through RSR

Assessment of Gaps in infrastructure which will be required by 2040 to transported coal through waterways, roads & railways.

Coal Logistic Action Plan

Multi-modal integrated National Coal Evacuation Plan

Multi-modal integrated National Coal Evacuation Plan and Coal Logistics Policy will be placed before the NPG

Monitoring & implementation of Multi-Model integrated National Coal evacuation plan

Discontinuation of defective Coal Wagon & expedite Rail Projects.

Re-introduction of concession in freight rates for Short Lead Goods Traffic (0-100km slab) for Coal

Coal Logistic Action Plan

Others

Integration with Coal Trading Exchange

MGR & Non-Government Railways policies

Coal supply to non-power sector & Supply of sized coal to power sector

Incentivization for opting greener modes of coal transportation

PM GATI SHAKTI NMP

Portal for Ministry of COAL

Concept of Gati Shakti Portal (NMP)

INTEGRATED PLATFORM FOR ALL MINISTRIES (CURRENTLY 25)

1. Railways
2. Road, Transport & Highways
3. Ports, Shipping and Waterways
4. Civil Aviation
5. Petroleum & Natural Gas
6. Power
7. Telecommunications
8. Coal
9. Mines
10. Chemicals & Petro-Chemicals
11. Fertilizers
12. Steel
13. Expenditure
14. Food and Public Distribution
15. Agriculture and Farmers' Welfare

16. Tourism
17. Promotion of Industry and Internal Trade
18. Fisheries, Animal Husbandry & Dairying
19. Commerce
20. Consumer Affairs, Food & Public Distribution
21. Housing and Urban Affairs; and
22. Electronics and Information Technology.
23. Fisheries and Coastal Affairs
24. Revenue/Chairman CBIC
25. Environment, Forest and Climate Change.

Concepts of Gati Shakti...continued

All infrastructure layer information to all Ministries are available at Portal

Administrative Layers

- State, District, Taluka, Village
- Revenue layers (Cadastral)
- High Resolution Satellite Data
- Google Maps

Logistics Layers

- Railways (Railway Line, Yards, Station, New Lines, Halts, Lands)
- Road (NH, SH, Expressways, New Roads, All Roads,)
- Waterways (River, Canals, Dams, Ponds , Waterbodies, estuaries etc.)
- Port, Toll, Airports, Others

Forest Layers

- Forest Land (Land Under FSI)
- ESZ (Eco Sensitive Zones)
- Sanctuaries, Wildlife Corridor (Tiger, Elephant)

Power Transmission Layers

- Existing Transmission Lines
- New Transmission Lines

Gas Pipeline Layer

- Gas pipeline Network (Existing and New)
- Other Layers related to Petroleum Ministries (Stations, Land etc.)

Social Input Data

- Census Data (Region wise)
- Literacy Data (Region Wise)
- Other Input Information

Concepts of Gati Shakti...continued

Speed ups the process of Planning by consideration of all requirements related to other Ministries during the planning stage

Input Data

1. Base layer of Administrative Boundaries, Logistics layers, Forest Boundaries, Power Transmission, Gas Pipeline Networks etc.
2. Concerned Ministry Layers available at Portal
3. Social Input data
4. Processing Tools for Planning

Output Data

1. Output will Contain the **plan which incorporate all activities** which will helps in speedy execution of the project.
2. **Details reports** will generate for approval/ planning.
3. Information helps up **speeding up of Clearance** , No Objection certificates etc.

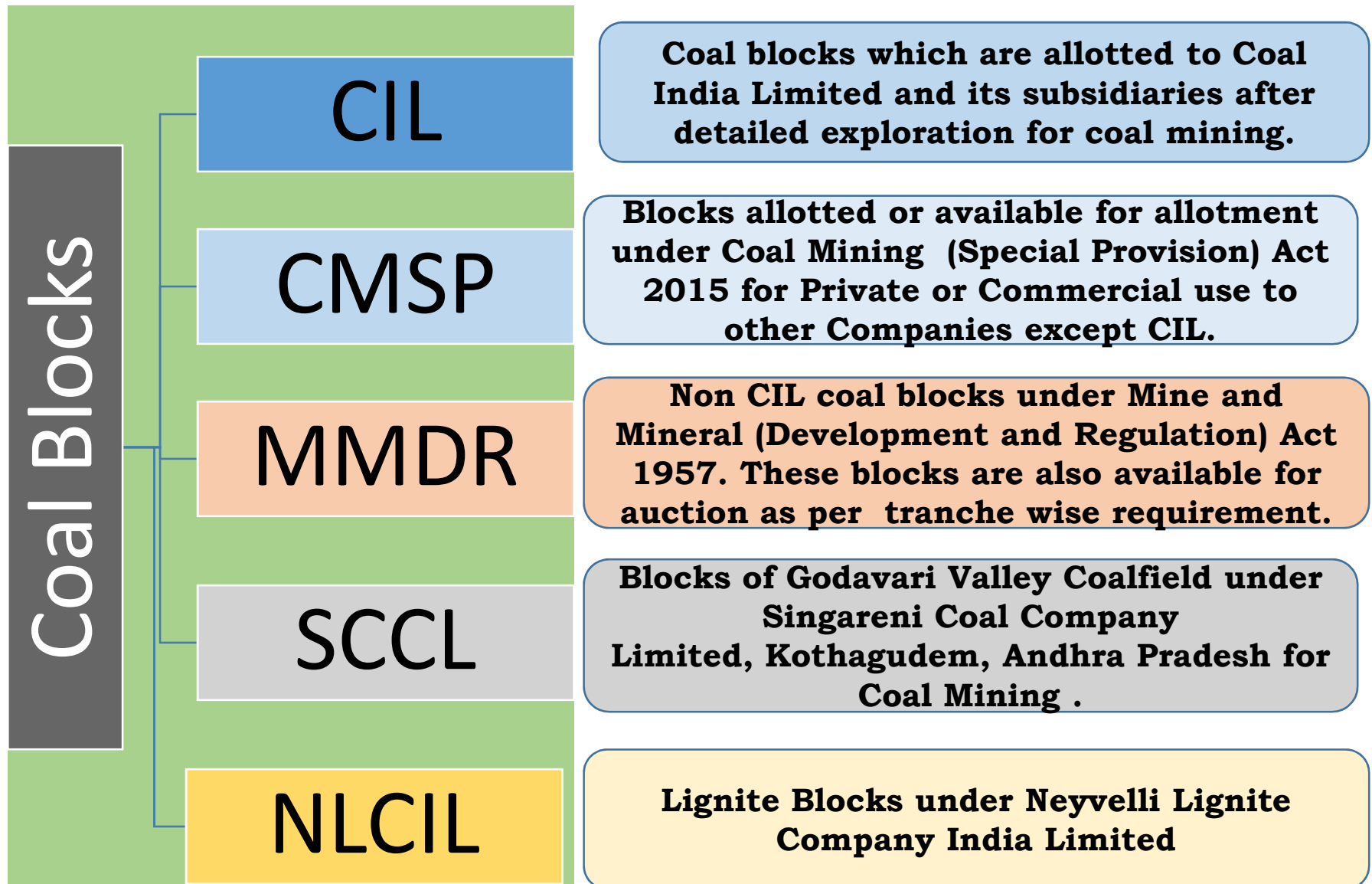
Concepts of Gati Shakti...continued

Provides tools for assessment, alignment etc. based on comprehensive planning and information database.

Navigation	• Navigate to desired layers through State, District , taluka and Village Level Boundaries by Step by step Selection
Swipe Layer	• Swipe between two selected layers to see overlap features
Route	• Possible Routes between two points or location.
Permission	• Available NOC and Permission Tool from One Ministry to Others
Find Location	• Find the location by Providing Coordinates
Search	• Keyword search to exact target layer
DPR Module	• Draft Project Report Module between AOI (Area of Interest) layers and their area of vicinity.
Line of Sight	• Tools for Network designing.
Intersect Layers	• Layers common features can be extract through intersect tool
Buffer	• Buffer distance creation and available features within the Buffer zone can be find out.
Measure	• Measure Between two points

Highlights of Ministry of Coal Layers at NMP portal

Available MoC Layers



Portal for information on the Blocks under Auction.

OBJECTIVE

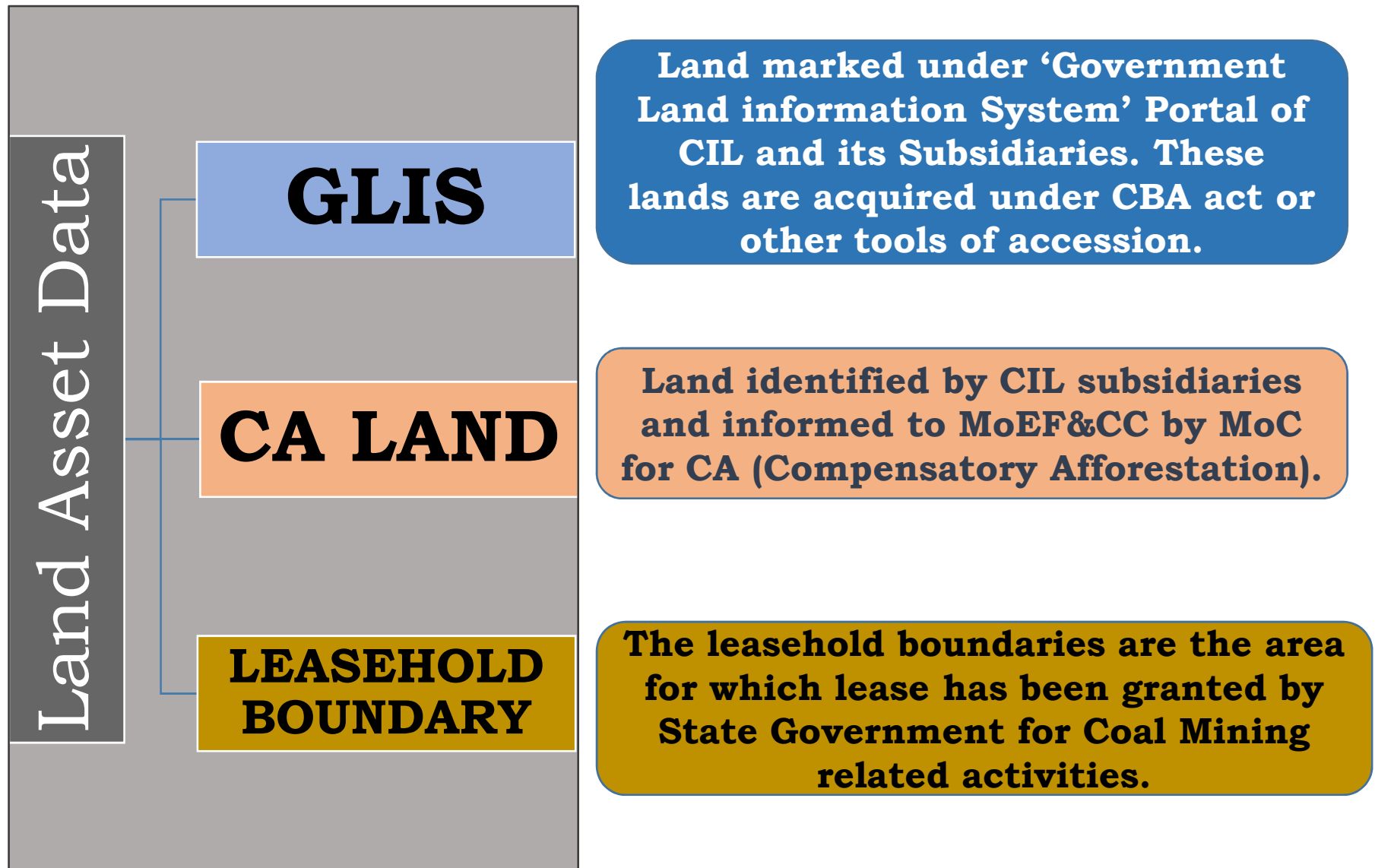
To provide information to prospective bidder about the standard infrastructure layers like road, rail, river, ESZ (Eco Sensitive Zone) etc. shown with respect to under auction blocks.

BENIFITS

The prospective bidder will obtain information upto the village level administrative layer, along with road, rail, river and ESZ etc. boundaries in the vicinity of the blocks of their interest. Satellite data is also available in background for more detailed information.

Portal along with mobile app is ready and will be available before next round of auction of 7th tranche with updated block information.

Available MoC Layers (contd..)



Portal for Alternative use of Land

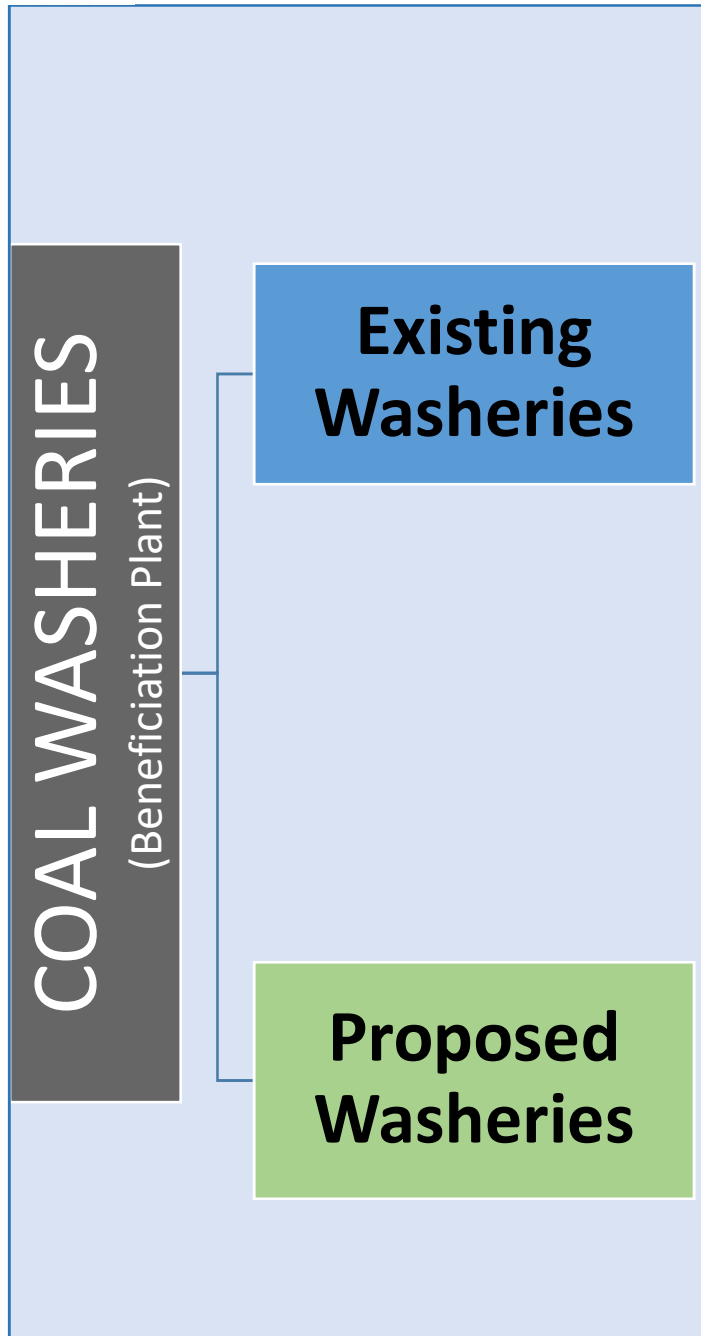
OBJECTIVE

For identification of land which can be proposed for utilization for other purposes.

HIGHLIGHTS OF THE PORTAL

- The portal contains tools for details data capturing through forms filling process.
- Additional basic layers like road, rail, water, forest , transmission and revenue land are available for decision making in regards to suitability of land.
- 3 tier approval and authorization system is incorporated. Land parcel will be uploaded to the system after authorization.

Available MoC Layers (contd..)



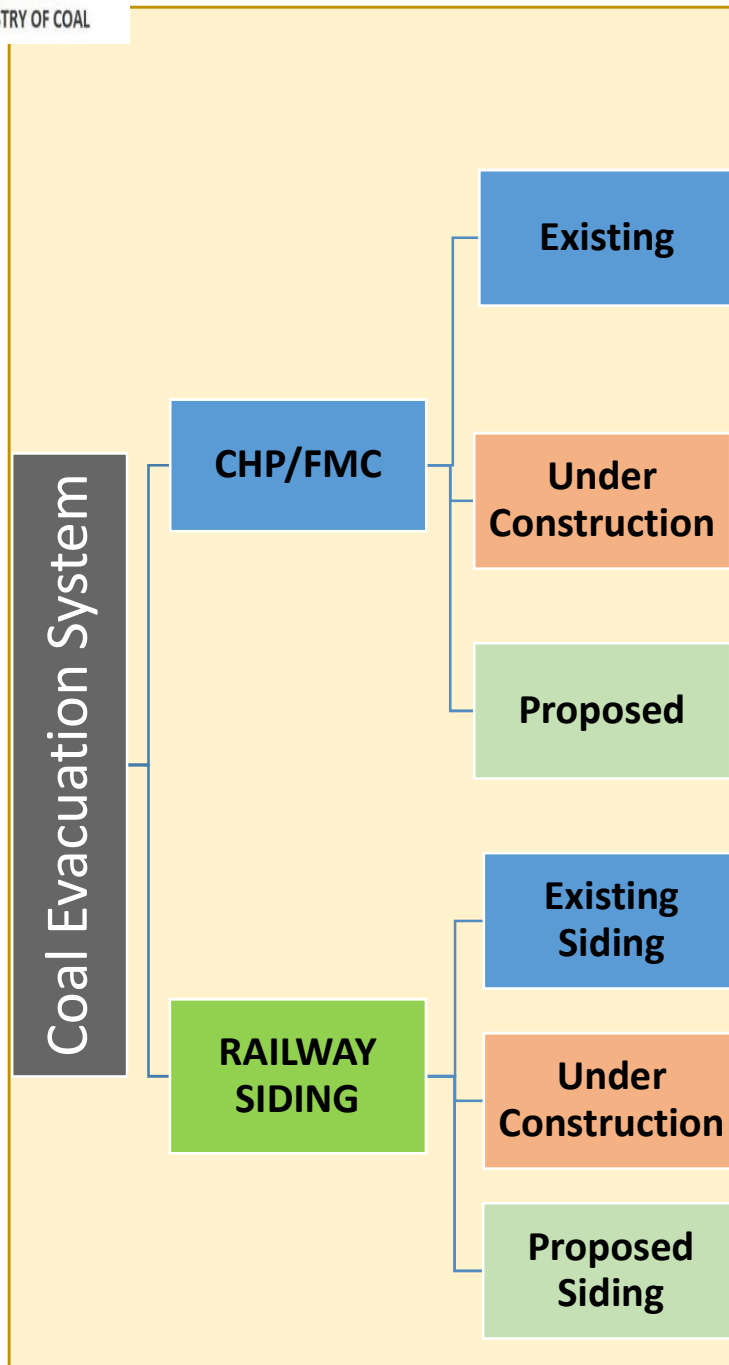
- Washeries are beneficiation plants where coal quality is improved by processing through various technologies.

- 13 operational Washeries are available including 11 Coking and 2 Non Coking Coal.

- Washeries which are proposed to be built in near future.

- Location of total 10 Washeries are available on NMP Portal

- 9 are for Coking and 1 for Non Coking coal) .



Available MoC Layers (contd..)

- CHPS & FMC are the coal transportation mechanism in which coal moves from mine to designated location for final transportation to end users.
- Location of 18 existing CHP/FMC under operation are available on the Portal.

Location of 32 FMC projects which are under construction in different subsidiaries of Coal India Limited area available on the portal.

Location of 08 FMC projects which are proposed are available on the portal.

Railway sidings are the wagon loading area from where coal stocks are loaded in wagons and moved to the end users. Presently location of 127 operational coal sidings are available on the portal.

Location of 19 railway sidings which under construction are available on the portal.

Location of 06 proposed railway sidings which are also available on the portal.

Available MoC Layers (contd..)

Coalfield Layers

Coalfield

Coalfield boundaries are probable coal bearing sedimentary basins reported by Geological Survey of India. Location of 62 coalfield boundaries which are available on the MNP portal of MoC.



Summary of Uploaded layers on NMP portal of MoC

DATA LAYER SUMMARY			
Layer Name	Existing	Under Construction	Proposed
CIL Blocks	339		
Additional CIL Blocks	110		
CMSP Blocks	196		
MMDR Blocks	252		
SCCL Blocks	84		
Lignite Blocks	1		
Leasehold	185		
Washeries	13 (11-Coking,2-Non Coking)		10 (9-Coking,1-Non Coking)
CHP	18	32	8
Railway Siding	127	19	6
Blocks Under Auction	141 / 139 (95-MMDR,9-Lignite,35-CMSP)		
Coalfield	62		
CA Land	KML received from MoC		
Blocks Under Auction	139 layers (MMDR,CMSP, Lignite)		

Glipse of NMP Portal

Coal Block at MNP Portal

- Coal Blocks are details explored potential coal bearing areas

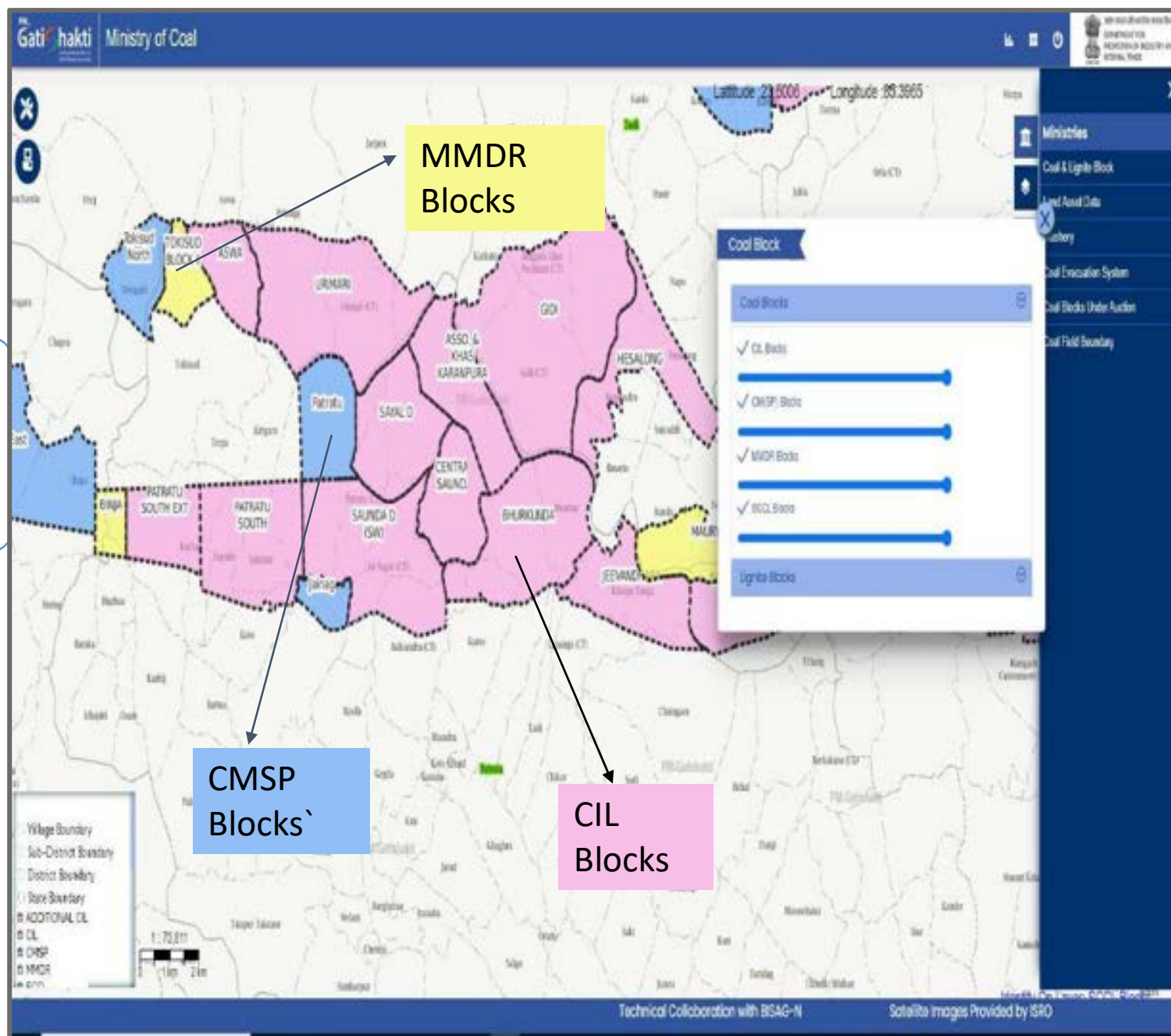
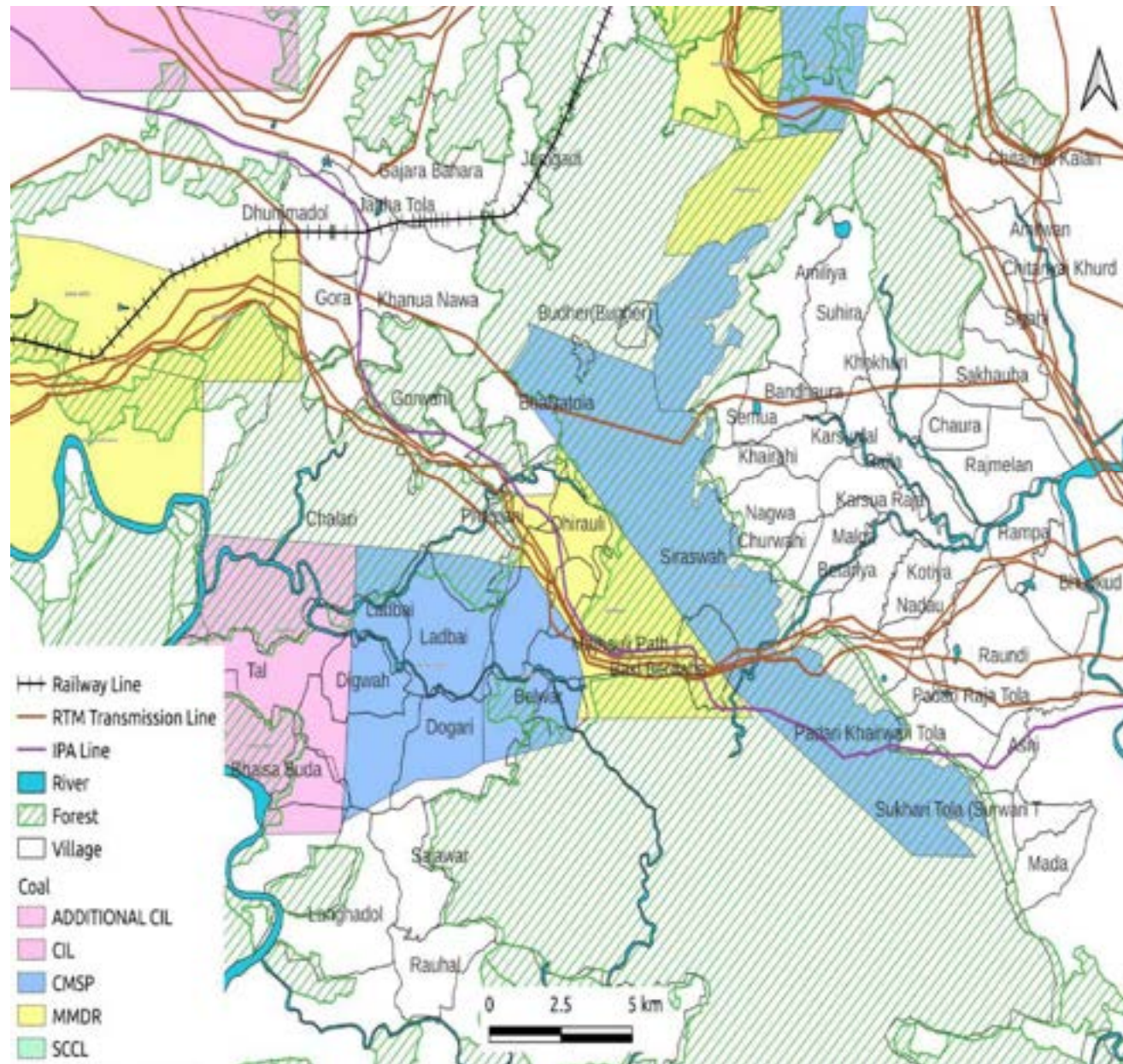
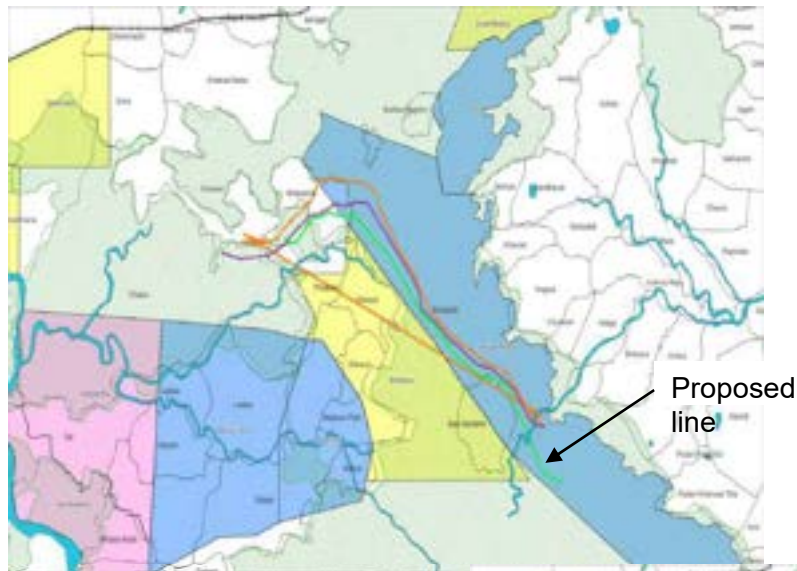


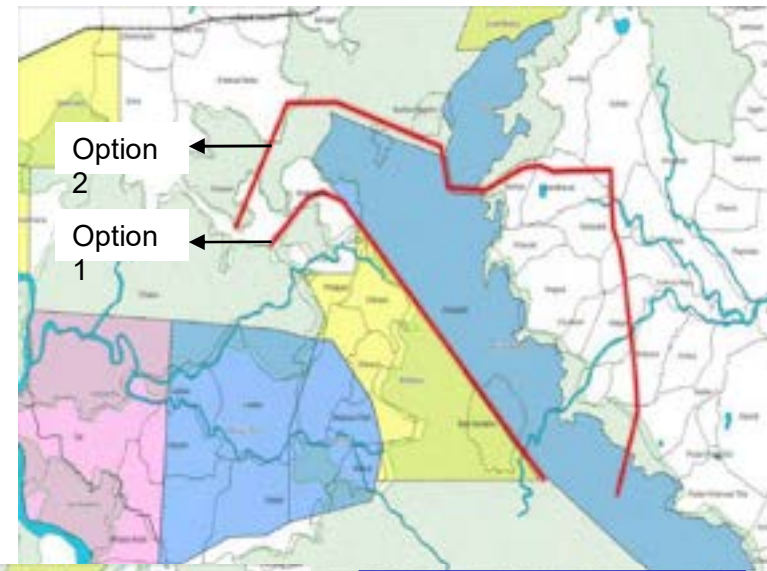
Illustration-1 : Case of Alternate route of transmission lines derived through Gati Shakti portal for Dhirauli Coal Block



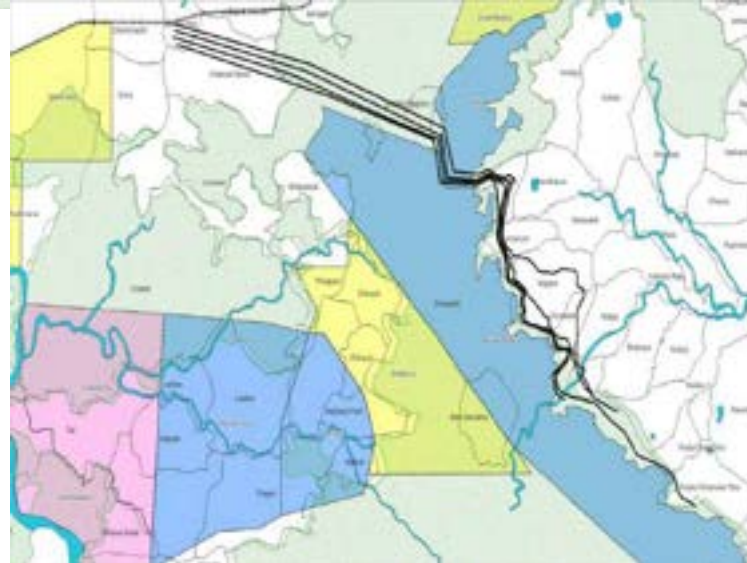
Alternative Alignment options worked out using Gati-Shakti Portal



**Surveyed by
Mo.Power**



**Suggested by
Mo.Coal**

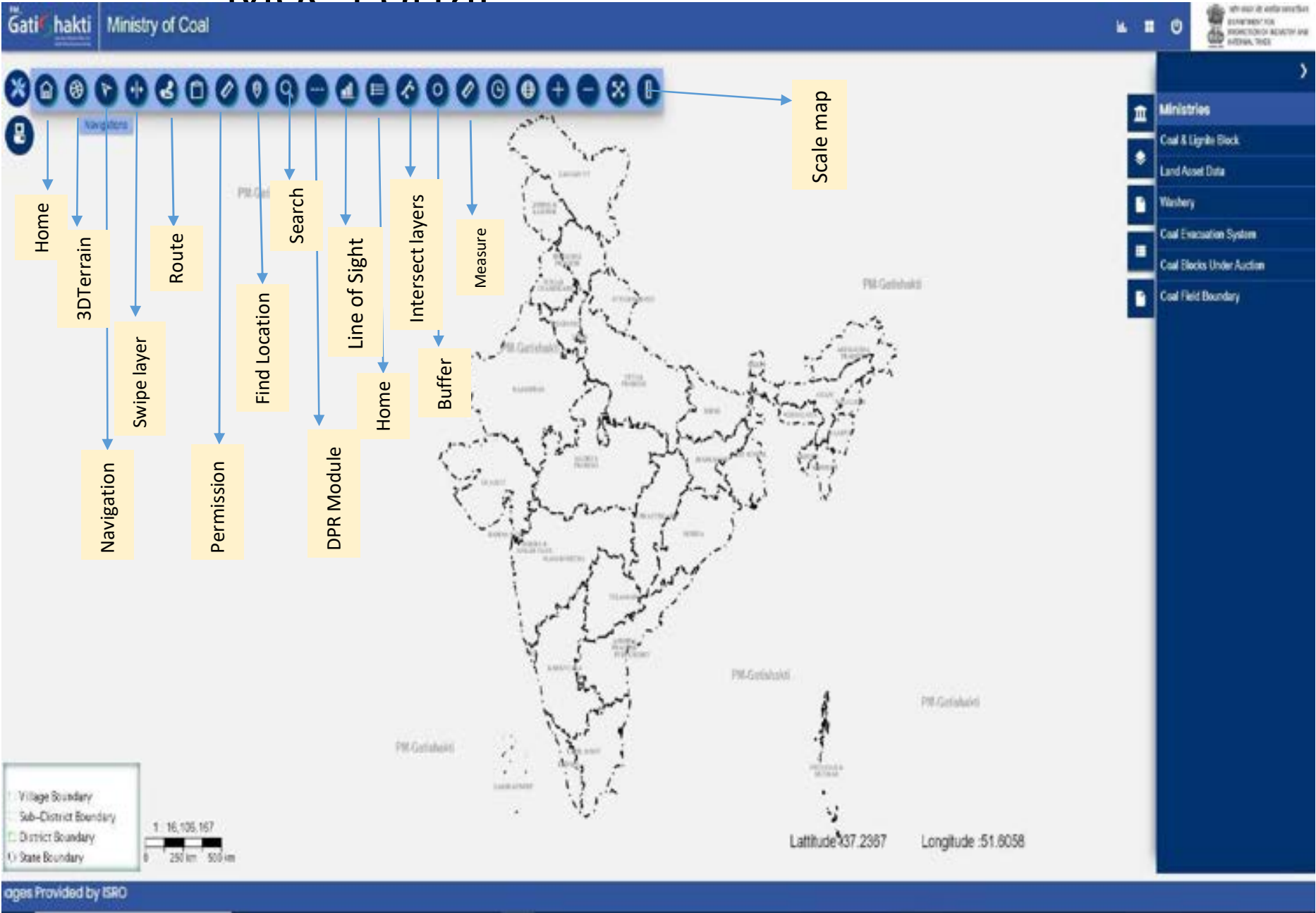


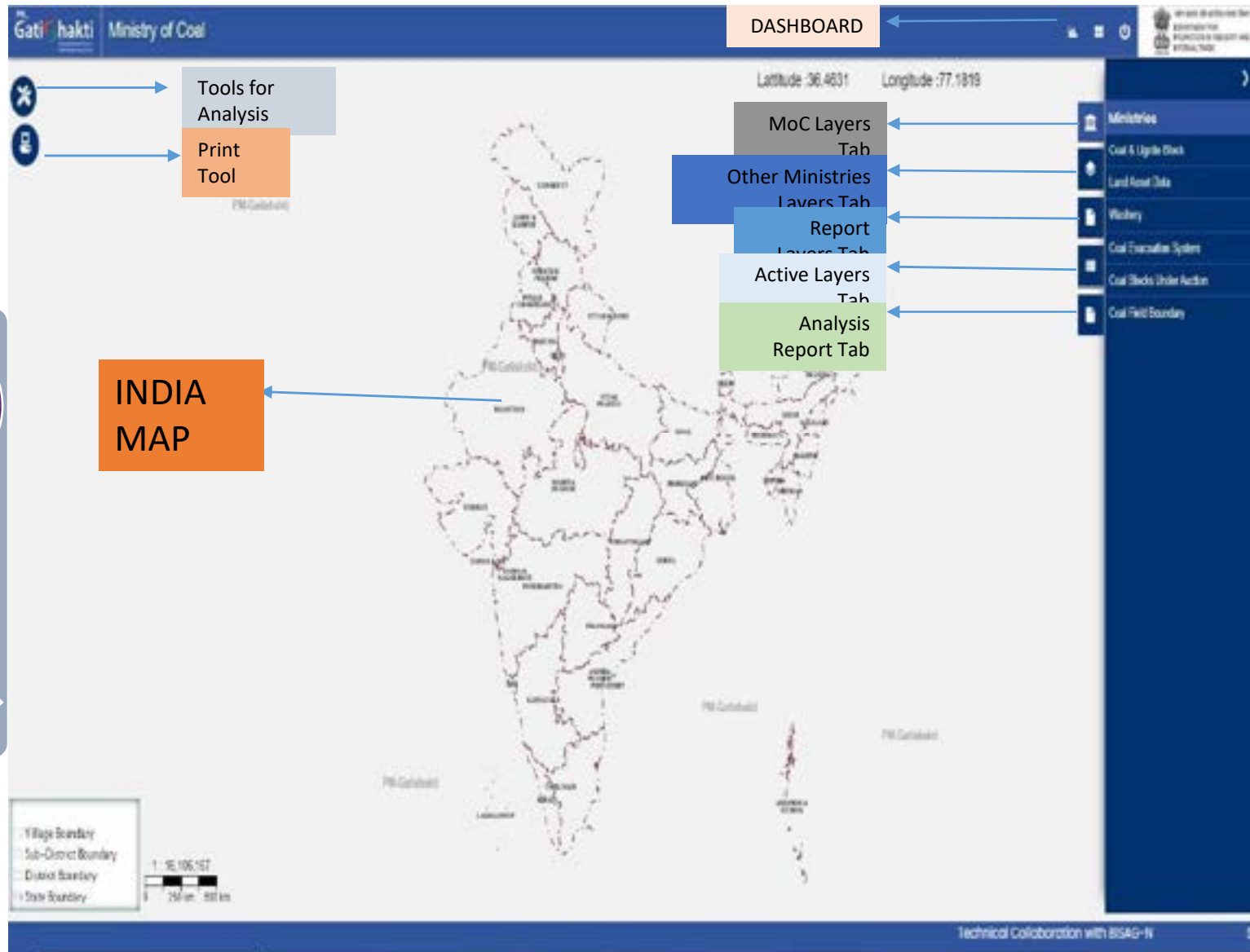
**Jointly Suggested by Mo.Power &
Mo.Coal Using PM GatiShakti
Portal**

**THANKING
YOU**

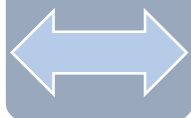


Customised tools available at
MeC Portal





MNP portal
after login
redirects to
India Map on
GIS platform





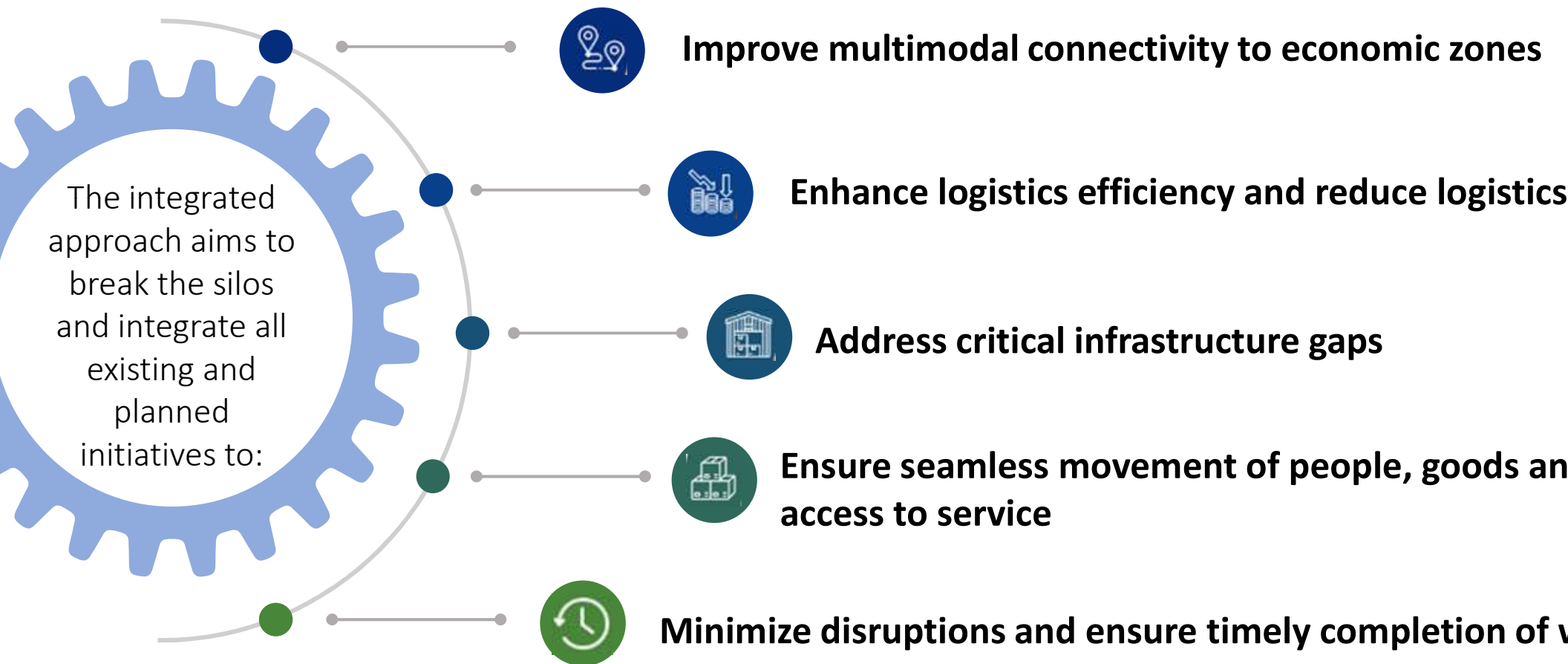
भारत 2023 INDIA

GatiShakti NMP

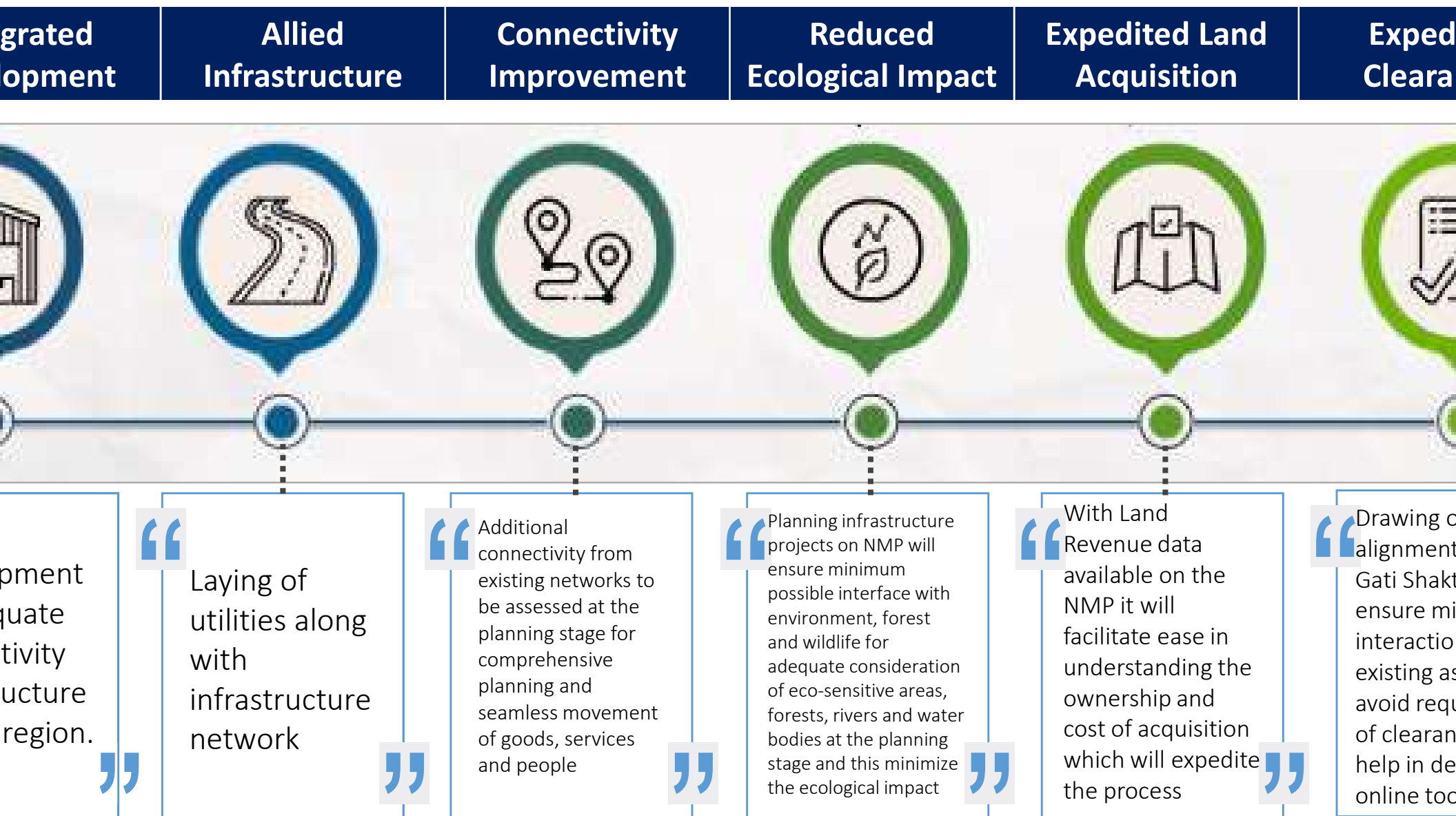


What is PM Gati Shakti?

PM Gati Shakti is a transformative approach for integrated and holistic planning across infrastructure and user Ministries/Departments.

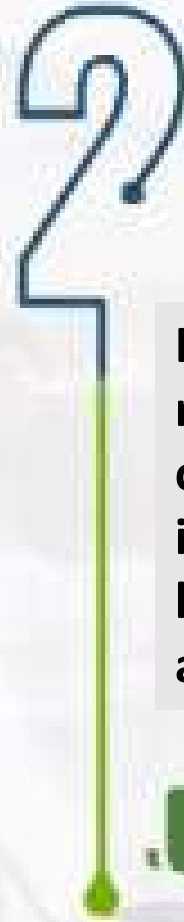


PM Gati Shakti : The Six Principles

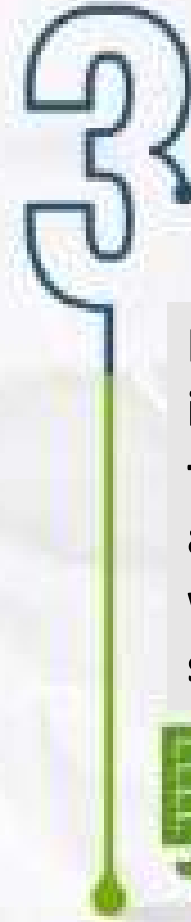
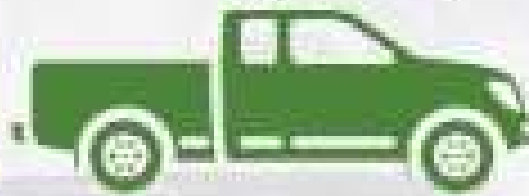


NMP Portal Major Features

Prevent duplication of work
and create a single window
system for infrastructure
planning



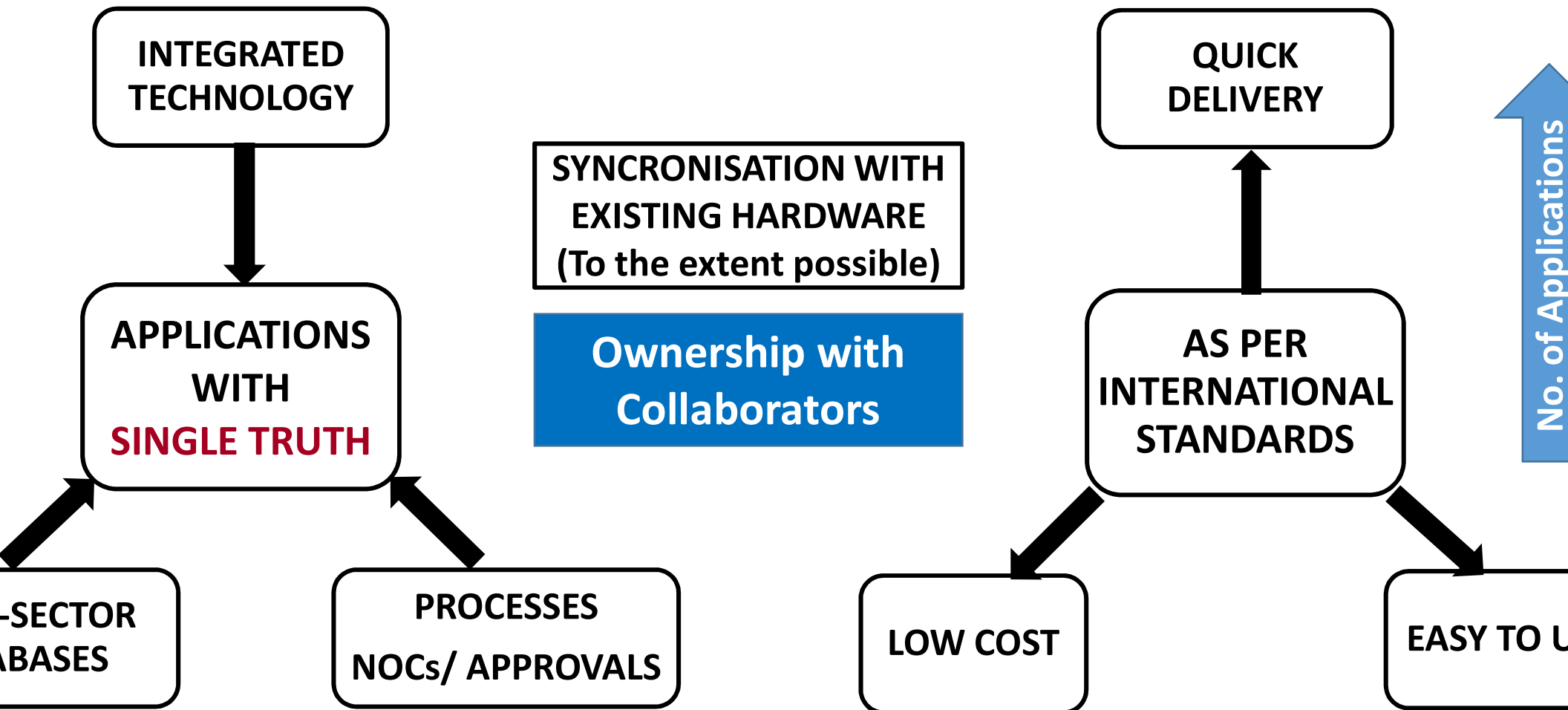
Individual portals with
necessary data layers
critical for
infrastructure and
logistics development
are being developed.



NMP can be used for
infrastructure planning
first understand the
available infrastructure
which leads to better
selection.



A Framework



Conceptualized by 'MeitY' through stake-holders consultation

Technologies used



**Geo-spatial
Information Technology
ERP
Artificial Intelligence
Database Systems Management
Mobile App
Image Processing
Open-source Technologies
Remote Sensing
Spatial Computing**

(In house / Open source)

**Additional tools are developed
for sector specific applications
on case by case basis**

Developed under R&D Programme of MeitY

Shakti Large Scale Database: Characteristics

i-Sector (Purpose)

3D/4D/5D

Standardized

Authenticated

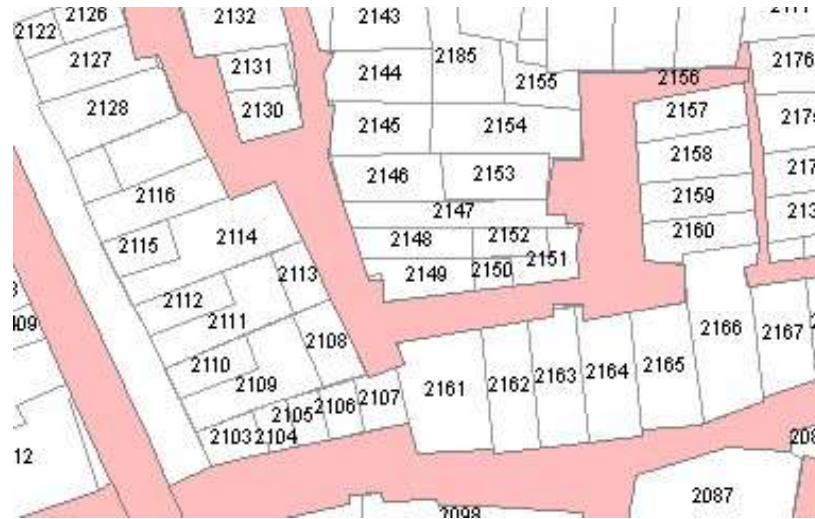
ated

Compatible

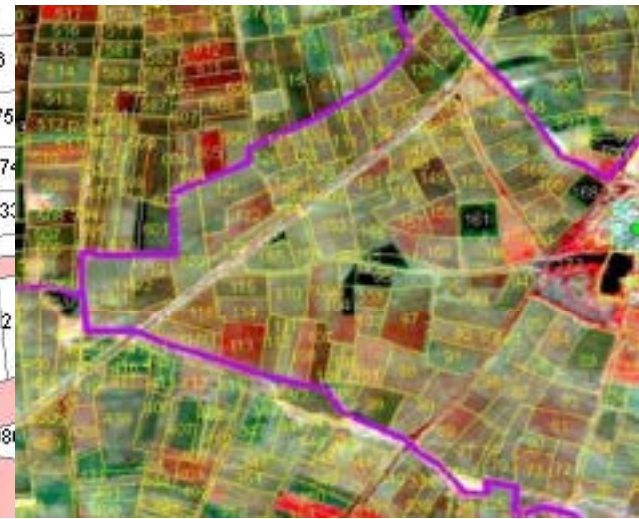
Common

Seamless availability in any format

Source Ownership Level (Individual /Group /Community, etc.)



City Survey Map



Village Map on Satellite

Base : [Seamless Geo-referenced, High resolution Satellite Image](#)

Case of Food & Civil Supply Godown, Anand, Gujarat



New erection of transmission line directly above the Godown building



**Higher Part of build
under transmission
need to be remove**



Regulation Implementation



REGULATION: EXAMPLES

Sanctuary/ National Parks

Ecologically sensitive zones

Forests

Water-body (River, Pond, Lake..)

Urban habitations

Mineralized zones

Infrastructure (Road, Railway...)

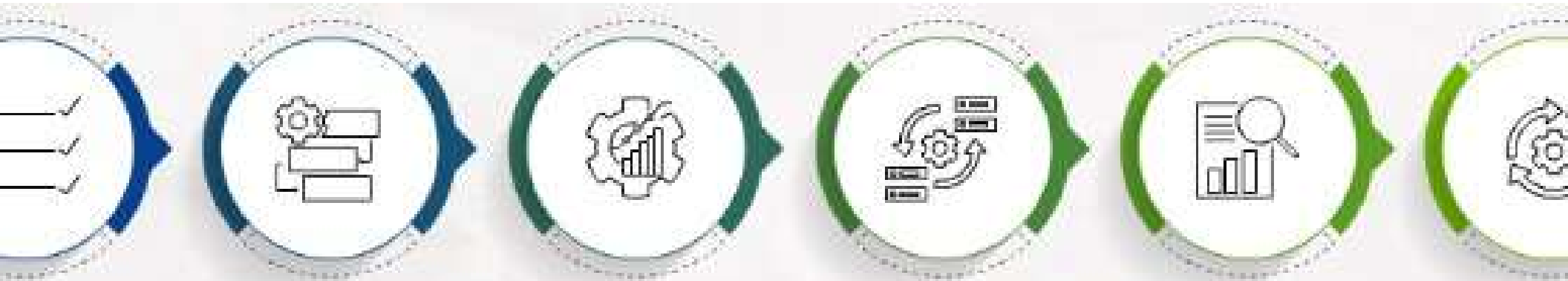
Sectoral Guidelines/ Regulations

- Heritage/ Monuments
- Coastal Regulation Zones
- Gochar/ Common Lands
- Man Made Hazard Zone
- Natural Hazard
- SEZ
- Wetlands
- CPCB guidelines for Industry

An Integral Part of Planning

Outcomes of PM Gati Shakti

an integrated approach, PM Gati Shakti aims at achieving efficiency through



Inclusiveness

Prioritization

Optimization

Synchronization

Analysis

Dynamic Planning

Inclusiveness will be obtained by combining all ongoing or planned projects from different ministries into a centralized platform that gives visibility to all stakeholders.

Prioritization will be attained by enabling different departments to prioritize their projects through inter-ministerial/departmental interactions.

Optimization will be attained through enabling different ministries in planning for modification, expansion or new projects after identifying crucial gaps.

Synchronization will be attained through providing visibility and coordination in planning and implementation of projects of individual Departments or Ministries, thereby avoiding delays, clashes or unsystematic development.

Analysis will be possible by providing entire data at one place with GIS-based spatial planning and analytical tools like land use, existing structure, soil quality etc. enabling better visibility to the executing agency.

It is dynamic planning, identifying interventions, improving infrastructure, updating the Master Plan. This plan involves all ministries to do a joint analysis and development of a sectoral plan.

Modules/Tools Developed in NMP



Name of Tool/Module	Characteristics	Impact
Search	To search the different location on map	
Navigation	To navigate through the different hierarchy of departments	Userfriendly ease of navigation
3D Terrain Module	To visualisation of 3D imagery with terrain, altitude, etc.	Enhanced Visualization for analysis
Swipe layer	To visualise the 2 layers on one another by swiping	Temporal analysis
shortest root between two point	To identify the shortest distance route based on the network available	Time effective, provides Clear and h approach
drag & Drop KML/KMZ	To Visualize the .KML/.KMZ file easily	Visualization of the spatial data
Find location	To search the location on map from coordinates	
No go area	To identify the area which is not usable for particular asset based on the different criteria	Time effective, provides Clear and h approach in planning new infrastruc
KML intersect with layers		
Measure Distance	To calculate the distance based on the line drawn on the map	Quick and handy analysis
Query Module	To build queries on different attributes of layer	Enhanced analysis
Zoom in ,Zoom out	To visualise the various features on map at different scale	Effective Visualization of the spatial

Modules/Tools Developed in NMP



Name of Tool/Module	Characteristics	Impact
Search by latitude longitude	To search the location on map from coordinates	
Search Toposheet grid		
Default MAP	To clear the displayed layers on map and reach at the home page of the portal	Userfriendly, ease the use of the p
DPR Tool for MoRTH	To fix the alignment of new/ Upgradation road and identify the obstruction in the route	Time effective, provides Clear and approach
Site suitability checking		
Add GAP Project	To share the gap in connectivity with concern implementing agency	Enhanced coordination, clear appr
Layer Editing		
Layer Deleting		
NH Validation tool for MoRTH		
Print Module	To prepare a map including necessary layers and other details	Effective Documentation with the visualisation
Add Bookmark		
Vertical Profile	To identify the nature of the terrain and slope	Effective Planning, time effective
Line of Sight		
Shortest distance for OFC network	Tower fiberization, Cost Calculations, RoW Approvals	Department of Telecom (DoT)
ROW Permission		
Proximity population count		
5G planning	RF/Tower Prediction	Time bound 5G rollout
enerate population for town extend		

Modules/Tools Developed in NMP



Name of Tool/Module	Characteristics	Impact
5G street furnish planning		
shape file upload		
excel upload		
Add special assistance project		
MAP NPG Project	To map the NPG projects with concern implementing agency	Effective Visualization with the project details
Proximity Module	To analyse the proximity of feature on map	Provide Holistic approach with visualization
verify layers	To authenticate the data integrated into the portal through the concern department	Improved database quality and usefulness
Mark Road in Haryana portal		
Mark Electricity line network mapping in Punjab portal		
Zone wise navigation for Railway Ministry	To navigate through the different hierarchy of departments	User-friendly ease of navigation
Tool integrate with IPRSM Dashboard for Railway ministry		
Site suitability tool for Tourism Ministry		
Good shad proximity Analysis for Railway Ministry		
Add Revenue ownership detail in cadastral Punjab		
DPR Tool for Railway	To fix the alignment of new/upgradation rail and identify the obstruction in the route	Time effective, provides Clear and holistic approach
Port Projects Monitoring Module	Project Information, Project Monitoring	Port wise Project Management and Monitoring

Modules/Tools Developed in NMP



Name of Tool/Module	Characteristics	Impact
Berths Utilization Module	Dynamic Realtime Updation, Tracking and Monitoring	Port Operation performance Management Monitoring
Commodity Handling Module		
Financial Analysis Module		
Road Connectivity Module	Dynamic Realtime Updation, Tracking and Monitoring of connectivity	Port Connectivity performance tracking and
Rail Connectivity Module		
Pipeline Connectivity Module		
Coastal Shipping Module		
Dredging Performance Module	Dynamic Realtime Updation, Tracking and Monitoring of Dredging	Dredging Performance tracking and moni
Land Utilization	Dynamic Realtime Updation, Tracking and Monitoring of Port Assets	Port Assets Management
Warehouses		
Urban Infrastructure		
Land Infrastructure		
Modify Tool	To modify the alignment as per requirement	Obstruction such as forest, mining etc. can well as important places can be covered a stage of alignment planning
Chainage Tool	To generate the chainage for the new alignment at required intervals	It helps to refer the precise location on the
Analytical Tool	To identify the Utility shifting within the ROW of alignment	Obstruction falling in the ROW such as ele OFC and other cables, pipelines at the ear alignment planning
Crossing Tool	To identify the location of alignment crossings with Road, Rail, River, Canal etc.	

NOC Developed in NMP



Department	Name of NOC
Revenue Department	Land Acquisition – Private Land
Revenue Department	Land Acquisition – Government Land
Forests & Environment Department	Certificate of Non Forest Land
Forests & Environment Department	Letter for Distance from the Forest
Forests & Environment Department	Forest Department – No Objection Certificate
Forests & Environment Department	Forest Clearance – Integration with Parivesh
Public Works & Building Department	Road Crossing/ Cutting Application
Culture, Farmers Welfare & Co-operation Department (Director of Fisheries)	NoC to carry out mining as well as related work within 10 km of the 107 notified fishing harbors/ fish landing centers
Culture, Farmers Welfare & Co-operation Department (Director of Fisheries)	Issuance of NOC for allotment of land for salt industry.
Energy & Petrochemicals Department	GPRD - Distribution Lines of Discoms
Energy & Petrochemicals Department	GETCO - Approval Line/Pole Shifting of Transmission Lines

Sr. No.	Department	Name of NOC
12	Energy & Petrochemicals Department	GEDA - Wind and Wind Solar Projects- Developer Permission Commissioning Certificate
13	Energy & Petrochemicals Department	GEDA - Wind and Wind Solar Hybrid Projects-Transfer Permission
14	Energy & Petrochemicals Department	GEDA - Registration of Ground Solar Power Project and Commissioning Certificate
15	Energy & Petrochemicals Department	DoP - Well, Installations (ONGC, ETC)-Construction Activity
16	Energy & Petrochemicals Department	GSPL - NoC for Pipeline crossing
17	Energy & Petrochemicals Department	GGL/SGL - Pipeline crossings (Gas, Fiber and Steel)
18	Energy & Petrochemicals Department	DoP - Mining Lease Application
19	Energy & Petrochemicals Department	DoP - Exploration License Application
20	Energy & Petrochemicals Department	GETCO - NoC for NA use of land
21	Energy & Petrochemicals Department	GETCO - Right of Use Application
22	Energy & Petrochemicals Department	GSPL - Non Agriculture (NA) – C

NOC Developed in NMP



Mineral and Mines Department	GPCPSIRDA – Issuance of Development Permission
Mineral and Mines Department	GPCPSIRDA – Issuance of Building Use Permission
Mineral and Mines Department	GPCPSIRDA – Issuance of DP Part Plan and Zoning Certificate
Mineral and Mines Department	GIDC - Bin Kheti NoC
Mineral and Mines Department	CGM - NoC for using mineral bearing area for any purpose other than mining
Mineral and Mines Department	DSIRDA - Issuance of Development Permission
Mineral and Mines Department	DSIRDA – Building Use Permission
Mineral and Mines Department	MBSIRDA- Issuance of Development Permission
Mineral and Mines Department	MBSIRDA- Building Use Permission
Water Resources, Water Supply and Kalpasar Department	SSNNL – Permission for Canal Crossing
Water Resources, Water Supply and Kalpasar Department	Water Resources - Permission for crossing of Notified Rivers / Nalas/ Canal/drains
Water Resources, Water Supply and Kalpasar Department	GWSSB/GWIL – Water Supply Connection
Water Resources, Water Supply and Kalpasar Department	Kalpasar : Permission for crossing of Notified Rivers / Nalas/ Canal/drains
Ports and Transport Department	GMB - NoC for Salt Pan

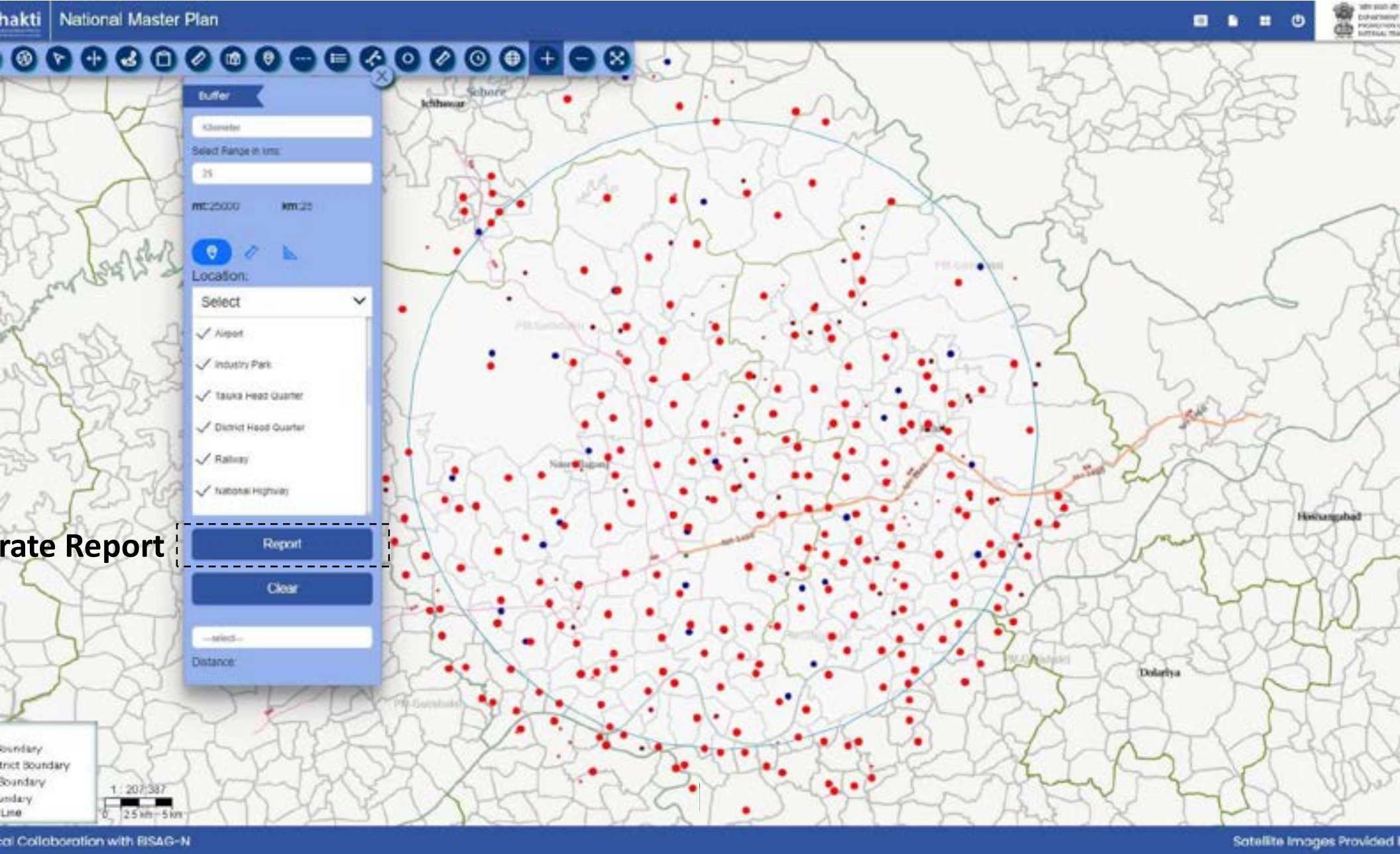
37	Ports and Transport Department	GMB - NoC for Jhinga Ucher
38	Ports and Transport Department	GMB - Land Reclamation
39	Ports and Transport Department	GMB - Intake-outfall of pipel
40	Sports, Youth & Cultural Department	Director of Archaeology - NoC (Residential /Commercial, Institutional & Public & Community)
41	Tourism, Civil Aviation & Pavitra Yatraadham Department	Civil Aviation – Height Clearance
42	Urban Development and Urban Housing Department (GUDM)	Mobile Tower Application
43	Urban Development and Urban Housing Department (GUDM)	Fire NoC
44	Urban Development and Urban Housing Department (GUDM)	Building Use Permission
45	Urban Development and Urban Housing Department (GUDM)	Building Construction Permission
46	Urban Development and Urban Housing Department (GUDM)	New Water Connection Permission
47	Urban Development and Urban Housing Department (GUDM)	New Drainage Connection Permission
48	Urban Development and Urban Housing Department (GUDM)	OFC Cable Installation Permission
49	Urban Development and Urban Housing Department (GUDM)	Gas Pipeline Installation Permission

ct Geometry

Select Layers



Key Tools: Proximity Tool



Key Tools: Proximity Tool

Census Report: State – Madhya Pradesh

Search: _____

	Village	Name	State	Total Population
30	Bisoni Khurd	Bisoni Khurd		481
4	Jeerawah	Jeerawah		992
2				0
6	Bhimgaon	Bhimgaon		686
44	Nausar	Nausar		2788
73	Bajaniya	Bajaniya		2043
8	Nirhi	Nirhi		1118
93	Bisoni Kalan	Bisoni Kalan		2452
98	Narharkola Khurd	Narharkola Khurd		942
5	Media Khedi	Media Khedi		6

Showing 1 to 10 of 343 entries

Total Population: 340427.00

Previous 1 2 3 4 5 ... 36 Next

National Highway

Search: _____

	Name	Length
6	NH 146B	49.815

State Highway

Search: _____

	Name	Taluka	Village
6	SALKANPUR		

Proximity Tool Report

Key Tools: Know your permission



The screenshot displays the Shakti National Master Plan software interface. The main map area shows a geographical region with a blue path drawn across it. A tooltip indicates the path length as 131.69 km and prompts the user to 'Click to continue drawing the line'. The interface includes several toolbars and panels:

- Top Toolbar:** Contains various icons for map navigation and editing. One icon, representing a free-hand path tool, is circled in red.
- Left Panel:** Labeled 'Permission', it lists various land use categories such as Road, Railway, River, Forest, Monuments, Eco Sensitive Zone, Sanctuary, and CRZ. A dashed red box highlights the 'Select Geometry' tool (represented by a blue line icon) and the 'Select Layers to get permission' section.
- Right Panel:** Labeled 'Layers', it lists various data layers including High Resolution Image, Administrative Boundary, Census 2011, Ministry Wise High Impact, Specific Action Plan, National Infrastructure Plan, Gap Analysis, MPO Project, Scheme, Logistics, Economic Zones, Infrastructure, Multimodal Project, Network of Logistics Park, Others, Health, Up Coming Project, MOWHA Project, Health Facilities, and SOI.
- Bottom Left:** A scale bar indicating a scale of 1:748,409, with markers for 0, 10 km, and 20 km.
- Bottom Right:** A watermark text that reads 'Activate Windows Go to Settings to activate Windows'.

Key Tools: Know your permission



Use cases of PM GatiShakti



Ministry of Railways (MoR)



Ministry of Coal



Ministry of Road Transport and Highways (MoR)



Ministry of Skill Development and Entrepreneurship



Department of Telecom (DoT)

PM GatiShakti NMP– Indian Railways

ay Ministry- Existing Database(Railway Network, Station, Cargo Terminal, Good Sheds, Railw
ing projects etc..)

analysis

es Connectivity

connectivity

connectivity

ict Head Quarter Connectivity

Area Connectivity

reparation

ay Project Monitoring (Drone , Web Camera, Project Monitoring Tool- IRPSM)

ay Electrification

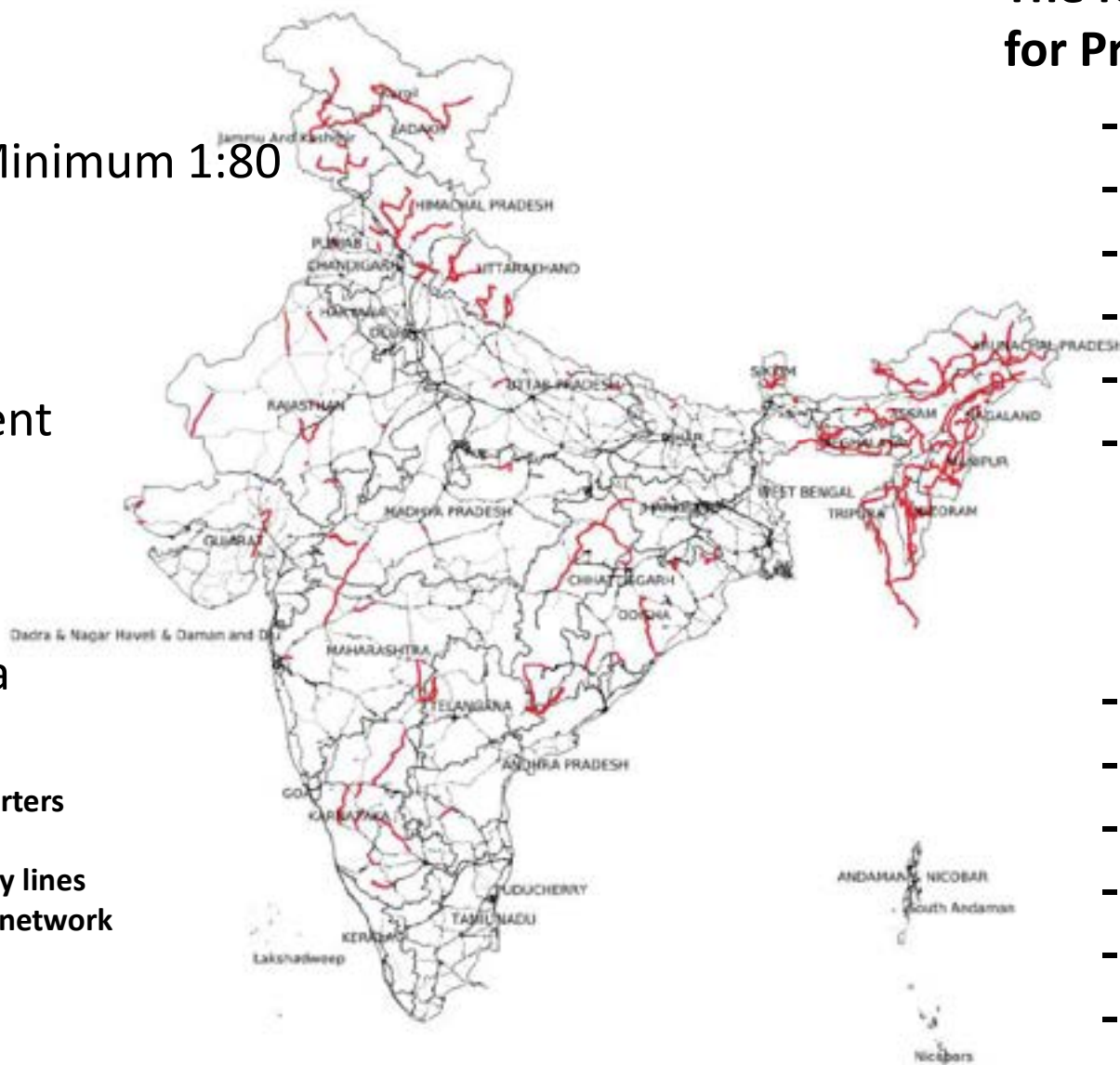
Ministry of Railways: Hilly Area Connectivity

Considered Gradient: Minimum 1:80
Slope: 4 to 6 Degree

12772 km alignment
proposed

New Alignment
proposed for border area
connectivity

- ▲ District Headquarters
- State Boundary
- Proposed Railway lines
- - - Existing Railway network

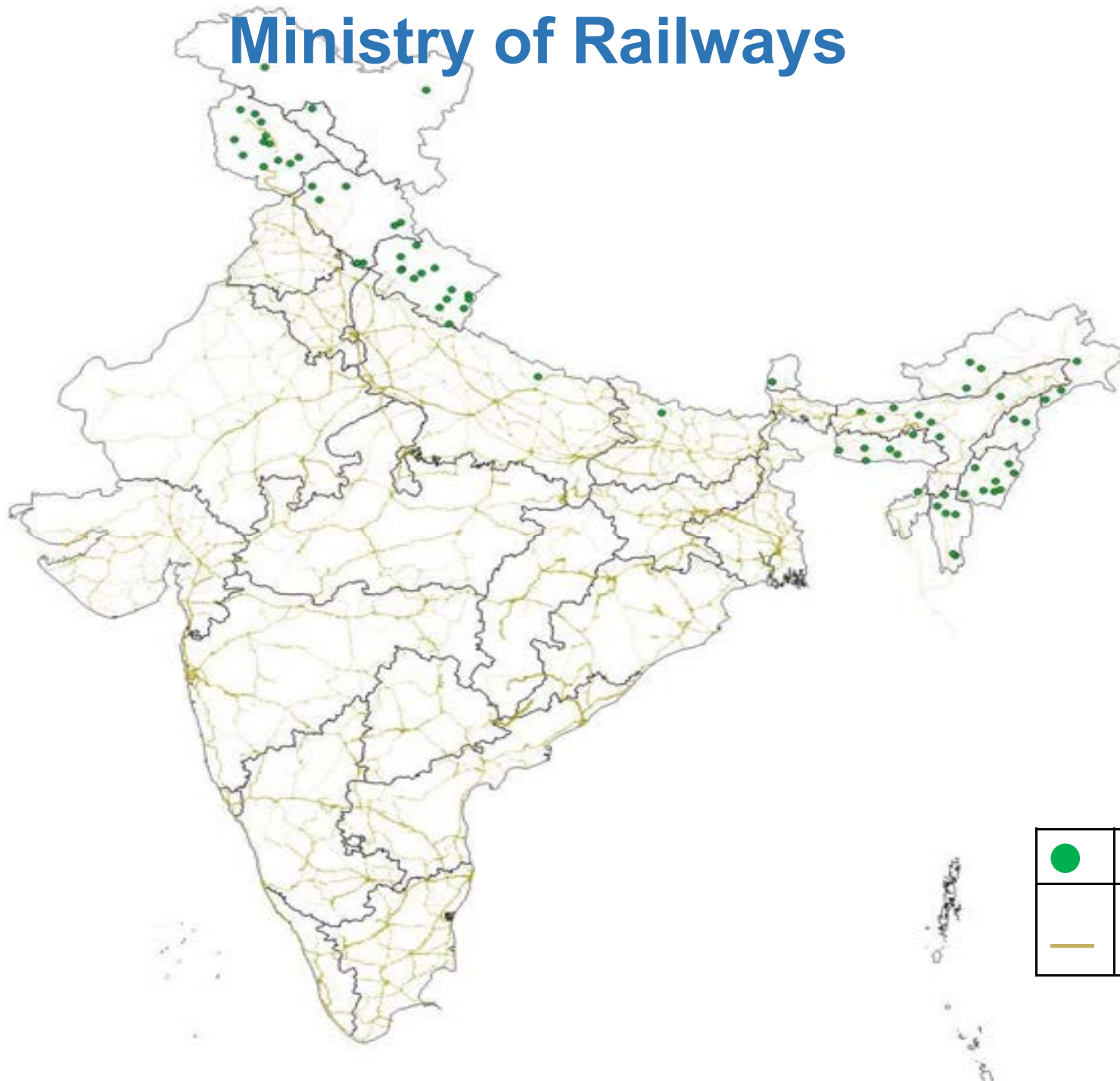




The following areas **to be**
for Proposal

- Forest
 - Sanctuary
 - Eco Sensitive Zone
 - Mining
 - Gradient below 1:
 - Curve less than 4 D
-
- District Headquarters
 - Habitation
 - Existing Railway network
 - Tourist Places
 - Industries
 - Heritage/ Monuments

Ministry of Railways

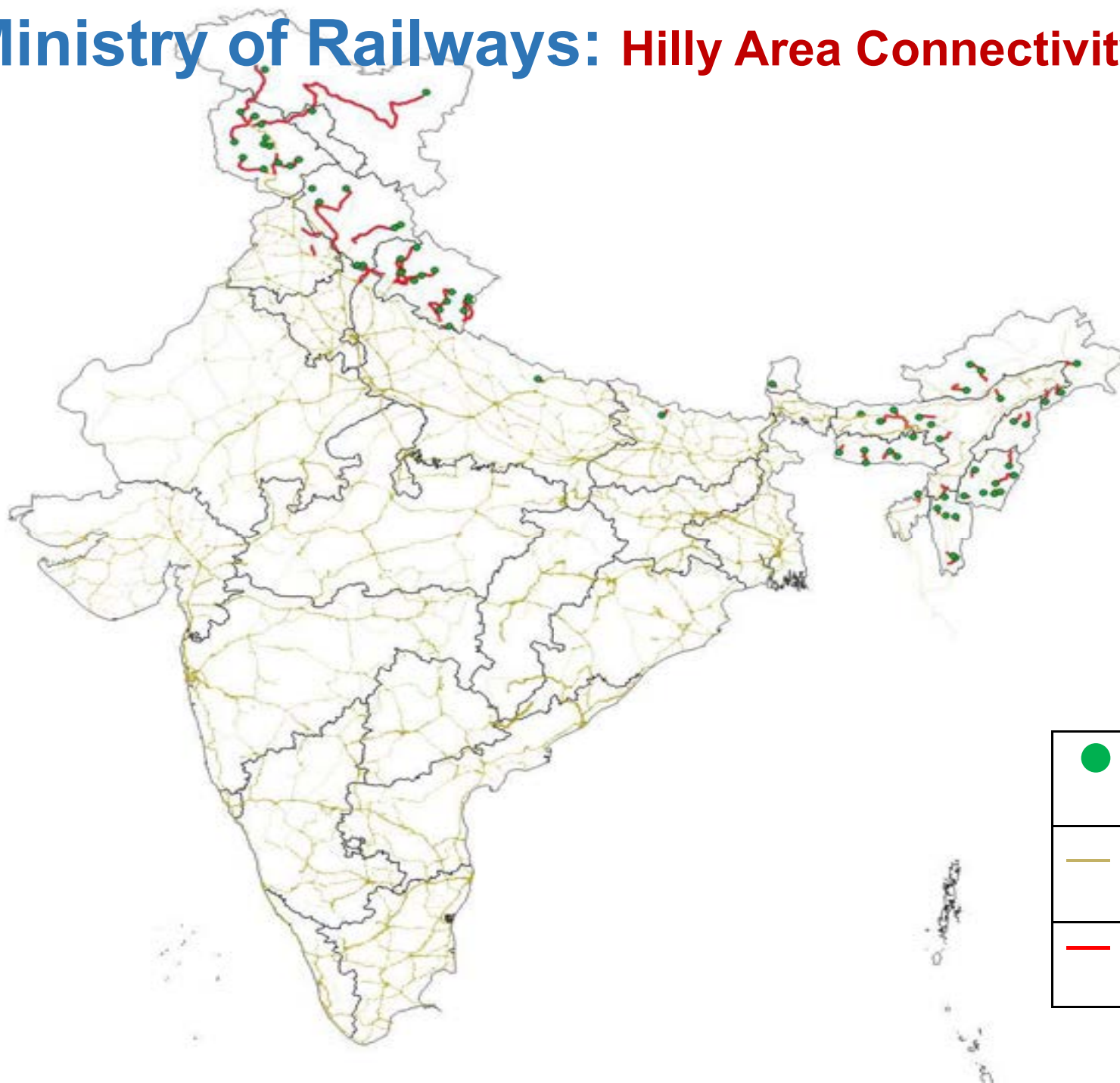
ected District
quarter Railway






	District Head Quarter
	Existing and Proposed Alignment

Ministry of Railways: Hilly Area Connectivity

ted District
quarter Railway



	District Head Quarter
	Existing and Proposed Alignment
	Connecting Head Quarter Alignment

Ministry of Railways: Hilly Area Connectivity

Name	length	State Name
Lohit	29.844	Arunachal Pradesh
Changlong	41.067	Arunachal Pradesh
Longding	40.19	Arunachal Pradesh
alukmong To Pasighat Connecting Seppa, Along	61.922	Arunachal Pradesh
Kra Daadi_kurung Kumey	78.255	Arunachal Pradesh
Baksa	98.029	Assam
Barpeta	65.631	Assam
Darrang-mairabari	39.314	Assam
Kolasib	47.875	Assam
Manjuli	33.682	Assam
Ribhoi-kamalajari	15.644	Assam
West Karbi Anglong-hojai	32.655	Assam
Sheohar To Riga	20.867	Bihar
Yamunanagar To Bharpur(sirmaur) 2	66.715	Haryana
Dehradun To Nahan	79.718	Himachal Pradesh
Dharamshala	35.891	Himachal Pradesh
Hoshiarpur To Jaijjon-nangal Dam	51.671	Himachal Pradesh
Joginder Nagar Kunna Bilaspur Baddi	251.455	Himachal Pradesh
Kinnaur-shimla	173.334	Himachal Pradesh
Keylong-barot	85.546	Himachal Pradesh
Kargil To Ganderbal	149.32	Jammu And Kashmir
Punch	89.015	Jammu And Kashmir
Doda	89.851	Jammu And Kashmir
Ganderbal	18.468	Jammu And Kashmir
Katra To Rajouri	108.588	Jammu And Kashmir
Kishtwar To Doda	37.745	Jammu And Kashmir
Kulgam To Anantnag	12.583	Jammu And Kashmir
Kulgam To Shupiyen	19.33	Jammu And Kashmir
Kupwara	35.081	Jammu And Kashmir
Jammu & Kashmir_32	180.924	Jammu And Kashmir
Ramban To Banihal	29.592	Jammu And Kashmir
Sopore To Bandipore	29.244	Jammu And Kashmir

Sr Number	Name	length	
33	Kamjong	51.71	
34	Tamenglong	28.416	
35	Ukhrul	49.901	
36	Chandel	8.579	
37	Pherzawl	28.272	
38	South Garo Hill	28.074	
39	South West Garo Hills	25.242	
40	South West Khasi Hills	31.267	
41	West Khasi Hills	39.748	
42	Williamnagar (MB)	21.858	
43	Lawngtlai	17.57	
44	Mamit	19.154	
45	Saiha	40.093	
46	Saitual	12.77	
47	Mokokchung	25.919	
48	Tuensang	37.077	
49	Rahon-samrala	28.383	
50	West District To Gayzing	9.547	
51	Unokoti	28.057	
52	Shravasti	17.217	
53	Pithoragarh To Tanakpur	107.987	
54	Uttarkashi To Tehri Garhwal	70.55	
55	Almora To Nainital Alignment	29.653	
56	Bageshwar-almora	67.33	
57	Bhaironghati To Rishikesh	158.287	
58	Chamoli	53.413	
59	Pithorgarh	37.161	
60	Garhwal To Rishikesh	89.188	
61	Nainital To Railway Line	139.248	
62	Rudraprayag 2	78.848	
63	Rishikesh To Tehri	51.681	
64	Sitarganj To Kicha	20.874	
65	Tanakpur To Champawat	30.667	
66	Tehri Garhwal	84.916	
67	Jammu & Kashmir_33	564.594	Jan



Alignment Marking

Forest, Sanctuary, ASI Sites, ESZ

Industrial Areas, Mining Areas, Industrial

Park, Industrial estate, Industrial plot,

Auction Mining

Land Acquisition

Govt. Land, Private Land, Forest Land

Tourist places

Proposed RoB, RuB and RoR, Major

Bridge, Minor Bridge, Tunnel

Power line, Gas Pipeline Optical Fiber

Network

Cutting-Filling Analysis

1. Tree Cutting Module

2. Utility Shifting

3. Soil Type, Parent Material

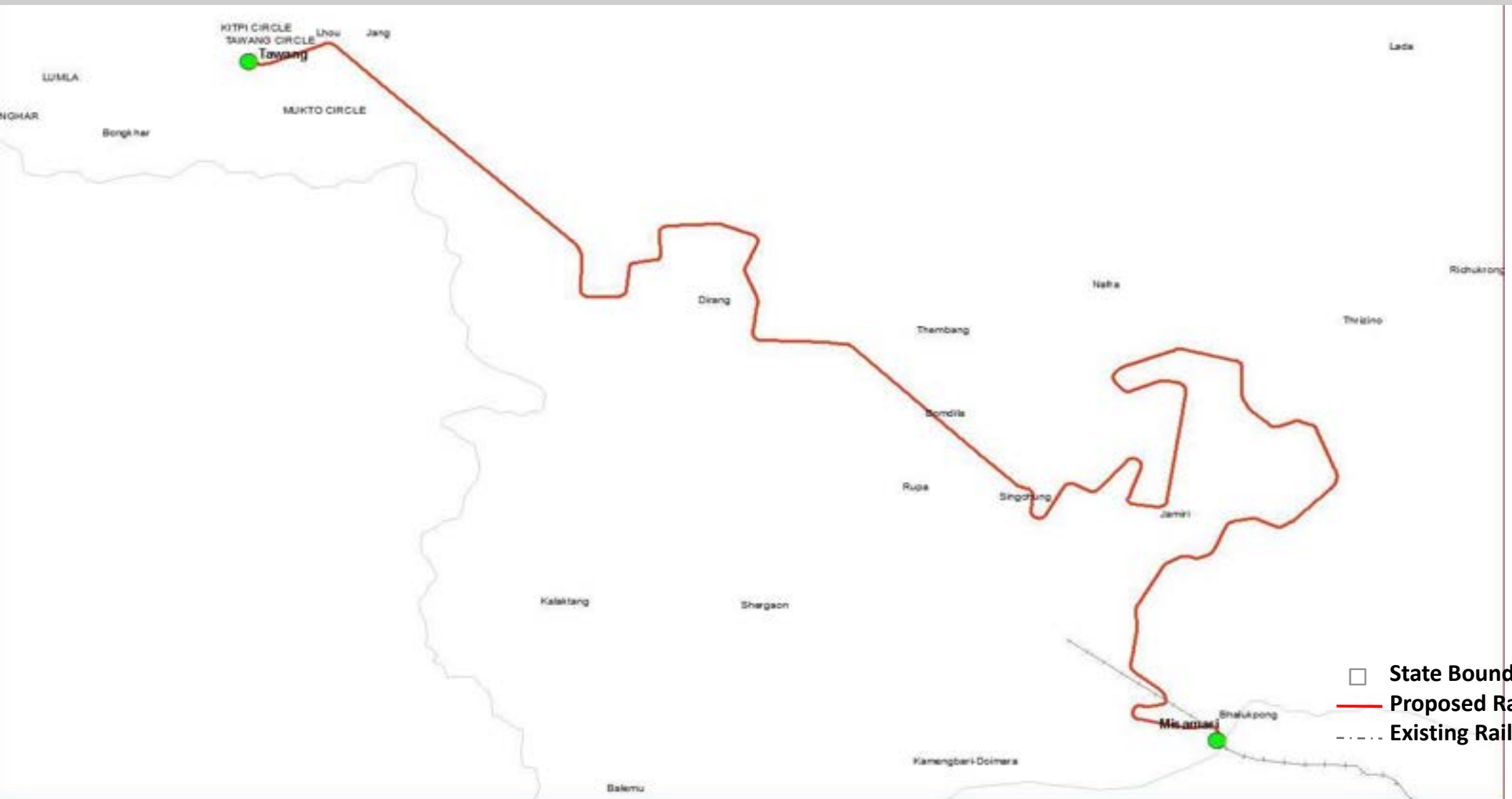
4. NOC Requirement

5. 3D / Terrain Module

6. Slope & Contour

Boarder Area Connectivity

Providing rail connectivity to District Head Quarter: **Proposed rail network (201.75 km)**



Boarder Area Connectivity

Major Parameters: Helipads



- State Bound
- Proposed Ra
- - - Existing Rail
- H Helipads

Boarder Area Connectivity

Major Parameters: **NEEPCO and Bichom Dam location**



- ☐ State Boundary
- Proposed Railway
- - - - Existing Railway
- Bichom Dam

Boarder Area Connectivity

Major Parameters: **Tourist Attraction points**



Border Area Connectivity

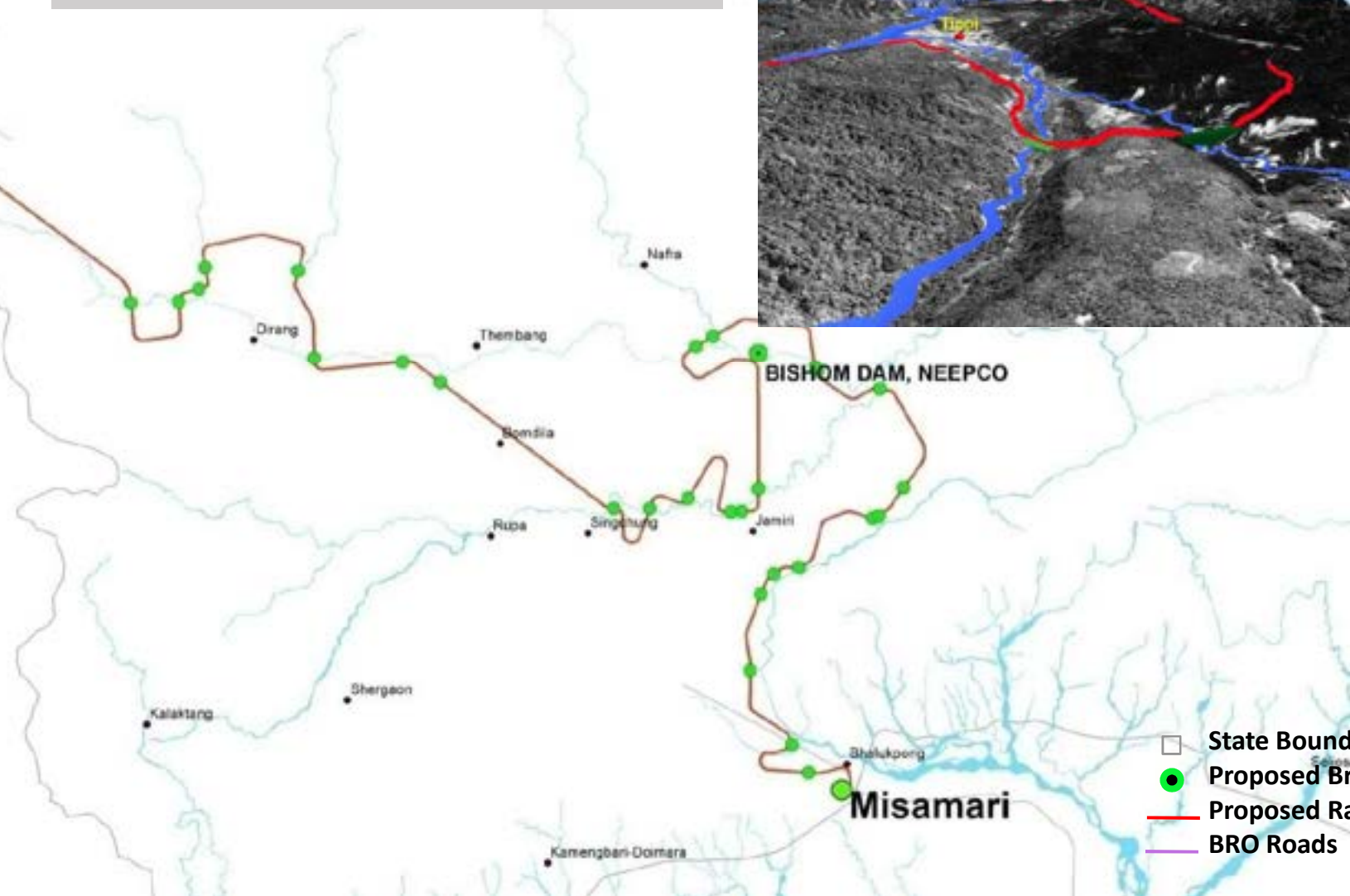


Major Parameters: **BRO Road**

Boarder Area Connectivity

Identified Bridge locations

End Chainage	Distance	Height (m)
4800	200	195
13800	2800	226
21100	800	307
27700	200	341
29800	100	396
33100	2000	402
41300	100	453
42000	400	464
45300	500	505
55700	100	600
62200	100	656
63500	1100	650
74900	400	793
78000	2000	839
96500	100	1014
99700	300	1063
101000	1000	1068
111000	200	1183
115800	1200	1220
122700	400	1290
141100	300	1508
144800	300	1537
153200	500	1616
162200	2400	1661
174500	2400	1753
176600	1500	1676
178400	1100	1758
180300	400	1727
189800	200	1863
221300	300	2066
228900	2000	2065



- State Bound
- Proposed Br
- Proposed Ra
- BRO Roads

Boarder Area Connectivity

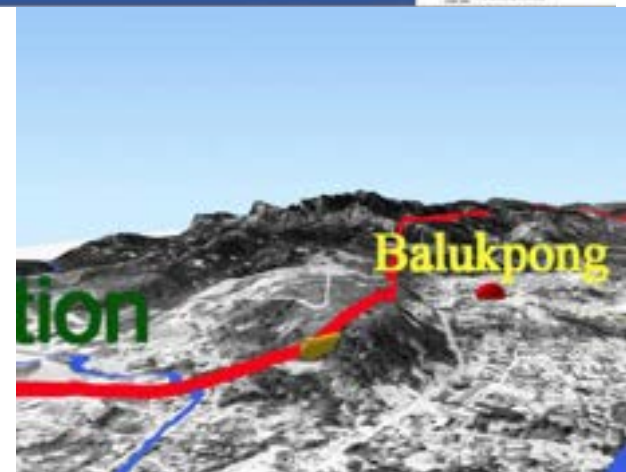
Identified Tunnel locations

End Chainage	Distance	Height (m)
4500	3100	273
9800	5000	252
10300	100	280
20200	6300	379
27400	6200	418
29600	1800	422
31000	1200	453
41100	7900	492
41500	100	509
44700	2600	515
55500	10100	637
62000	6200	721
62400	100	689
74400	10800	918
75900	900	843
96300	18200	1083
99300	2700	1078
99900	100	1079
110700	9600	1206
114500	3400	1262
122200	6300	1340
140700	17900	1569
144400	3200	1580
152600	7700	1665
159700	6400	1656
172000	9700	1732
175000	400	1758
177200	500	1784
179800	1300	1800
189500	9100	1982
220900	31000	2092
226800	5400	2154

State Boundary 250 km 500 km

Technical Collaboration with BISAO-N

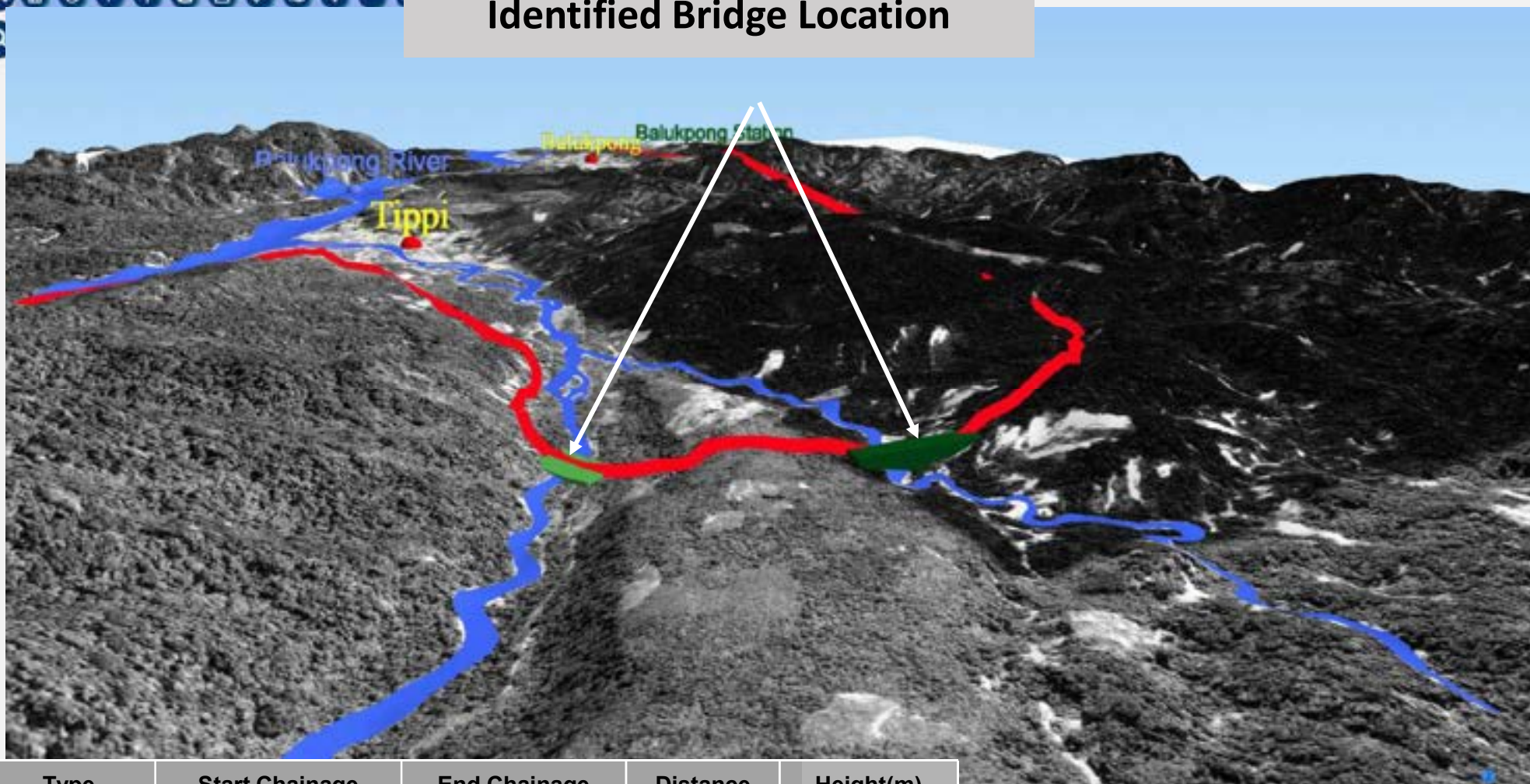
Satellite Images Provided by ISRO



- State Bound
- Tunnels
- Proposed Ra
- BRO Roads

Boarder Area Connectivity

Identified Bridge Location



Type	Start Chainage	End Chainage	Distance	Height(m)
Bridge_1	4600	4800	200	223
Bridge_2	9850	10050	200	243

■ Proposed bridge
— Proposed Railway line

Boarder Area Connectivity

Identified Tunnel locations



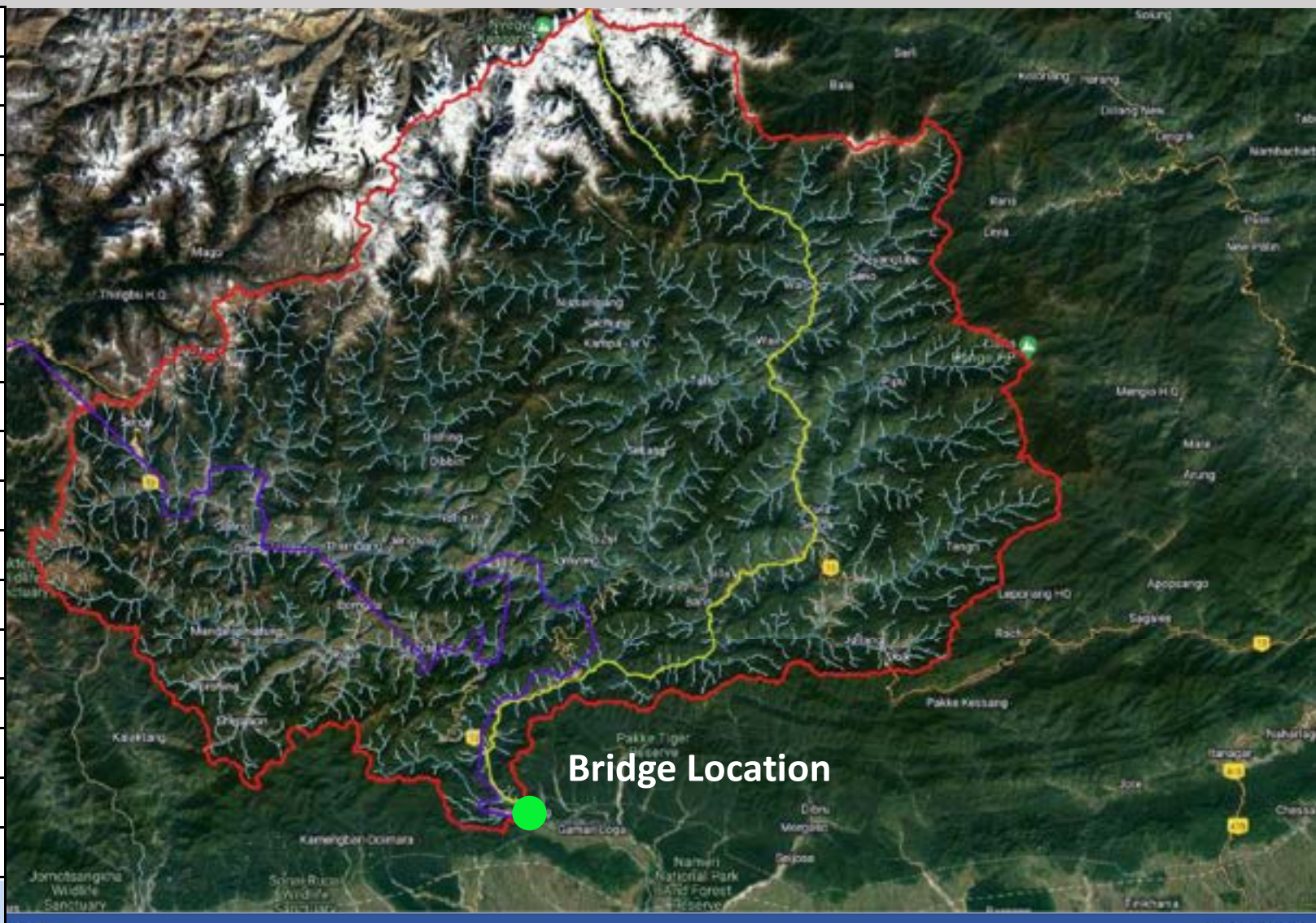
Type	Start Chainage	End Chainage	Distance	Height(m)
Tunnel	1300	4600	3300	189

■ Tunnel
— Proposed Railway line

Boarder Area Connectivity

Discharge Calculation for Proposed Bridge

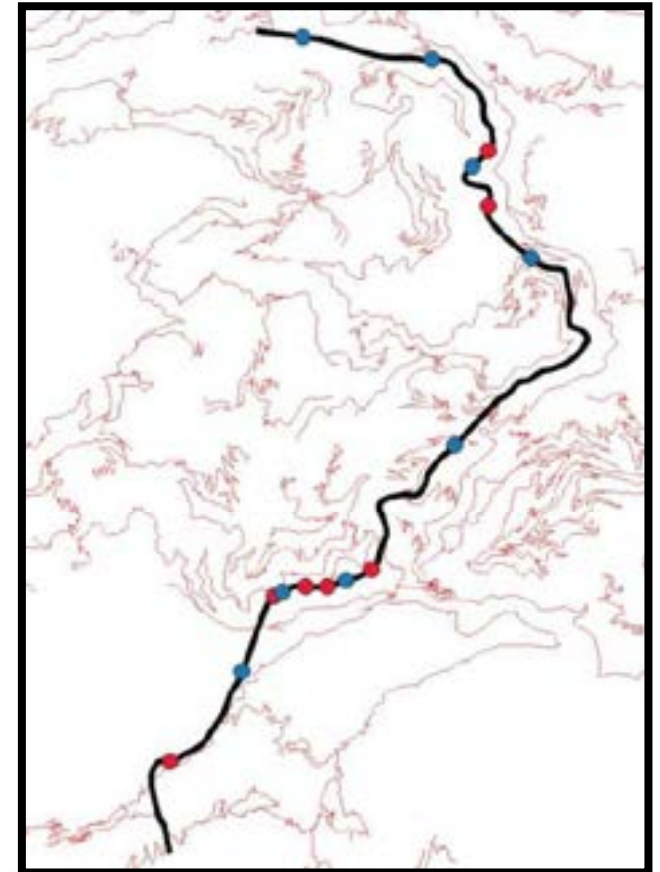
Discharge Calculation of Bridge	
(sq.m)	8972.00
Longest Stream (Mt)	190254.00
Height (Max) (Mt)	6095
Height (Min) (Mt)	131.00
$(H1-H2)/L$	0.03134757
Duration (minutes) = $7 / S^{0.385}$	857.86
Duration (hr)	14.2976034170492
LL (cm)	32.00
on factor)	0.85
efficient	0.80
	0.55
	0.36
	1.53
	118.40
	180.89
(mm/hr)	12.65
c meter/Sec)	25353.89



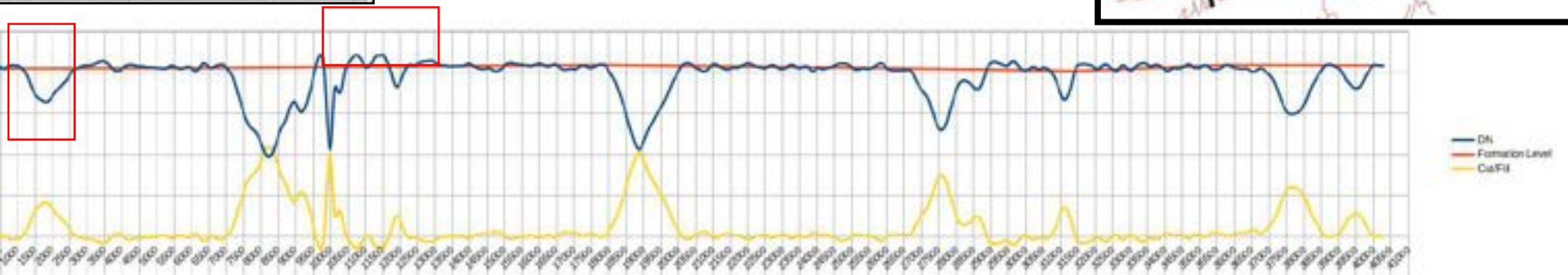
Planning of Railway Connectivity for Sikkim District Head Quarter Connectivity



No of Proposed Tunnels	8
No of Bridge	7

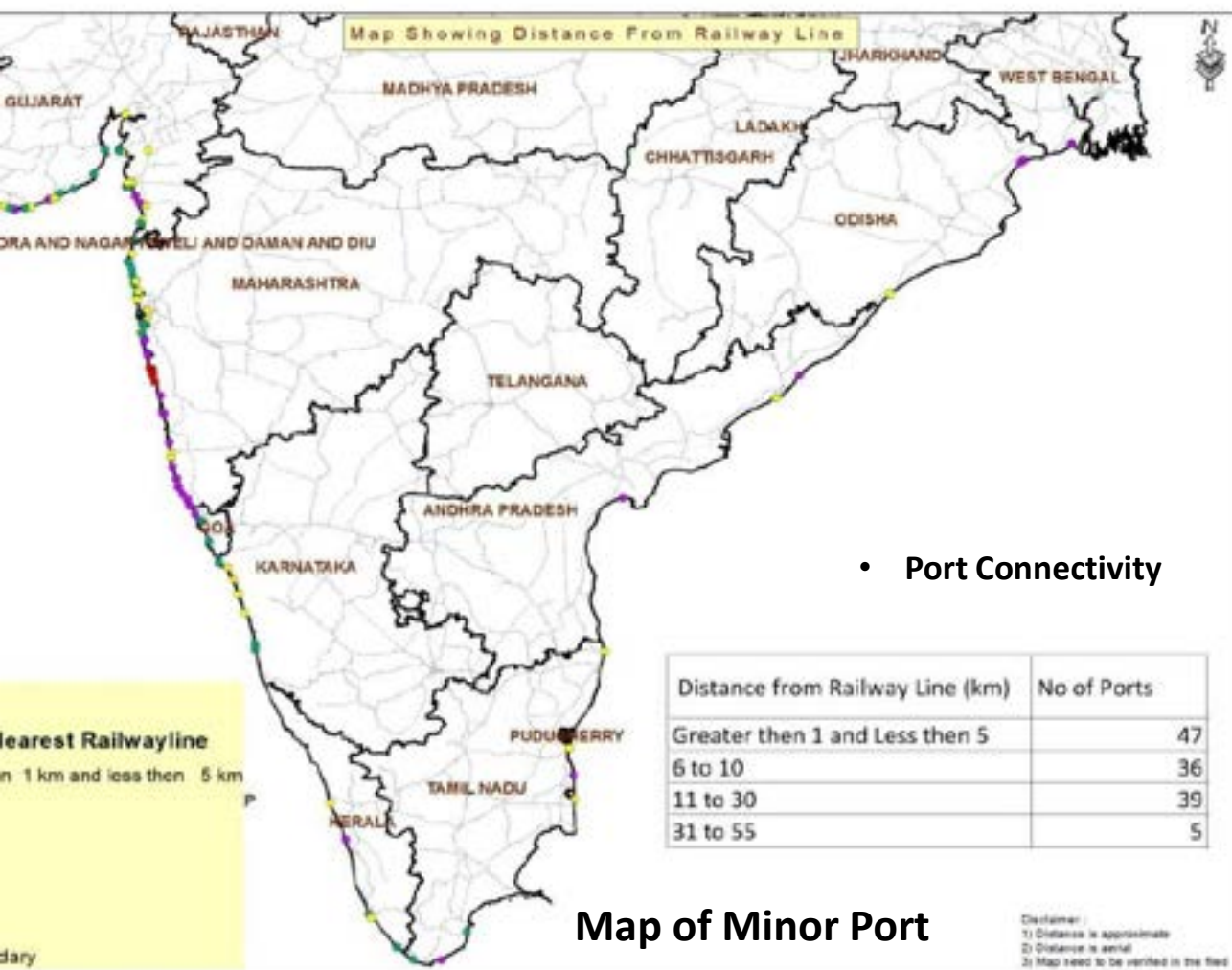


Tunnel



PM GatiShakti NMP-Gap Analysis in Railway Connectivity

Extensive use of Gatishakti portal Gap analysis for railway connectivity is completed for district head quarter, major ports minor ports and mining area



• Port Connectivity



Port Connectivity



Following areas **to be**
for Proposal

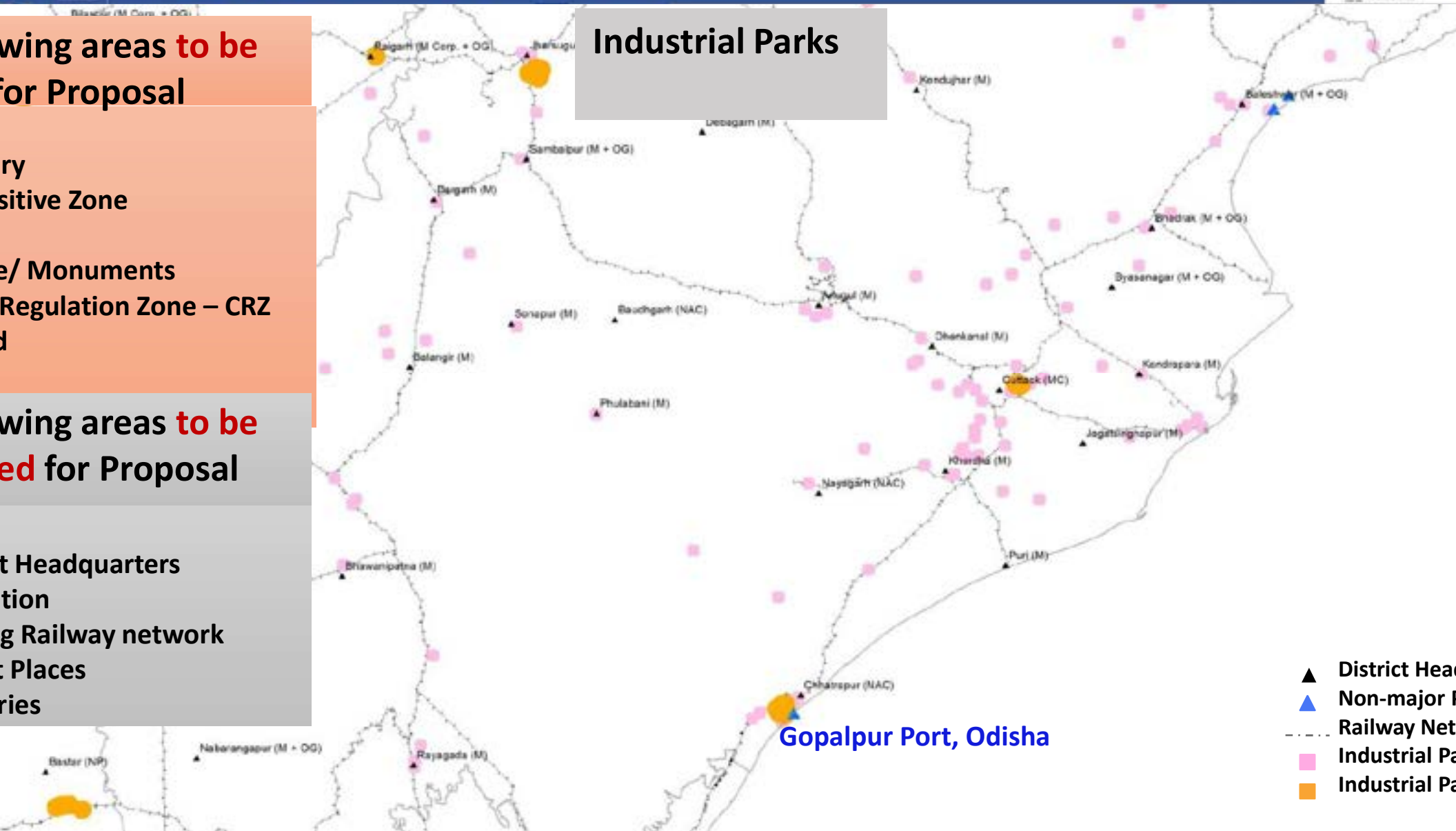
ry
sitive Zone

e/ Monuments
Regulation Zone – CRZ

Following areas **to be**
ed for Proposal

t Headquarters
tion
g Railway network
t Places
ries

Industrial Parks

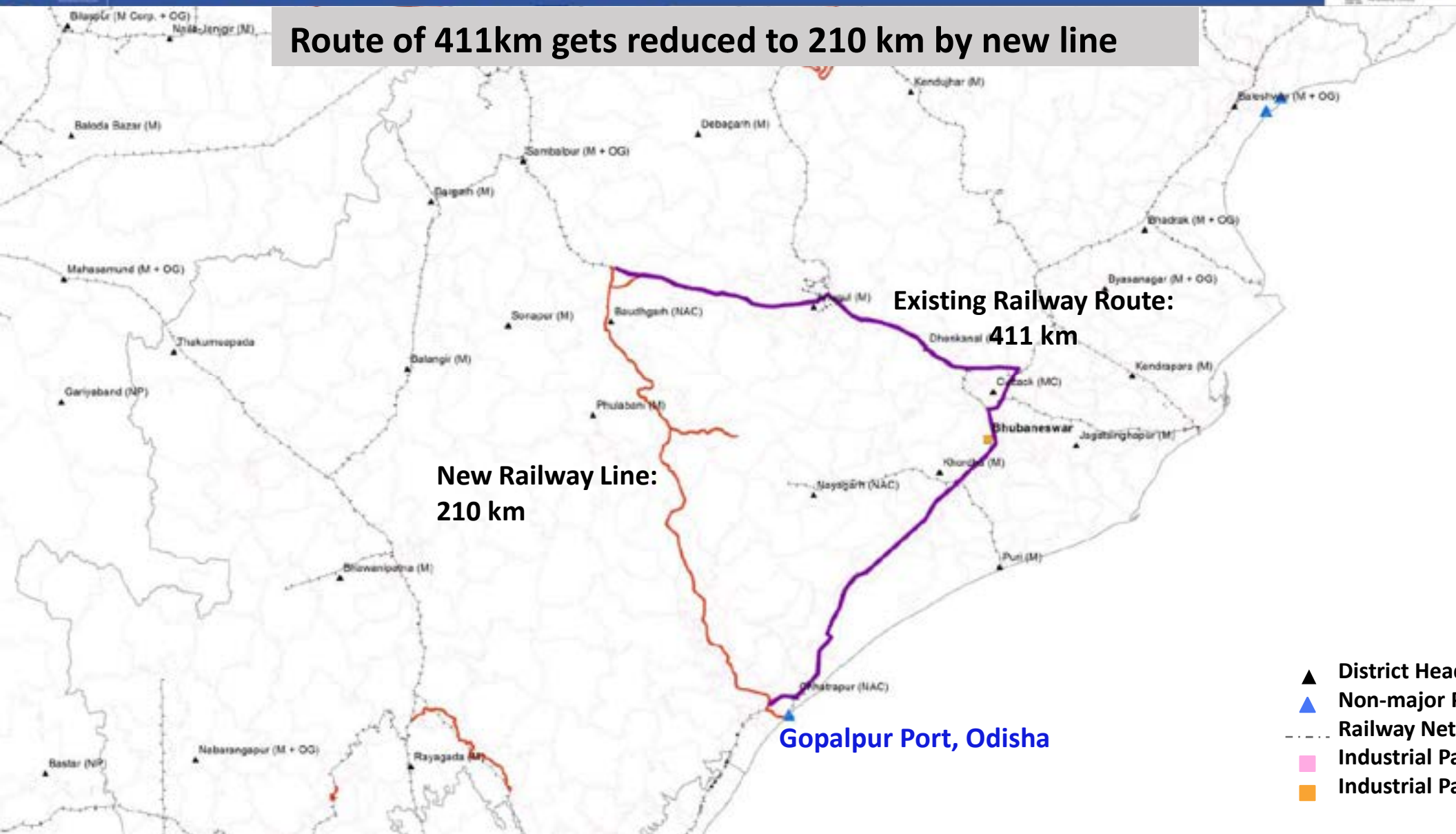


- ▲ District Head
- ▲ Non-major P
- Railway Net
- Industrial Pa
- Industrial Pa

Port Connectivity

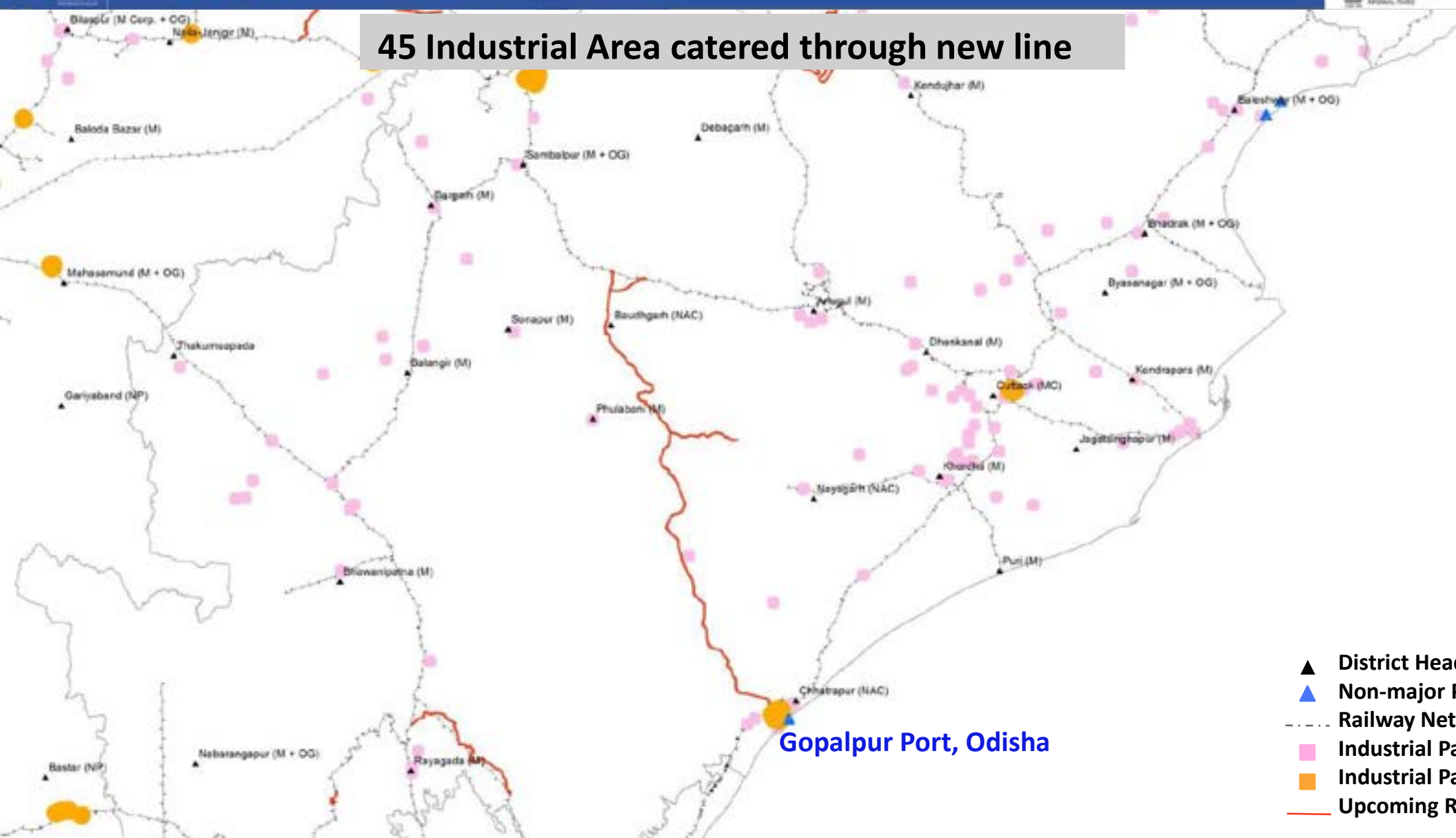


Route of 411km gets reduced to 210 km by new line



Port Connectivity

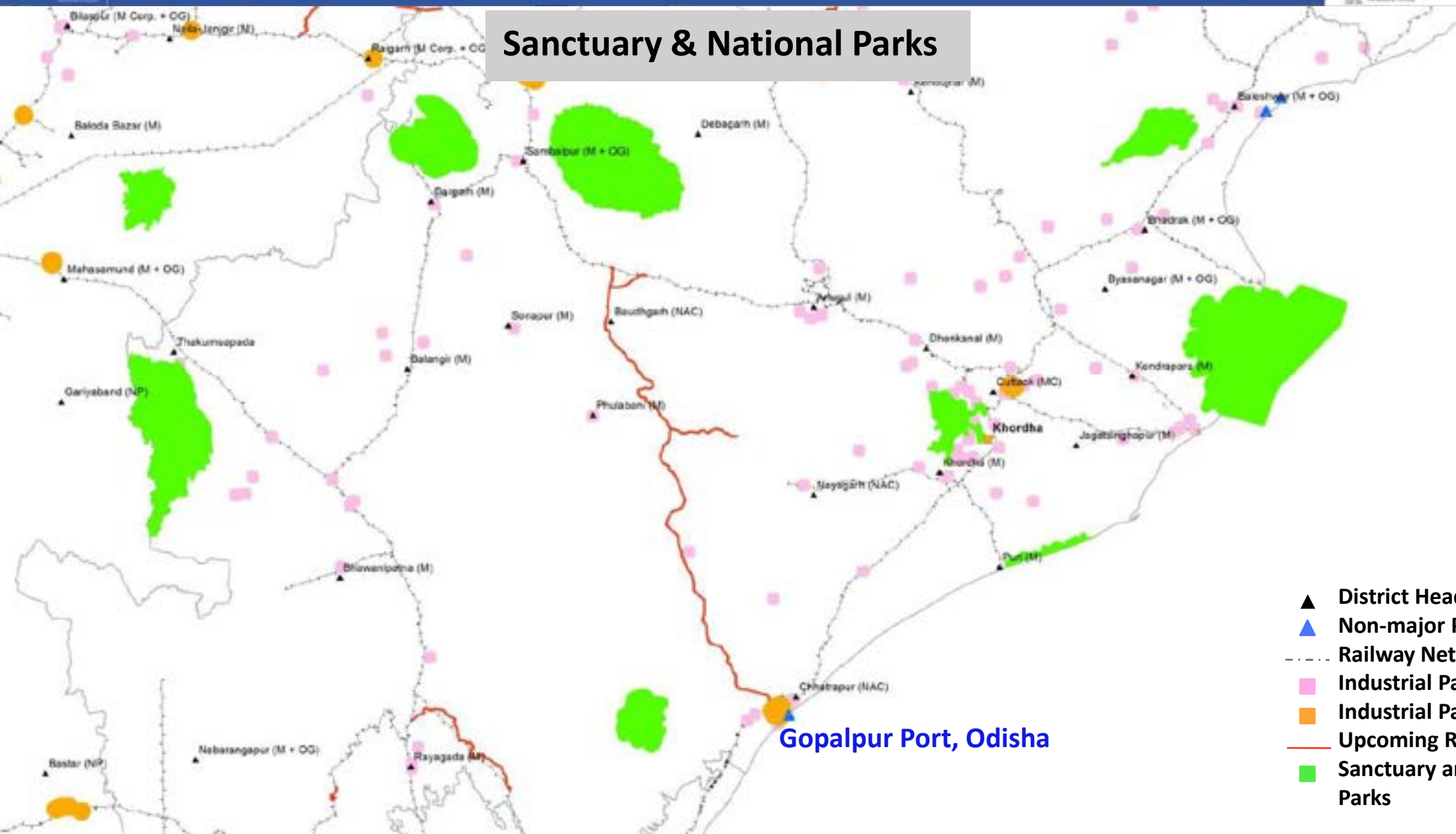
45 Industrial Area catered through new line



Gopalpur Port, Odisha

Port Connectivity

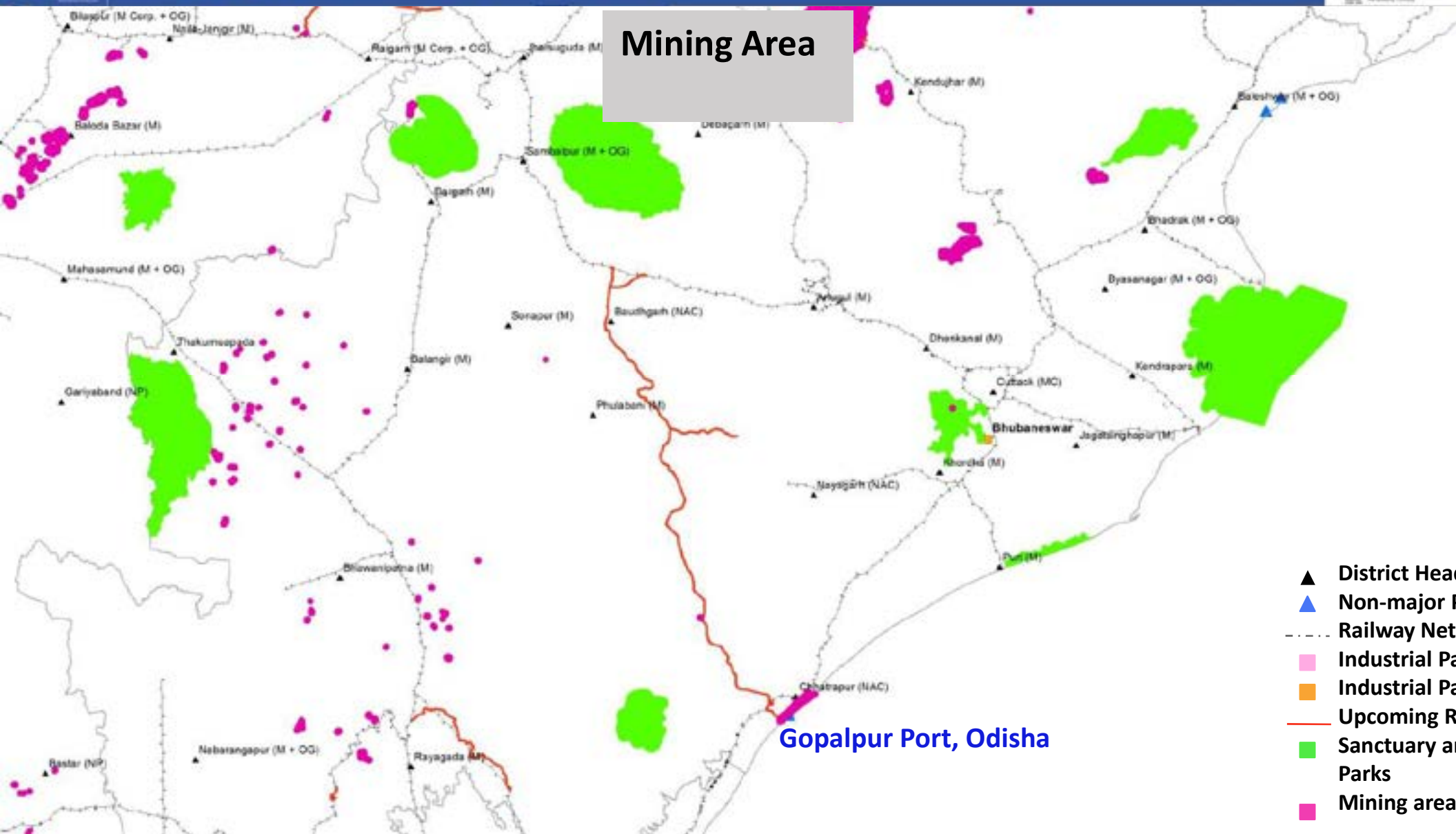
Sanctuary & National Parks



- ▲ District Head
- ▲ Non-major P
- Railway Net
- Industrial Pa
- Industrial Pa
- Upcoming R
- Sanctuary a
- Parks

Gopalpur Port, Odisha

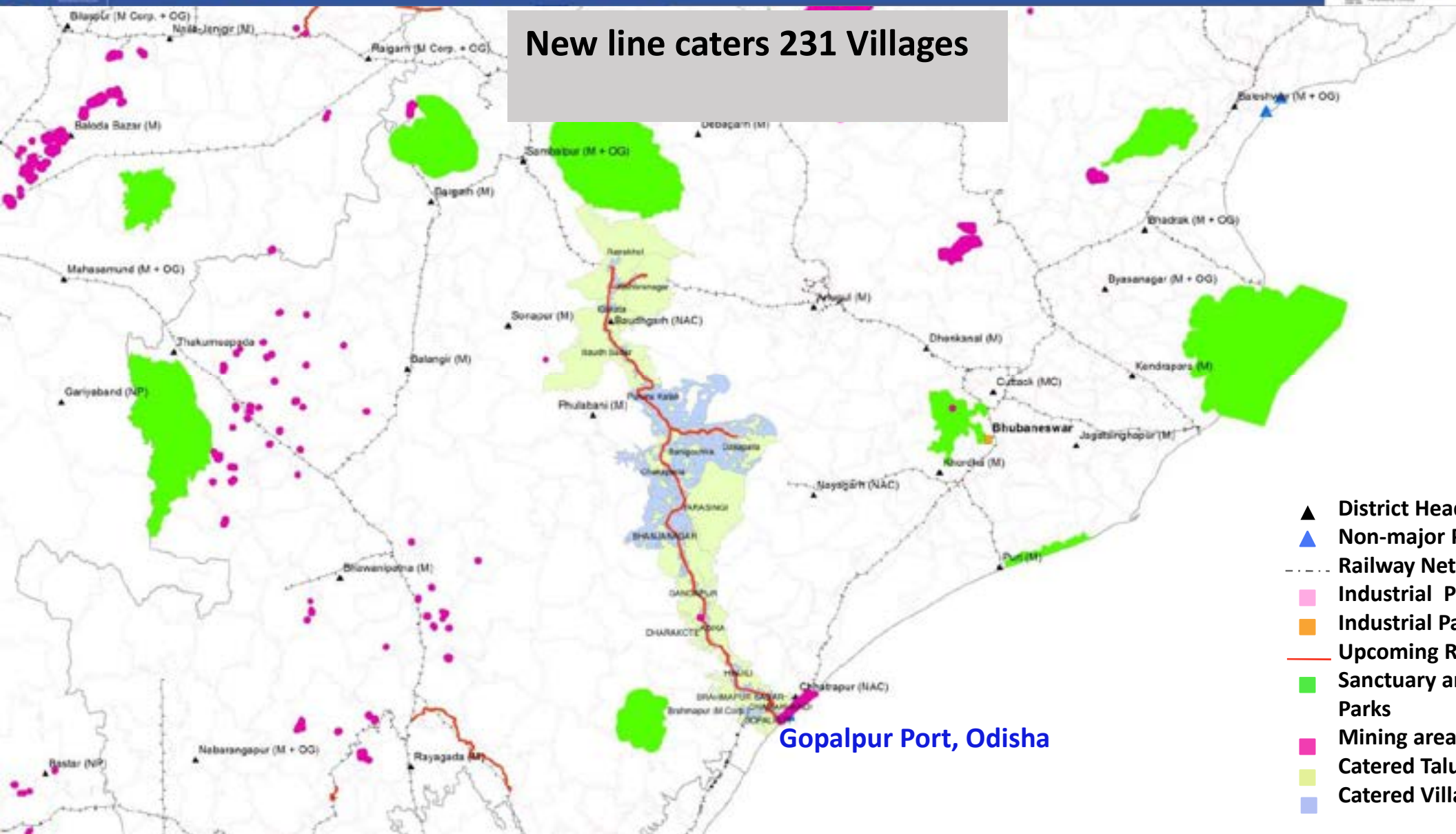
Port Connectivity





Port Connectivity

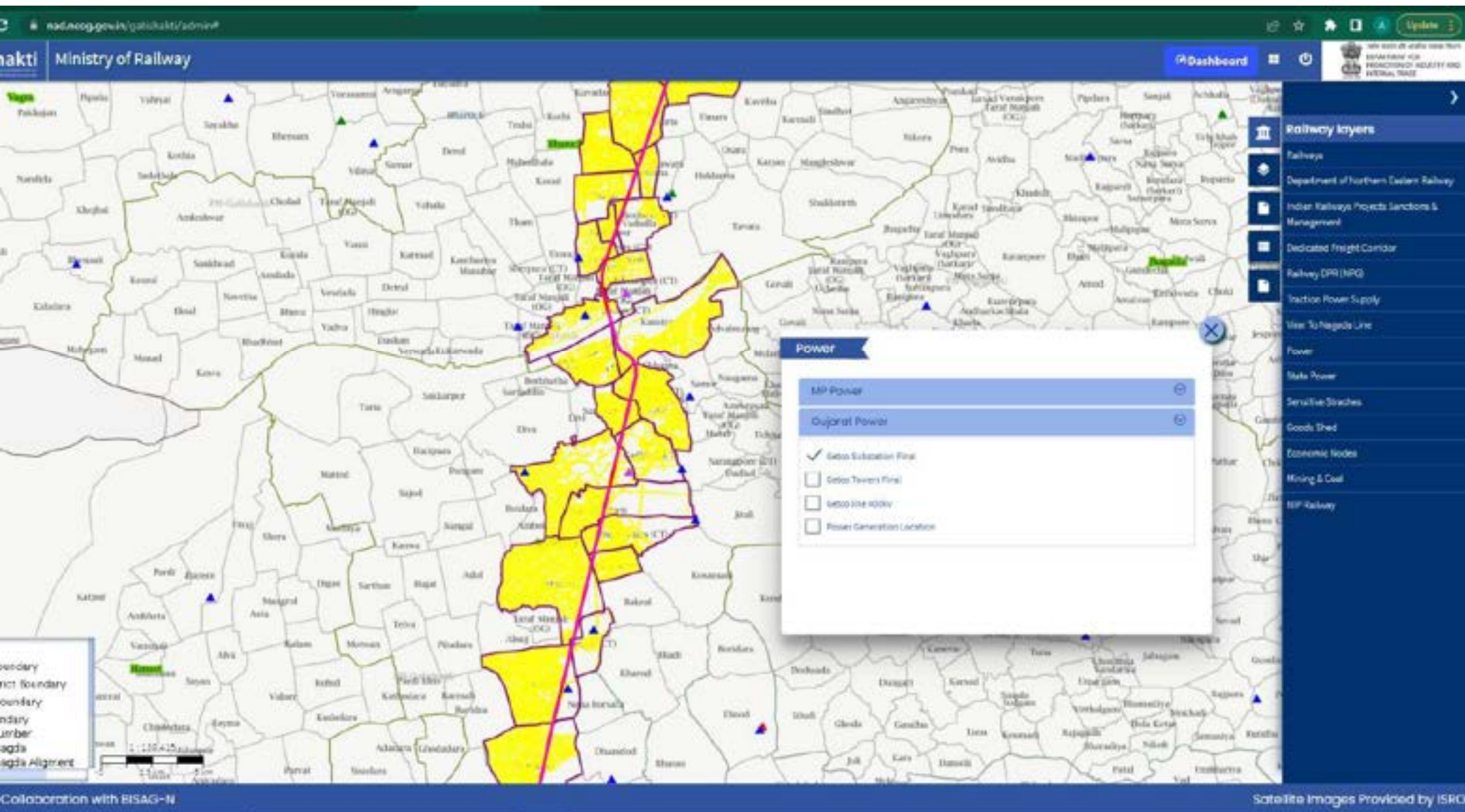
New line caters 231 Villages



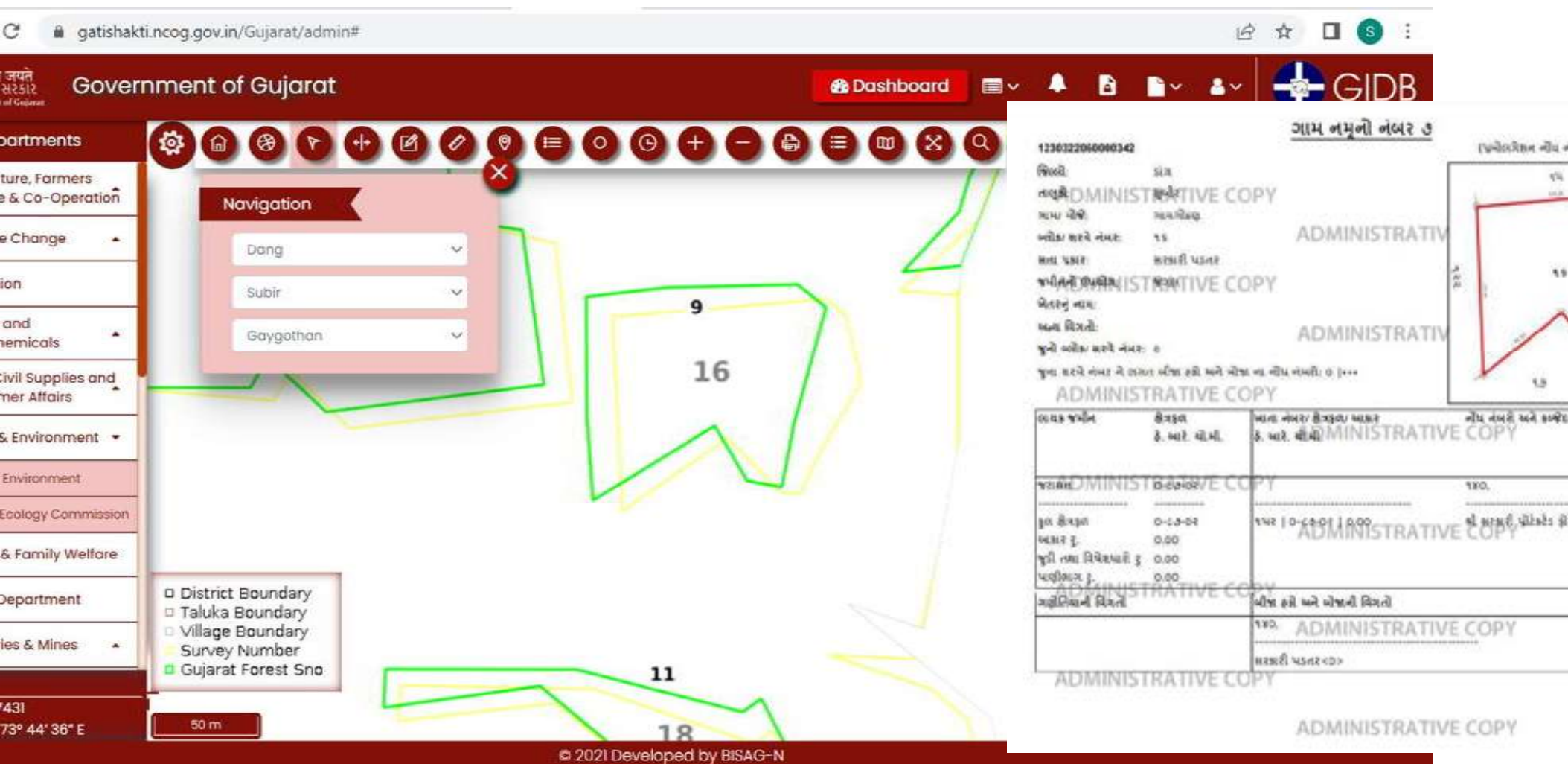
- ▲ District Headquarters
- ▲ Non-major Ports
- Railway Network
- Industrial Parks
- Industrial Parks
- Upcoming Road
- Sanctuary and National Parks
- Mining Areas
- Catered Talukas
- Catered Villages

Gopalpur Port, Odisha

PM GatiShakti NMP-Electrified Network of Indian Railway



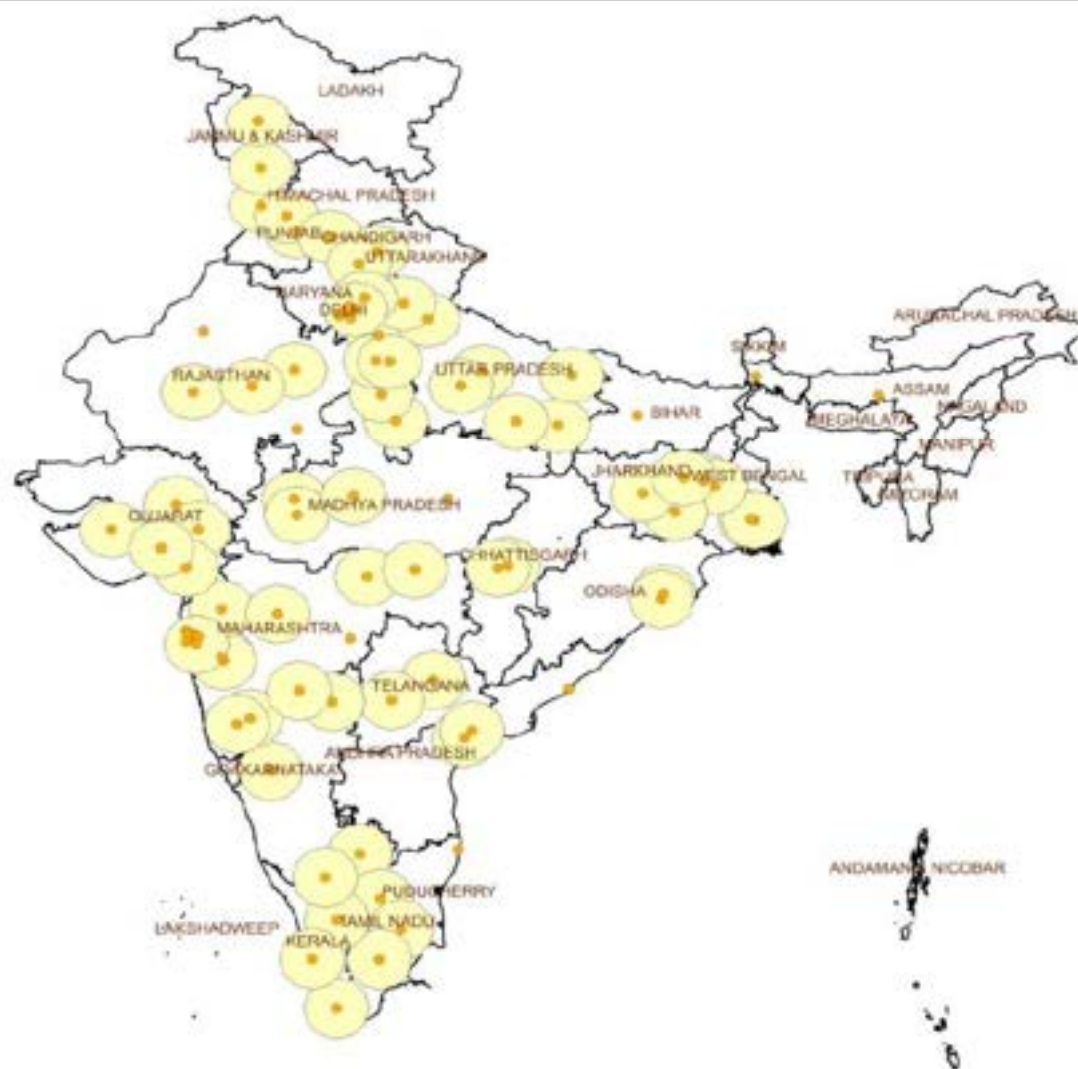
Mapping of Old Survey Numbers to New Survey Numbers on PM Gati Shakti Gujarat





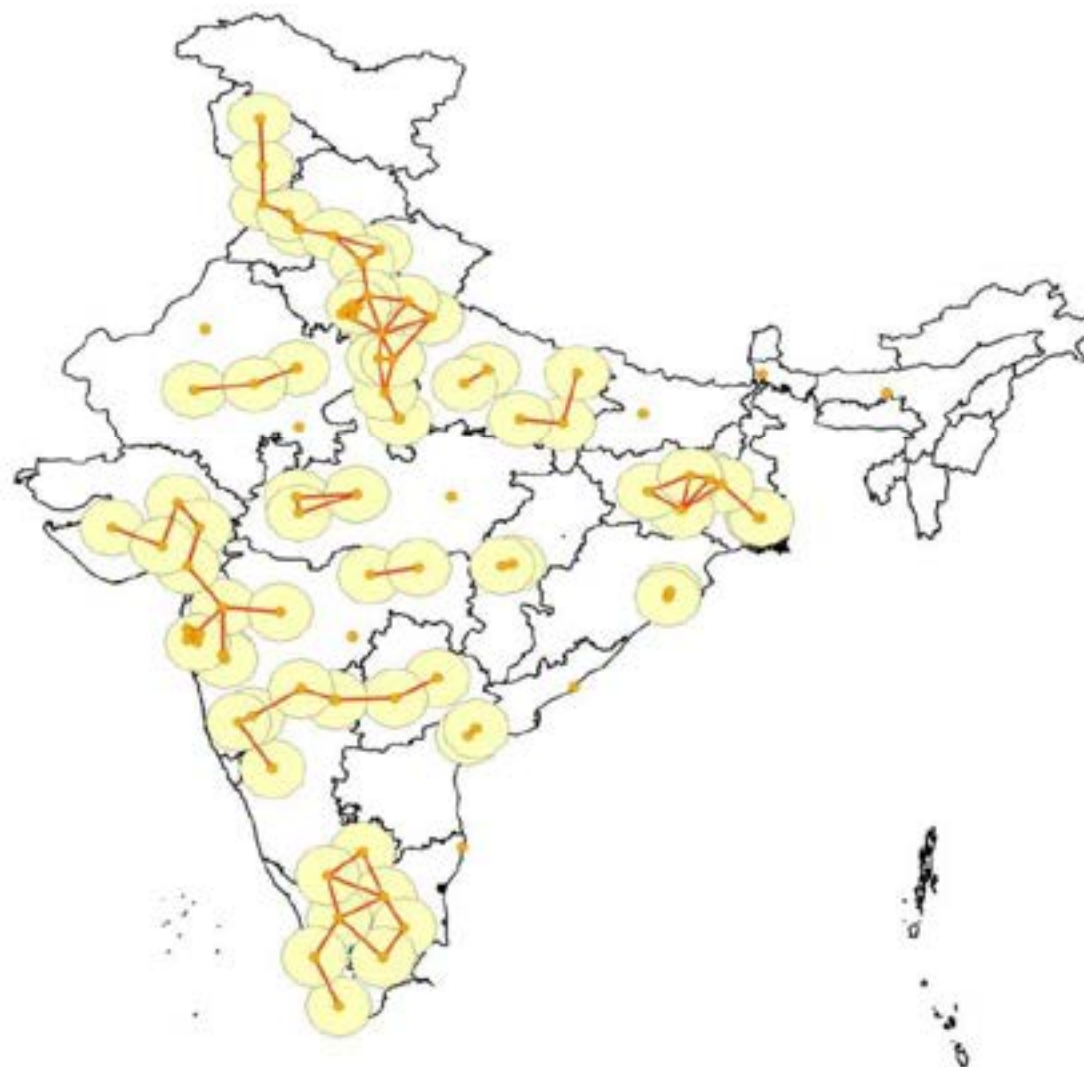
Semi High Speed Routes

Created 200 km buffer to the identified cities



- Population more than 1 million
- Buffer (200 km)

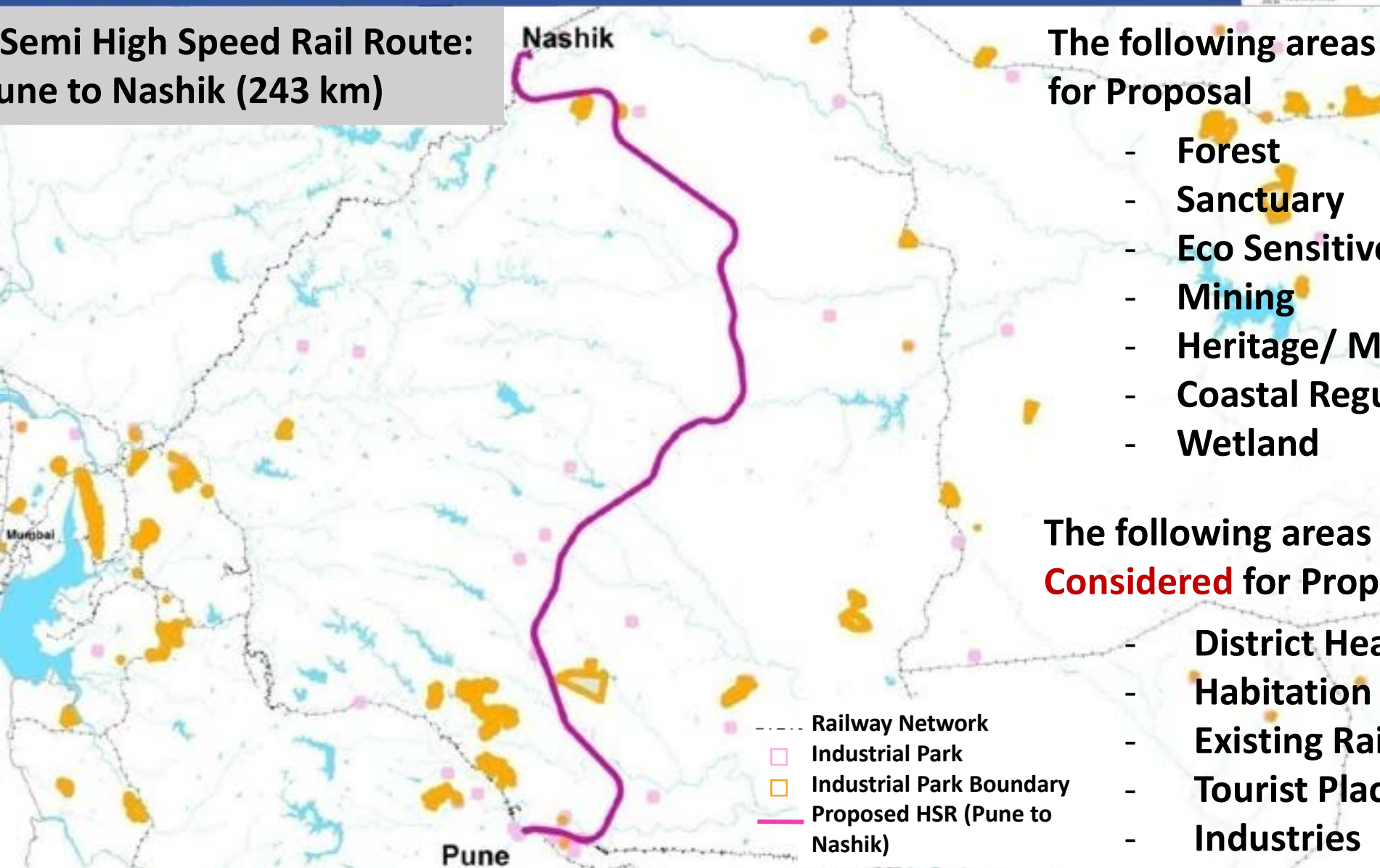
Probable Semi High Speed Routes



- City location (Population more than 100,000)
- Buffer (200 km)
- Probable Semi High Speed Route

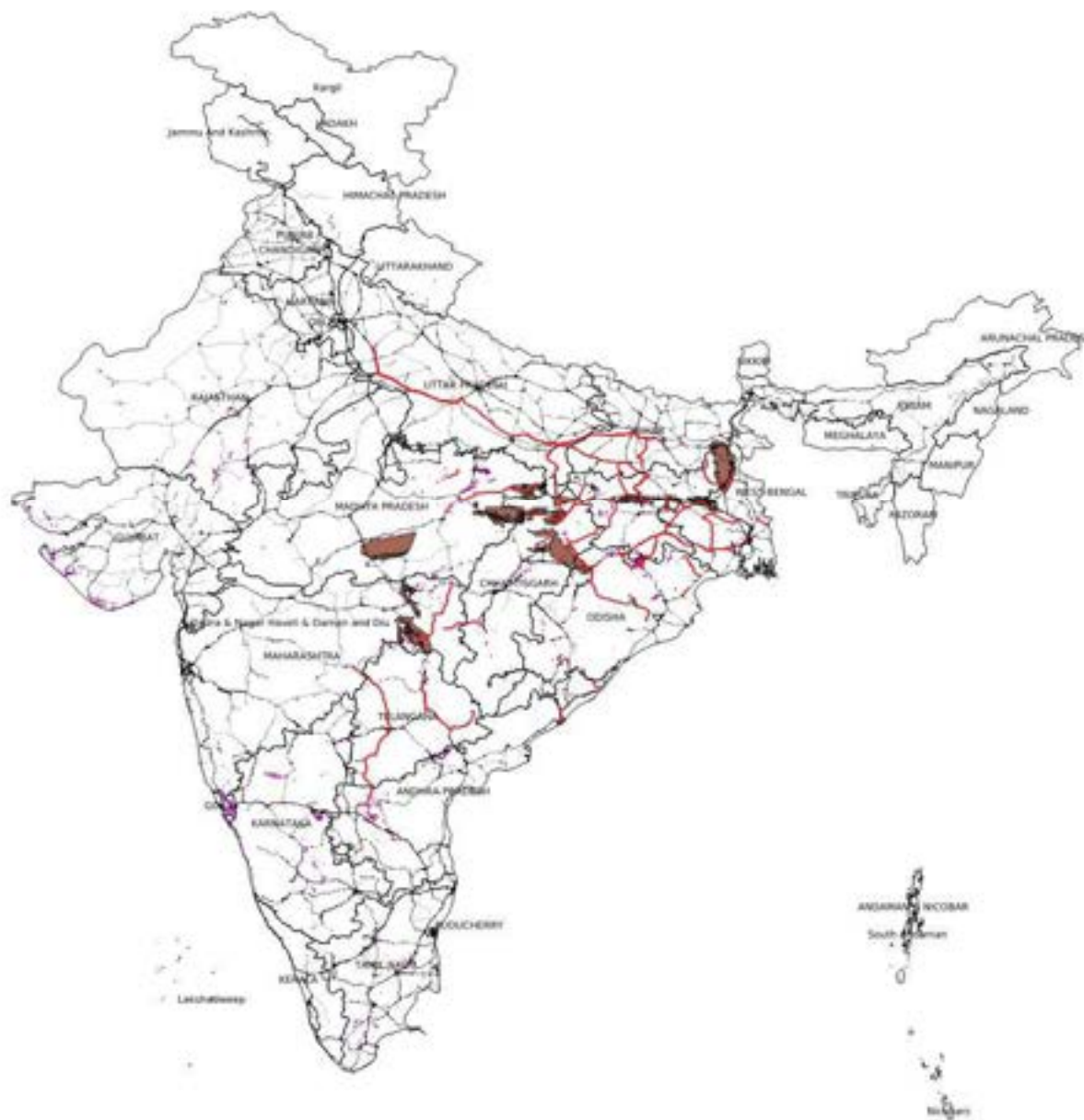
Semi High Speed Routes




**Semi High Speed Rail Route:
Pune to Nashik (243 km)**




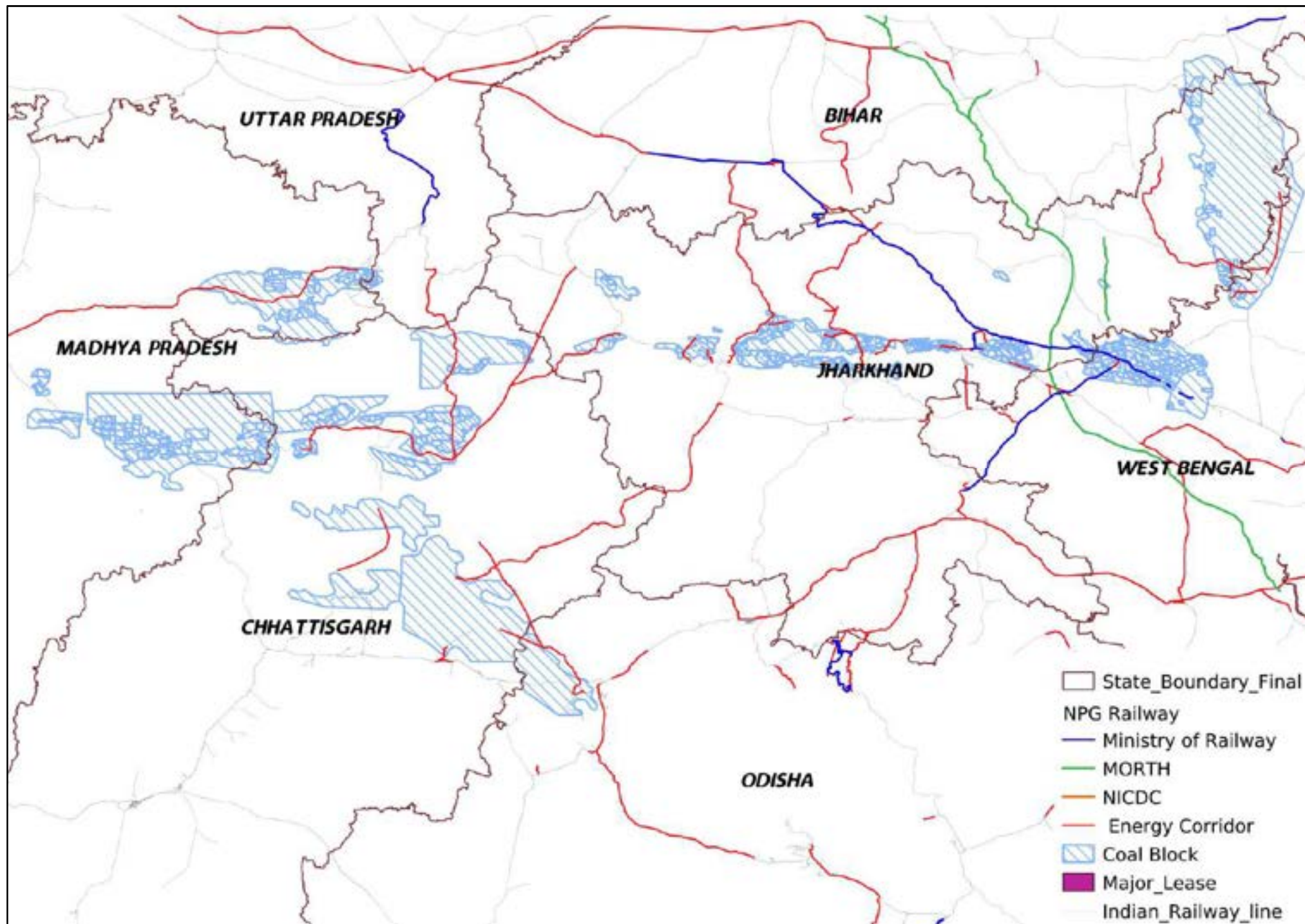
Land acquisition for Pune to Nashik Semi High Speed Rail Route





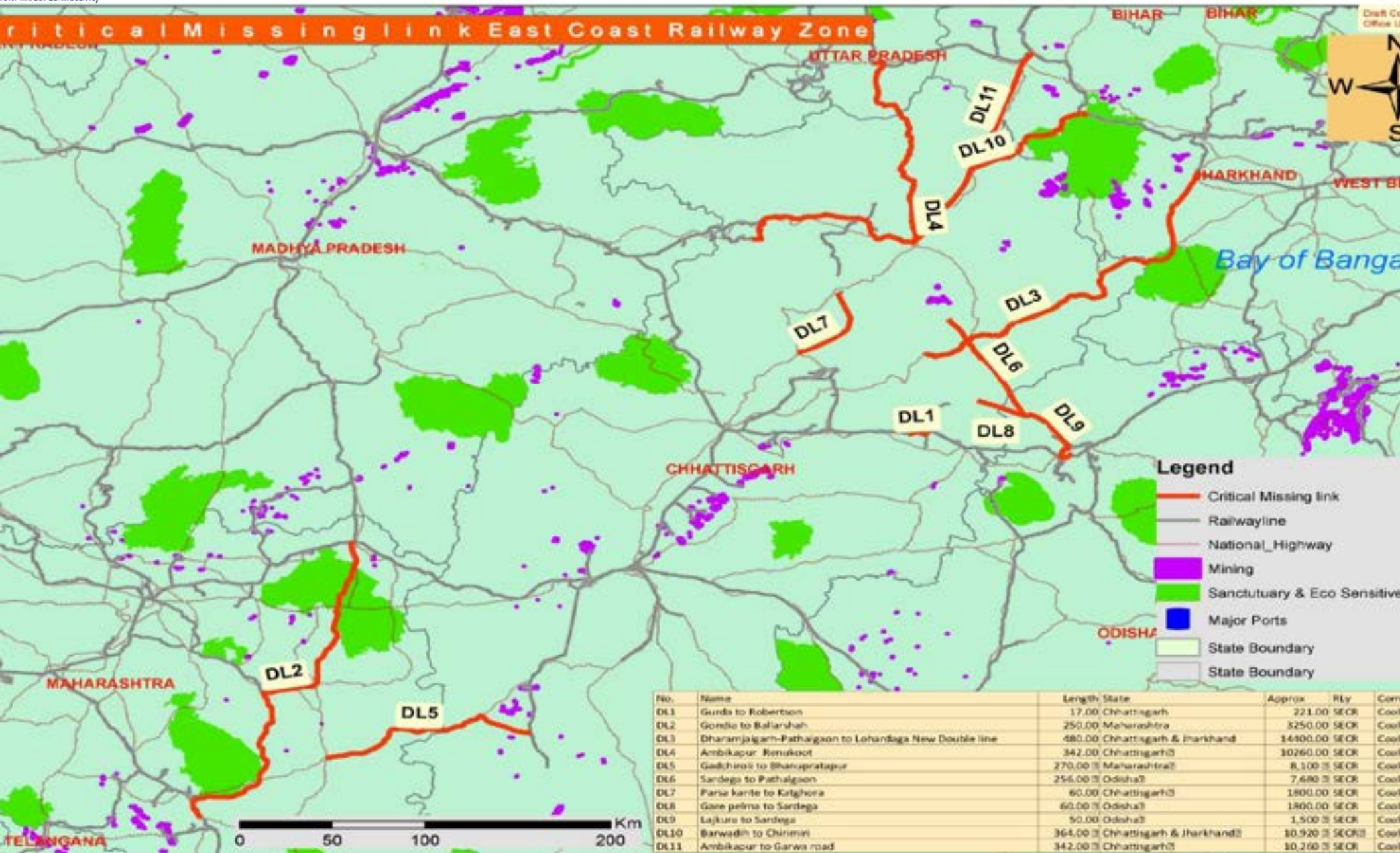
	Coal Mining Area
	Existing Railway Alignment
	Energy Corridor Alignment

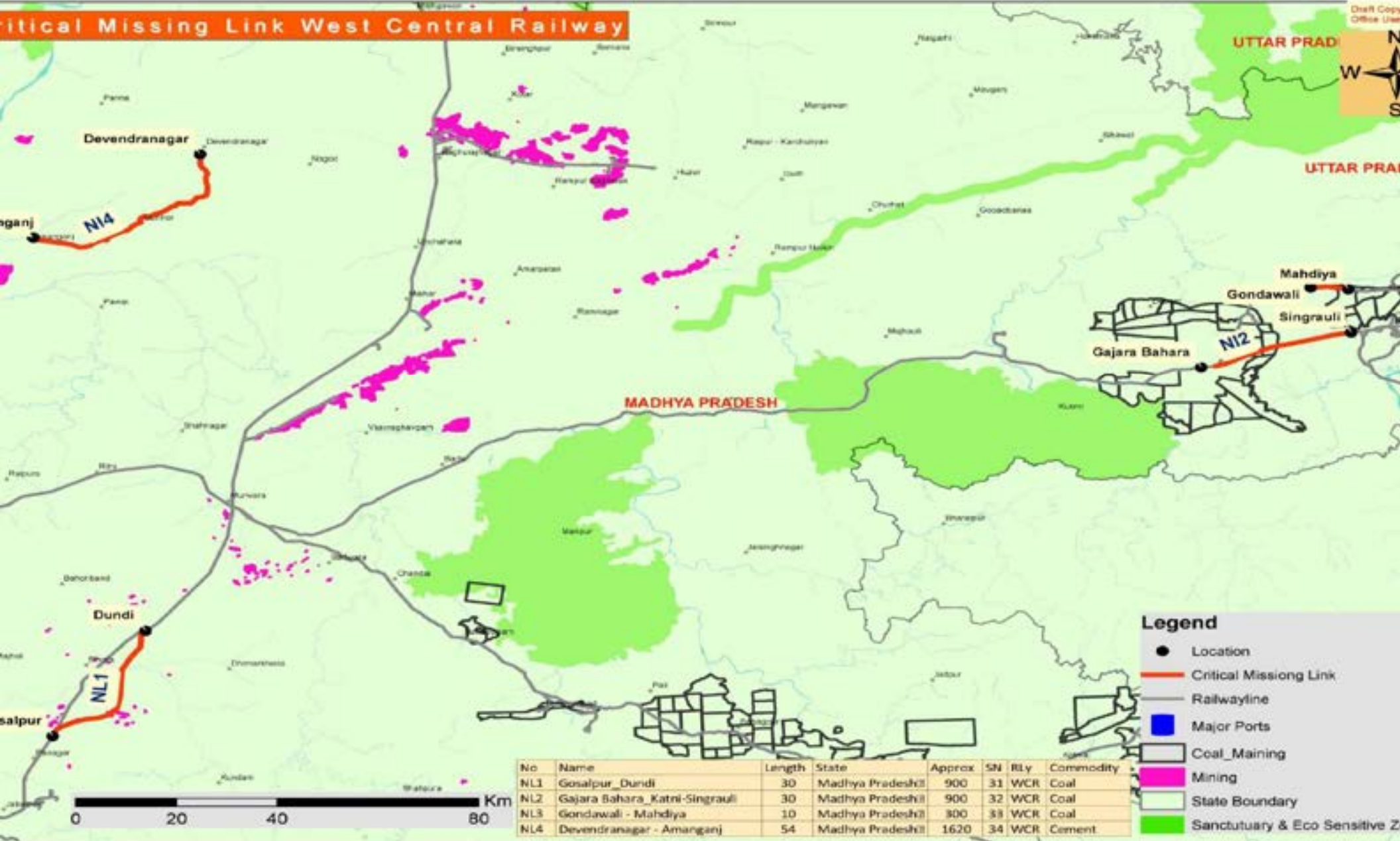
	Major Lease
---	-------------





Ministry of Coal



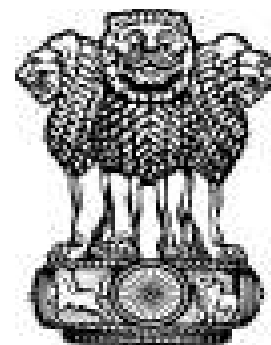




सत्यमेव जयते

कोयला मंत्रालय MINISTRY OF COAL

Geo-spatial Digital Platform for Coal Ministry
(National Master Plan)



सत्यमेव जयते

वाणिज्य एवं
उद्योग मंत्रालय
MINISTRY OF
COMMERCE
AND INDUSTRY

Portal Basic Features

Integration of Existing Coal Infrastructure Information

- Coal & Lignite Blocks
- Coal Washeries
- Coal Blocks Under Auction
- CHP & FMC
- Coal Field Boundary

Information of Allied infrastructure

- Road Network
- Rail Network
- Power Line Network
- Gas Network

Dashboard

- Coal Field
- Category
- Status

❖ Tool Development

❖ DPR Module

❖ Mobile Application - Coal Auction

- ALL Blocks Under Auction
- Blocks Summary report Can Be Exported In Pdf
- Facility Of Analytical tools

❖ Land For Other Use Portal

DPR Module :-

- Draw , import and Selection of block to be Analysed
- ROW Generation
- Analytical Tool
 - Crossing Generation (Road, Rail Forest, Administrative Area, Power Network, Gas Network, etc..)
- Utility Shifting Tool
- Land Acquisition
- 3D Profile Generation
- Reporting and Monitoring Tool
- Project Management Tool(Save, update and Delete Project)
- Comparison Tool

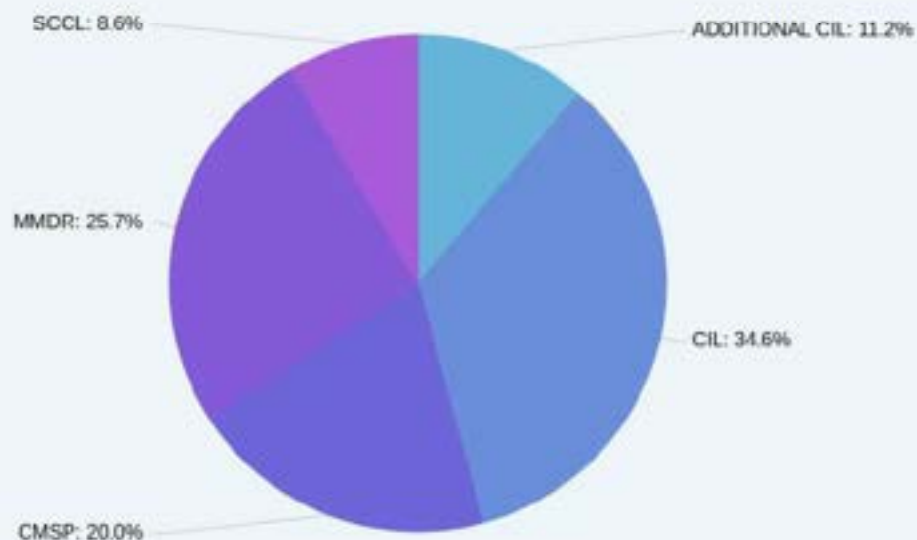
Select Coal Field Area



○ ○ ● ○ ○ ○ ○ ○

Coal Field

-----select-----



CSV

Search:

Sr.No	Block Name	CF Name	Category	Status	an
1	BEGUNIA	RANIGANJ	CIL	EXPLORED	4.
2	CHANCH	RANIGANJ	CIL	EXPLORED	8.
3	DAHIBARI BASANTIMATA	RANIGANJ	CIL	EXPLORED	6.
4	BAKULIA	RANIGANJ	ADDITIONAL CIL	EXPLORED	9.
5	RAMAKRISHNA	RANIGANJ	CIL	EXPLORED	0.
6	VICTORIA	RANIGANJ	CIL	EXPLORED	1.
7	BAKULIA EXTENSION	RANIGANJ	CIL	EXPLORED	14.
8	VICTORIA WEST	RANIGANJ	CIL	EXPLORED	3.
9	Gidhmuri	HASDEO ARAND	CMSP	EXPLORED	7.
10	AMLABAD	JHARIA	CIL	EXPLORED	3.

Showing 1 to 10 of 981 entries

Previous 1 2 3 4 5 ...

Select Coal Field Area



○ ○ ○ ● ○ ○ ○ ○

Coal Field

-----select-----

-----select-----

AURANGA
BANDER
BIRBHUM
BISRAMPUR
CHIRIMIRI
DALTONGANJ
DILLI JEYPORE
DIMA HASAO
EAST BOKARO
GIRIDIH
GODAWARI VALLEY
HASDEO-ARAND
HUTAR
IB VALLEY
JHANZI DISAI
JHARIA
JHILIMILI
JOHILLA
KAMPTEE

SCCL: 8.6%

MMDR: 25.7%

CMSP: 20.0%

CSV

Search:

Sr.No	Block Name	CF Name	Category	Status	an
1	BEGUNIA	RANIGANJ	CIL	EXPLORED	4.
2	CHANCH	RANIGANJ	CIL	EXPLORED	8.
3	DAHIBARI BASANTIMATA	RANIGANJ	CIL	EXPLORED	6.
4	BAKULIA	RANIGANJ	ADDITIONAL CIL	EXPLORED	9.
5	RAMAKRISHNA	RANIGANJ	CIL	EXPLORED	0.
6	VICTORIA	RANIGANJ	CIL	EXPLORED	1.
7	BAKULIA EXTENSION	RANIGANJ	CIL	EXPLORED	14.
8	VICTORIA WEST	RANIGANJ	CIL	EXPLORED	3.
9	Gidhmuri	HASDEO-ARAND	CMSP	EXPLORED	7.
10	AMLABAD	JHARIA	CIL	EXPLORED	3.

Showing 1 to 10 of 981 entries

Previous 1 2 3 4 5 ...

Select Coal Field Status



○ ○ ○ ○ ● ○ ○ ○ ○

Coal Field

AURANGA

Status

-Select-

-Select-

EXPLORED

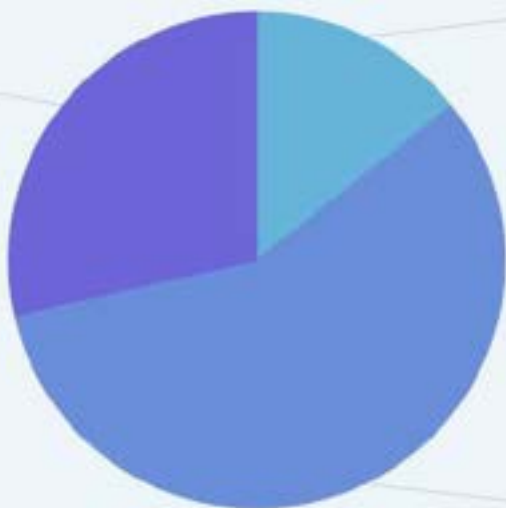
PARTLY EXPLORED

REGIONALLY EXPLORED

Search:

MMDR: 28.6%

ADDITIONAL CIL: 14.3%



CMSP: 57.1%

Sr.No	Block Name	CF Name	Category	Status
1	RAJBAR ABC	AURANGA	ADDITIONAL CIL	EXPLORED
2	Latehar	AURANGA	CMSP	PARTLY EXPLORED
3	Rajbar E&D	AURANGA	CMSP	EXPLORED
4	Banihardih	AURANGA	CMSP	EXPLORED
5	Tubed	AURANGA	CMSP	EXPLORED
6	CHIRU	AURANGA	MMDR	REGIONALLY EXPLORED
7	GAWA	AURANGA	MMDR	PARTLY EXPLORED

Showing 1 to 7 of 7 entries

Previous

Select Coal Field Area



○ ○ ○ ○ ○ ● ○ ○ ○

Coal Field

AURANGA

Status

EXPLORED

CSV

PDF

Search:



Sr.No	Block Name	CF Name	Category	Status	area
1	RAJBAR ABC	AURANGA	ADDITIONAL CIL	EXPLORED	35.3
2	Rajbar E&D	AURANGA	CMSP	EXPLORED	14.1
3	Banhardih	AURANGA	CMSP	EXPLORED	18.3
4	Tubed	AURANGA	CMSP	EXPLORED	4.9

Showing 1 to 4 of 4 entries

Previous



उद्योग संवर्धन और आंतरिक व्यापार विभाग
DEPARTMENT FOR
PROMOTION OF INDUSTRY AND
INTERNAL TRADE



PM
Gati

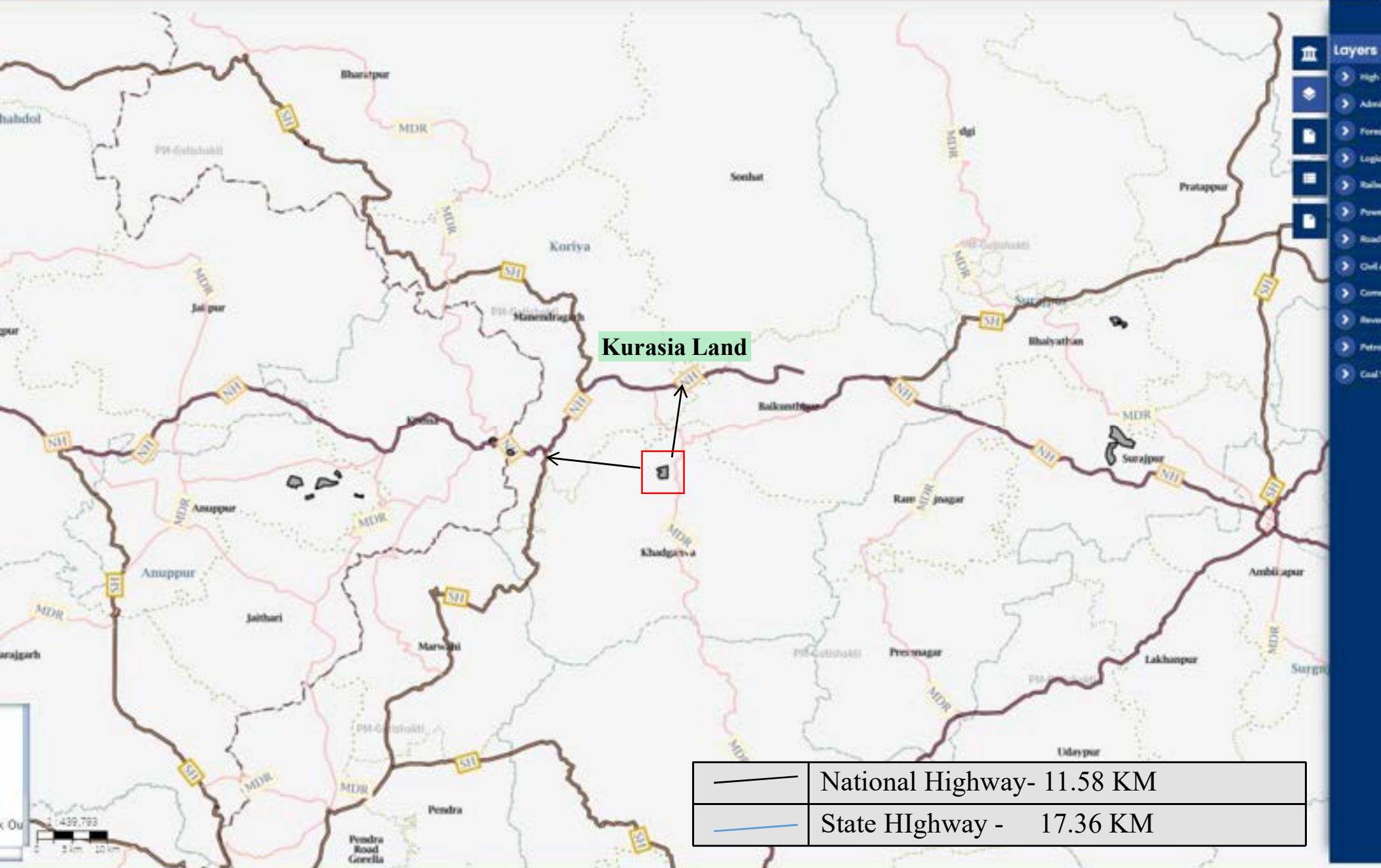
Futuristic Land use Planning



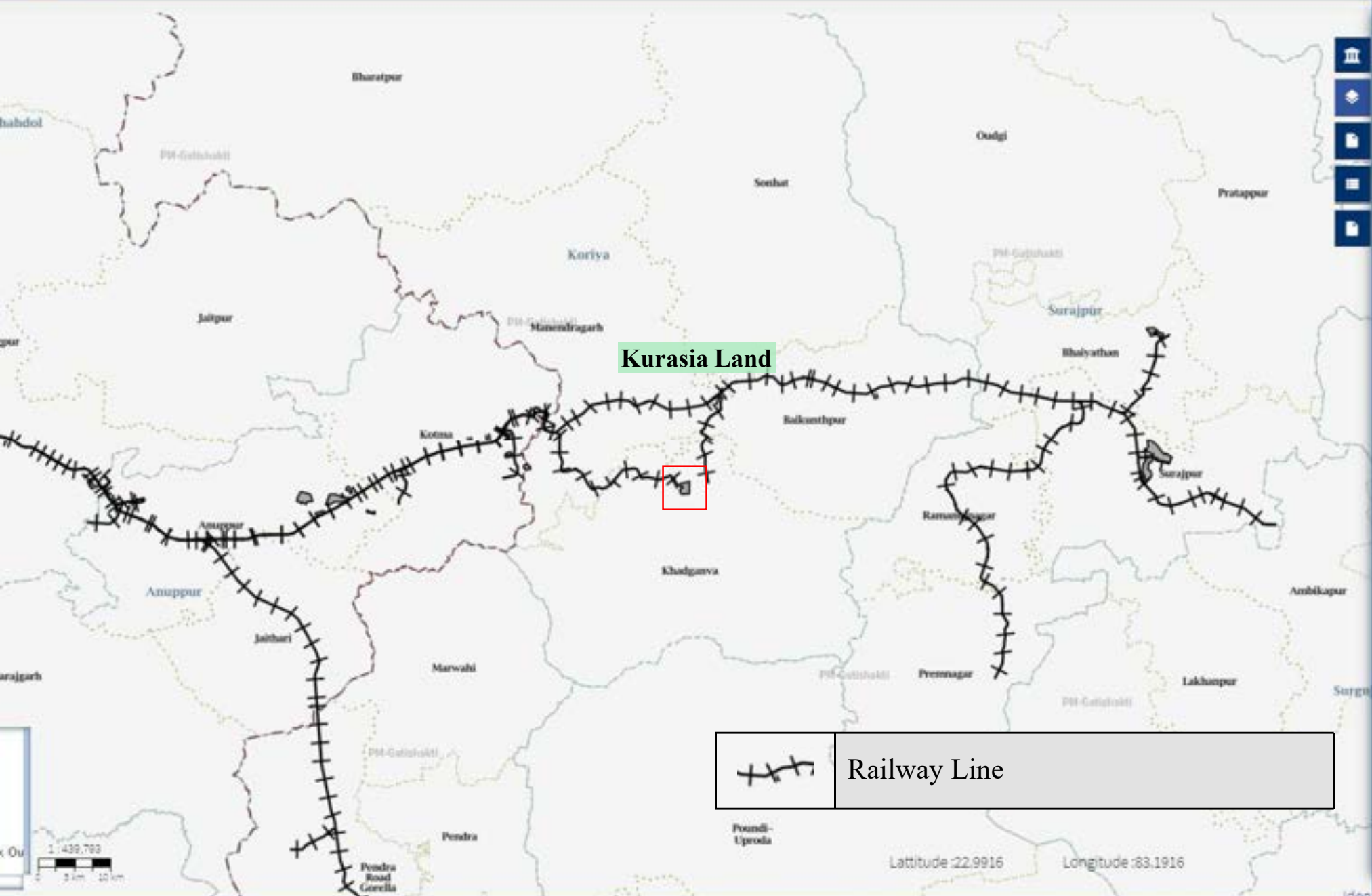
सत्यमेव जयते

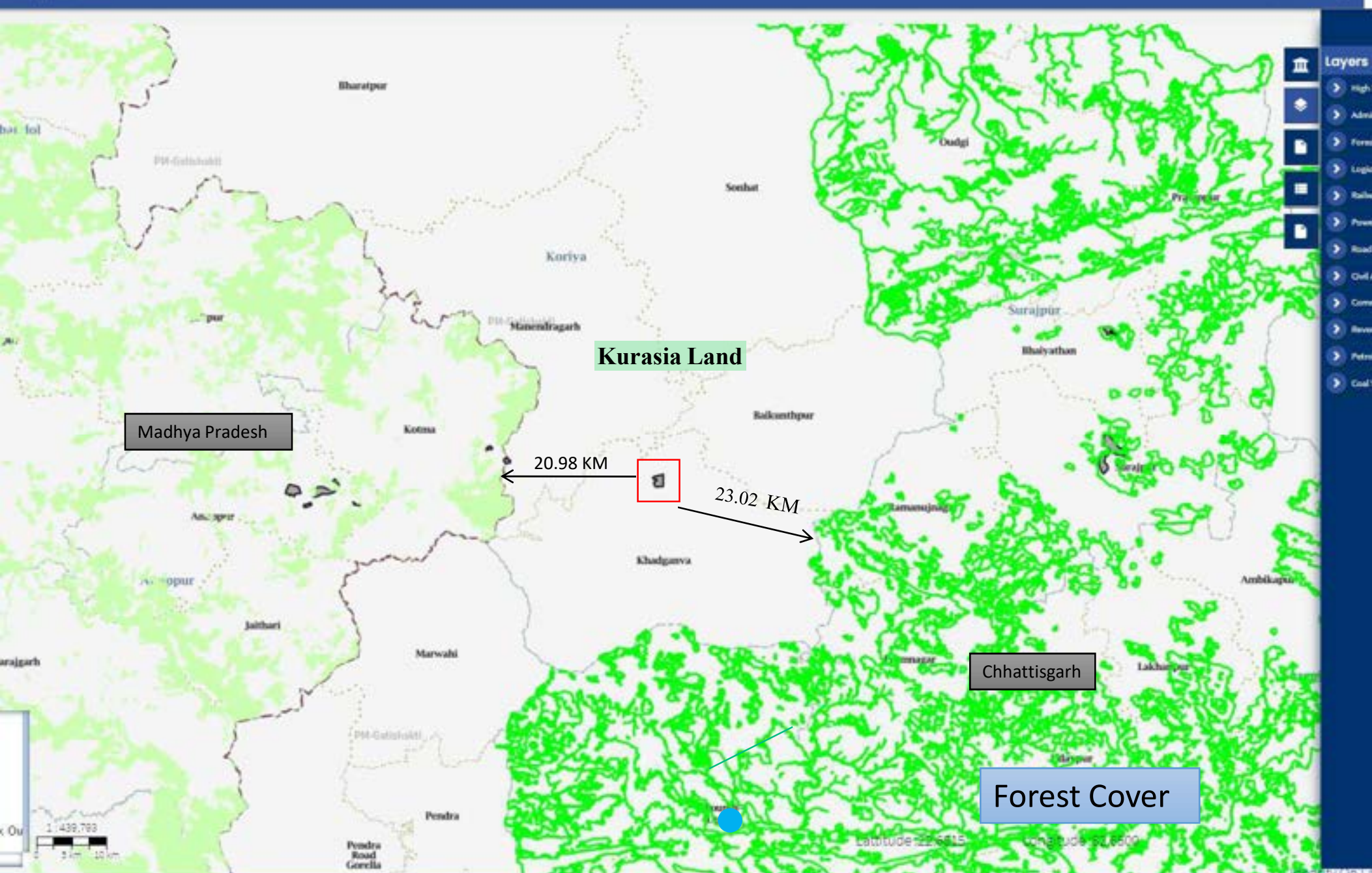
कोयला मंत्रालय
MINISTRY OF
COAL

Road Connectivity

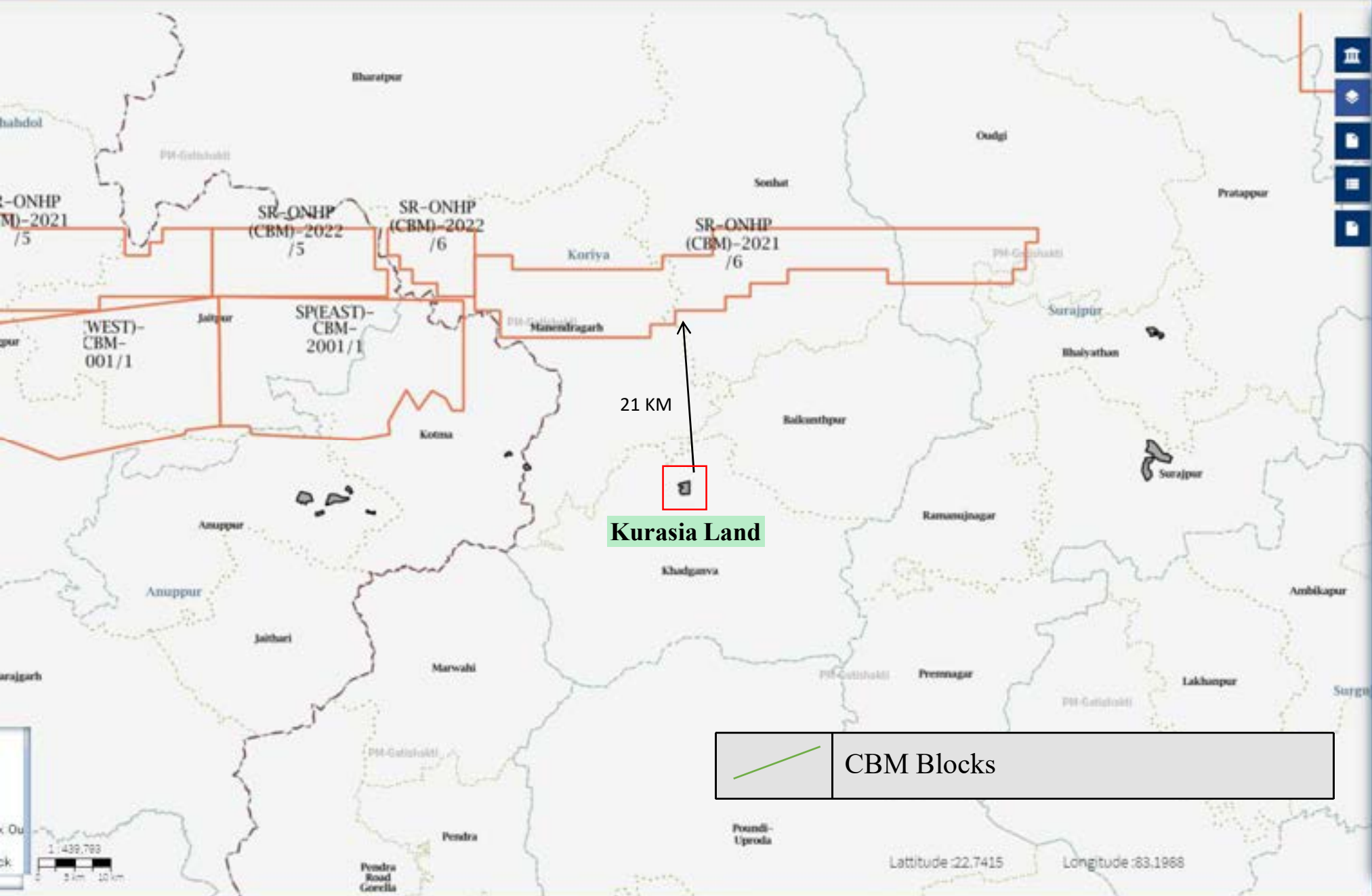


Railway Connectivity

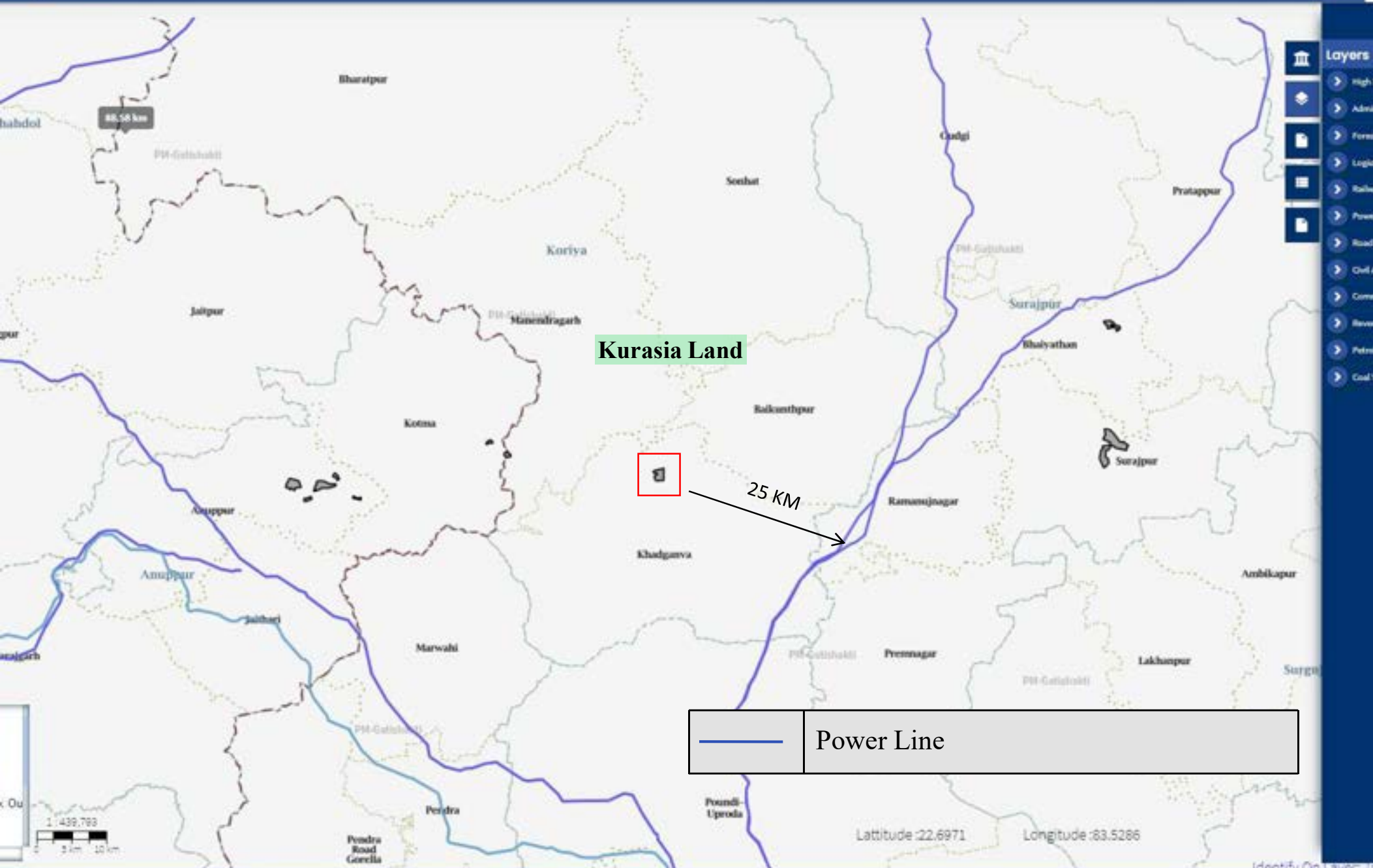




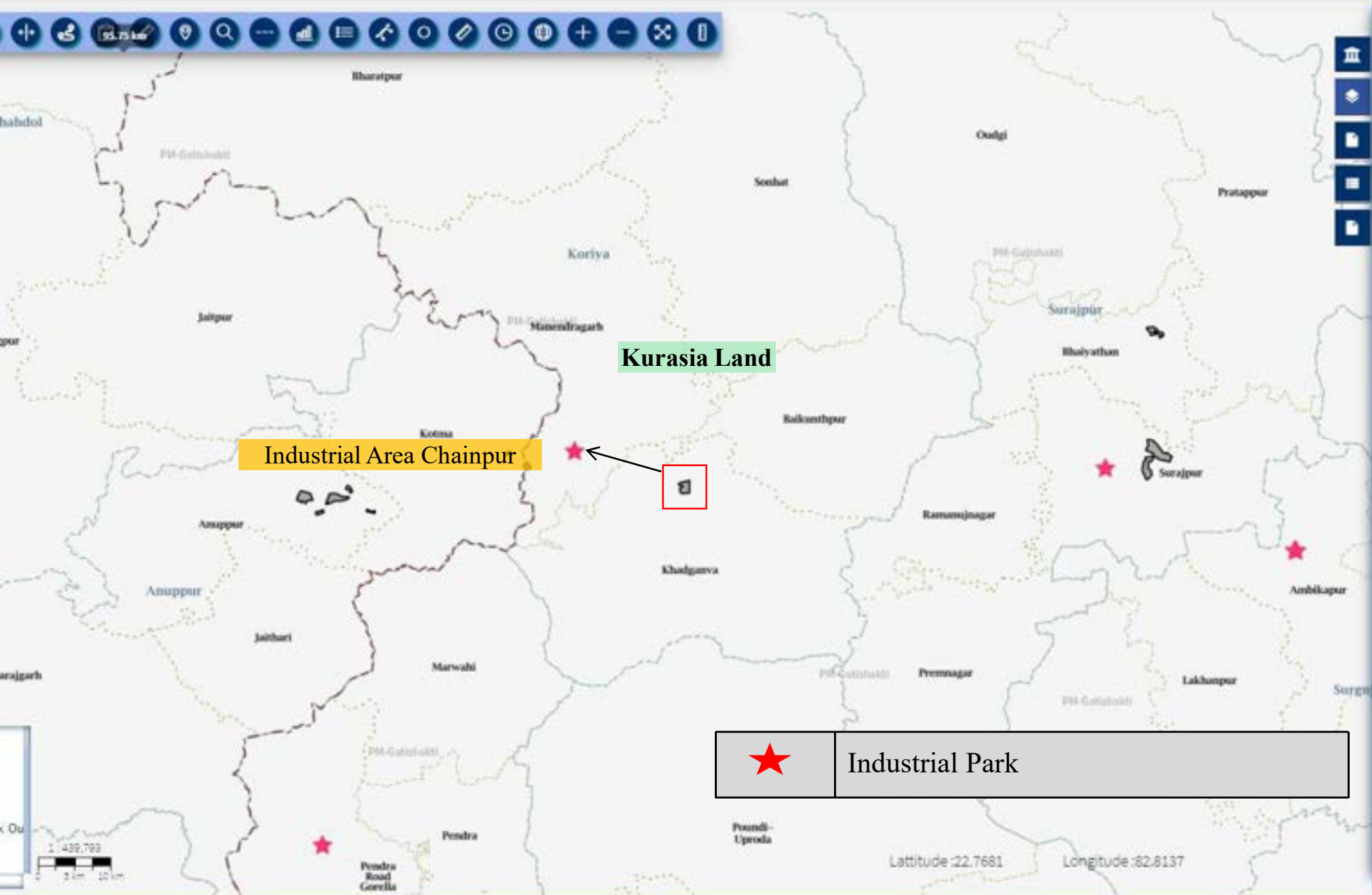
CBM Blocks - DGH



Transmission Line – 765 kV

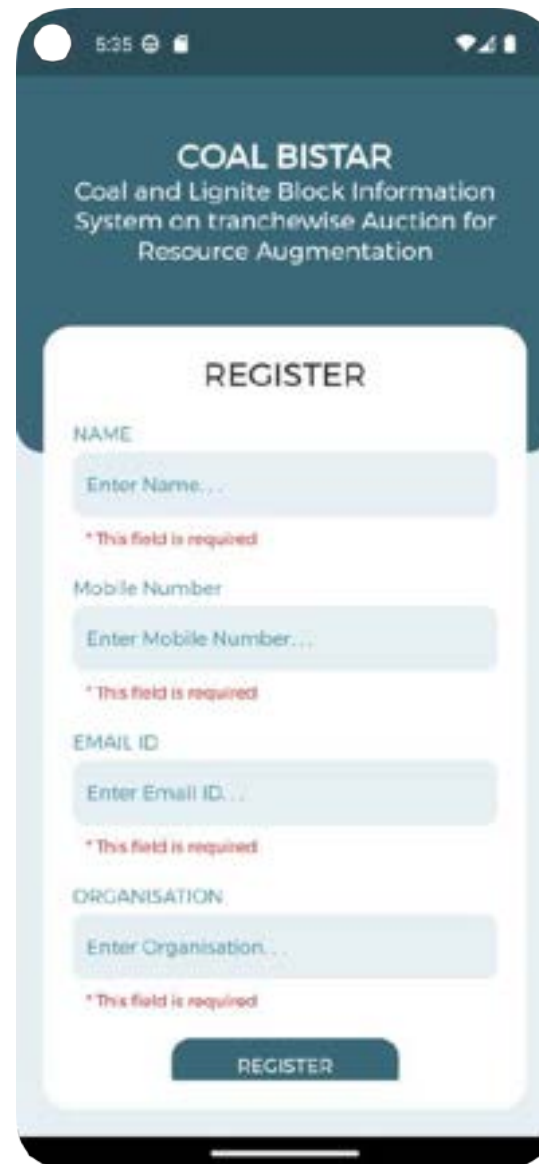
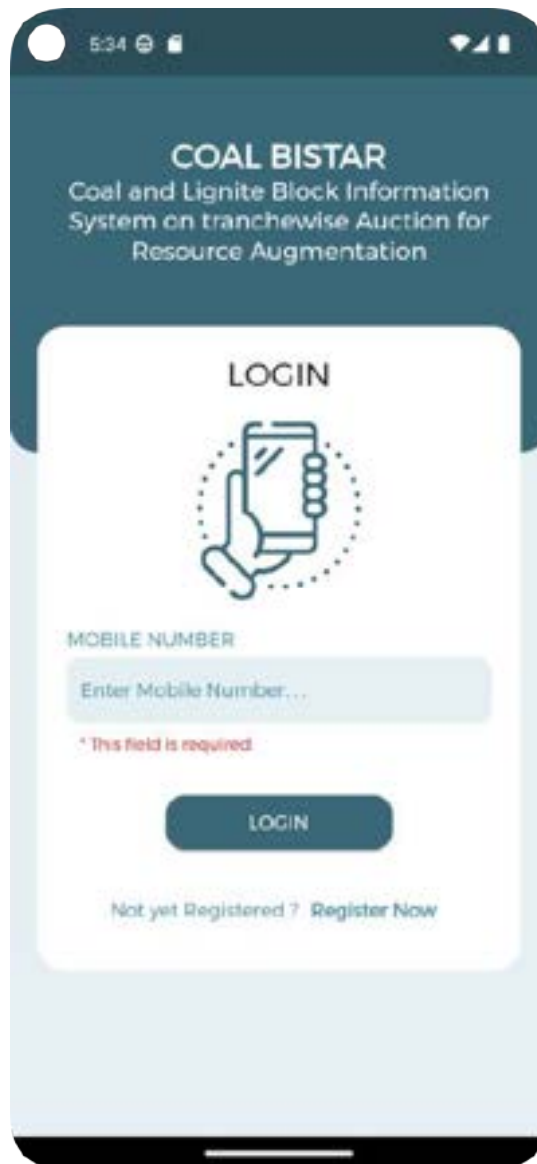
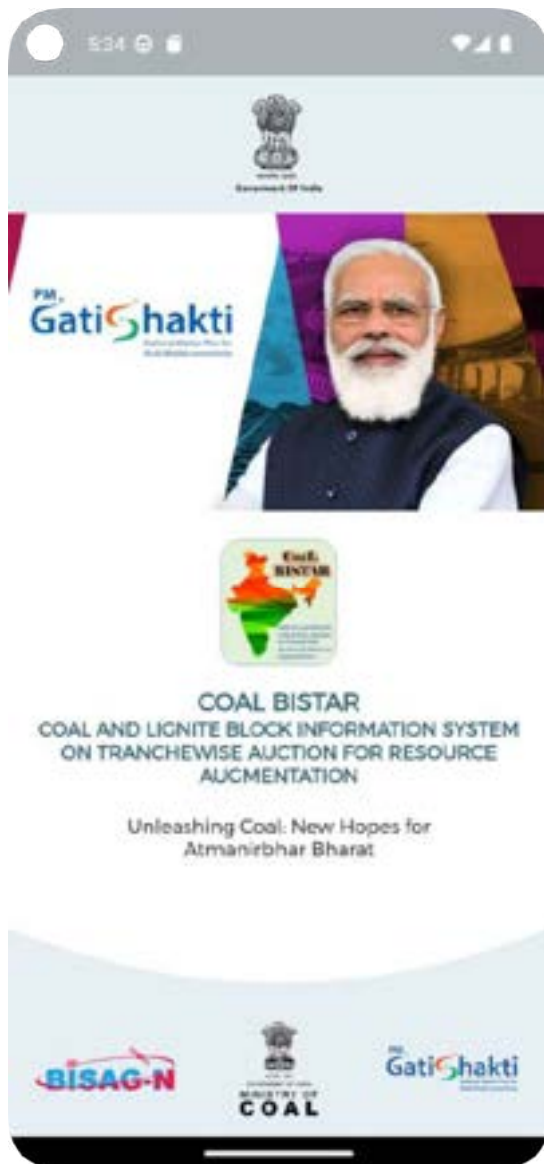




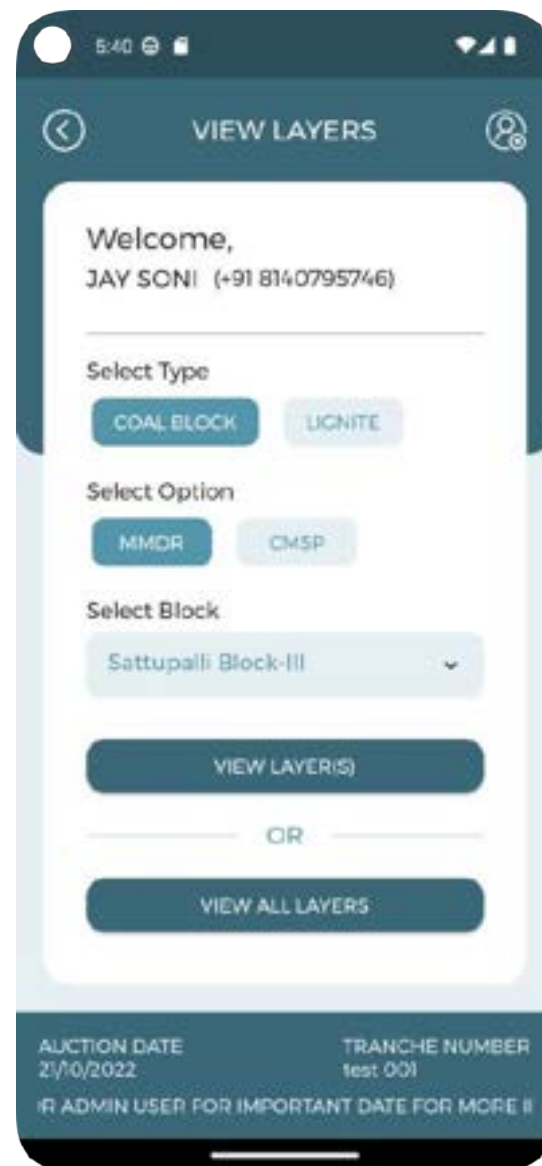
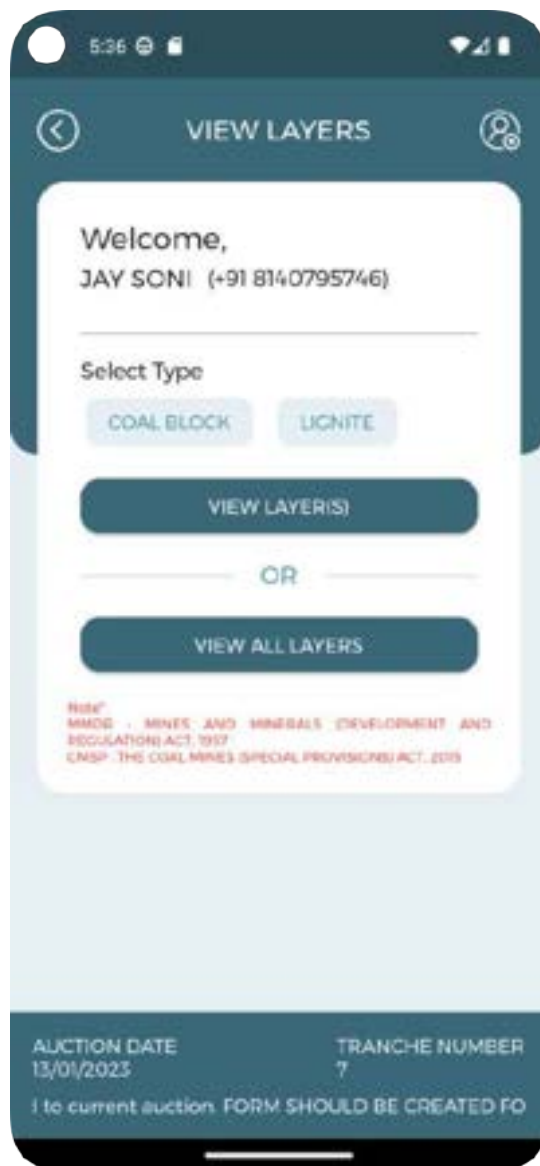


Mobile Application - Coal Auction

Mobile Application - Coal Auction



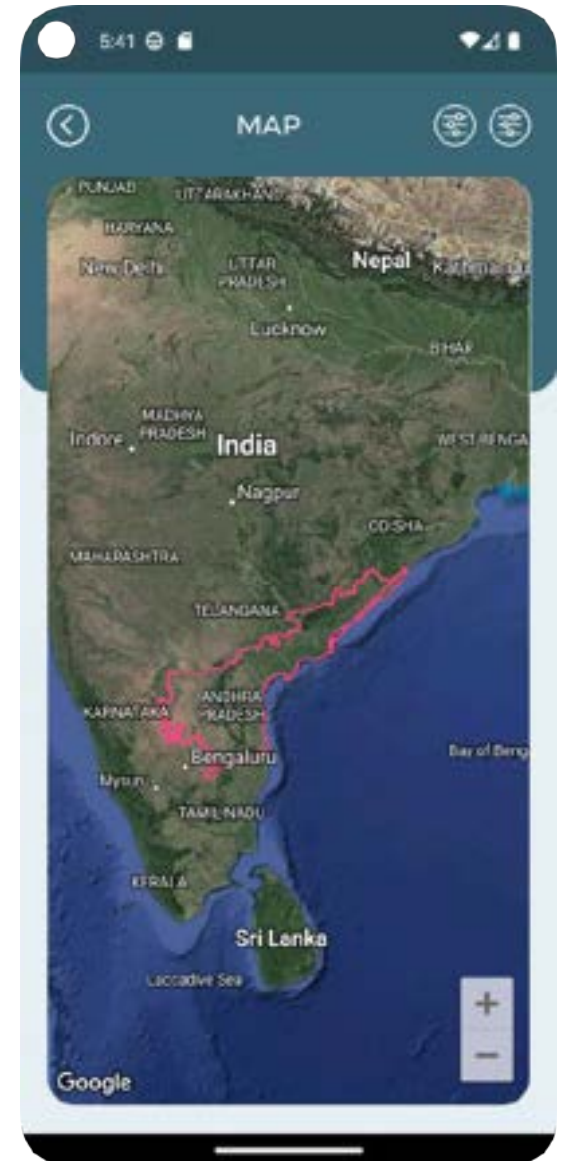
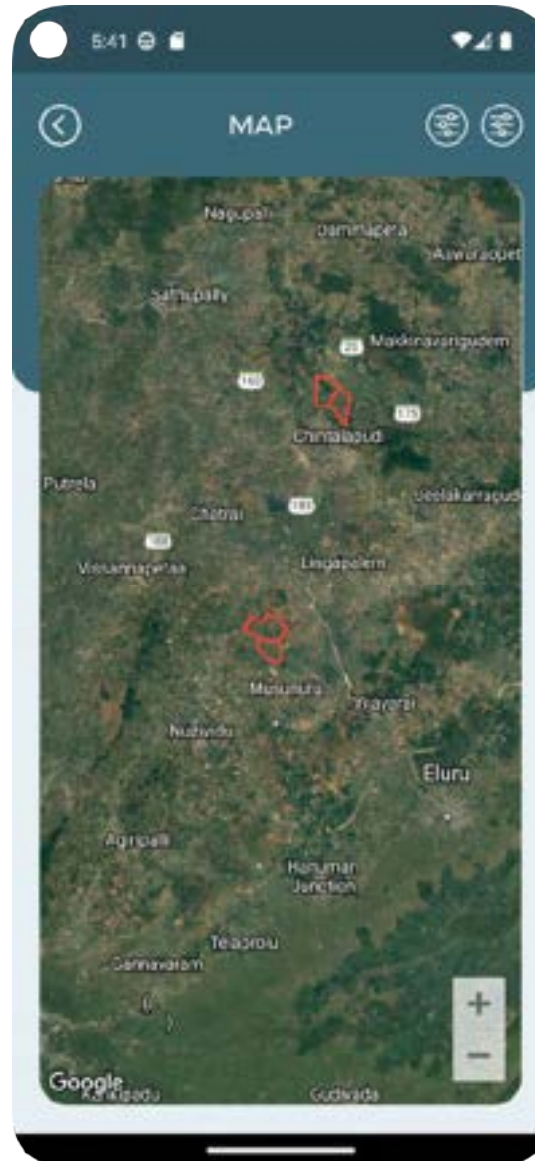
Mobile Application - Coal Auction



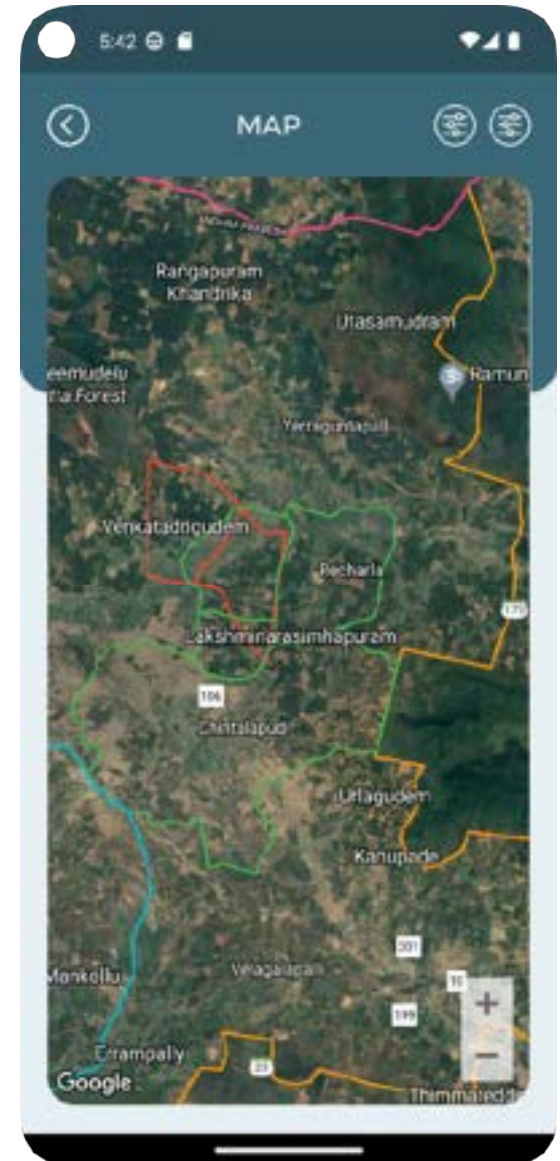
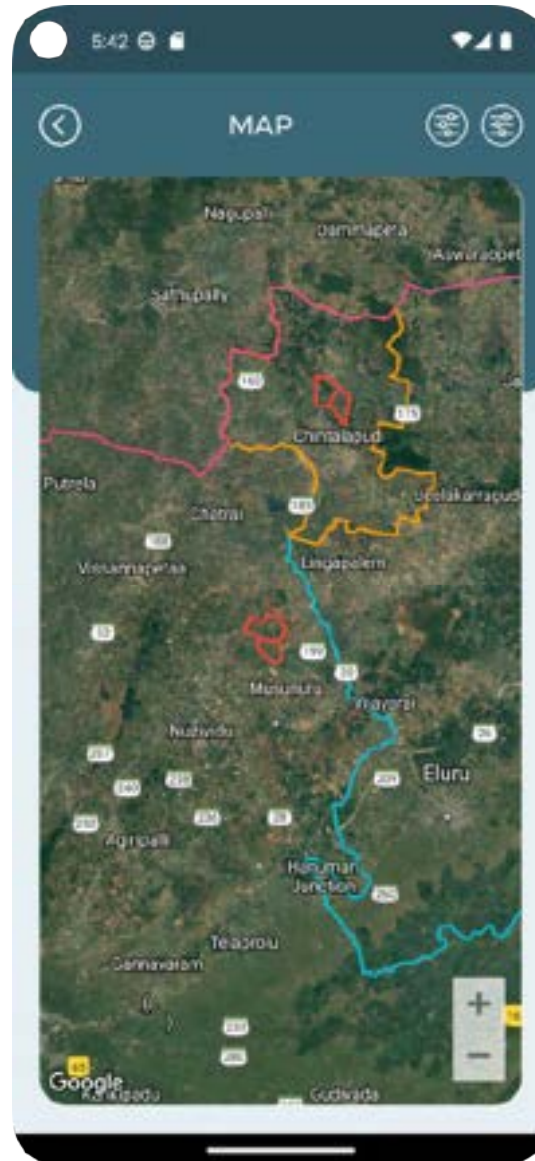
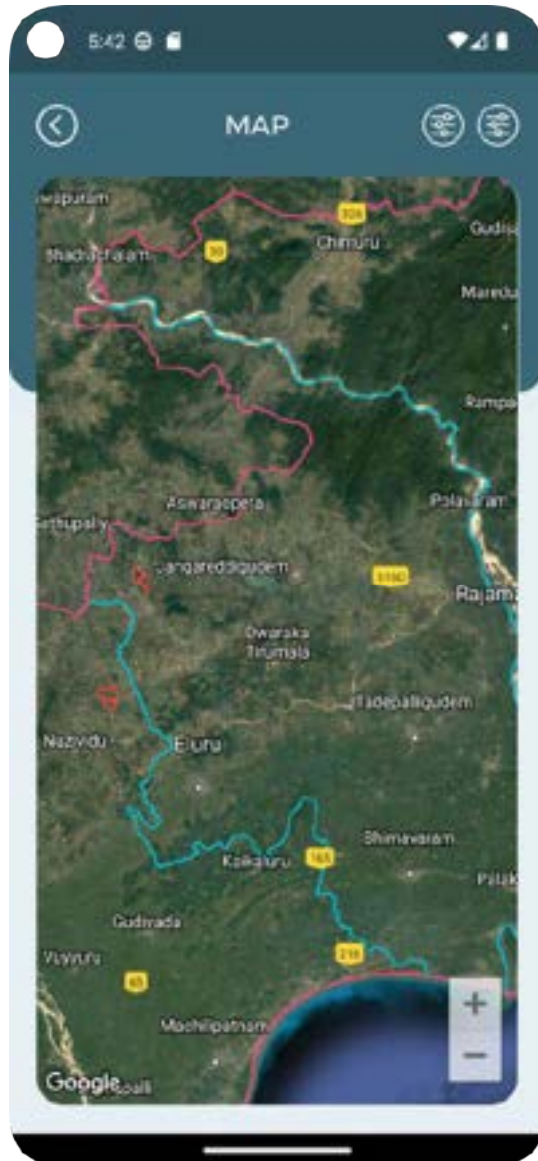
Mobile Application - Coal Auction



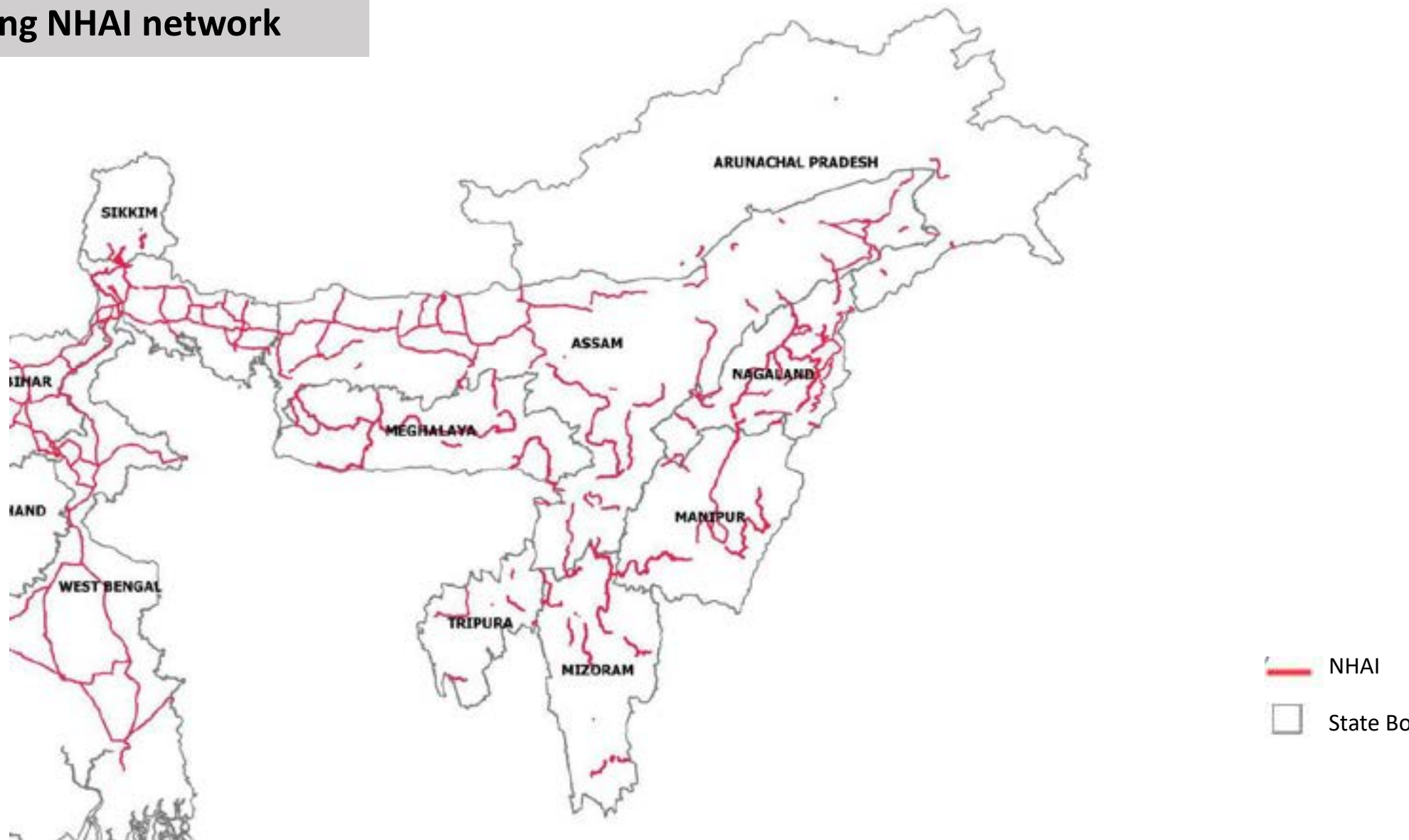
Mobile Application - Coal Auction



Mobile Application - Coal Auction



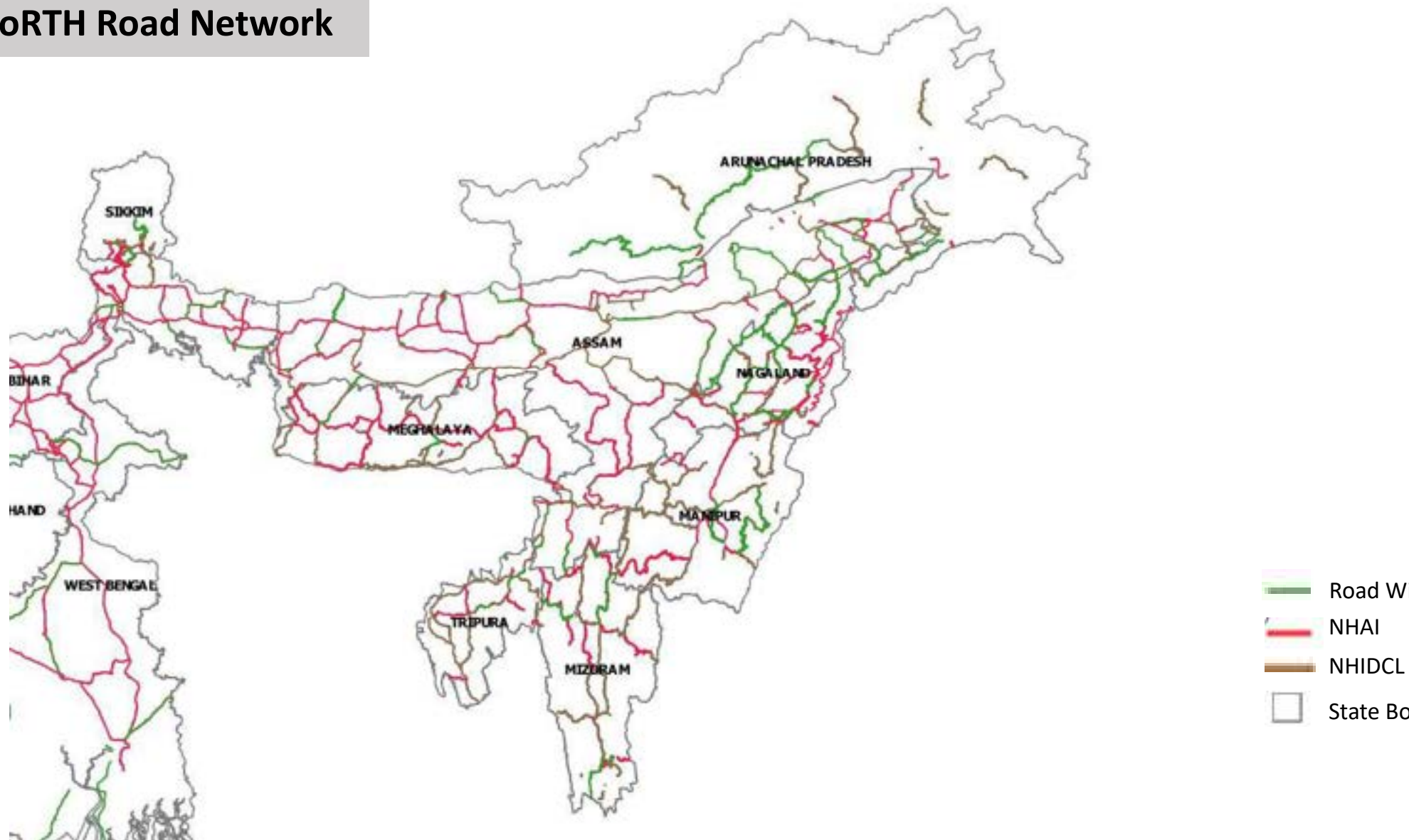
Existing NHAI network



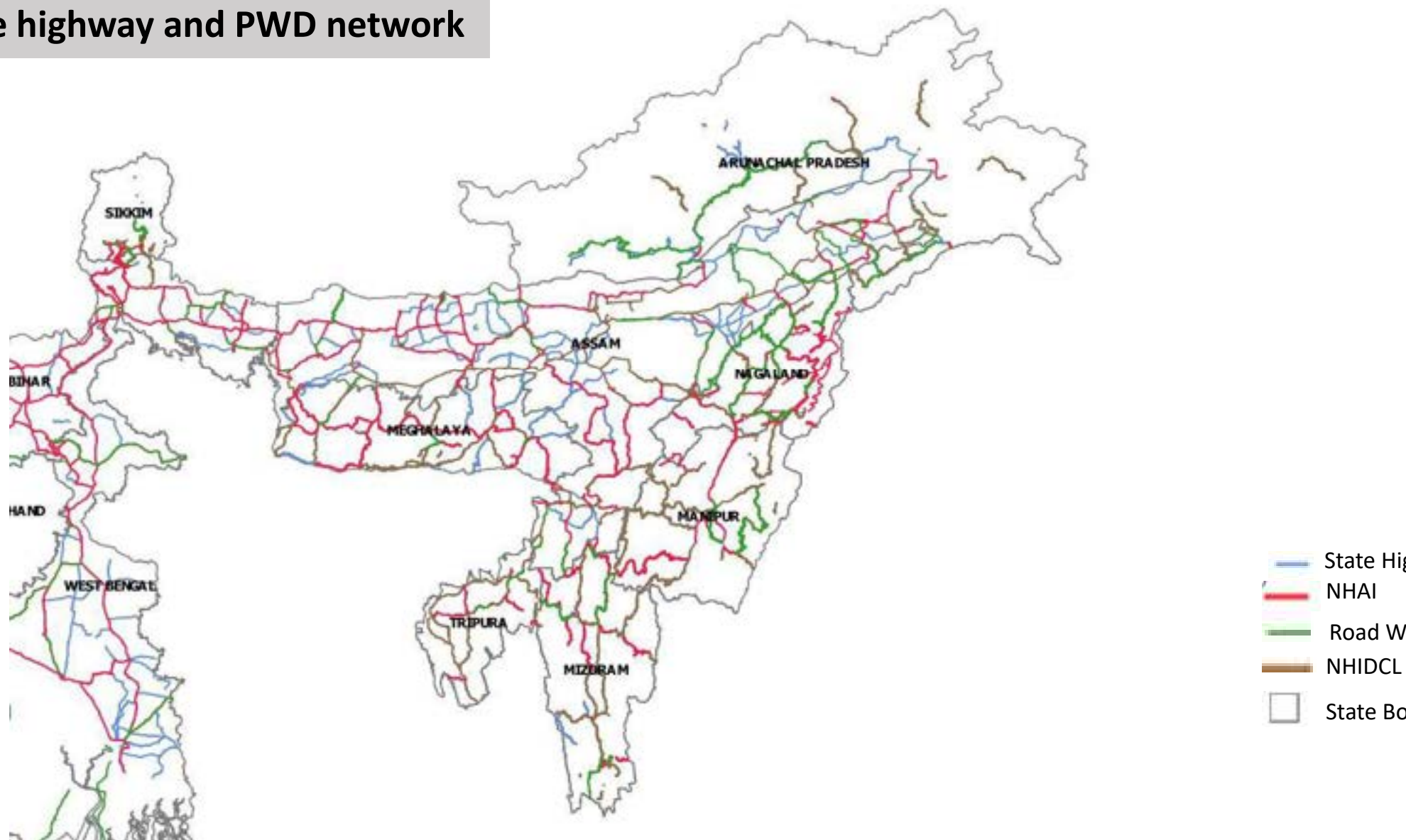
Existing NHIDCL network



ing MoRTH Road Network

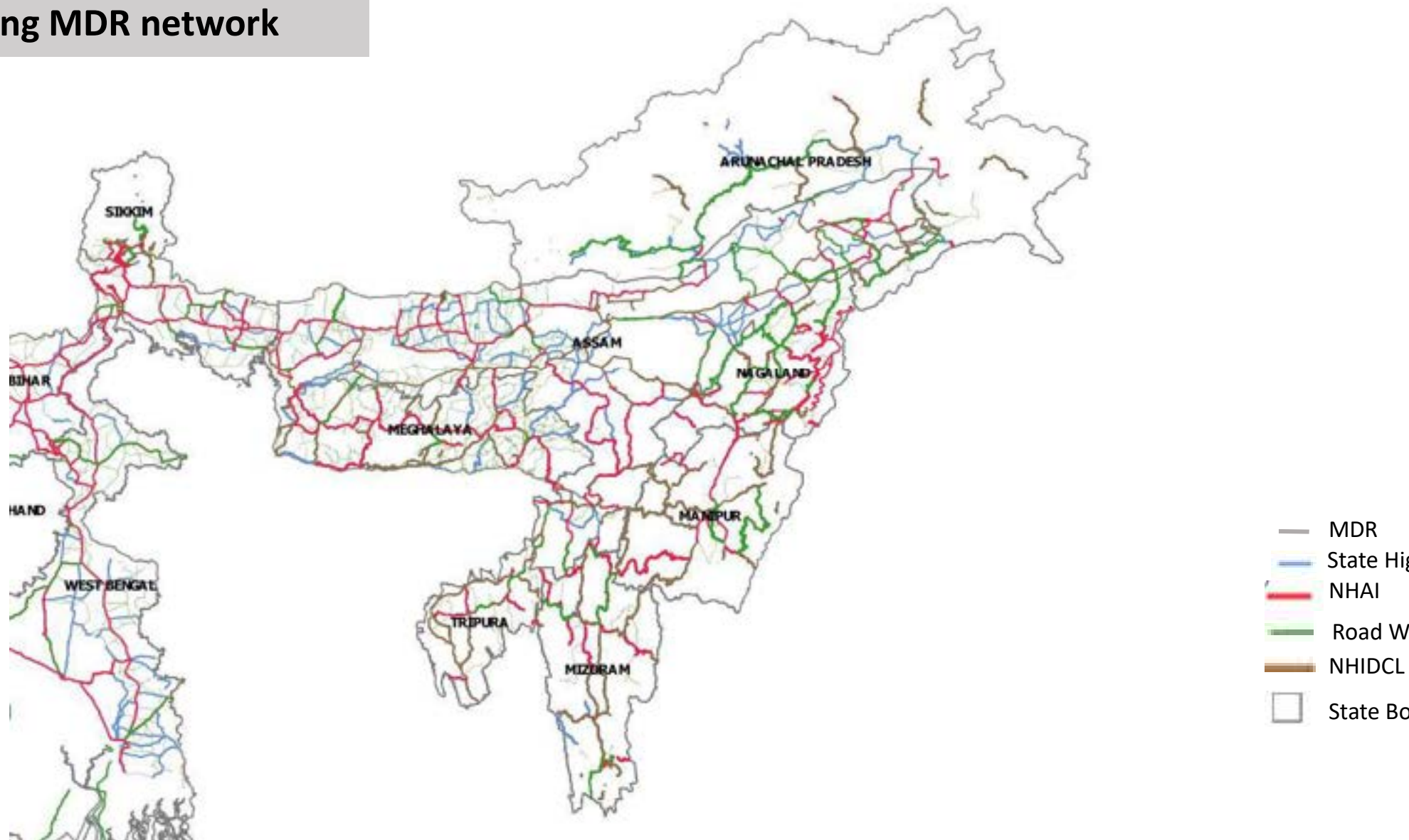


g State highway and PWD network

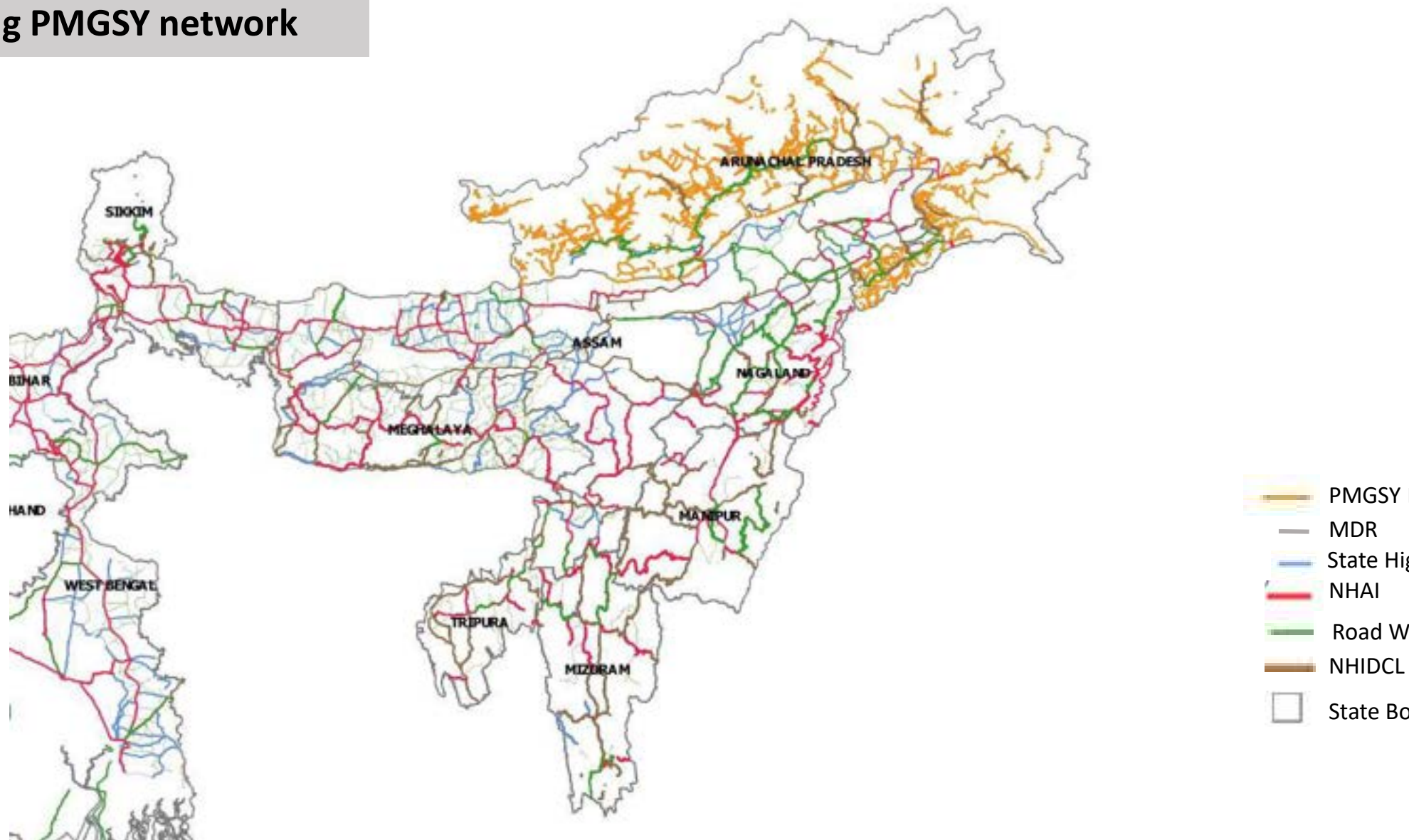


Road Synchronization

Existing MDR network



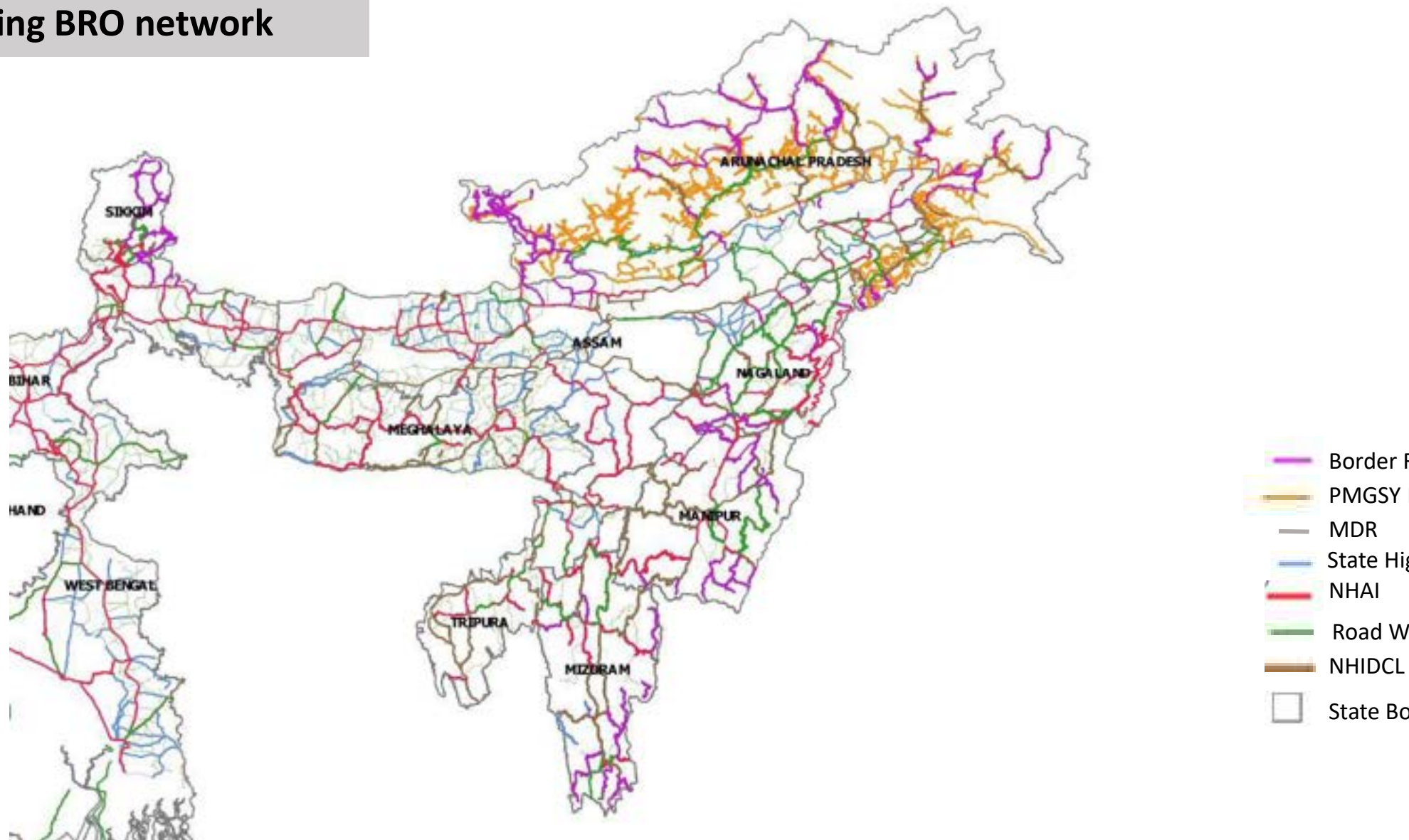
Existing PMGSY network



- PMGSY
- MDR
- State Hig
- NHAI
- Road W
- NHIDCL
- State Bo

Road Synchronization

Existing BRO network



GO Tool

Modify

LatLon Manually

Lat: Lon:

Make Route

Project Name:

Chainage From ☒ Source ☐ Destination

Chainage From (in meters):

Chainage (in meters): **Go**

ROW on left side (in meters): **Go**

ROW on right side (in meters): **Go**

Crossing:

☐ Road

☐ Tunnel

☐ Railway Line

Utilities Shifting

Land Acquisition

☐ Village Boundary
☐ Sub-District Boundary
☐ District Boundary
☐ State Boundary

DPR Module: Editing Tool



Select Origin and Destination to draw Alignment

GO Tool

Modify

LatLon Manually

Lat: Lon:

Make Route

Project Name:

Chainage From ☒ Source ☐ Destination

Chainage From (in meters):

Chainage (in meters): **Go**

ROW on left side (in meters): **Go**

ROW on right side (in meters): **Go**

Crossing:

☐ Road

☐ Tunnel

☐ Railway Line

Utilities Shifting

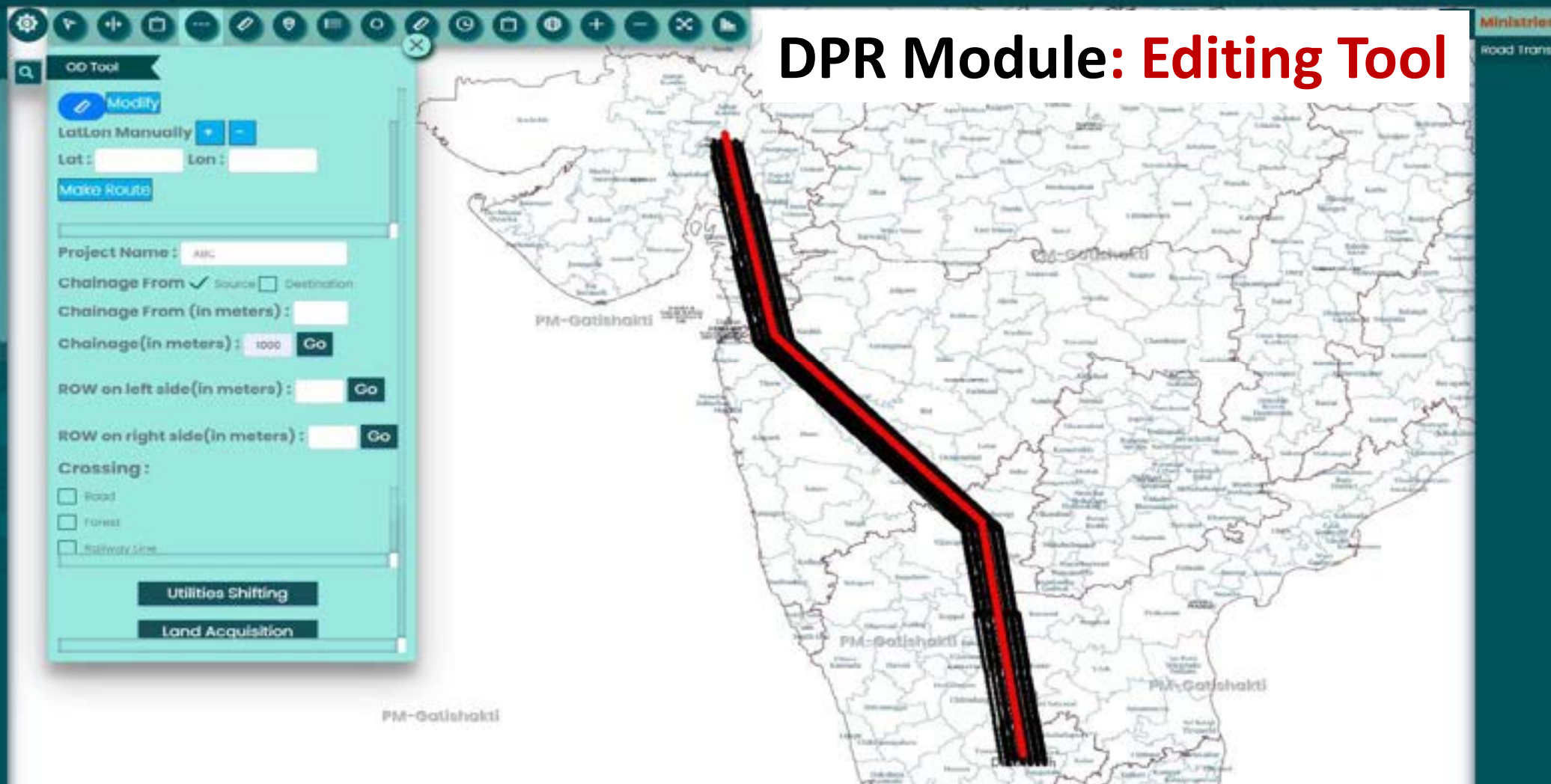
Land Acquisition

DPR Module: Editing Tool



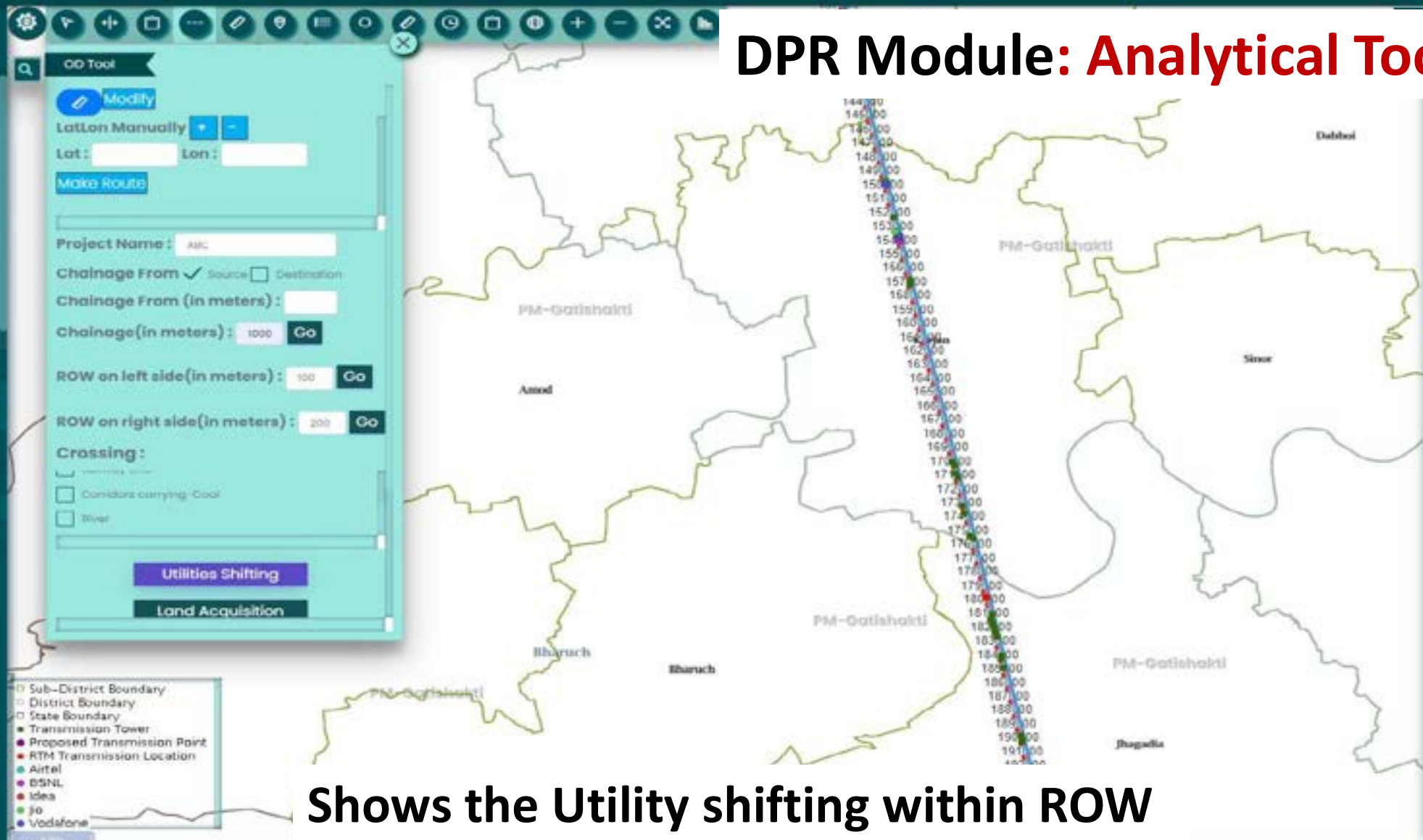
Using Modify tool user can modify the alignment as per requirement

DPR Module: Editing Tool



The screenshot displays the 'DPR Module: Editing Tool' interface. On the left, a sidebar contains various tools and settings. The 'Chainage' tool is highlighted, showing options to set chainage from a source or destination, and to set chainage in meters. The 'Crossing' section has checkboxes for Road, Forest, and Railway Line. The 'Utilities Shifting' and 'Land Acquisition' sections are also visible. The main map area shows a map of India with a red line indicating a proposed road route.

Using Chainage tool user can generate chainage particular interval



DPR Module: Analytical Tool

Shows the Utility shifting within ROW



DPR Module: Analytical Tool

Shows the Utility shifting within ROW

1	Transmission Tower		Latitude
		1	22.0
		2	22.0
		3	22.0
		4	21.8
		5	21.8
		6	21.8
2	Jio Tower		Latitude
		1	22.0
3	Vodafone Tower		Latitude
		1	22.0
		2	22.0

DPR Module: Analytical Tool

The screenshot displays the 'DPR Module: Analytical Tool' interface. On the left, a sidebar contains a 'GO Tool' section with input fields for 'Chainage From (in meters)' (set to 1000), 'ROW on left side (in meters)' (set to 100), and 'ROW on right side (in meters)' (set to 200). Below these are checkboxes for 'Crossing' (set to 'Crossing carrying-Goat') and a 'Go' button. Further down are buttons for 'Utilities Shifting', 'Land Acquisition', 'Save Project', 'Delete Project', 'DPR Report', and 'Export KML'. The main area shows a map with a project alignment (yellow line) and a 'Project saved successfully' message box with an 'OK' button. A legend at the bottom left identifies various map features: Sub-District Boundary, District Boundary, State Boundary, Transmission Tower, Proposed Transmission Point, RTM Transmission Location, Airtel, BSNL, Idea, Jio, Vodafone, NH, SH, MCR, Railway, and OR.

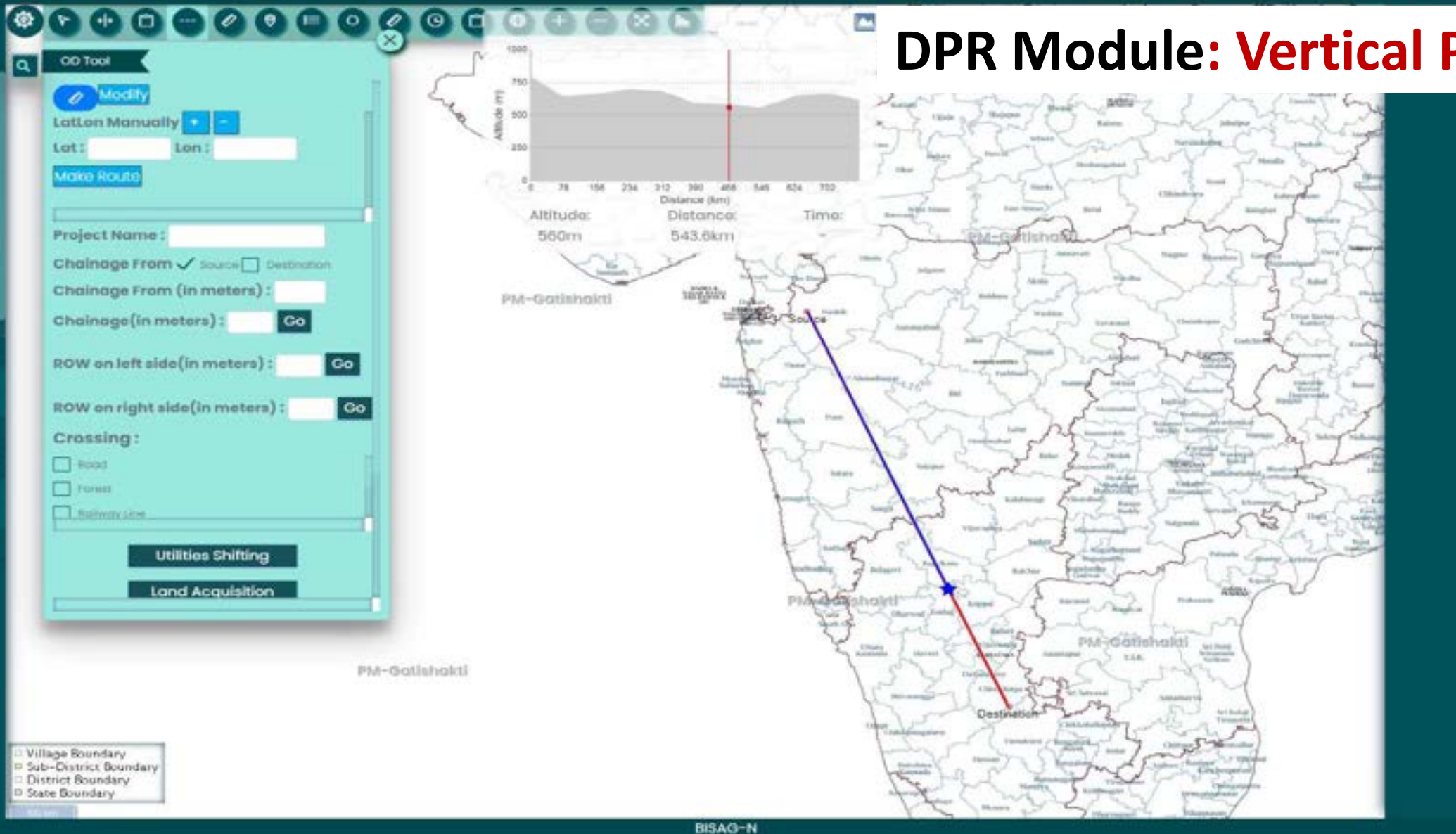
Project saved successfully

Save the particular project for further modification of alignment

DPR Module - Report

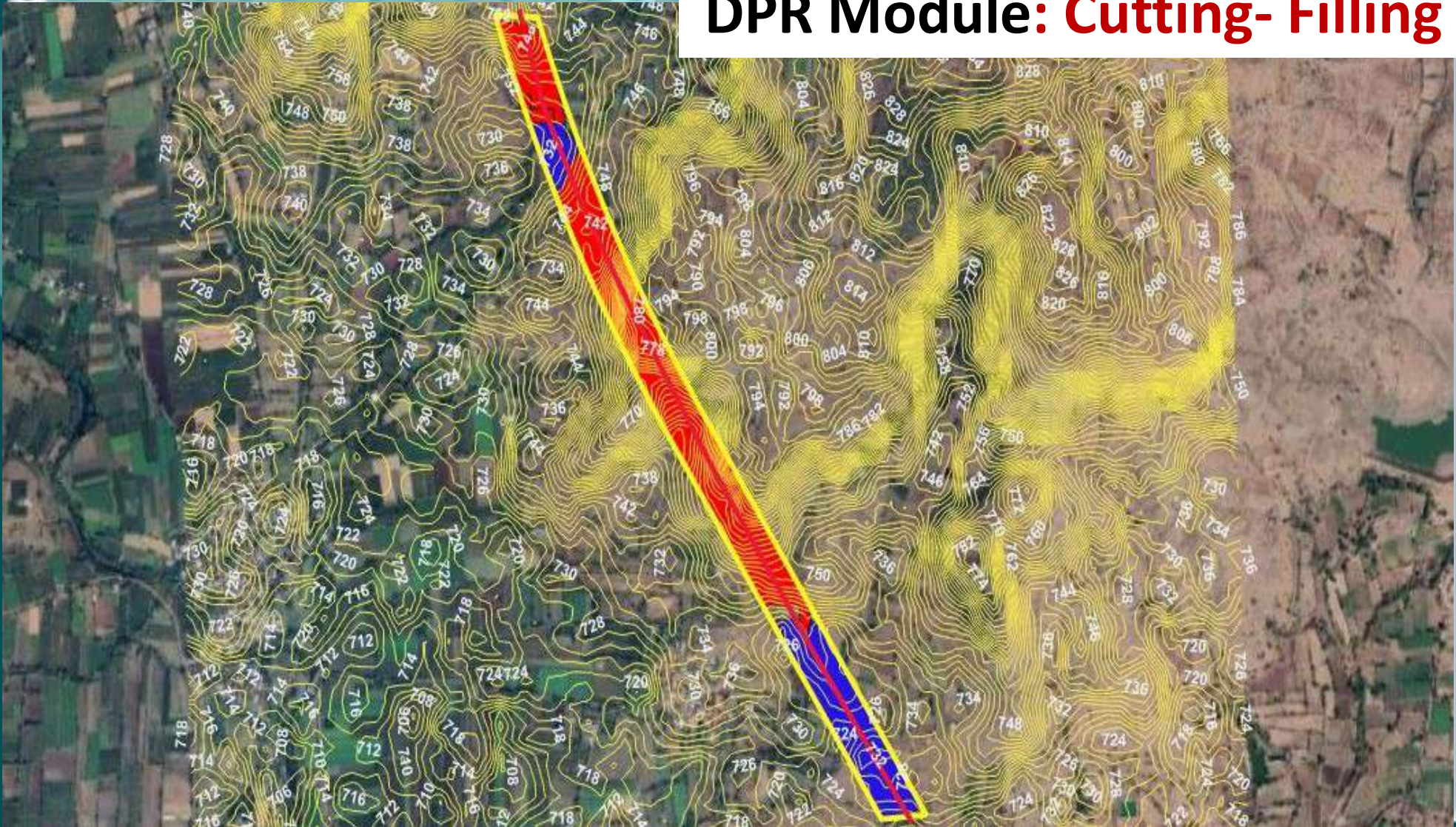
India Roads								
Search: <input type="text"/>								
State	District	Taluka	Village	Road Length (in Meters)	Road Type	View On Map	Intersect Point	
GUJARAT	Mahesana			250.0000	MDR	View	View	
GUJARAT	Mahesana			225.0000	OR	View	View	
GUJARAT	Mahesana			251.0000	MDR	View	View	
GUJARAT	Mahesana			372.0000	OR	View	View	
GUJARAT	Mahesana			227.0000	OR	View	View	
GUJARAT	Mahesana			248.0000	OR	View	View	
GUJARAT	Mahesana			267.0000	OR	View	View	
GUJARAT	Mahesana			11.0000	OR	View	View	
GUJARAT	Mahesana			230.0000	OR	View	View	
GUJARAT	Mahesana			232.0000	OR	View	View	

10 of 908 entries





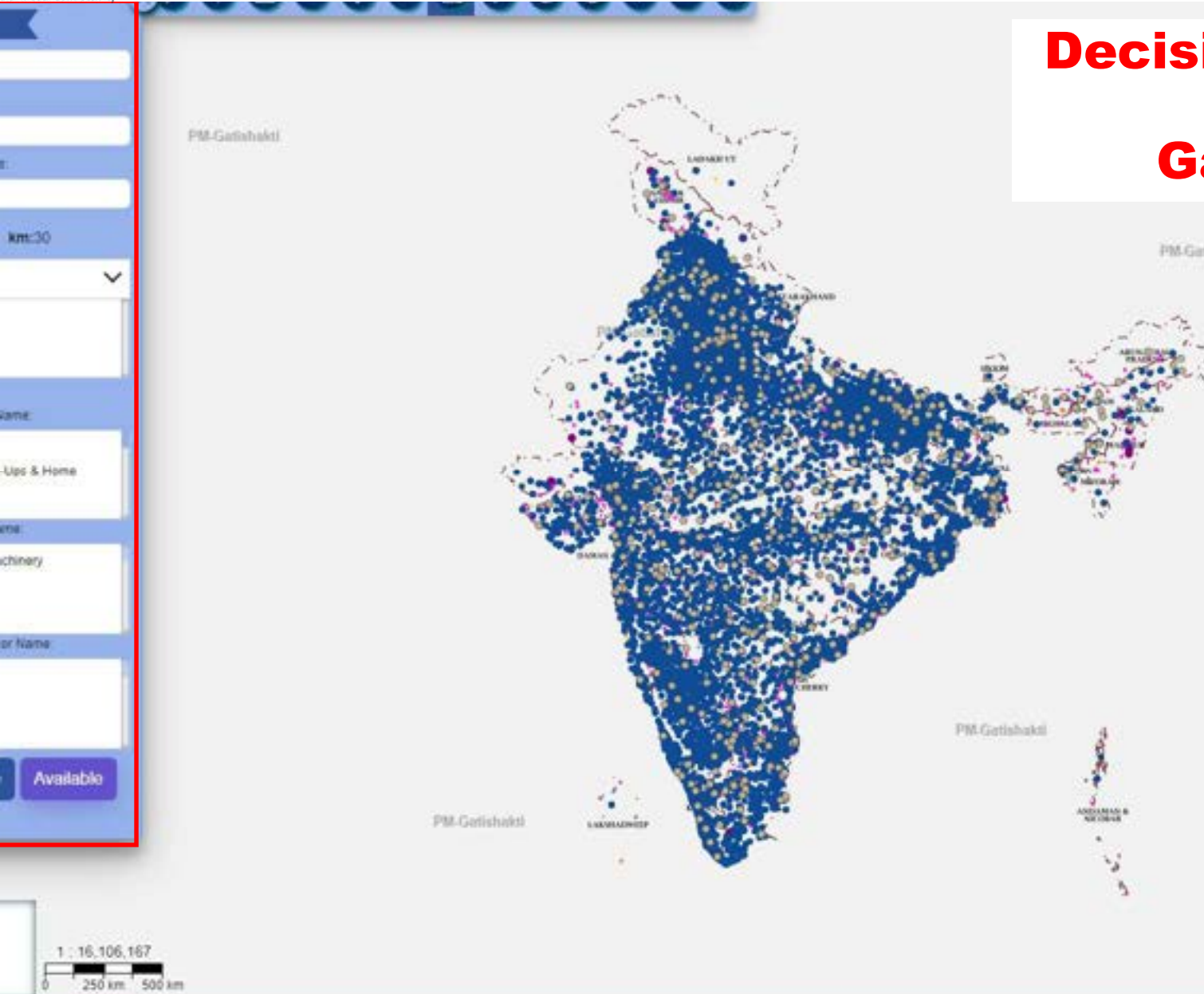
DPR Module: Cutting- Filling



BISAO-N



Decision Making Tool Gap Analyzer



Key Features of T

1. Decision Making Tool for F gaps in terms of Institutes applying dynamic range of around the Industrial setup.
2. Report will generated.
3. Visualization on map of co Industry.
4. Sector wise Gaps can also out.
5. Demand and supply Gap.
6. This tool works in vice versa (Availability & Non-availability MSDE Institutes).

Gap Analysis Report (Not Available)

Excel

Search:

District	Sub District	Park Name	Data Owner Agency	Park Type	Level Type	Latitude	Longitude
Tiruchirappalli	Ranastalam	DR.REDDY'S SECTOR SPECIFIC SEZ FOR APIs & PHARMADEUTICALS	DR.REDDY'S SECTOR SPECIFIC SEZ FOR API & PHARMACEUTICALS	Special Economic Zones	Central	18.1462133491387	83.6195856553
Tiruchirappalli	Naidupet	IP Naidupeta	APIIC	Industrial Park	State	13.925693171591847	79.8249309194
Tiruchirappalli	Venkatachalam	IP RAMDAS KANDRIGA		Other	State	14.8952284258002	79.5250675578
Tiruchirappalli	Tirupati (Urban)	CC_TIRUPATI		Other	State	15.2135062120881	79.6294376749
Tiruchirappalli	Anantapur	IP_Ananthpur	APIIC	Industrial Park	State	14.6902535629636	77.571165851516
Tiruchirappalli	Dhone	IP_DHONE		Other	State	15.3857068543277	77.88261150312
Tiruchirappalli	Nakkapalle	HETERO INFRASTRUCTURE SEZ LIMITED	HETERO INFRASTRUCTURE SEZ	Special Economic Zones	Central	17.3867342120474	82.7009697803
Tiruchirappalli	Srikalahasti	Inagaluru	APIIC	Special Economic Zones	State	13.8993240811507	79.57231447043
Tiruchirappalli	Chittoor	Venkatapuram	APIIC	Industrial Park	State	13.1648656576709	79.19874454512
Tiruchirappalli	Atchutapuram	Brandix India Apparel City Pvt. Ltd.		Other	Central	17.5395281276282	82.9804696651



Generate grids of customizable size in the city of interest for 5G planning

- Overlap layer of mobile towers to see which grids are being covered
- Overlap layer of street furniture to check which grids are being covered
- The uncovered grids can be focused for infra installation

Generate Grid

Town

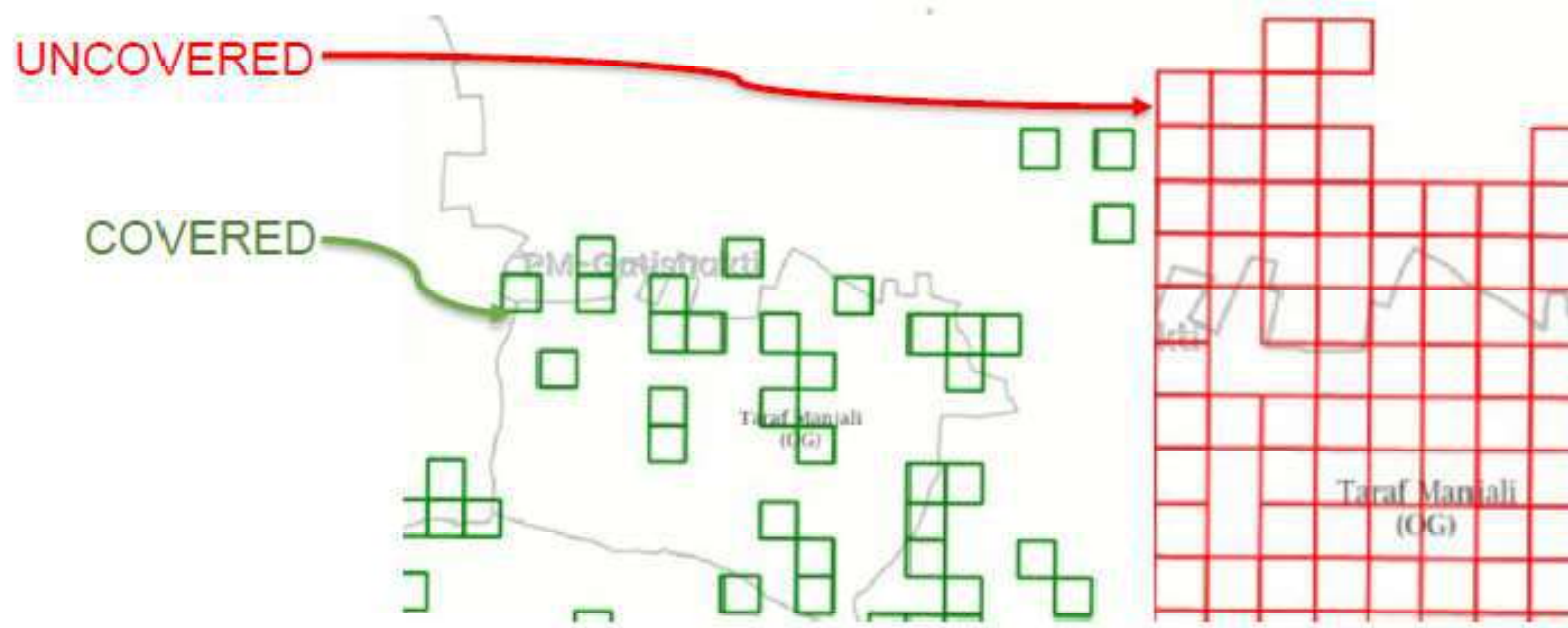
Area (sq.m) max upto
(00)

0

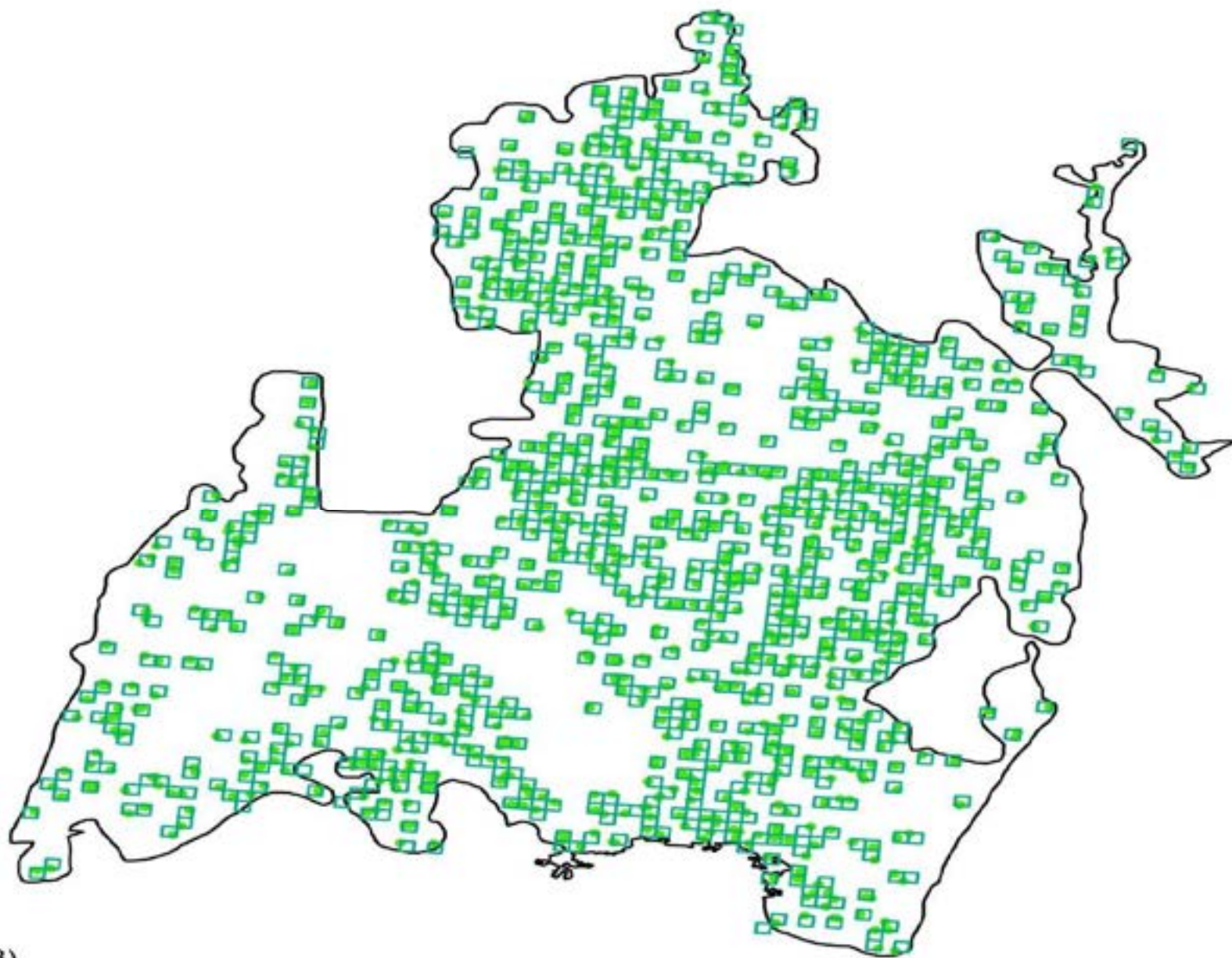
of grid(200*200 m)

of grid

Report



eswar City



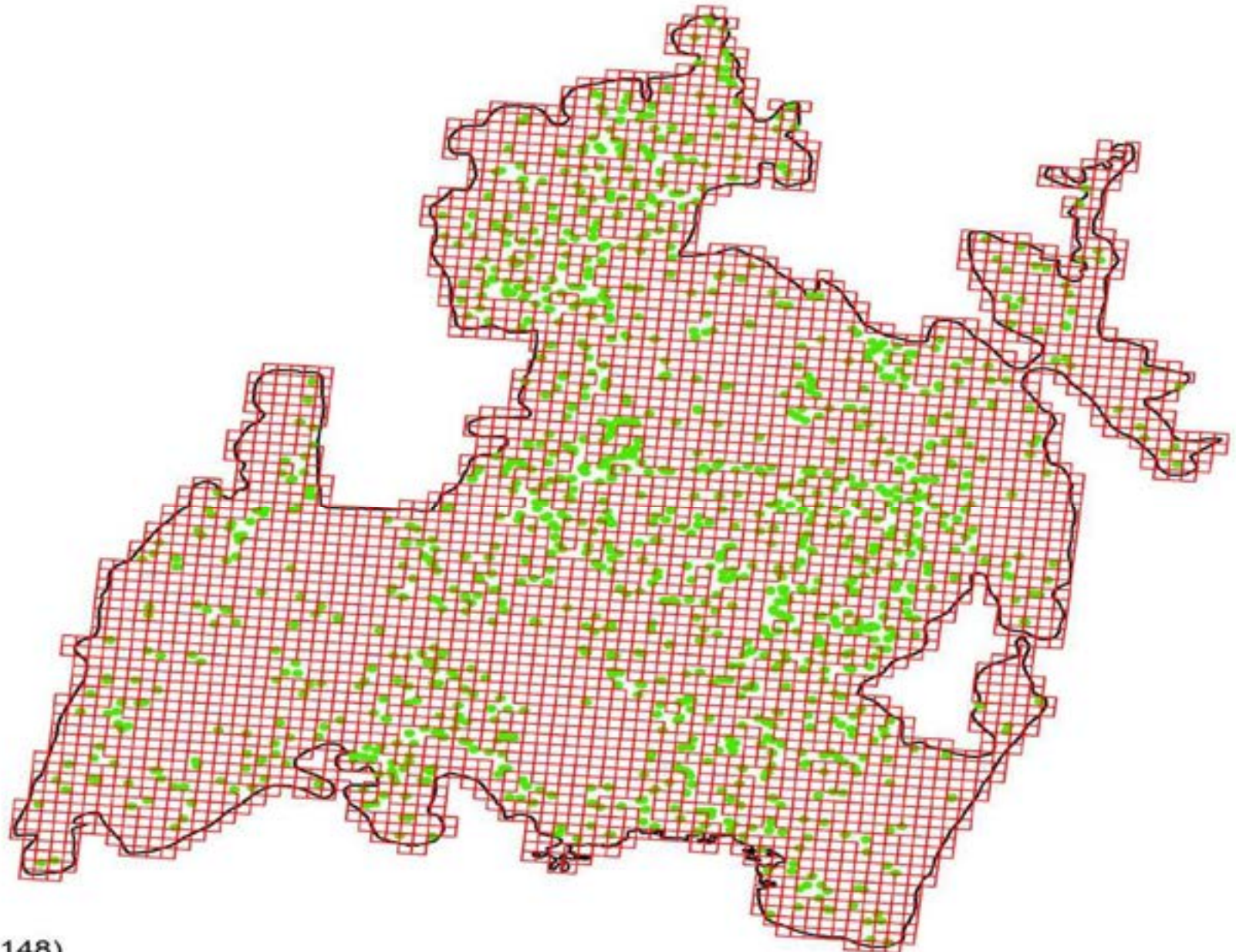
d

isting Mobile Tower

0*200 Grid Covered (1008)

tent Boundary

eswar City



d
isting Mobile Tower

0*200 Grid UnCovered (3148)

tent Boundary

Call Before u Dig



Call Before u Dig

Ministry of India to prevent damage to
infrastructure due to unplanned
excavations.



11:44 3G

New Enquiry

Khodiyar Mata Mandir

3 / 0.06km / 23.1157, 72.6979

Google

Total Distance

0.12 km

Latitude and Longitude

1. Latitude : 23.1159, Longitude : 72.6974
2. Latitude : 23.1162, Longitude : 72.6976
3. Latitude : 23.1157, Longitude : 72.6979
4. Latitude : 23.1159, Longitude : 72.6974
5. Latitude : 23.1162, Longitude : 72.6976
6. Latitude : 23.1157, Longitude : 72.6979
7. Latitude : 23.1159, Longitude : 72.6974
8. Latitude : 23.1162, Longitude : 72.6976
9. Latitude : 23.1157, Longitude : 72.6979

Call Before u Dig

Mark Location

11:44 3G

Application Preview Details

State - Gujarat
District - Gandhinagar
Taluka/Tehsil - Gandhinagar
Address - Sargasan
PinCode - 382007
Agency Name - BISAG-N
Purpose Of Enquiry - Digging Purpose
Start Date and Time - 17-11-2022 :
11:27 AM
End Date and Time - 18-11-2022 : 11:27 AM
Total Distance - 0.12 km
Latitude and Longitude -
1. Latitude : 23.1159, Longitude : 72.6974
2. Latitude : 23.1162, Longitude : 72.6976
3. Latitude : 23.1157, Longitude : 72.6979
4. Latitude : 23.1159, Longitude : 72.6974
5. Latitude : 23.1162, Longitude : 72.6976
6. Latitude : 23.1157, Longitude : 72.6979
7. Latitude : 23.1159, Longitude : 72.6974
8. Latitude : 23.1162, Longitude : 72.6976
9. Latitude : 23.1157, Longitude : 72.6979

Call Before u Dig

Application preview

12:02

Asset Owner D

Name : Daxesh Barot
Email ID : daxesh.barot@ril.co
Agency Name : RJIL
Mobile Number : 6355211437

Call

Name : Ajay Singh
Email ID : ajaysonu.singh@gn
Agency Name : Airtel
Mobile Number : 9026653055

Call

Name : Sathish Kumar
Email ID : sathish@sabarmati
Agency Name : SABARMATI C
Mobile Number : 9925009968

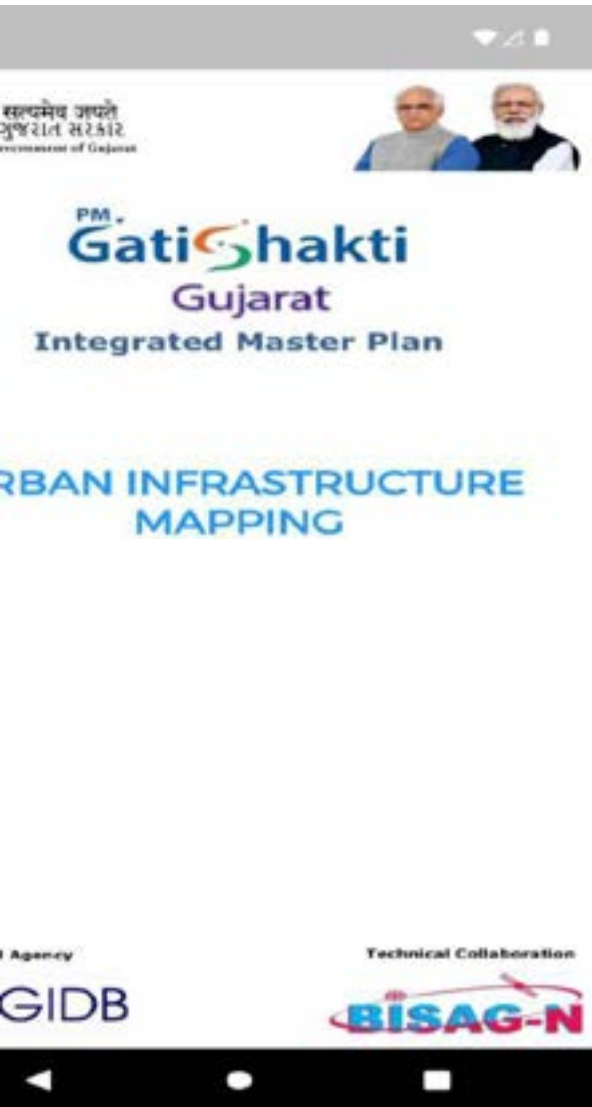
Call

Name : R B PATEL
Email ID : dekudasansd@ugv

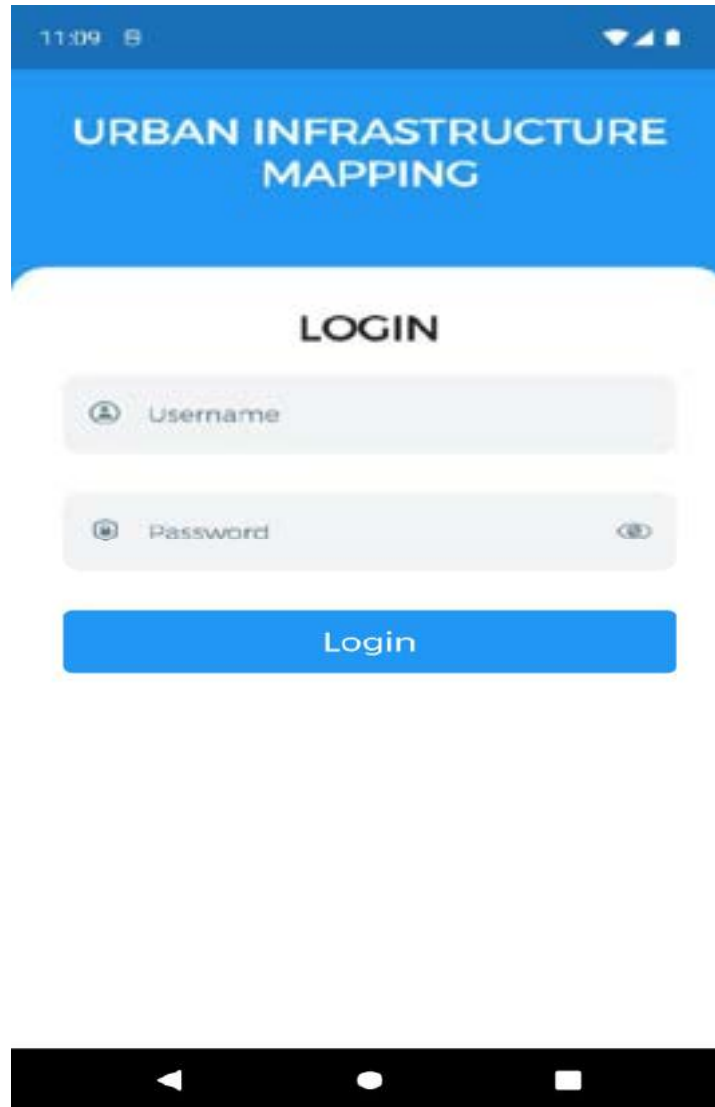
Call Before u Dig

Asset Owner
Details

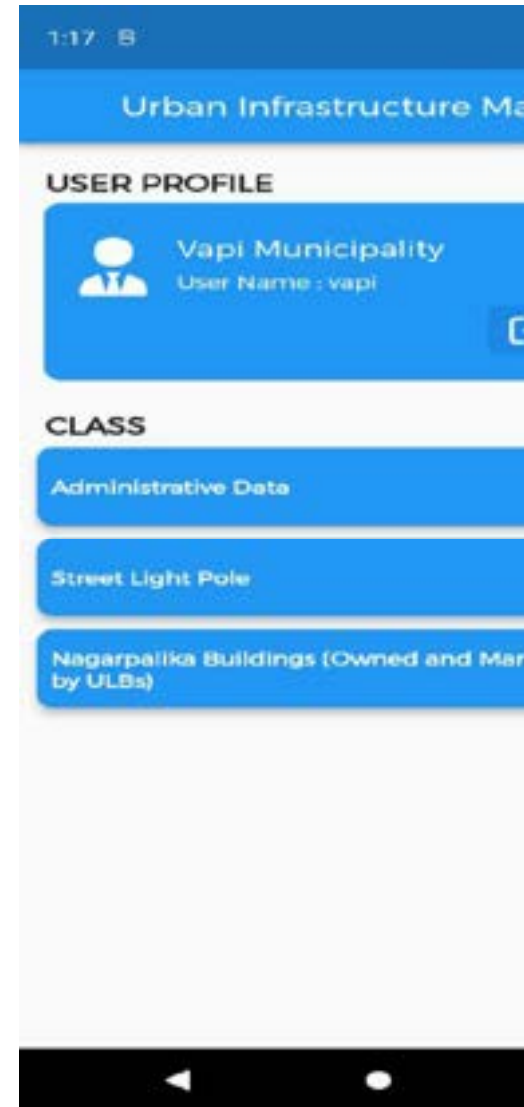
GatiShakti Mobile Application for Urban Infrastructure Mapping



Splash Screen



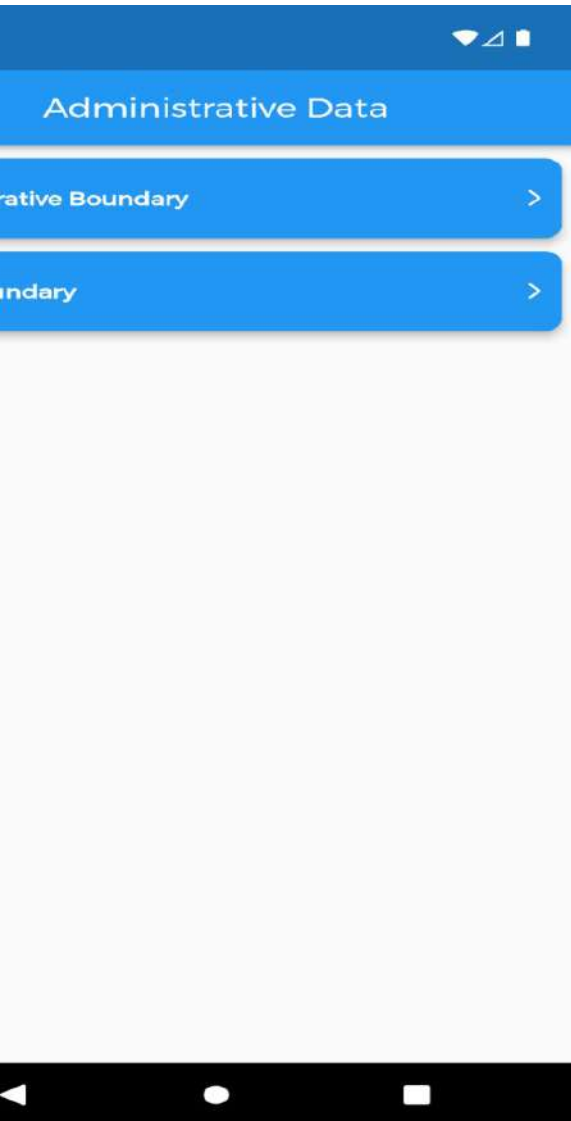
Login Screen



Dashboard

Shakti Mobile Application for Urban Infrastructure Mapping

National Master Plan for
Multi-Modal Connectivity



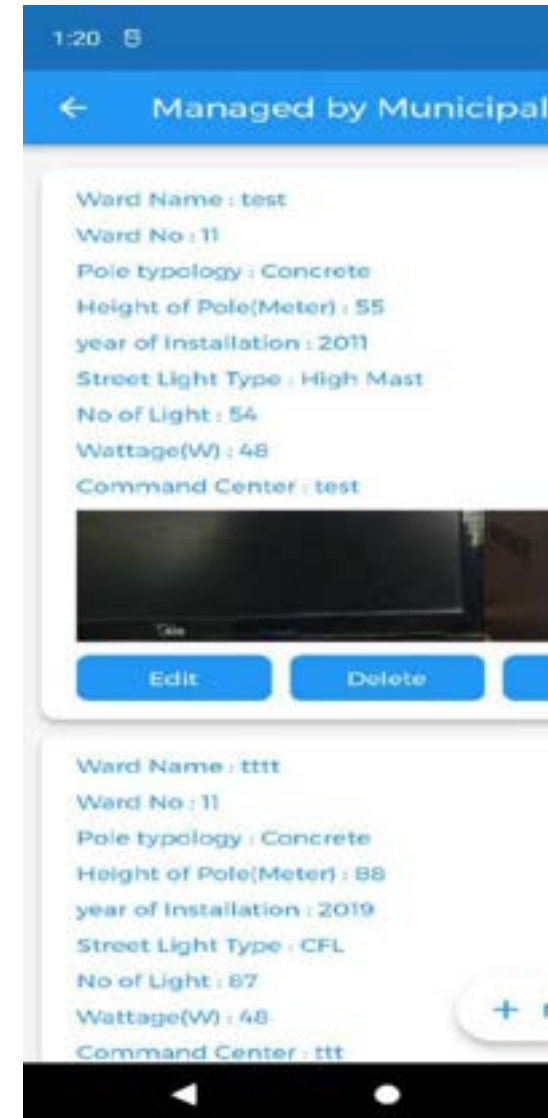
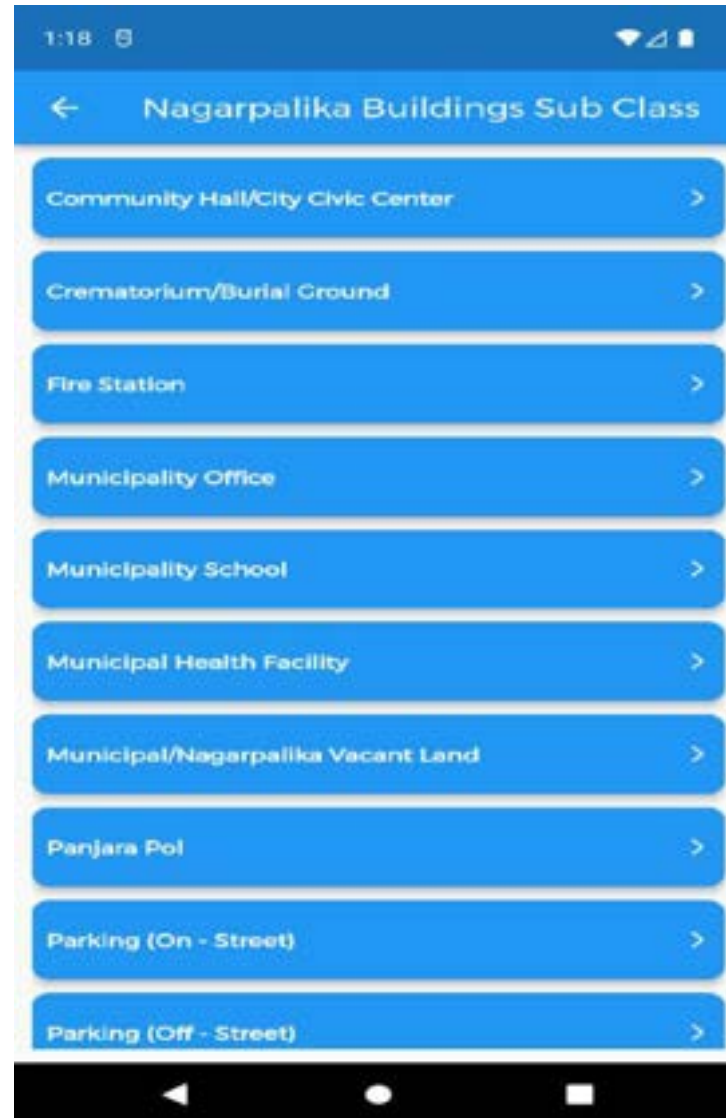
Administrative Boundary



Ward Boundary

Shakti Mobile Application for Urban Infrastructure Mapping

National Master Plan for
Multi-Modal Connectivity



Nagarpalika building subclass

Street light details



Geo-spatial Digital Platform (Odisha State Master Plan)

A Collaborative Programme

30 Mandatory Layers for Odisha State Master Plan

State / U.T.	Odisha	Sr. No.	State / U.T.	Odisha
Land Records	Yes/WMS	16	Mining Areas	Partial
Forest	Yes/API	17	ASI Sites	Yes/WMS
Wild Life	Yes/API	18	Tourism Sites	Partial
Eco Sensitive Zones	Yes/API	19	Roads	Yes/WMS
CRZ	Yes	20	Water Supply Pipelines	
Reserve Forest	Yes/API	21	Sewer Lines	
Water Resources	Yes	22	Drainage	Yes
Rivers	Yes	23	Economic Zones	
Embankments		24	Industrial Parks	Partial/ API
Canals	Yes	25	Electric Poles	
Reservoirs Dams	Partial	26	Traffic Light Poles	
Soil Type	Yes/WMS	27	Bus Terminal & Bus Shelters	
Seismicity / Earthquake	Yes/WMS	28	Govt. Buildings (State Govt. / Central Govt. / PSU)	
Flood Maps	Yes/WMS	29	Petrol/Diesel Outlets	
Power Transmission & Distribution	Partial	30	Village Habitations	

PM-GatiShakti



1 : 2,898,269

0 50 km 100 km



Road Network for PWD

National Master Plan-Odisha

- Departn
- > ASI
- > CDP

PM-GatiShakti

Package No	"OR26271"
Road Name	"NH203A - Rendhagarh"
Total Length Km	"1.65"
Start Habitation	"Rendha"
End Habitation	"Barapada"
Other Benifited Habitation	{
Original	"DD.DSOTT."

PWD

Odisha Roads

Rural Works

✓ Roads

PM-GatiShakti

PM-GatiShakti

PM-GatiShakti

1 : 3,053,896
0 50 km 100 km

- > State W
- > Telecom
- > Tourism
- > Water R
- > Approve

Non Fiber Mobile Tower for Telecom Department

National Master Plan-Odisha

Department

- > ASI
- > CDP

Non Fiberise Mobile

Sn	9656
Tower Id	"OD/07/5126/0290/0047/03/0"
Nameofisa	"Odisha"
Nameofstat	"Odisha"
District	"Jagatsinghpur"
Ip Name	"ATC"
Ip Name	"OD/07/5126/0290/0047/03/0"

Telecom

Odisha Telecom

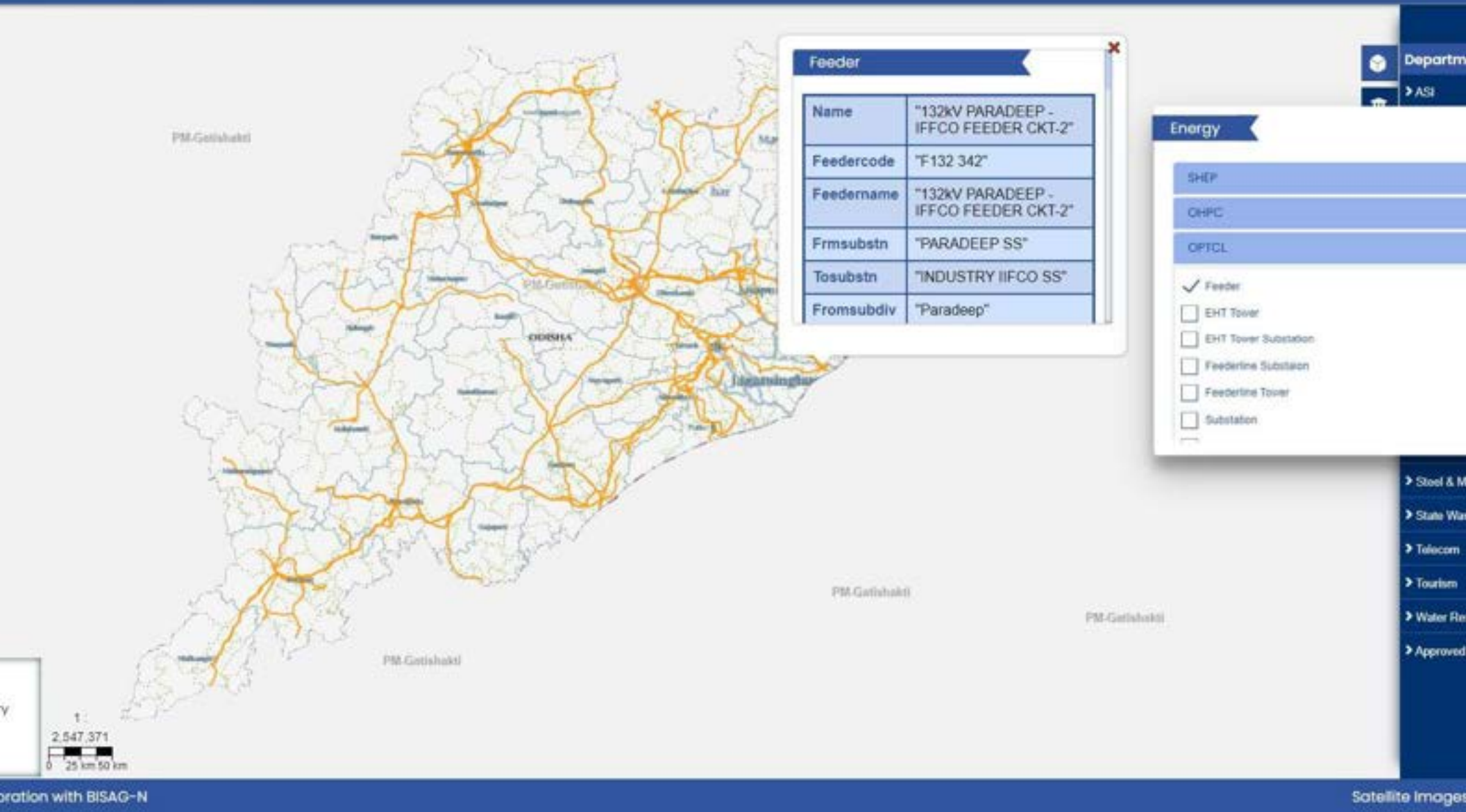
- ☒ Non Fiberise Mobile Tower
- ☐ BSNL OFC Network
- ☐ BBNL OFC Network
- ☐ MTNL Network
- ☐ TCL Cable
- ☐ Gail Ofc Network Dgrpl Lrpl Dbrpl
- ☐ Gail OFC Upcoming Line Kkmbpl
- ☐ Bhubaneswar 200mt Grid
- ☐ Village extant

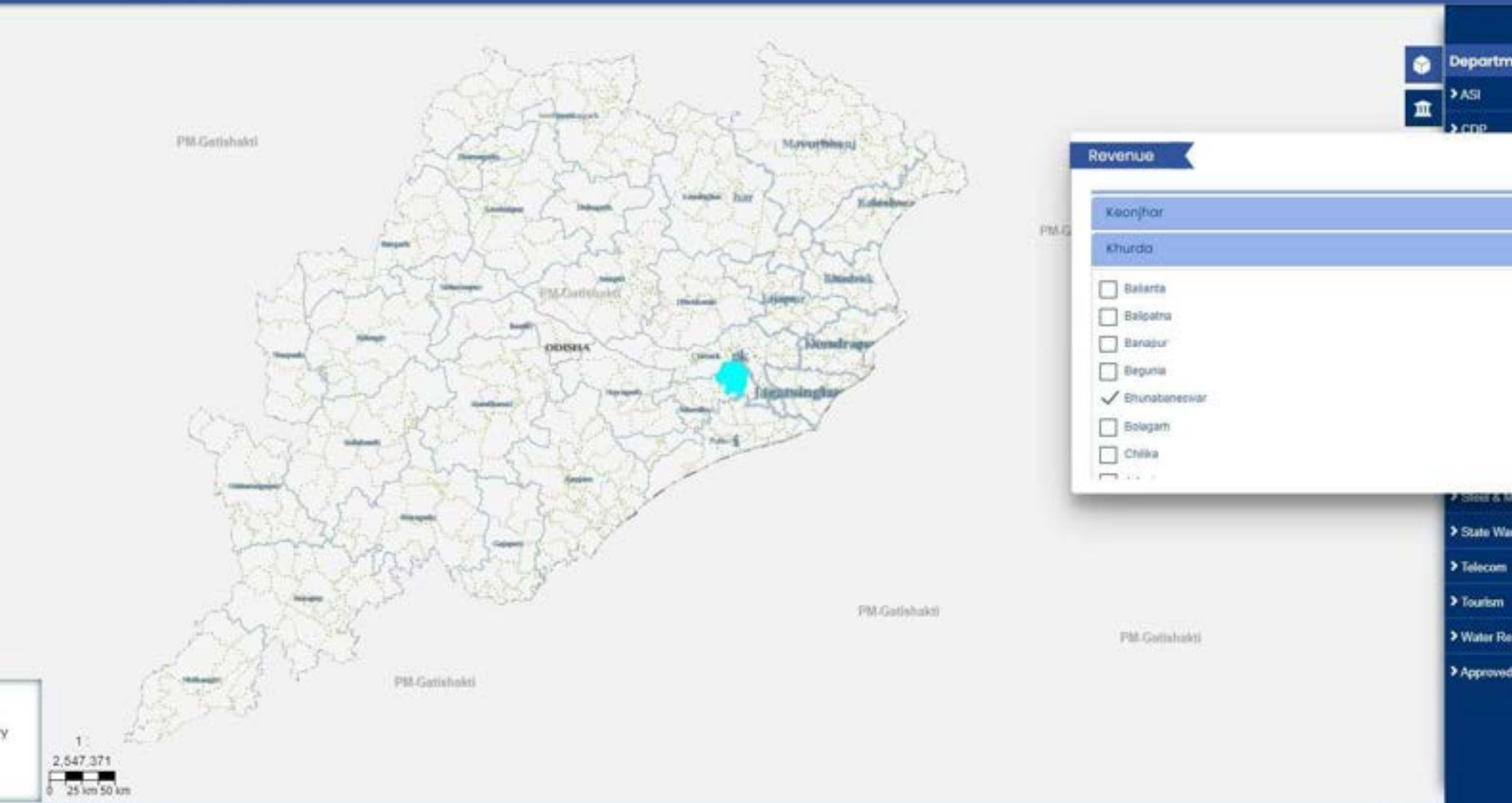
- > State Wa
- > Telecom
- > Tourism
- > Water Re
- > Approved

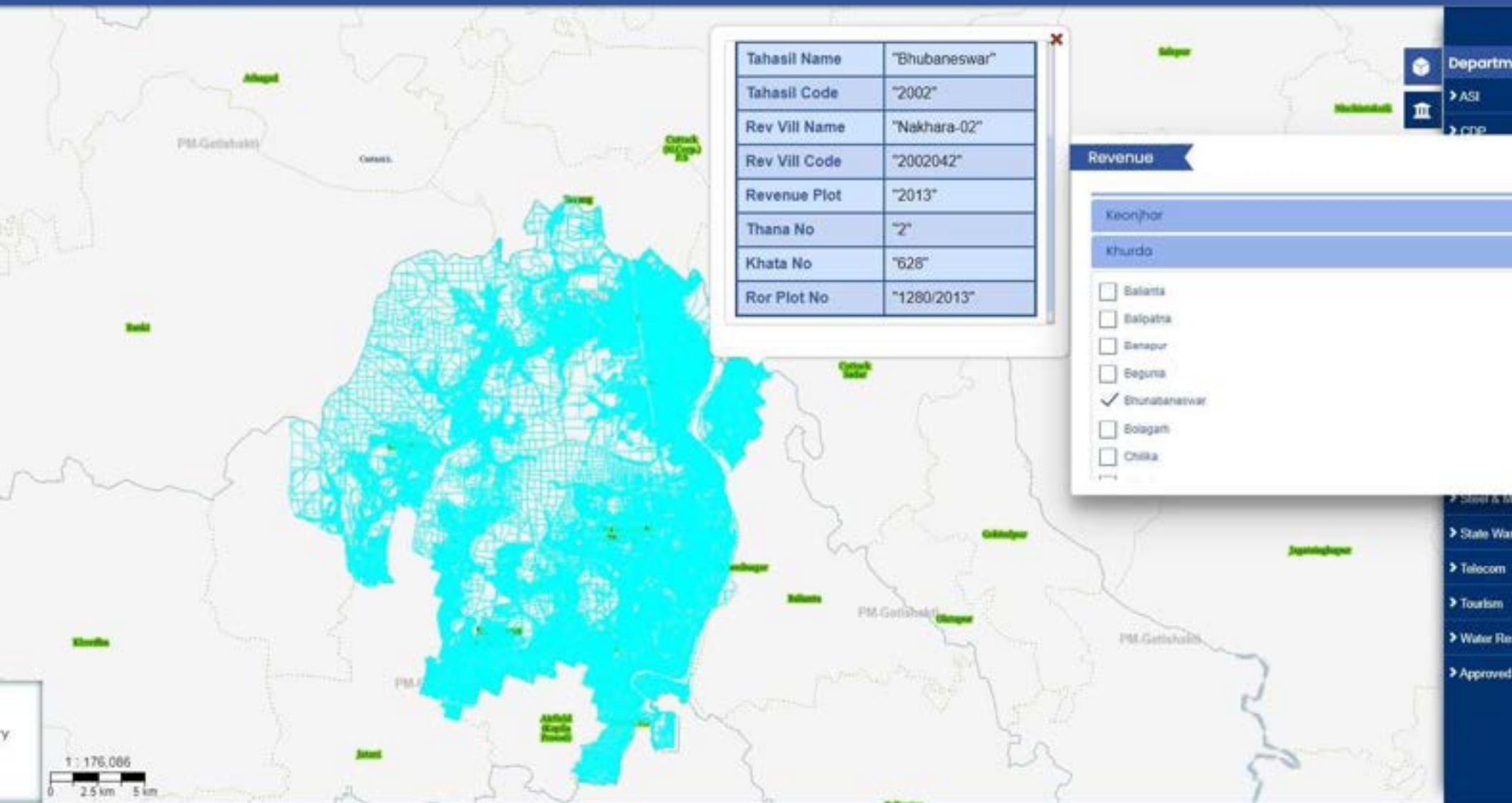
1 : 3,056,323

Feeder Line for Energy Department

National Master Plan-Odisha









West Bengal State Master Plan



Latitude :25.1858

Longitude :91.3350

Tools Panel

Layers Panel



Central Ministries Lay

Latitude :23.7718

Longitude :91.3971

PM-Gatishakti

PM-Gatishakti

PM-Gatishakti

PM-Gatishakti

PM-Gatishakti

PM-Gatishakti

State Department

- Depo
- En
- Fore
- Indu
- Pop
- Distri
- Soil
- Seis
- ASI
- Tran
- PHE
- View

1 28 12 380

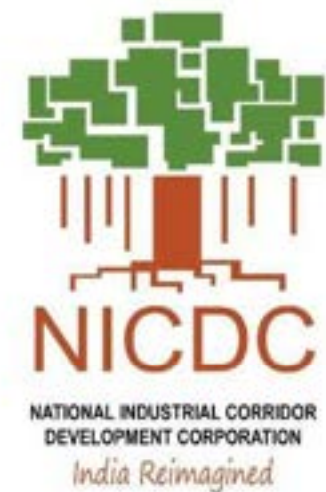
West Bengal State Master Plan Portal

	DATE	14/02/2022	
Sr. No.	Layer/Department	West Bengal	Data Type
1	Land records		
2	Forest	Yes	
3	WildLife	Yes	
4	Eco sensitive zones	Yes	
5	CRZ	Yes	.shp by Environment dept.
6	Reserve Forest	Yes	
7	Water resources		
8	Rivers	Yes	.shp shared by PHED
9	Embankments		
10	Canals		
11	Reservoirs Dams		
12	Soil Type	Yes (As per Central Ministry)	Data from Central ministry
13	Seismicity	Yes (As per Central Ministry)	Data from Central ministry
14	Flood Maps	Yes (As per Central Ministry)	Data from Central ministry
15	Power transmission and distribution	Yes	.shp of Feeder lines, Substations and Poles (WBSEDCL) .shp of Substations, Line and towers (WBSETCL)
16	Mining areas		
17	ASI sites	Yes (As per Central Ministry)	Data from Central ministry
18	Tourism Sites		
19	Roads	Yes	.shp shared by PHED
20	Water supply pipelines	Yes	.shp shared by PHED
21	Sewer lines	Yes	.shp of 15 ULBs by UD&MA dept.
22	Drainage	Yes	Storm Water Drainage .shp for 31 ULB by UD&MA dept.
23	Economic zones	Yes	shp of 14 electronics park by IT&E dept .shp shared by WBIDC
24	Industrial Parks	Yes (Partial)	MSME .DWG files need to sent kml/shp
25	Electric Poles	Yes	.shp of Electric Poles (WBSEDCL)
26	Traffic Light Poles		
27	Bus Terminals and Bus Shelters	Yes	.shp shared by Transport dept
28	Government Buildings		
29	Petrol/Diesel stations		
30	Village Habitations		
Other Than Mandatory Layers			
	Helipads	Yes	.shp shared by Transport dept
	Impounded Waterbody	Yes (Partial)	.shp shared by PHED
	Admin Boundaries	I. Mouza II. GP III. Block iv. District v. Municipality	.shp shared by PHED (GP in Birbhum is missing)
	Fishery	Existing and proposed projects	.shp shared by Fishery dept



Thank You.

NATIONAL INDUSTRIAL CORRIDOR DEVELOPMENT CORPORATION LIMITED



INDIA | AN ECONOMIC POWERHOUSE

#1

Fastest Growing
G20 Economy

#2

Largest Internet
Subscriber Base

#1

Smartphone
Data Consumers

#3

Largest
Startup Ecosystem

#1

Global
Fintech Adopter

#3

Largest Consumer
Market

#2

Global
Retail Index

#3

Economy by
PPP



GatiShakti National Master Plan for Multi-Modal Connectivity launched by Prime Minister on 13th October 2021

Option of GatiShakti Principles

Distance from - Road, Rail, Port, Airport & Waterways

Availability of Utilities - Gas, Water, Power & Telecom/Optical Fibre network

Contiguous land, free from litigation/encumbrance/wildlife /eco-sensitive area

Availability of raw material, skilled labour, logistic hubs

Distance from existing industrial parks / clusters / SEZs / urban agglomerations

Implementation

Dholera ➡

6-lane Expressway – Ahmedabad to Dholera

Greenfield International Airport

Bhimnath Dholera Rail line

Acquisition of 30mtr RoW by NHAI for MRTS within RoW for Expressway

Shendra-Bidkin ➡

Development of economic zone basis availability of multimodal connectivity

(Jalna Dry port, NH/SH/Sammrudhi Mahamarg, Rail, Port & Airport connectivity)

Gap assessment – Shendra-Bidkin road connectivity

Planning

Surpura Farm ➞

Leveraging existing infrastructure – Road (NH09/SH44), Rail (Panthenagar/K
Airport, ICD CONCOR, Telecom

Infrastructure gaps identified – strengthening of SH (2/4 lane), NH (4/6 lane)

Included in planning of respective agencies

Surpura-Patiala ➞

Site identification considering proximity to Road (NH44), Rail (EDFC/IR), A
(Chandigarh)

Last mile connectivity (5.6 km) – funded under GatiShakti

No additional infrastructure required

Application of PM GatiShakti Principles

Completed	On-going	New
<p>Dholera Ahmedabad–Dholera(A-D) Expressway RoW for Vande Bharat Exp. along Expressway Greenfield Int. Airport Bhimnath-Dholera Rail Link</p> <p>Chandrapur-Bidkin Aurangabad- Paithan Road</p>	<ul style="list-style-type: none">○ Khurpia<ul style="list-style-type: none">• Widening of SH-44 to 4 Lane• Widening of NH-9 to 6 Lane○ Rajpura<ul style="list-style-type: none">• Development of Primary access road (5.6 km) under GatiShakti Scheme	<p>Site selection of GatiShakti principles</p>

National Industrial Corridor Programme

Industrial Corridors

Delhi-Mumbai Industrial Corridor (DMIC)

Amritsar-Kolkata Industrial Corridor (AKIC)

Chennai-Bengaluru Industrial Corridor (CBIC)

Vizag-Chennai Industrial Corridor (VCIC)

Odisha Economic Corridor (OEC)

Delhi-Nagpur Industrial Corridor (DNIC)

Hyderabad-Nagpur Industrial Corridor (HNIC)

Hyderabad-Warangal Industrial Corridor (HWIC)

Hyderabad-Bengaluru Industrial Corridor (HBIC)

Bengaluru-Mumbai Industrial Corridor (BMIC)

Extension of CBIC to Kochi via Coimbatore



Key features of Greenfield Industrial Smart Cities



Plug n Play
Infrastructure



Potable and
Recycled
Water Supply



Reliable 24-Hours
Power Supply



Effluent
Treatment Plants



Multi Modal
Connectivity



Integrated
City Planning



Walk to Work
Concept



Environment
Clearance
Obtained



Single Window
Clearance



E - Land
Management
System



Complete
Handholding
Support

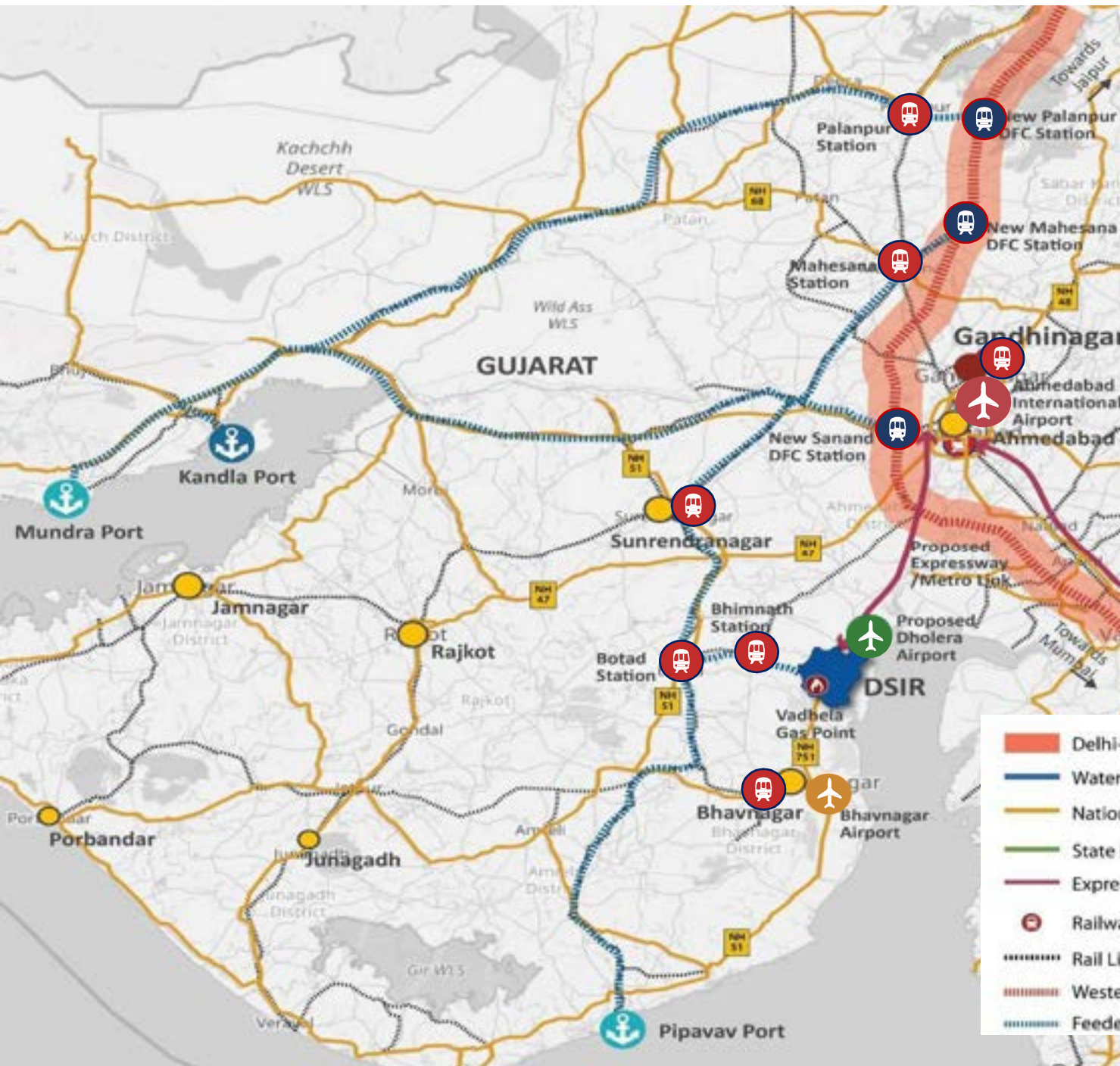


Quality
Living



Dholera Special Investment Region, Gujarat

dholera
— A NEW ERA —



CONNECTIVITY

- Access Controlled Expressway
- Metro along expressway
- Roads to ports and airports
- Rail Connection with Dedicated Freight Corridor (DFC)
- International Airports





Infrastructure



estors


Investment & Employment Highlights

	Land Allotted 244 Acre		Plots allotted 4		Total Investment Mobilised INR 5275 Cr		Employment 2600
--	----------------------------------	---	----------------------------	---	--	---	---------------------------

Key Investors

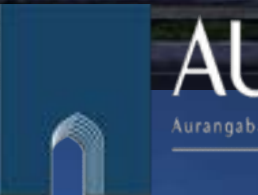

TATA
CHEMICALS LIMITED
126 Acre
2 GW Li-ion Battery
Manufacturing Plant

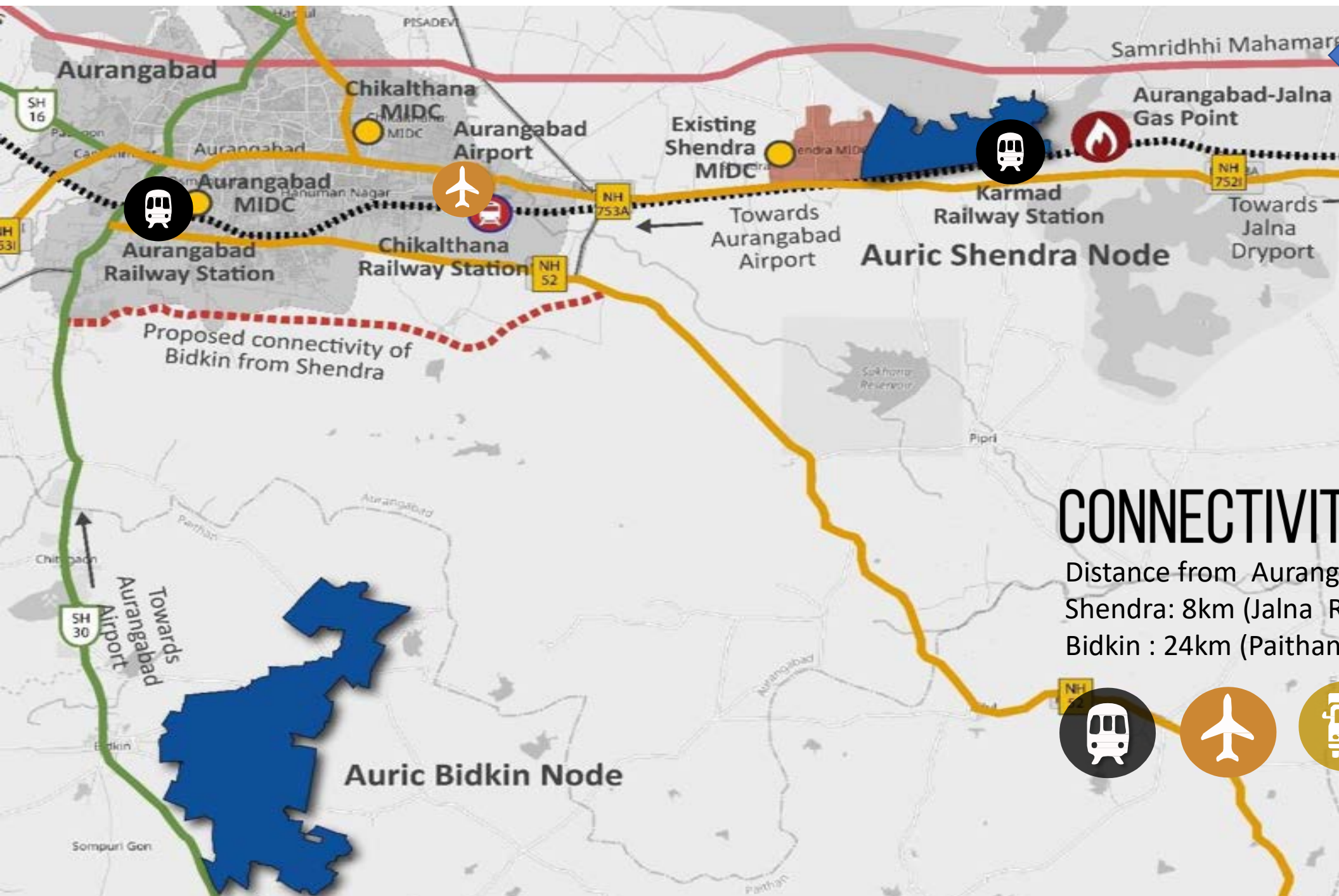

ReNew
POWER
100 Acre
2 GW Solar Module
Manufacturing Plant


torrent
POWER
6 Acre
Power Distribution
Network in Dholera SIR



Aurangabad Industrial City (AURIC), Maharashtra







Infrastructure



units already operational



Companies under construction

Investment & Employment Highlights

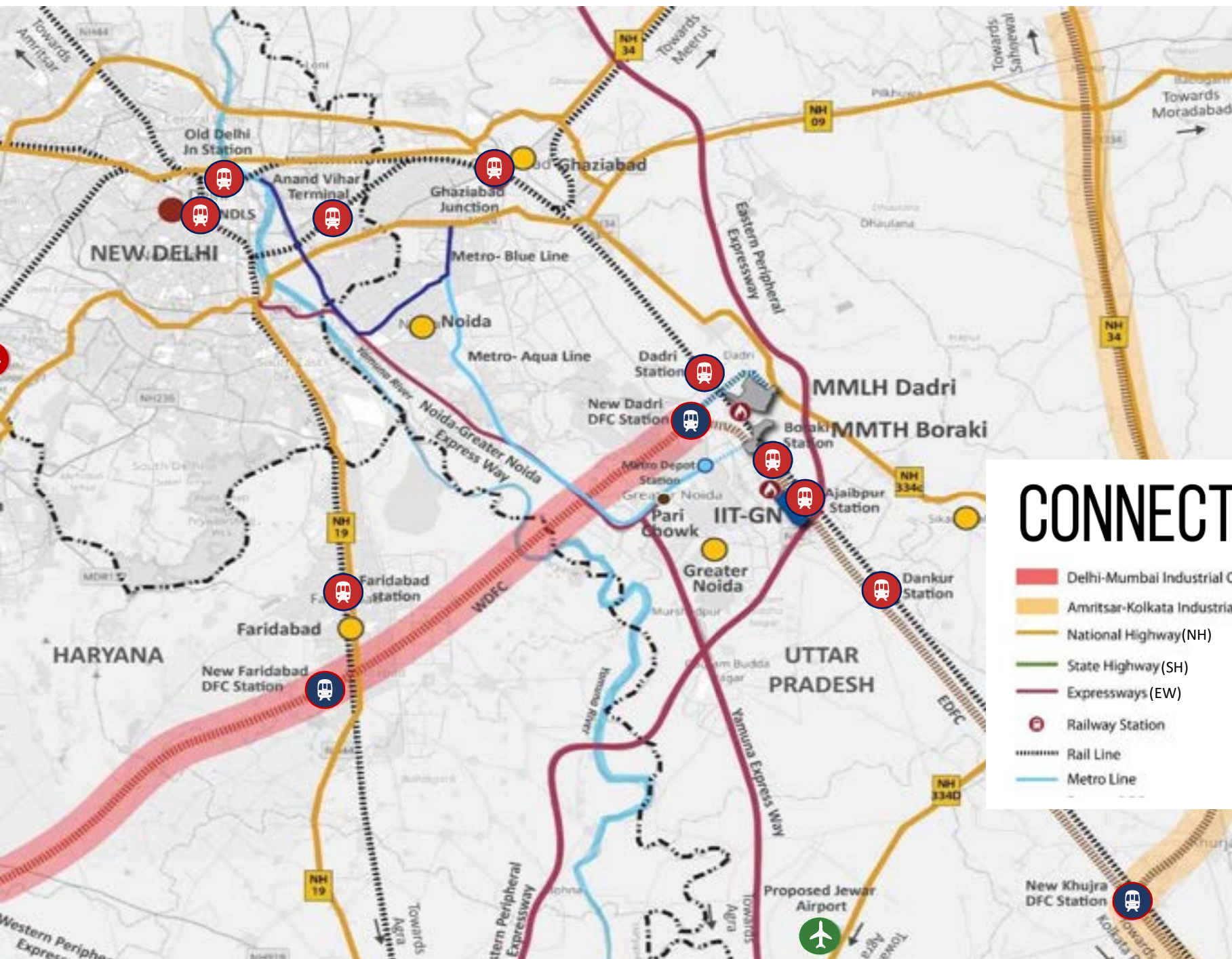
	Land Allotted 525 Acre		Plots allotted 189		Total Investment Mobilised INR 5539 Cr		Employment Created 8626
--	----------------------------------	---	------------------------------	---	--	---	-----------------------------------

Investors





egrated Industrial Township, Greater Noida



CONNECTIVITY

- Delhi-Mumbai Industrial Corridor (DMIC)
- Amritsar-Kolkata Industrial Corridor (AKIC)
- National Highway(NH)
- State Highway(SH)
- Expressways (EW)
- Railway Station
- Rail Line
- Metro Line

- Eastern Peripheral Expressway
- Western Peripheral Expressway
- Ferocious
- DF
- Sta
- Ur
- Int
- Gr
- Ca



Infrastructure

曼丰科技
Manfeng Technology



Haier



estors



J World Electronics India Pvt Ltd



Forme Trading India Pvt

companies under construction

Investment & Employment Highlights



Land Allotted
168 Acre



Plots allotted
8



Investment Mobilised
INR 5110 Cr



Employment Created
11,810

Key Investors

Forme (India)

Haier Appliances (China)

Satkriti Infotainment (India)

Chenfeng (China)

World Electronics (South Korea)





Integrated Industrial Township, Vikram Udyogpuri







Infrastructure



Companies under construction

Investment & Employment Highlights



Land Allotted

614 Acre



Plots allotted

25



Investment Mobilised

INR 2252 Cr



Employment Generated

17376

Key Investors



RINIWAS PHARMACHEM (P) LIMITED

SIMPLYCO INDUSTRIES PRIVATE LIMITED

JK LIFE CARE CENTERS, UJJAIN

Sudhakar PVC Products Pvt. Ltd.

Geofast Industries India Ltd.

Symbiotech Life Sciences Pvt. Ltd.

Angeel Oak Speciality Chemtech Pvt. Ltd.

DCM Nouvelle Specialty Chemicals Ltd.

Fena Pvt. Ltd.

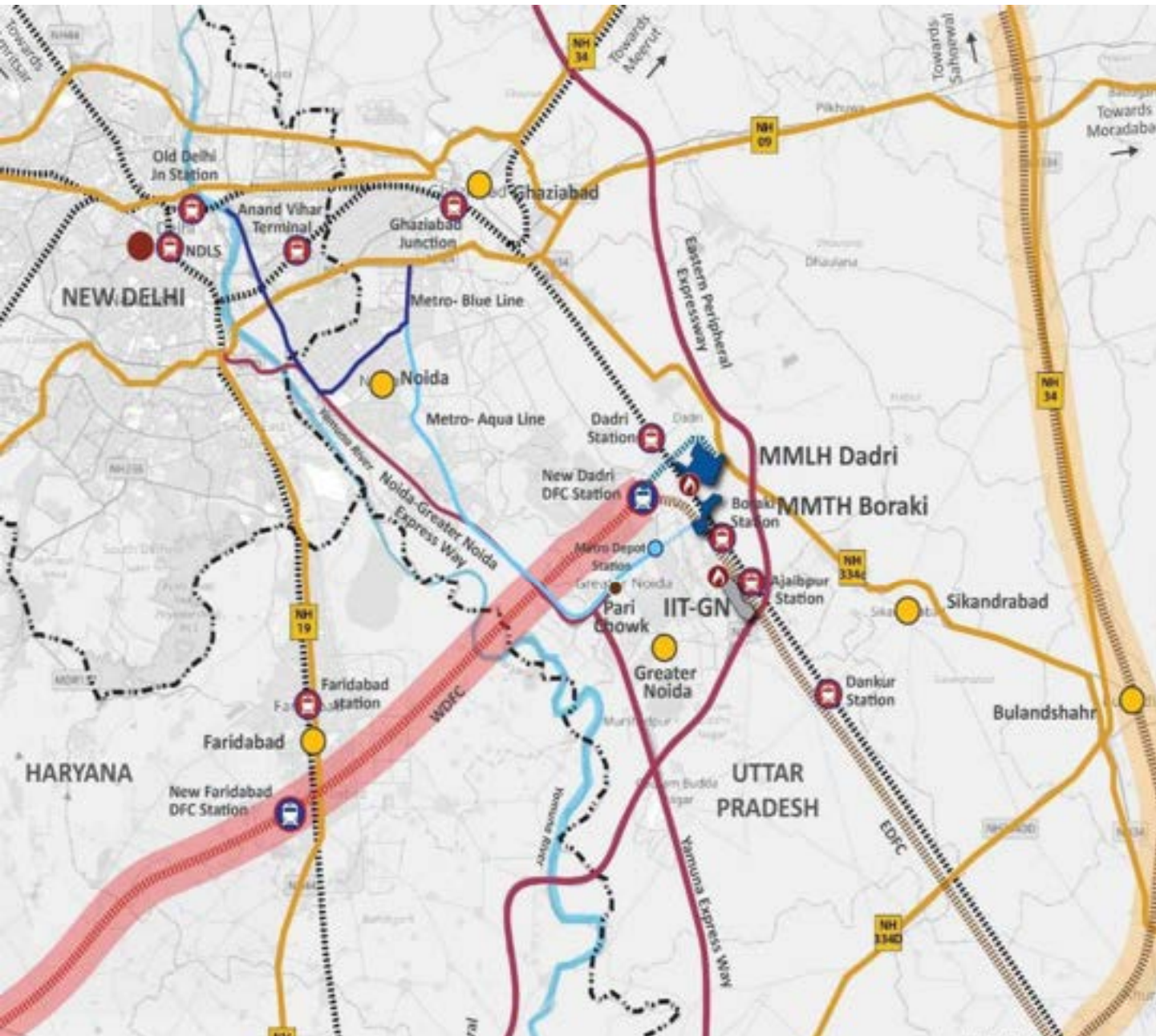
IMLH Haryana (8) Delhi Mumbai Industrial






Parameter	Status	Details	Distance
Road	Existing	NH 148 B	20 km
		SH 17	1 km
	Proposed	Paniyala Mor to Narnaul & Narnaul Bypass and Rewari to Pachari kalan & Rewari bypass & Gurgaon-Pataudi-Rewari (180 kms)	Passing through
Rail	DFC Proposed	New Dabla	12 km
Airport	Existing	Delhi via NH 11	140 km
	Proposed	Bhiwadi via NH 11	94 km
WaterWay	Not Feasible for Cargo transportation		
Gas	Existing	Chainsa Jhajjar Hisar Natural Gas Pipeline with Nangal Chaudhary as Tap off point	45 km

H, Nangal Chaudhary

Connectivity



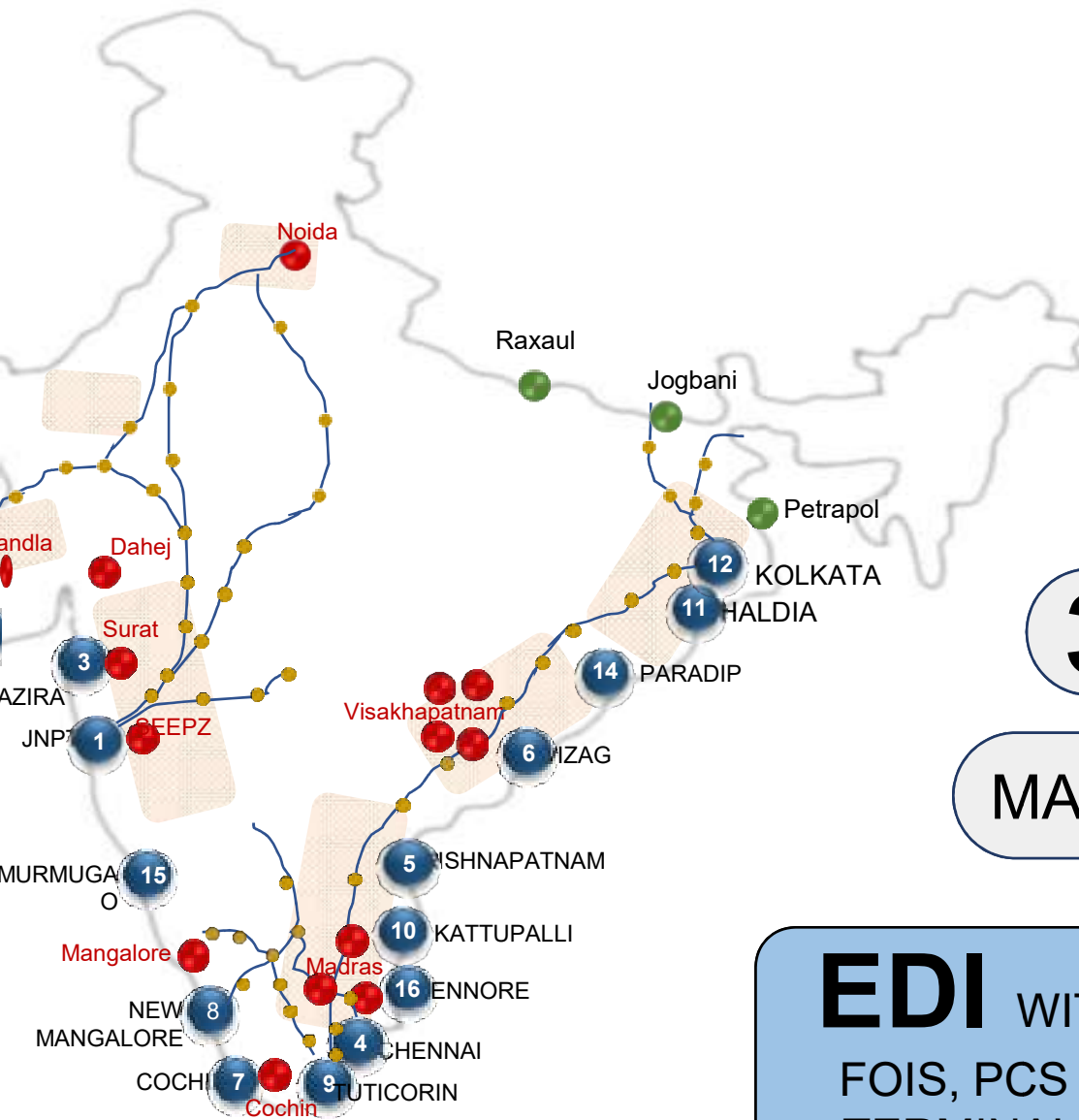
Parameter	Status	Details
	Existing	Eastern Peripheral Expressway
		Delhi Meerut
	Proposed	Yamuna Expressway
		Delhi Vadodara (845 kms)
	Indian Railways Existing	DND - Faridabad – Sohna (60 kms)
		New Dadri
	DFC Proposed	Boraki
		New Dadri
	Existing	Delhi via Noida-Greater Noida EW
	Proposed	Jewar via Yamuna EW

Modal Logistics Hub and Multi Modal Transport Hub (MMLH and MMTH) – 1208 A

Logistics Data Bank (LDB) and Unified Logistics Interface Platform (ULIP)



3's Coverage:



17 PORTS (27 TERMINALS)

74 TOLL PLAZAS

341 CFS/ICD/EY/PP

14 SPECIAL ECONOMIC ZONES

3 INTEGRATED CHECK POSTS

MAJOR CARGO RAIL ROUTES & DFCO

EDI WITH
FOIS, PCS &
TERMINALS

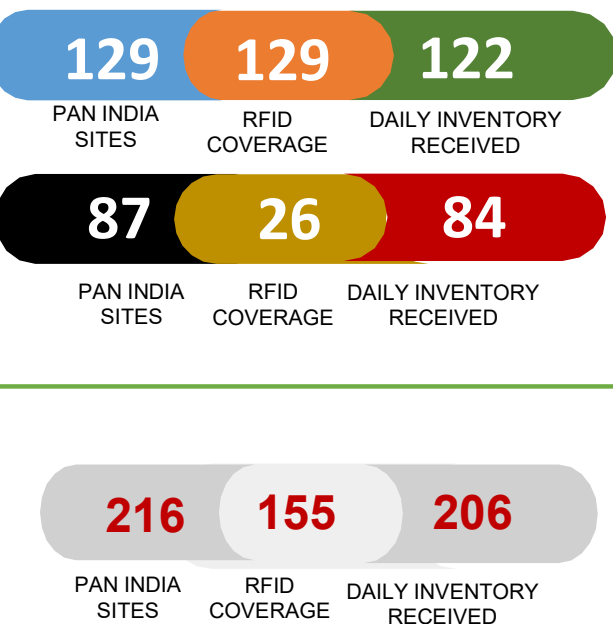
2250+
RFID READERS

55M
CONTAINERS
HANDLED

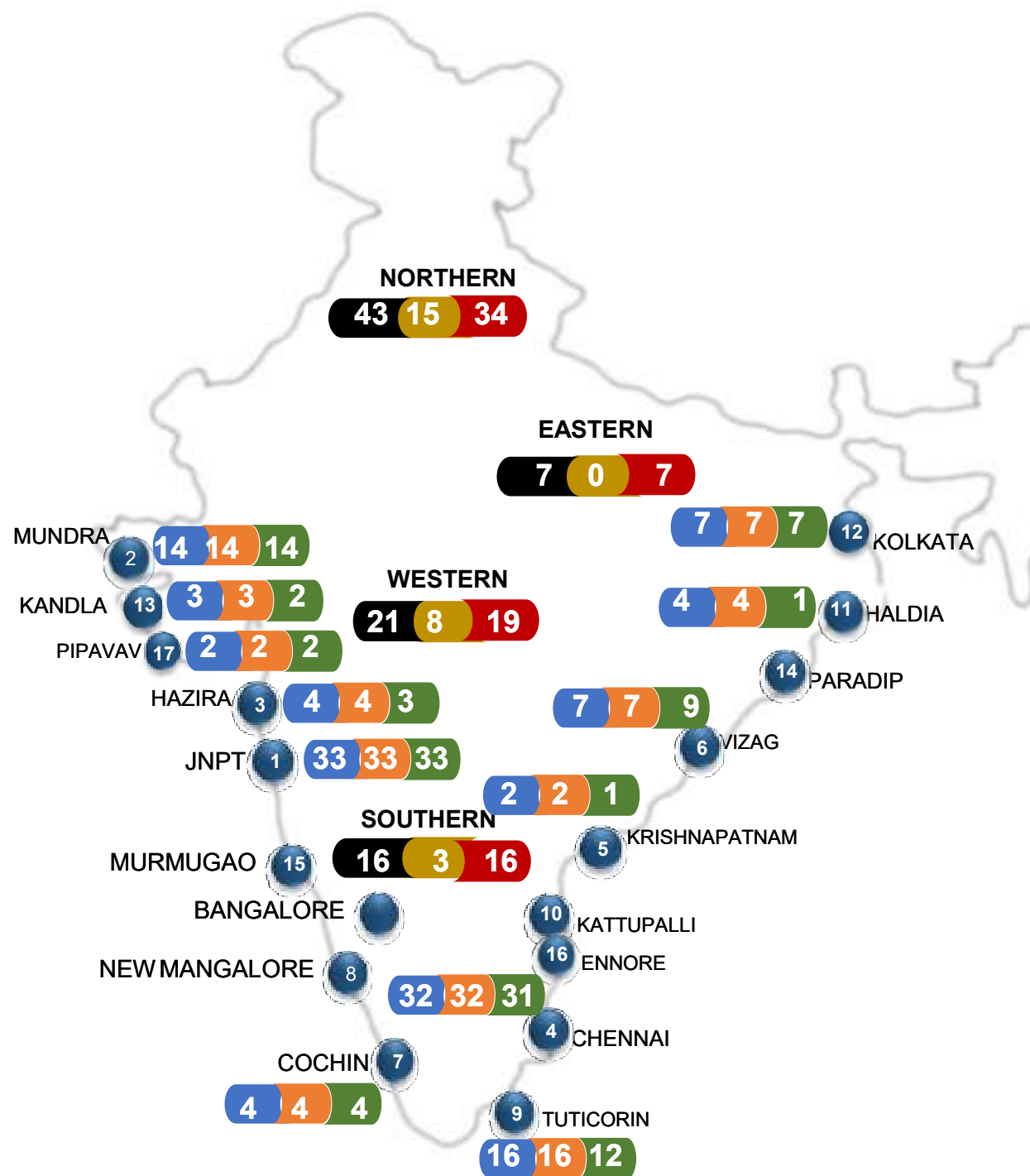
er Freight Station, ICD: Inland container Depot, EY: Empty Yard, PP: Parking Plaza

ICD Coverage – LDB

Pan India



permission awaited for ICDs
 managed by CONCOR
 inventory data currently received
 via email, soon to be automated
 through NLP Marine



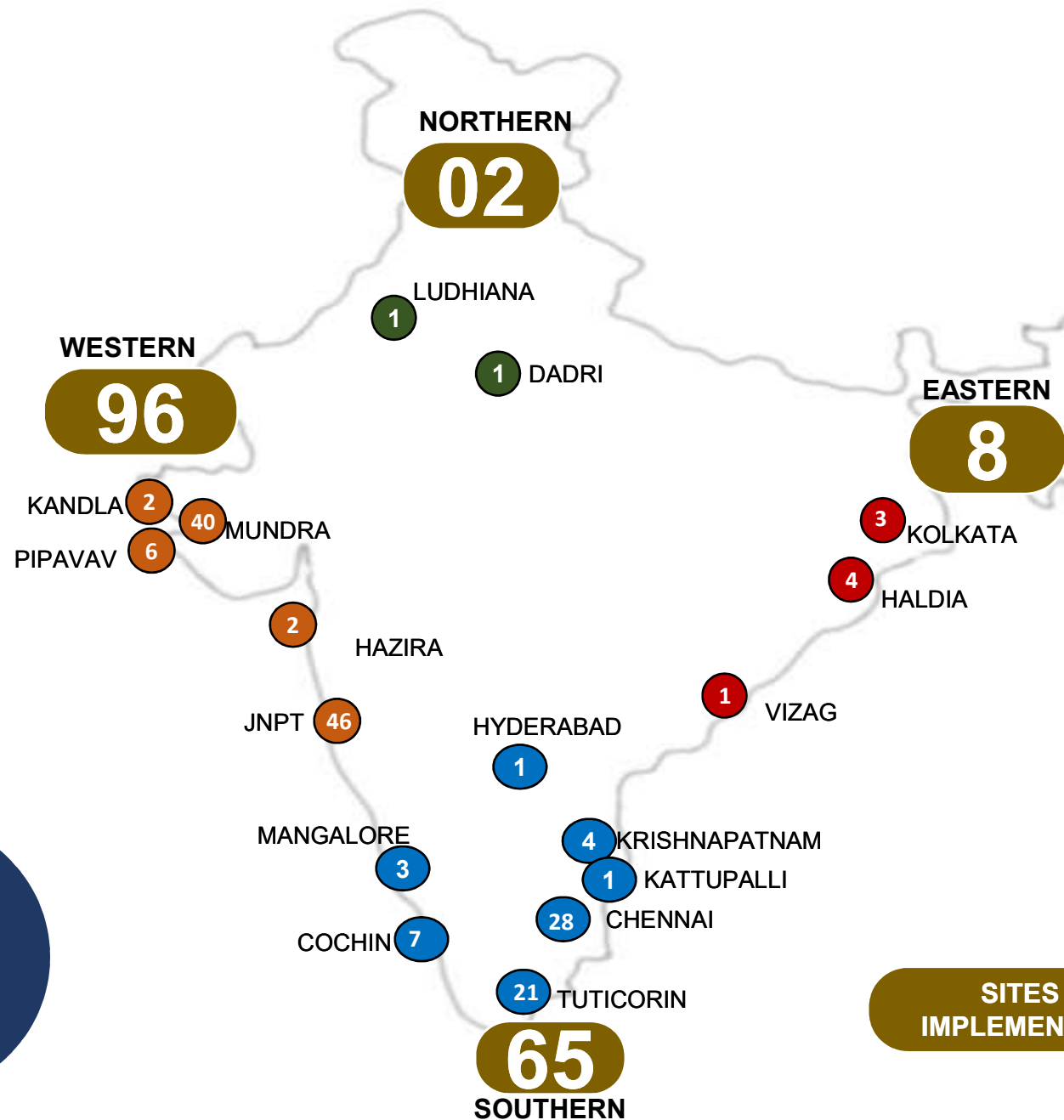
India Empty Yard Coverage:

Site survey done: **210**
Empty Yards

Total **171** Empty Yards
covered under LDB.

39 sites found
unsuitable.

Approx.
80%
Empty
Containers



Milestones and Achievements:

LDB tracking **100%** of India's EXIM containers and achieved **5 crore** milestone.

Nearly **30 Lakh** containers searched every months on LDB portal.

Technology driven **performance benchmarking** for entire container ecosystem available to the trade for decision making.

Coverage at **Empty and maintenance yards**, one of the most unorganized in EXIM logistics.

Supporting Govt. initiatives for **container manufacturing in India**.

Extending services for visibility of **domestic/coastal container** movement.

Unified Logistics Interface Platform (ULIP)

P Phasing Strategy

COMPLETED

Logistics Gateway

Integrate the information available with various government systems across the supply chain.



Multimodal Coverage

Help in taking informed decision with availability of **seamless track and trace** information for multi-modal logistics.



Unified System for Documentation & Compliance

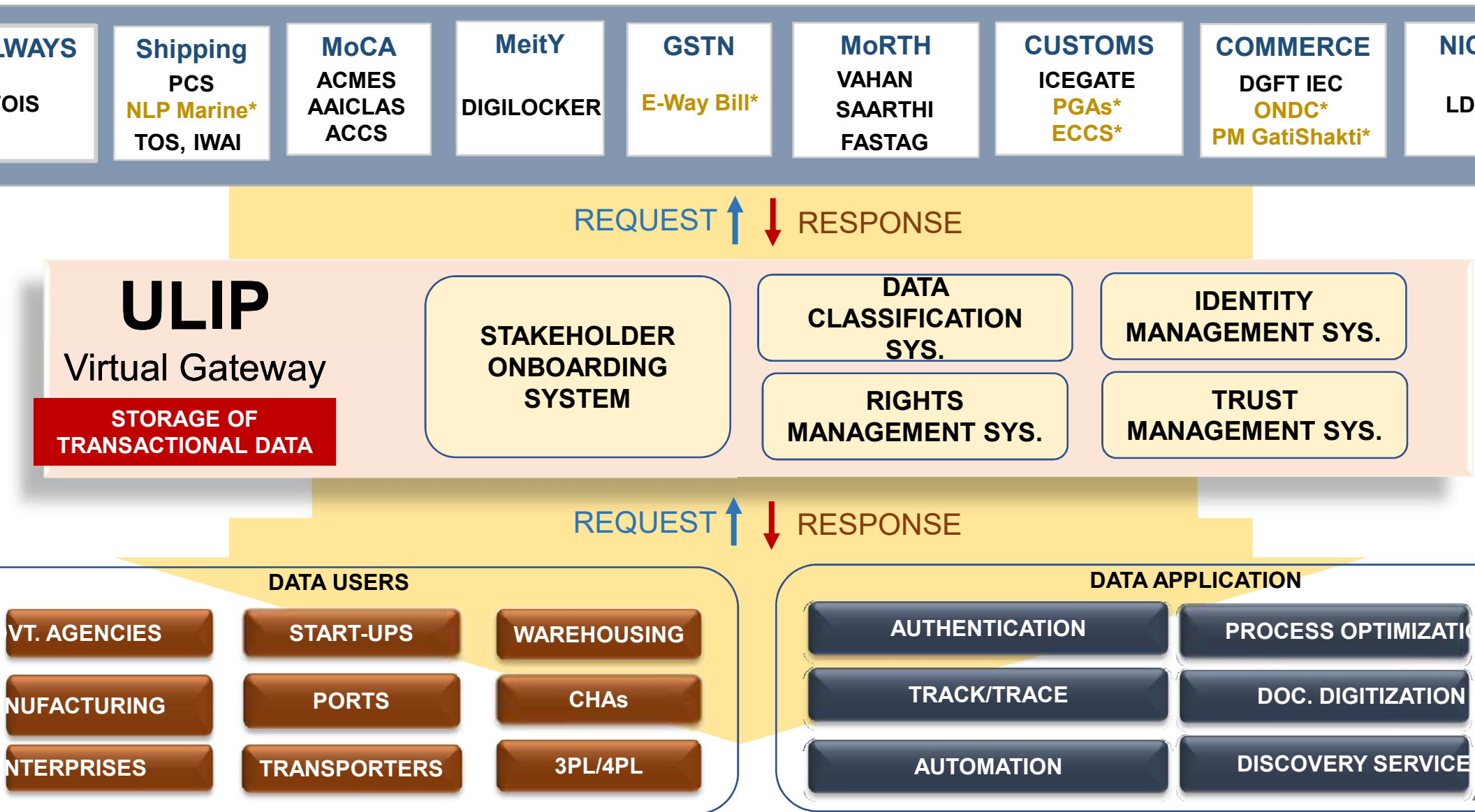
Single stop access to all compliance requirements, document filing, certifications and approval procedures



Public-Private Partnership

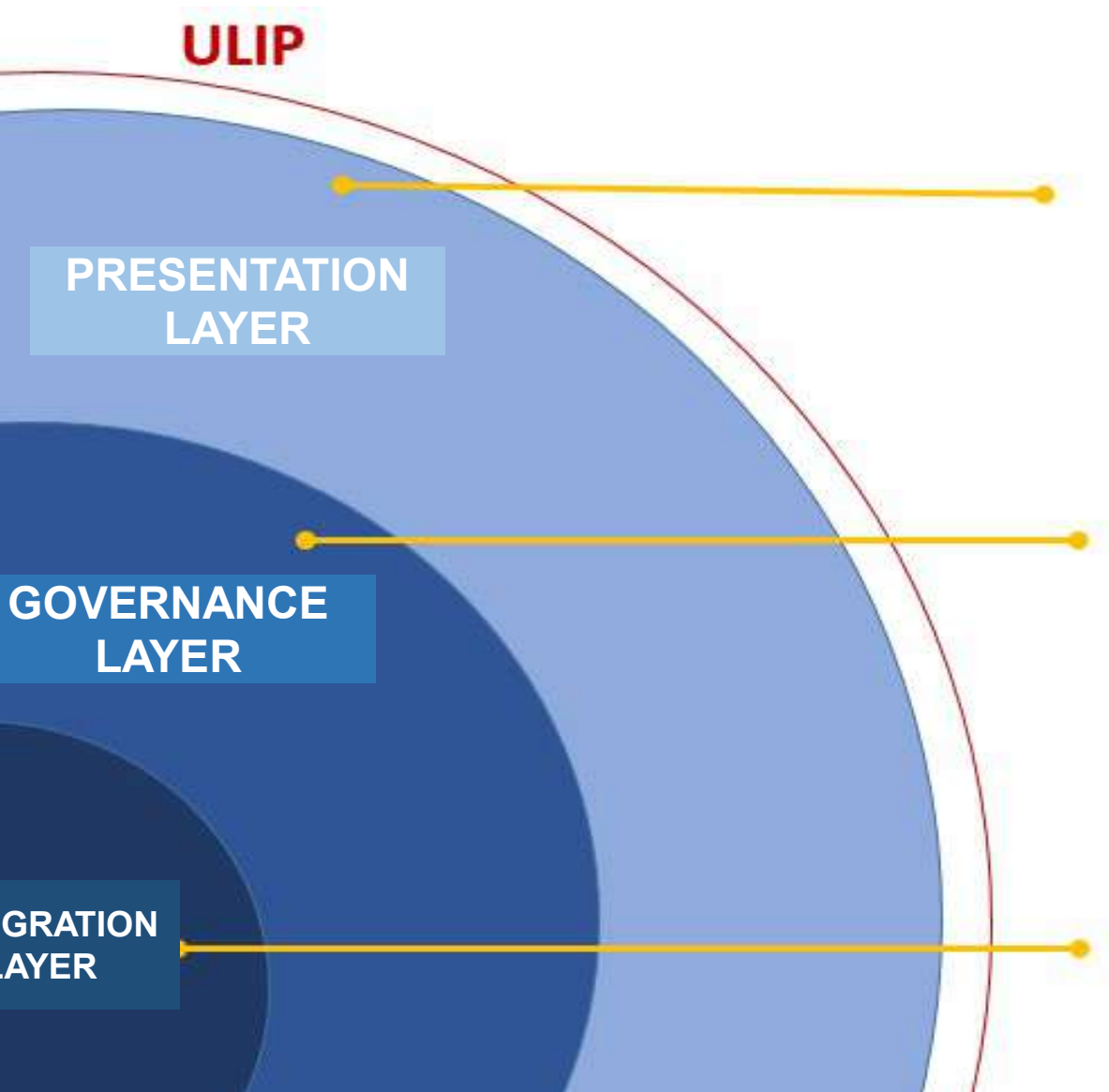
Gateway for data exchange between government and private entities to **cross leverage** each other's information

P Architecture:



Discussion

IP Ecosystem:



Collaborative community of users and data principals for value creation.

- Public/private actors creating new solutions
- End users utilizing user-facing applications
- Trade feedback

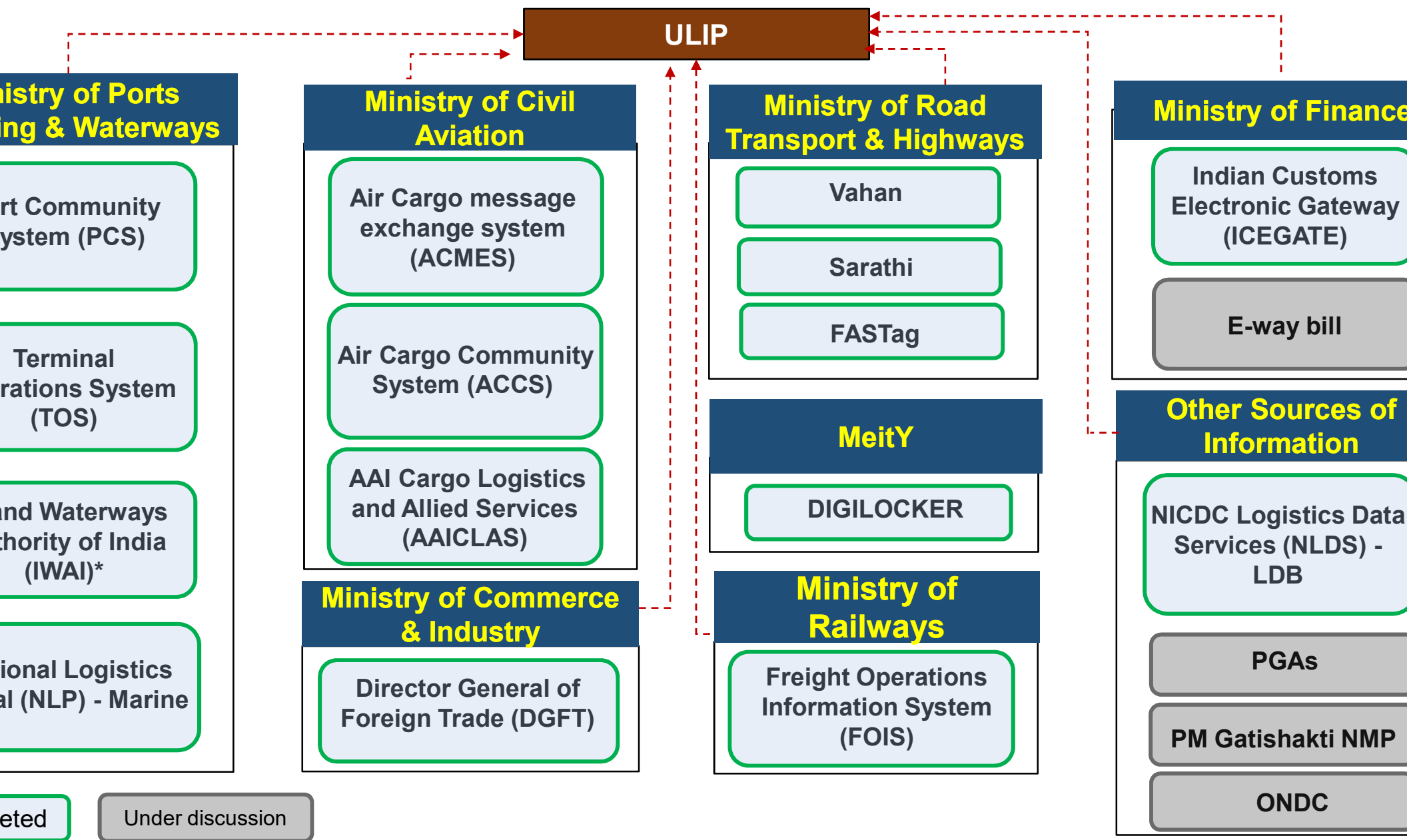
Laws and Rules to govern the Ecosystem and accountable the institutions.

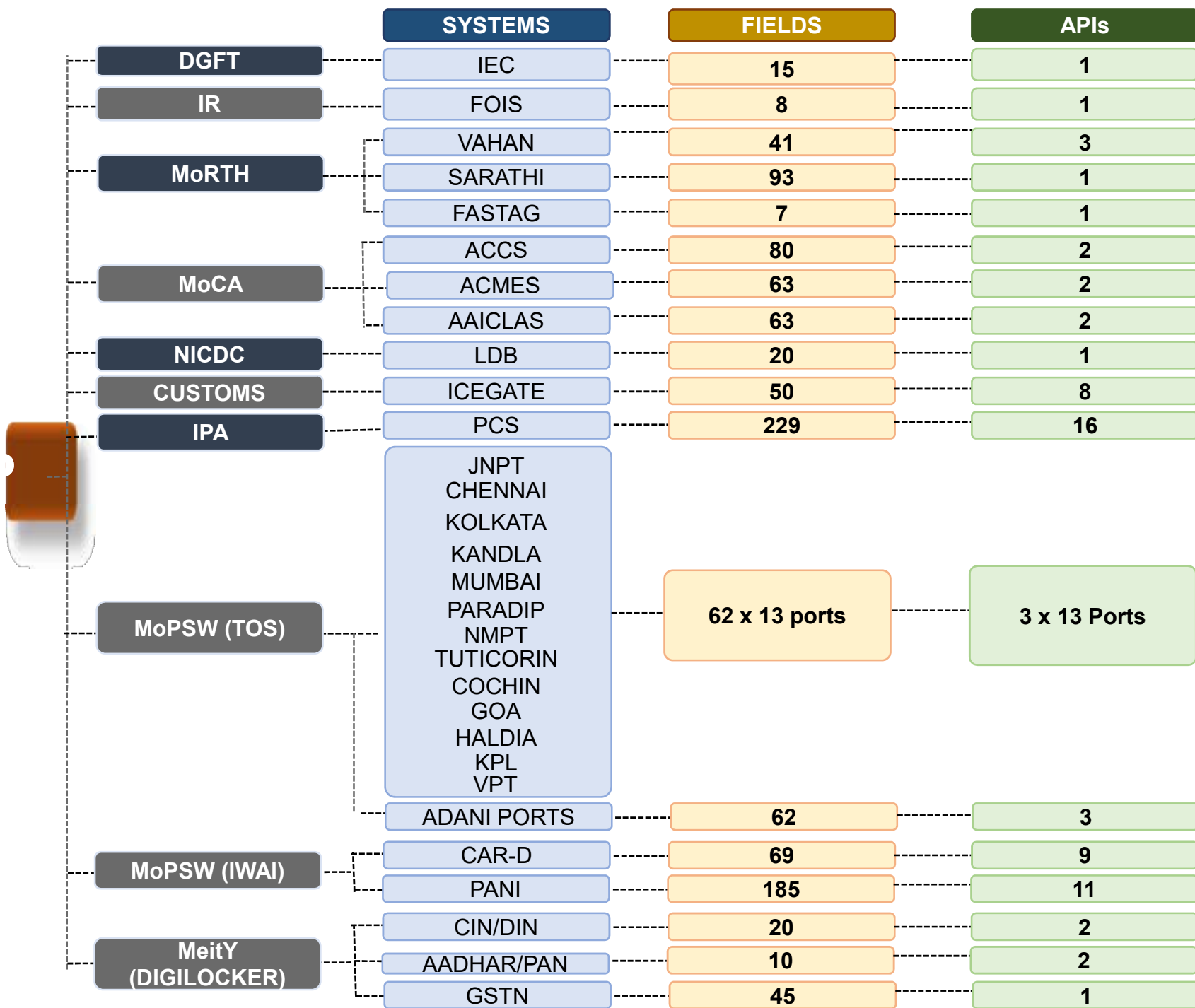
- Platform Ownership / Access
- Data privacy and integrity
- Domain specific policies and standard

Digital infrastructure that facilitates delivery of the services and solutions.

- Modular application with APIs.
- Data exchanges / interoperability.
- Stack combining applications, protocols, registries.

Integration Status:





32
SYSTEMS

1600
FIELDS

104+
APIs

s Update:

340+

**Companies
registered on Portal**

84

**Companies submitted
use-cases**

242

Use-cases received

50

Companies signed NDA

5.7 Cr. +

API hits processed

60

Associations consulted

06

**Consultation events
organized at diff. cities**



**Awarded "Geospatial
for Logistics"**

05

**In-House Use Cases
Developed**

A signed:

Logistics Service Providers

CloudSTRATS

MapmyIndia

CARGOEXCHANGE[®]
FUTURE OF LOGISTICS

Freightfox

FREIGHTWALLA

INSTAVANS

AGGRANDIZE

Lynkit.
Orchestrating Efficiency

Industry Giants

adani
Ports and
Logistics

DHL

TCI
LEADERS IN LOGISTICS

Shiprock

BOSCH

aitwia

YES BANK

Total
Group
Since 1903

Start-ups

MYTRUX

CARGO SHAKTI

EIKONA TECH

Intugine

INDICOLD[®]

onoa

TRUCKHALL
Keep Moving

FRETRON

AXESTRACK
Right Information, Great Decisions

PORTLINKS INC

Shyplite
Your shipping gateway

Case – 1: Know Your Transporter

Problem Statement

Manual Verification of Vehicle & Driver Details

Unavailability of real time data

High Risk in Logistics Trade

Duplicate driving licenses
Infit/unsecured vehicles

Solution

- Real-time verification of
 - **Vehicle Information:** Fitness, carrier type, manufacturing details, insurance, etc.
 - **Driver Information:** Status of driving license, permission category, validity, penalty, photo Id, etc.
- **Toolkit** developed for linking individual ERP's
- **Multi verification** by uploading excel

Additional Services

- Driver Behaviour Analysis and Risk Assessment
- Vehicle Audit Tool
- Driver Recruitment Tool
- Insurance Alert Tool

Integrations: VAHAN, SARATHI

Target User/ Companies	Third-Party Logistics (3PL)	Shipping
	Manufacturing	E-Commerce

Case – 2 Track Your Transport

Problem Statement

Market Dominated by Small Transporters

90% with fleet size <5 trucks

Low Service Quality

Lack of visibility and transparency

Solution

- Universal road tracking without dependency on tracking device.
- Visibility across multimodal transport
- Route Optimization Planning
- SMS and Email notifications/alerts

Additional Services

- Demand Planning and business operations
- Efficient Route Planning.
- Fraud and Unauthorized Movement Detection.
- AIS 140 Compliant Tool

Integrations: FASTAG, EWAY-BILL (Optional), FOIS, ACCS, TOS

Target Users	Manufacturers	Logistics Service Providers
	E-Commerce	Warehouse Agencies

Case – 3 LDB 2.0 (Tracking + Documentation flow)

Problem Statement

**Unidentifiable Delays/
Bottlenecks**

Clearance Visibility

Complex and unintegrated
documentation process

Solution

- Integrated Physical and Information Flow with map view
- Alerts for customs clearance, yard clearance, out of charge, etc.
- Analysis on source and impact of delays

Additional Services

- LDB's Coverage Expansion
- Enhanced Congestion Analysis and Route Planning.
- Better Accuracy of ETA

**Target
Users**

**Importer/ Exporter/
Domestic User**

**Freight Forwarder
& CHA**

**Port
Authorities**

**Logistics Service
Providers**

Case Case – 4 Empty Carrier Discovery

Problem Statement

**Lack of Carrier Visibility
Leading to High Logistics
Cost**

Untracked empty carriers
with high movement
Disorganized truck
operators
Unsystematic vehicle
movements

Solution

- Real time carrier visibility
 - Low empty carrier movement
 - Empty carrier information visibility among stakeholders
- Optimized Transportation Cost
- Systematic and Organized Vehicle Movement
 - Available empty carriers under single umbrella

Additional Services

- Empty carrier discovery & booking
- Display on the top priority
- Vehicle compliance check
- Driver background check
- Map view

Integrations: VAHAN, SARATHI

Target Users

Vehicle owner, transporter, factory owners and other participants of the transportation segment

Case Case – 5 Empty Container Discovery

Problem Statement

Manual Process

• Lack of visibility of empty containers
• Untracked empty containers information
• High cost incurred due to outstation containers

Solution

- Real time empty container visibility
 - Low chances of container staying empty
 - Information visibility among stakeholders
- Optimized Transportation Cost
- Container utilization in a systematic and organized way
 - Available empty containers under single umbrella

Additional Services

- Empty carrier discovery & booking
- Display on the top priority
- Map view
- Easy to search

Integrations: LDB, ICEGATE, PCS

Target Users Shipping line, leasing company, container agents in the logistics segment



Follow us



**PRESENTATION
BY
EAST COAST RAILWAY
FOR IR**

16.02.2023

Railway projects for Coal Evacuation

Name of Railway project	Coal Field	Total length (Km)	Total Cost (Cr.)	Likely TDC
abling and electrification projects in Singrauli area - Singrauli-Katni (257 Km) (IRCON) Railway funded Singrauli-Chopan (48 Km) (ECR-South) Railway funded	NCL	305	3021	i) 2024-25. Diversion in 47 length due to Tiger reser ii) DPR Stage
Line Annupur -Katni (165 km) (SECR) Railway funded	NCL	165	1371	March 25
abling of Dudhichua- Shakti Nagar section (9.5 Km) R/ RITES) (NCL funded)	NCL	9.5	114	June 23
abling of Karaila Road- Shaktinagar (ECR) Railway funded	NCL	32	529	June 23 (12 km balance dela aquisition court case
i bypass (IRCON)	NCL	35	1248	Sep 24
ern DFCC (upto Sonnagar)	CCL	1337	51220	June 23
pur-Kathautia line(47 km) (IRCON) SPV	CCL	47	1799	June 25
abling of Gaya-Kiul section (130 km) IRCON) Railway funded	CCL	130	1220	Mar 24
ling of Patratu- Son Nagar section (291 km) Railway funded	CCL	291	4525	Mar 25
erma-Tilaiya railway line (65 km) (ECR- South) Railway funded	CCL	65	1626	June 24
ling of Tori - Shivpur line (44.4 Km) (ECR-South) Deposit	CCL	44.4	3323	Dec 23
ing of Sainthia- Barharwa section (107 km)	ECL	107	1284	Feb 24

Railway Projects for Coal Evacuation

Name of Railway project	Coal Field	Total length (Km)	Total Cost (Cr.)	Likely TDO
upgrading of Sambalpur- Talcher Road line ECoR Railway funded	MCL	168	1539	Mar 23 (15 km balance)
talcher-Bimalgarh line (150 KM) (ECoR) Railway funded	MCL	150	1928	Land acquisition + 1000 Cr.
4th line between Jharsuguda and Bilaspur (206 km) (SECR) Railway funded	MCL	206	2135	Mar 24
upgrading of Sardega Loading Platforms (SER) Deposit	MCL		52	Mar 23
upgrading of the Jharsuguda- Barpali-Sardega (SER) Deposit <i>50 Km, Flyover: 26 Km, Bulb line: 48 Km, Dhutreta 3.50 Km)</i>	MCL	128	3200	Dec 23
tal- Balram rail link, 14.5 km (IRCON) SPV	MCL	14.5	240	Commissioned
3rd & 4th line between Jarapada-Budhapank (91 Km) with flyover at talcher (ECoR) Railway Funded	MCL	91	810	Mar 25
3rd & 4th line from Budhapank-Salegaon via Rajatgarh (2x86km) (ECoR) Railway Funded	MCL	86	1173	Mar 25
tal- Jarapada-Tentuloi (54 Km) (IRCON) SPV	MCL	54	1460	Dec 25
upgrading-signaling between Cuttack & Paradeep (83 Km) Railway Funded	MCL	83	99	Oct 23
tal/Talcher - Sukinda line (Alternate route towards Paradeep via Haridaspur) (IRCON) SPV	MCL	104	2441	Completed
West Corridor (Gevra- Pendra Rd section) (135 Km) (IRCON) SPV	SECL	135	4970	Dec 24
Total (24 Nos)		3787	91327	

Railway Projects for Coal Evacuation

Summary

Name of Coal Company	No of projects	Total length (Km)	Total Cost (Cr.)
NCL	5	546.5	6283
CCL	6	1914.4	63713
ECL	1	107	1284
MCL	11	1084.5	14978
SECL	1	135	4970
Total	24	3787	91228

Progress of Coal Projects in last 02 years and till Dec 22

Name of Project	Commissioning (Km)			
	20-21	21-22	22-23	Total (K
Katni - Singrauli doubling	0	43.2	37.7	80.9
Karila Road - Shaktinagar doubling	0	0	11	11
Annupur Katni 3rd line	0	13.5	22.4	35.9
Katni Grade Separator	0	0	0	0
Kiul Gaya doubling	0	0	18	18
Patratu Sonnagar 3rd line	0	0	3	3
Koderma Tilaiya new line	0	0	0	0
Rampur - Murarai 3rd line	0	0	0	0
Sambalpur - Talcher doubling	23.49	32	36	91.49
Angul - Sukinda new line	0	0	0	0
Talcher - Bimalgarh new line	0	0	0	0
Jharsuguda- Bilaspur 4th Line	0	14.5	25.5	40
Jharsuguda- Sardega doubling	0	0	19.3	19.3
Angul - Balram new line	0	0	14	14
3rd & 4th Line between Jarapada-Budhapank	0	0	15.81	15.81
3rd & 4th Line between Budhapank- Salegaon	0	0	45.5	45.5
Gevra -Pendra Road	0	0	0	0
Total	24	103	248	375

INFRASTRUCTURE IN EAST COAST RAILWAY

SANCTIONED ONGOING RAILWAY PROJECTS

NEW LINE :

- . Talcher – Bimalgarh (150 Kms.)**
- . Angul - Sukinda Road (98 Kms.)**
- . Khurda Road – Bolangir (301 Kms)**
- . Sambhalpur - Gopalpur via Phulbani (241 Kms.)**
- . Jeypore – Malkanagiri (130 Kms.)**
- . Jeypore – Nabarangpur (42 Kms.)**

SANCTIONED ONGOING RAILWAY PROJECTS

DOUBLING/3RD LINE/QUADRUPLING PROJECTS:

ambalpur – Talcher (174 kms.)

rd & 4th line between Jarapada to Budhapank with fly over at Talcher Road (101 Kms)

rd & 4th line from Budhapank to Salegaon via Rajathgarh (170 Kms.)

hurda Road - Barang third line (35 Kms.)

d line between Bhadrak – Nergundi (80 Kms.)

d line from Vizianagaram to Titlagarh (272 Kms.)

khapura – Banspani (180 Kms.)

randul – Jagdalpur (150 Kms.)

gdalpur –Koraput (110 Kms.)

Koraput – Kottavalasa (189 Kms.)

Koraput –Singapur Road (164 Kms.)

SANCTIONED ONGOING RAILWAY PROJECTS

CONNECTIVITY TO EXISTING RAILWAY NETWORK :

Inner Corridor between Angul – Balaram – Putagadia - Jarapada (68 Kms.)

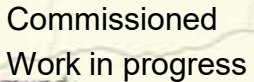
Talcher - Angul - New line with Y-connection at Talcher (15 Kms.)

Gandhamardan Iron Ore Mines to Naranpur Railway Station (12.76 Kms.)

Kodingamali Bauxite Mines to Lakshmipur Road Railway Station (9.4 Kms.)

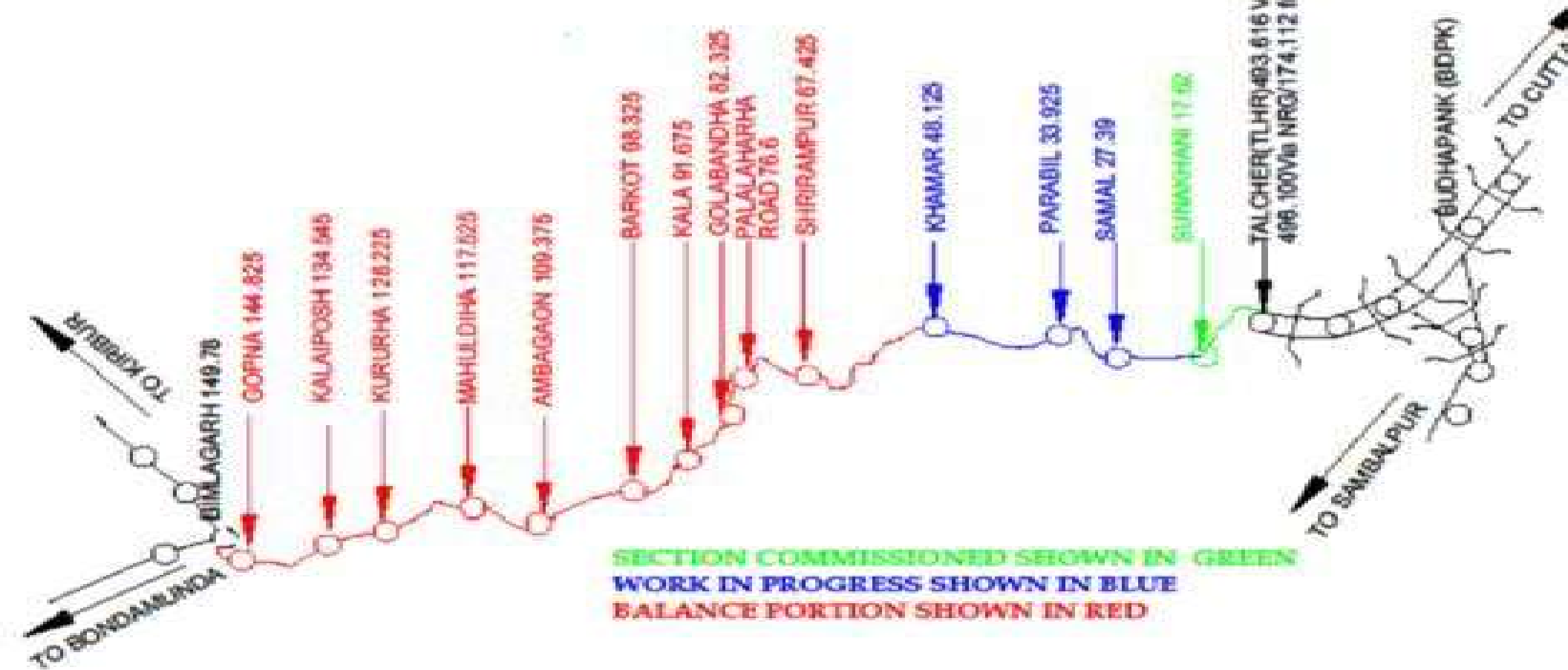
Part from above works Rs 45000 crores sanctioned for Energy Corridor in current Budget for New Works in OR, ECR, ER, SER and SECR.

r-Bimalgarh New line



Name of Project: Talcher Bimalagarh New Line PH : NL

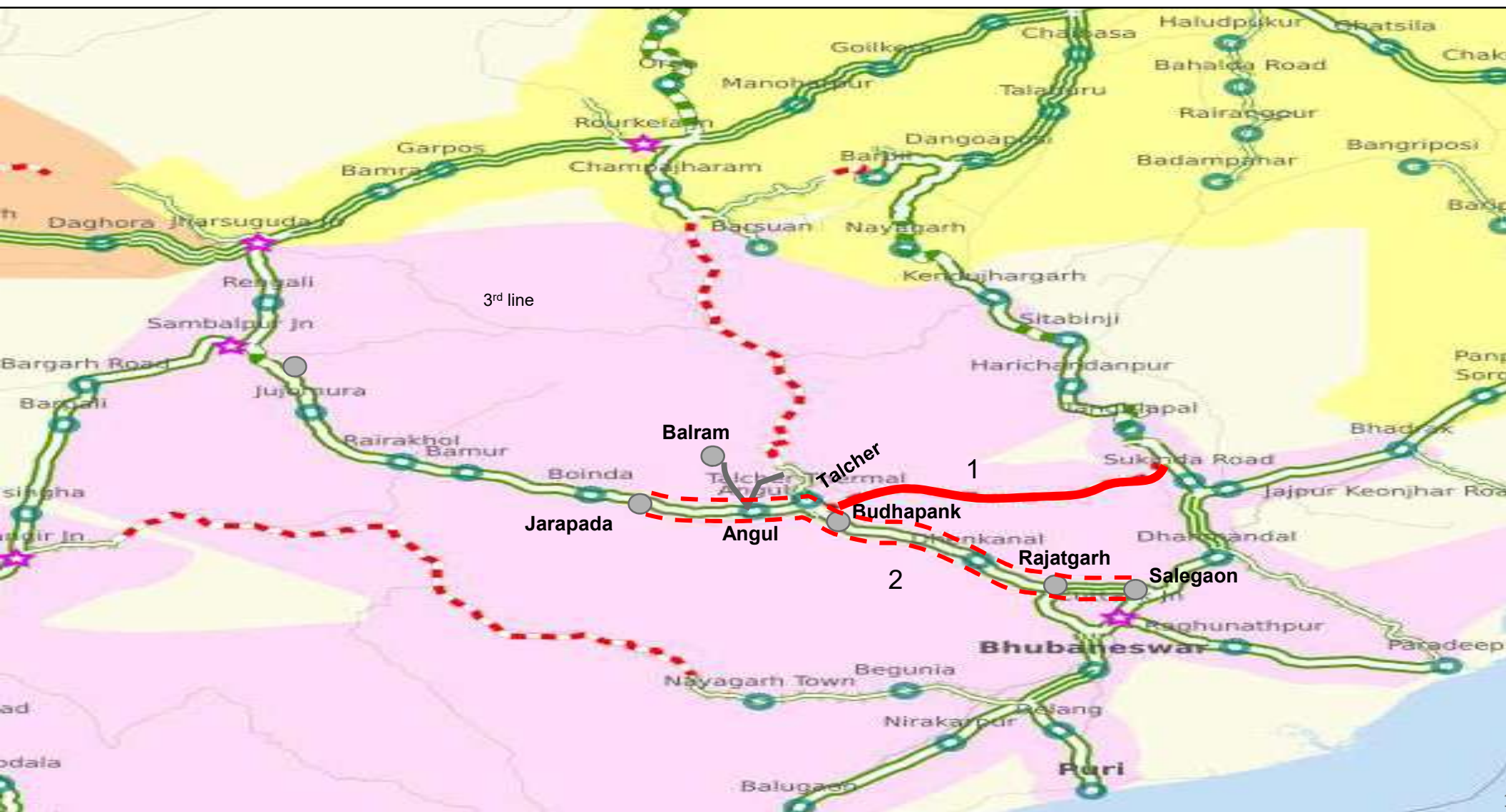
TALCHER BIMALAGARH NEW BG RAIL LINK PROJECT 149.78 KM



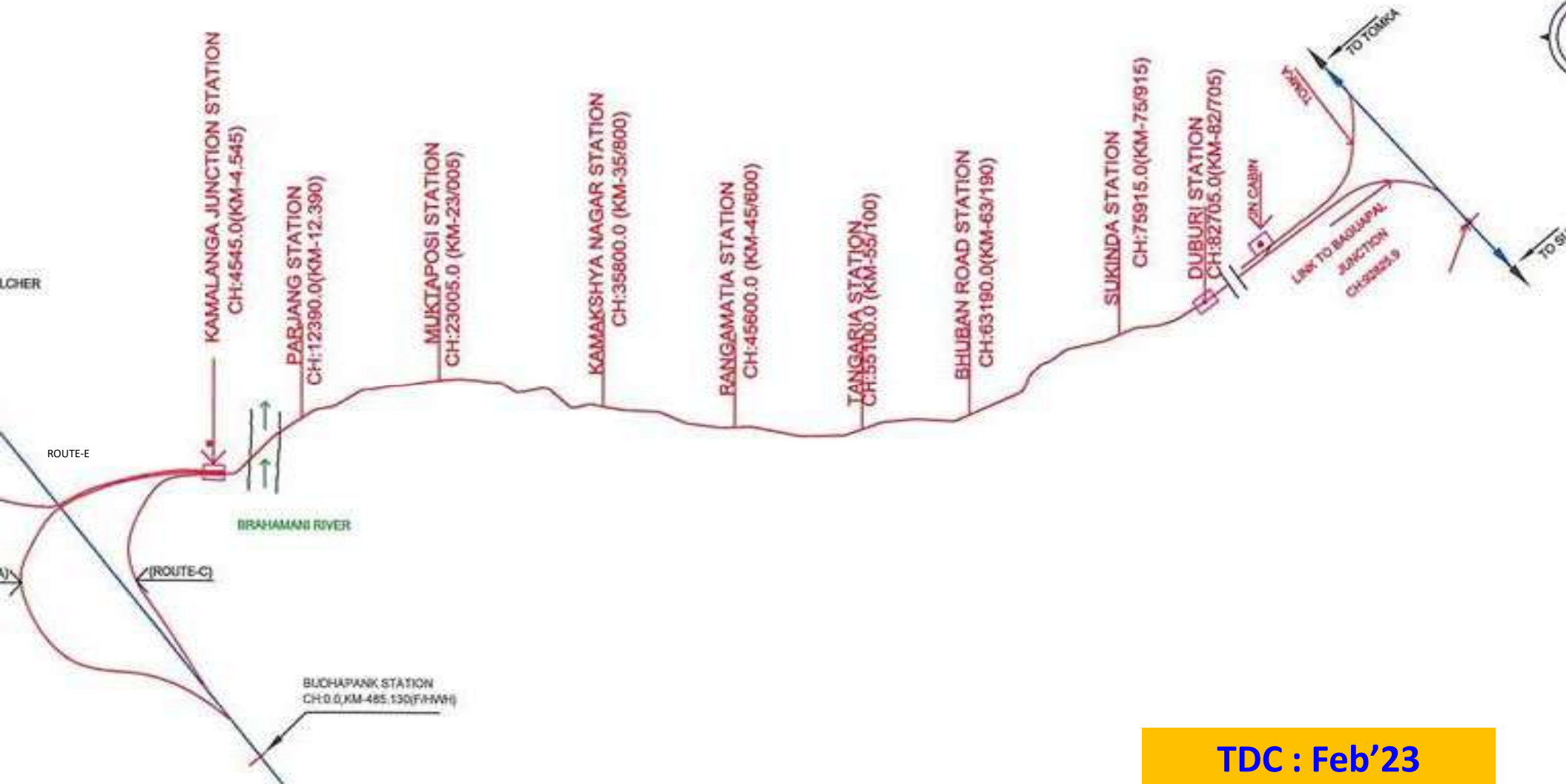
of the work	Cost in crores of Rs.	Expenditure In crores of Rs.	Status	Benefit
Bimlagarh	1928.1	1043.4	<ul style="list-style-type: none"> ▪ Length completed: 17.62 Kms ▪ Remain : 132.16 Kms. ▪ Private land acquisition is in progress. ▪ TDC : D+3 Years (D : date of taking over possession of 90 % of land for core construction between Khamar-Bimlagarh). 	<ul style="list-style-type: none"> ▪ Alternative movement of iron ore. ▪ Ease utilization of – Rajathgarh

- Sukinda New line.

Work in progress: - - - DL — NL



Angul - Sukinda New BG Rail Line Project



Status of the complete project:

of the work	Cost in crores of Rs.	Expenditure In crores of Rs.	Status	Benef
kinda New Rail (/)	2440.5	2346.8	<ul style="list-style-type: none"> ▪ Length completed: Nil ▪ Remain : 98 Kms. ▪ Planned to be commissioned with C-Route surface connectivity between Budhapank - Kamalanga & surface connectivity at Baghuapal. ▪ Trial run of freight train with diesel loco done on 30.01.2023. ▪ TDC : Feb-2023 (Loop 1 and Loop 2 TDC Jun – 2023) 	<ul style="list-style-type: none"> ▪ Alternative shorter route for movement of coal & iron ore ▪ Ease of utilization of Talcher Rajathgarh section.

er – Sambalpur Doubling

Work in progress

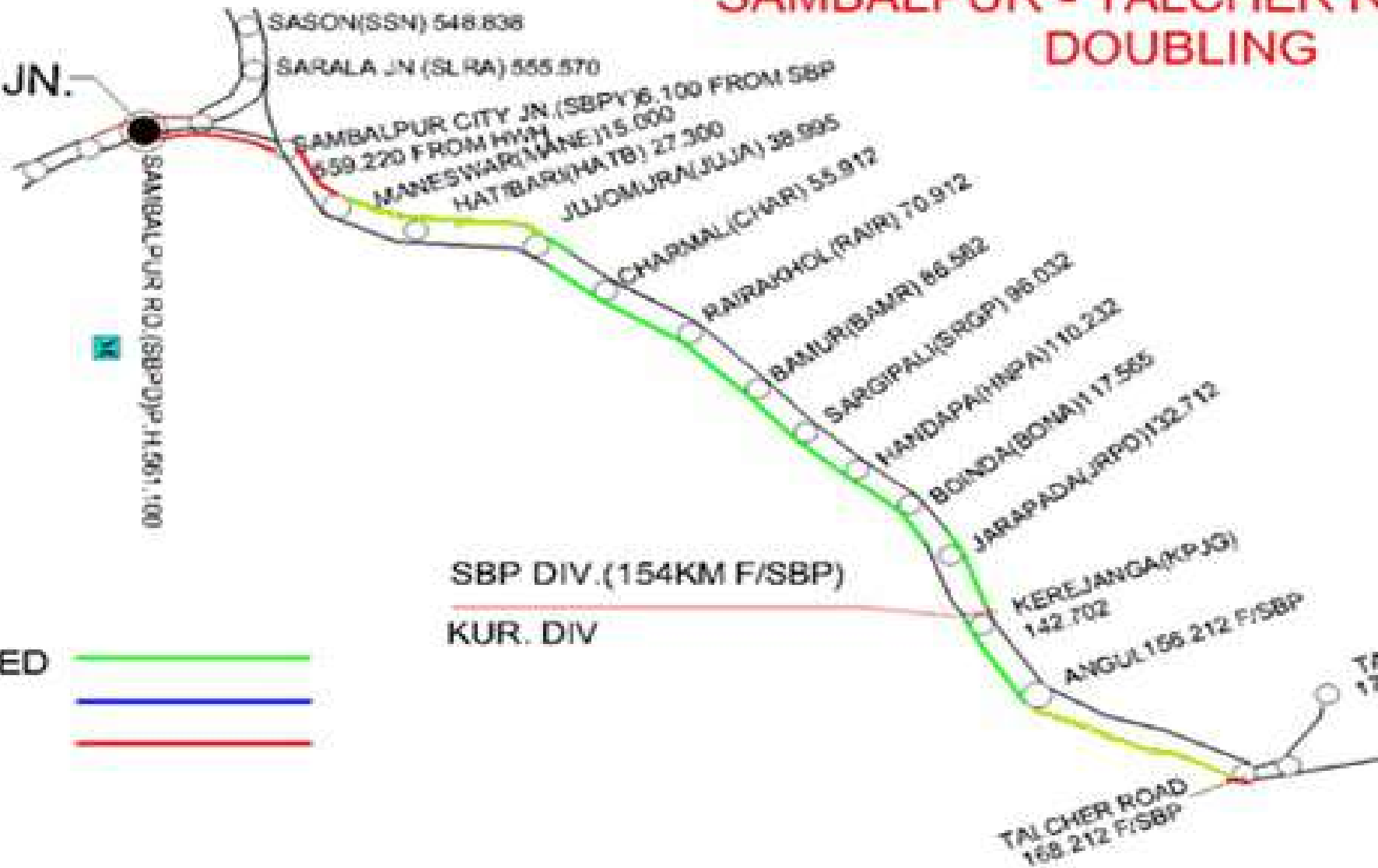
3rd & 4th line

NL



SAMBALPUR - TALCHER R DOUBLING

SAMBALPUR JN.
(SBP)



LEGEND

WORK COMPLETED
TARGETTED
BALANCE



SBP DIV. (154KM F/SBP)

KUR. DIV

Sambalpur – Talcher doubling (168.21 Km)

of the rk	Cost in crores of Rs.	Expenditure In crores of Rs.	Status	Benefit
ur – section	1572.0	1343.82	<ul style="list-style-type: none"> ▪ Actual Project Length (Sambalpur- Talcher Road): 168 Kms. ▪ Completed : 153.22 Kms. (12 block sections) ▪ Remain : 15.0 Kms. Work in progress. ▪ TDC: Mar-2023 	Line C Utilization expected improve current 14 77% Maintena (Block) doubling whole sec

ada-Budhapank-Salegaon 3rd and 4th line)

Work in progress: --- DL --- NL



KEY PLAN OF JRPD-BDPK 3RD & 4TH LINE WITH FLYOVER AT TLHD ANGL-TLHR NEW LINE WITH 'Y' CONNECTION AT TALCHER

EXISTING LINE SHOWN IN BLACK.

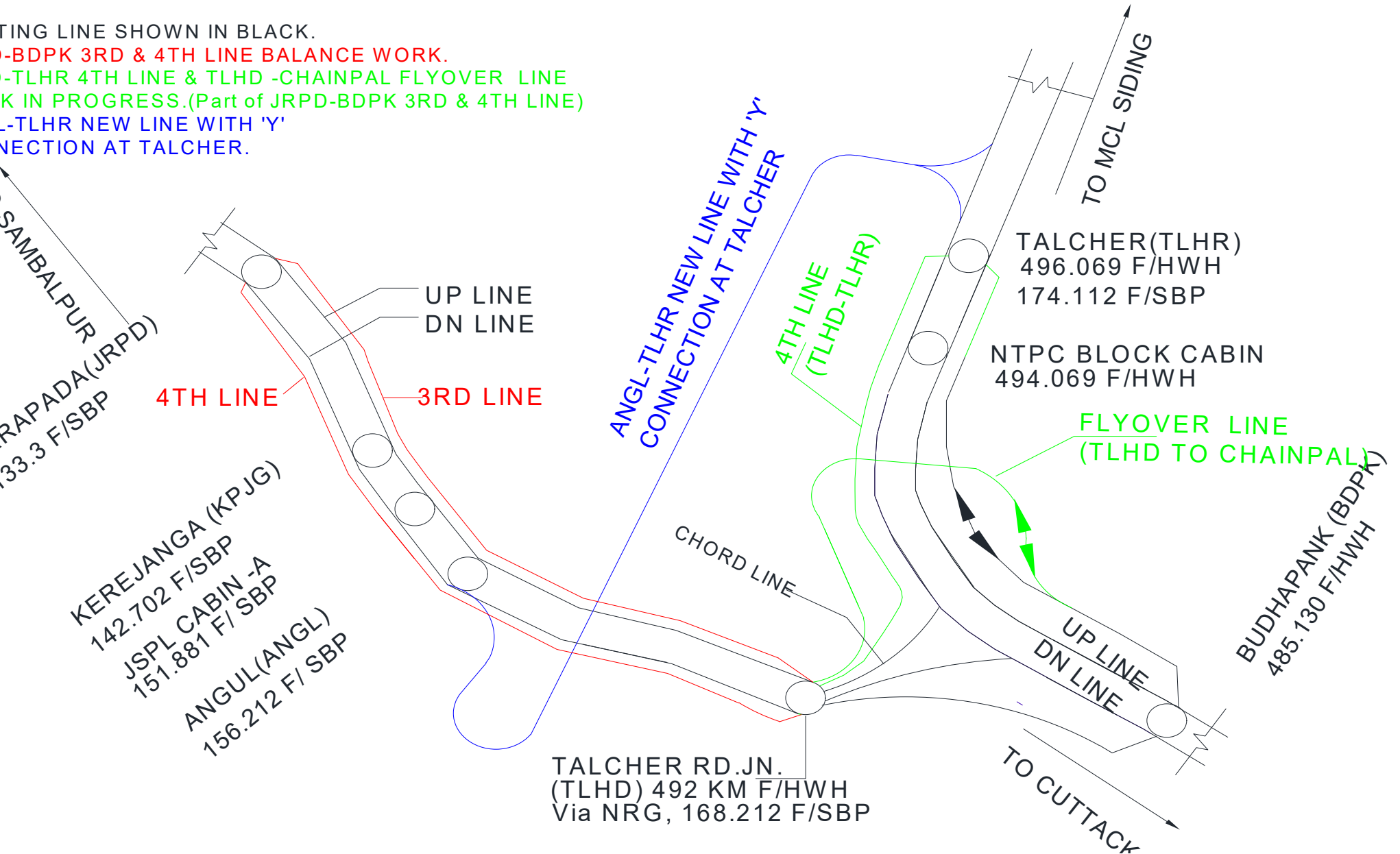
RED LINE - JRPD-BDPK 3RD & 4TH LINE BALANCE WORK.

GREEN LINE - TLHR 4TH LINE & TLHD -CHAINPAL FLYOVER LINE

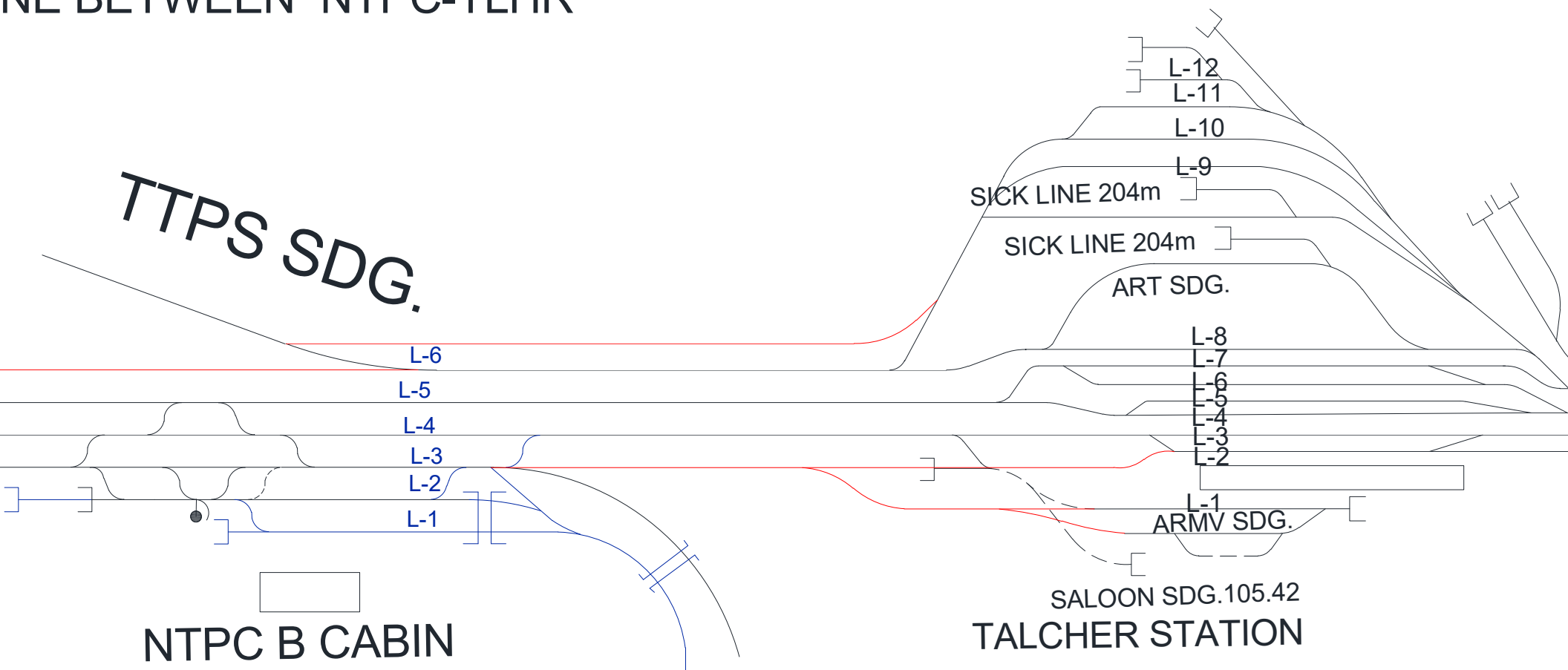
BLACK LINE IN PROGRESS. (Part of JRPD-BDPK 3RD & 4TH LINE)

BLUE LINE - ANGL-TLHR NEW LINE WITH 'Y'

CONNECTION AT TALCHER.



PLAN FOR PROPOSED LINE BETWEEN NTPC-TLHR



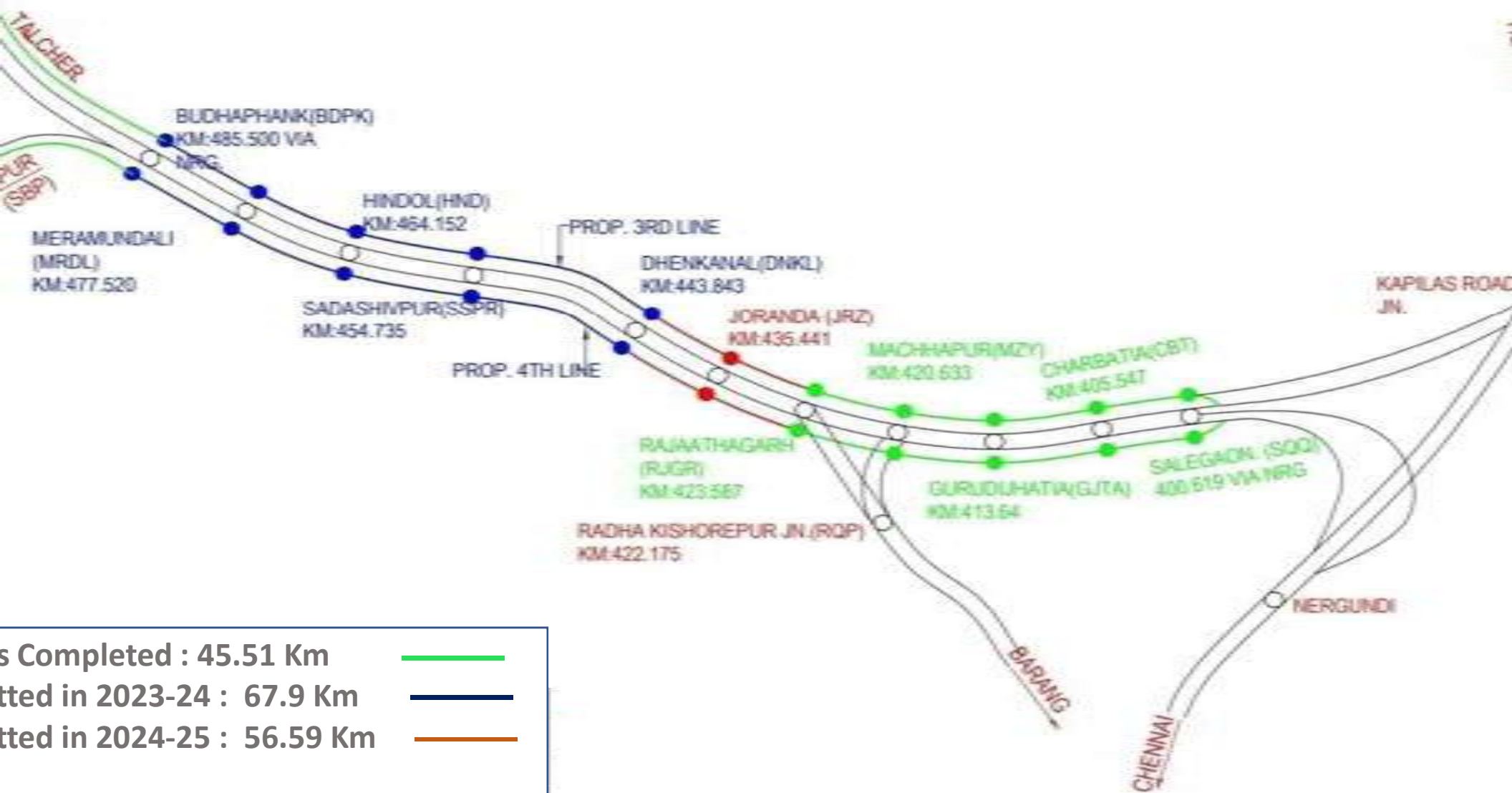
LEGEND:

1. EXISTING WORK SHOWN AS
2. PROPOSED 3RD & 4TH LINE BETWEEN NTPC-TLHR & TLHD-TLHR, SHOWN AS
3. PROPOSED DOUBLING OF LINGARAJ SILO-NTPC YARD (8.24 KM) SHOWN AS

e of the ork	Cost in crores of Rs.	Expenditure In crores of Rs.	Status	Bene
- nk 3 rd & with fly alcher Rd	810.0	280.61	<ul style="list-style-type: none"> ▪ Total length of the project is 101 Km ▪ Completed : 15.67 Kms. ▪ Remain : 85.3 Kms. ▪ TDC : Mar'25 ▪ Private land acquisition is in progress. ▪ <u>Assistance Required</u> - Land acquisition. 	Line Utilization expected improve current 51% Maintena Block).

3RD & 4TH LINE BETWEEN BUDHAPHANK AND SALEGAON VIA RAJATHAGARH (2X85=170KM)

TALCHER (TLHR)
M 496.100 VIA NRG



Salegaon – Budhapank via Rajathgarh 3rd & 4th Line

e of the ork	Cost in crores of Rs.	Expenditure In crores of Rs.	Status	Bene
ank - on via garh th Line	1172.9	877.53	<ul style="list-style-type: none"> ▪ Completed : 46 Kms. (2x23 Km) ▪ Remain:124.36 Km (2x62.18Km) ▪ TDC : Feb'25 ▪ Work in progress for rest of the sections. 	Line (C Utilization expected improve current 1 103% Maintena Block).

Inner Corridor between Angul – Balaram-Putgadia-Jarapada (MCRL) ALIGNMENT PLAN

aharani Coal Railway Limited

OC: 31.12.2025



Inner Corridor between Angul – Balaram-Putgadia-Jarapada

Name of project	Cost in crores of Rs.	Expenditure in crores of Rs.	Status	Benefits
Construction of Inner Corridor between Angul – Balaram-Putgadia-Jarapada	1700	300	<ul style="list-style-type: none">Phase-I Angul – Balaram (14 Km) commissioned on 11.11.2022.173.57 Ha of private land acquisition for Phase-II (54 Km) is in progress. Working permission for 125.35 Ha of forest land received.TDC: 31.12.2025	<ul style="list-style-type: none">Alternative route to facilitate movement of traffic by-passing Talcher.Quick evacuation of coal.

MCL AREA

Barangam-Jarapada-Tentuloi New line



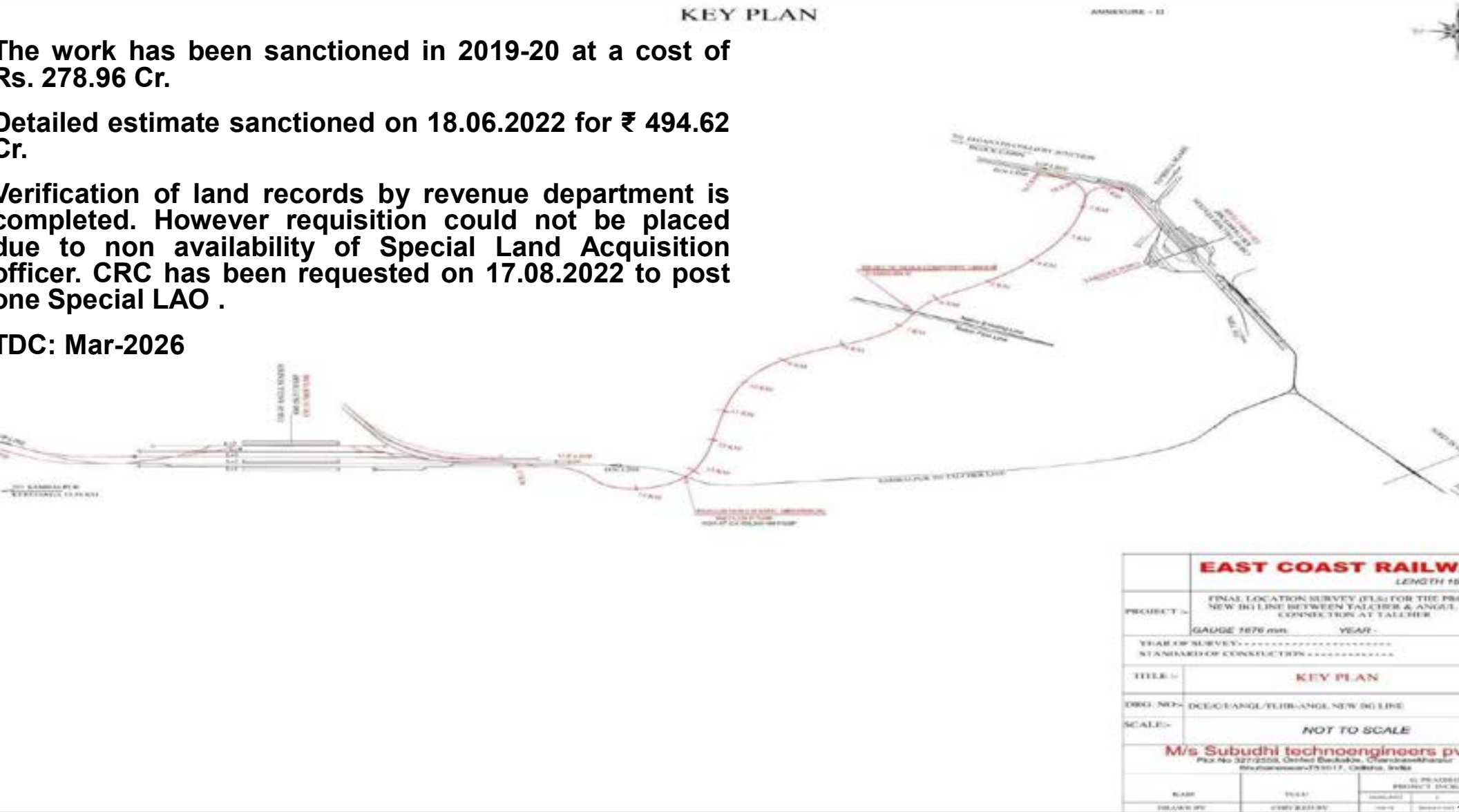
Talcher-Angul New Line with Y-connection at Talcher (14.5 Km)

The work has been sanctioned in 2019-20 at a cost of Rs. 278.96 Cr.

Detailed estimate sanctioned on 18.06.2022 for ₹ 494.62 Cr.

Verification of land records by revenue department is completed. However requisition could not be placed due to non availability of Special Land Acquisition officer. CRC has been requested on 17.08.2022 to post one Special LAO .

TDC: Mar-2026



Talcher-Angul New Line with Y-connection at Talcher (14.5 Km)

Part of the work	Cost in crores of Rs.	Expenditure In crores of Rs.	Status	Benefit
Angul e with Y- ion at	494.7	0.0011	<ul style="list-style-type: none">▪ Completed : Nil▪ Remain: 14.5 Km▪ TDC : Mar-2026▪ FLS prepared. Alignment finalized.▪ L-Section approved.▪ Detailed estimate sanctioned.▪ Private & Govt. land acquisition process is underway.	<ul style="list-style-type: none">▪ Alterna shorter ro empty from Sar side.▪ Power at Talche will be av▪ Operatio constraint receiving despatchi rakes w removed.▪ Coal eva will impro

THANK YOU



Mines & Minerals Related Spatial Layers_dBase @ PM GatiShakti-National Logistic Policy

East Zonal Conference on PMGS National Logistic Policy.
Bhubaneswar, Odisha.

16 Feb 2023; Session 2.

Pushpender Gaur
Regional Controller of Mines, Gandhinagar
Indian Bureau of Mines

Contents

1. Objectives of PM GatiShakti NMP/NLP
2. Brief about Ministry of Mines
3. What the **Ministry of Mines Portal** Contains in PMGS National Master Plan w.r.t. PMGS Objectives
4. How the data in portal contributes/Would contribute towards National Logistic Policy

. Objectives of PM GatiShakti

A. Connecting all concerned departments on **ONE** platform.

1. Geo-Spatial (GIS)
2. Database

B. Integration of all the **existing** / **planned** initiatives of the various Ministries/Departments being undertaken for **better synergy** to facilitate various Economic Zones.

C. This is Dynamic **GIS based system** (IT driven Master Plan)

D. **SHAKTI** from synergy giving **GATI** to the projects by Transformative approach

E. Launched on **13th October 2021**

5 Pillars and 7 Engines to Drive NMP



Comprehensiveness Prioritization Optimization Synchronization Analytical Dynamic

6 Pillars of PMGS
PMGS East Zonal Conference, BBN 16 Feb 2023

2. Brief About Ministry of Mines

A. Ministry of Mines is responsible for

1. Survey and exploration of all minerals, other than natural gases, petroleum and atomic minerals,
2. Administration of the Mines and Minerals (Regulation and Development) Act, 1957 in respect of all mines and minerals other than coal, natural gas and petroleum.

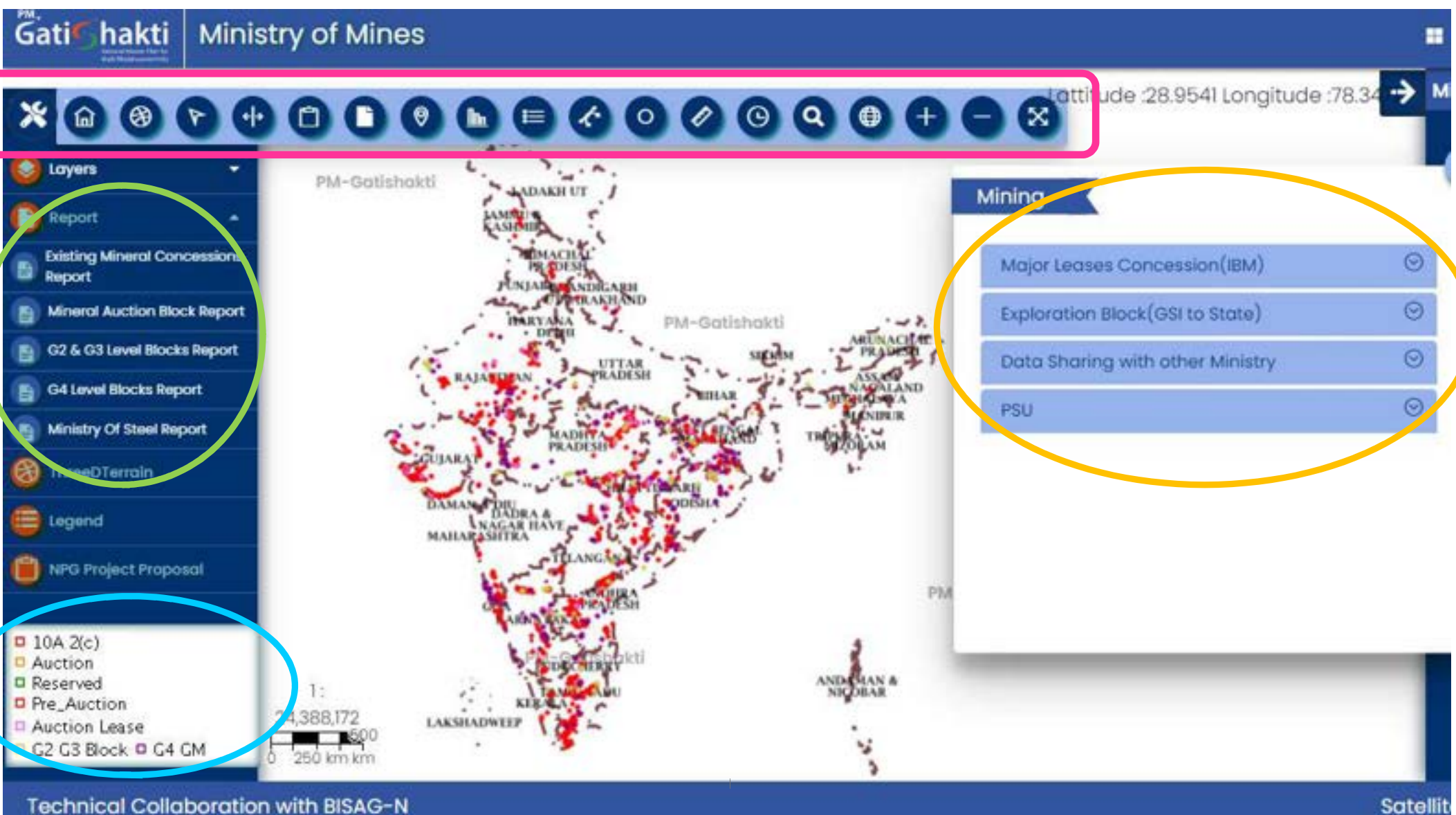
B. Attached office

1. Geological Survey of India; HQ at Kolkata

C. Subordinate office

1. Indian Bureau of Mines, HQ at Nagpur

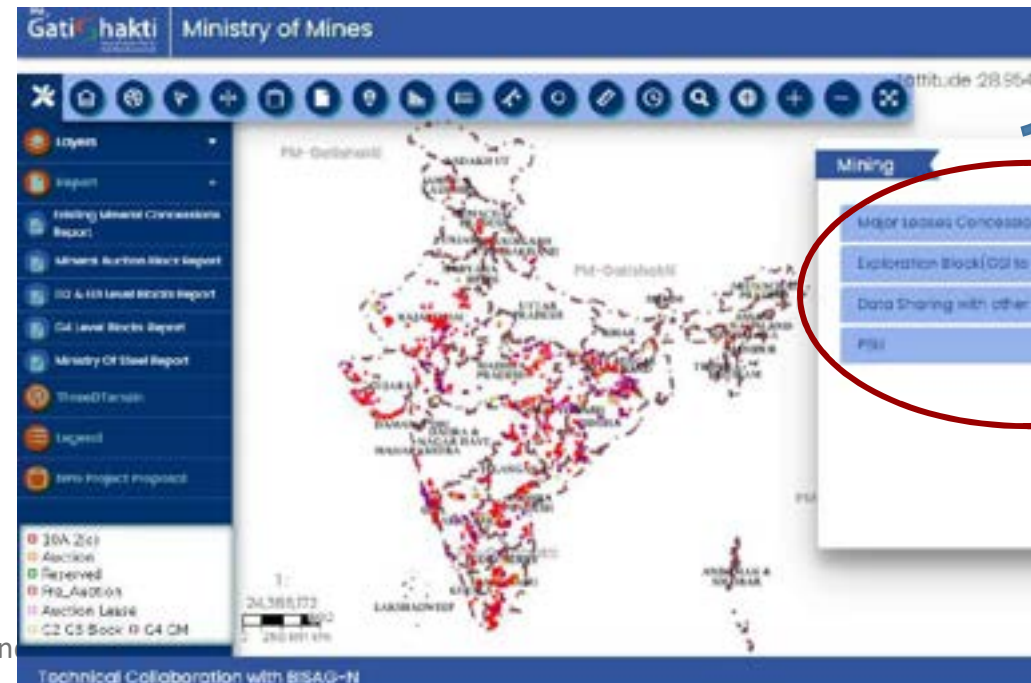
3. Ministry of Mines' Portal in PMGS National Master Plan: Overview



Contd... 3. Ministry of Mines' Portal in PMGS National Master Plan

A. Data Layers Management: 4 Major Groups

1. Major Leases/Concessions (IBM): **2674** Concessions
2. Exploration Blocks (GSI to States): **426** Blocks
3. Data Sharing with other Ministries: **445** Concessions
4. PSUs of Ministry of Mines: **2** PSUs



Contd... 3. Ministry of Mines' Portal in PMGS National Master Plan: Layers in Layer Groups

A. Major Leases/Concessions (IBM)

1. Existing Mineral Concessions (ML/CL) : Attribute data including data of dispatches from respective mining lease for three years i.e. 2019-20, 2020-21, 2021-22): **2570**
2. Mineral Auctioned Blocks: **104**

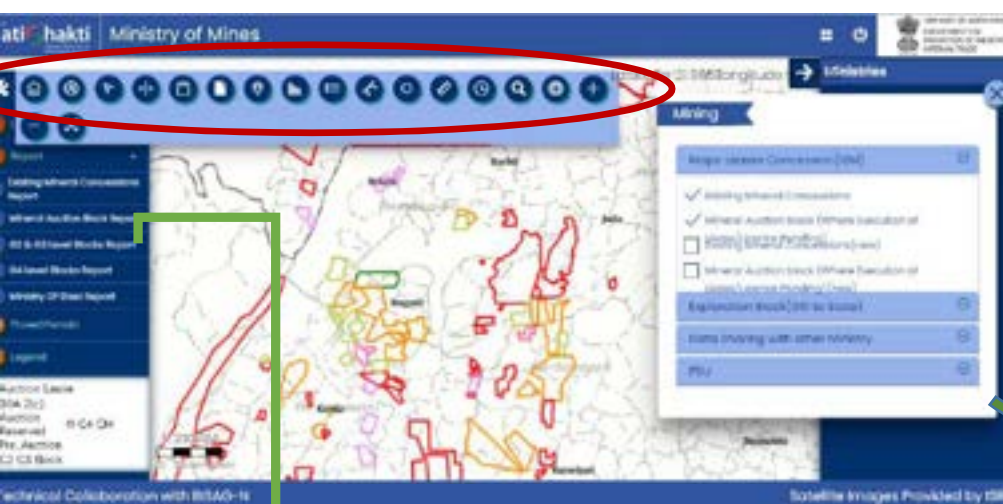
B. Exploration Blocks (GSI to States)

1. G2 and G3 Level Resource bearing blocks for auctioning as Mining Lease: **174**
2. G4 Level Blocks (Geological Memorandum) for auctioning as Composite Licence: **252**

C. Data Sharing with other Ministries: Steel: **445**

D. PSUs of Ministry of Mines

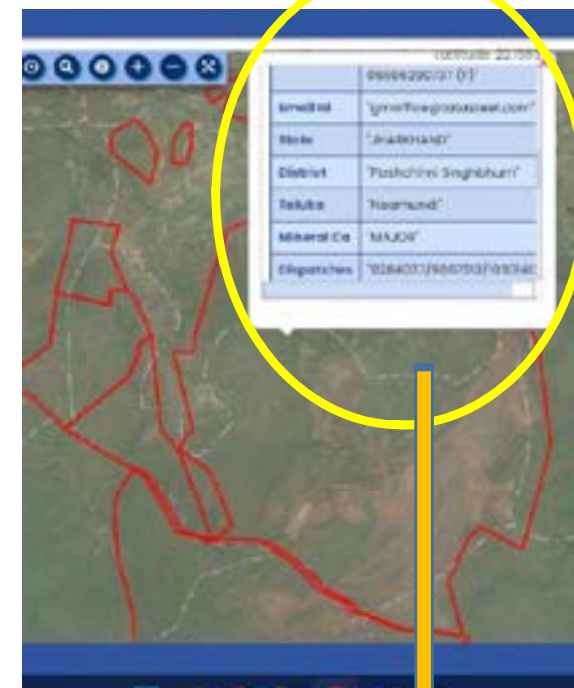
Contd... 3. Ministry of Mines' Portal in PMGS National Master Plan: Salient Features/Tools/Attribute Displays on MoM Portal of PMGS



Legends

Reports

Layer-heads and
Respective Layers



TOOL BAR:

Forms

Intersect
Layer reports

Query
builder



Display of attribute
of specific Spatial ob

Contd... 3. Strict Adherence to the time lines for Creating Ministry of Mines' Portal and uploading data on it

- A. Start date : **31 May 2022**
- B. The data structure for these layers has been finalized and data compilation/updation commenced : 21 July 2022.
- C. Mineral concession data compilation completed: **31 Aug 2022**
- D. Data Live on PMGS on **12 Sep 2022**
- E. **GSI** Data of G4 Level/G2 & G3 Level: December 2022 & Jan 2023
- F. **Other updation:** Time to time based on regular reviews by the Ministry
- G. **Other tools** like reports/query builder developed by BISAG simultaneously

Contd... 3. Some Interactive Tools to facilitate analysis



Query builder

- Interactive query on various attributes to filter objects of concern and get the report simultaneously



Reports

- Downloadable all data together in Excel, CSV format for further analysis



Intersect Layer Report

- For further analysis and auto generated report facilitates DSS.



Forms

- For updation/addition of data and spatial object



Display of attribute data on Spatial Object

- For instant data visualization

Contd... 3. All concessions without application of Query builder

The screenshot displays the PM-Gatishakti Ministry of Mines web application. The interface features a top navigation bar with the PM-Gatishakti logo and 'Ministry of Mines' text. A left sidebar lists various reports and maps. The main area displays a map of India with red dots representing mineral concessions. A 'Query Builder' dialog box is open, showing fields for 'select table*', 'select field*', 'select operator*', and 'select value*', with a 'Query*' field indicating 'Query is required'. A 'Mining' panel on the right shows options for 'Major Leases Concession (IBM)', 'Existing Mineral Concessions', 'Mineral Auction block', 'Exploration Block (GSI to State)', 'Data Sharing with other Ministry', and 'PSU'. The bottom of the map shows a scale bar (0 to 500 km) and coordinates (Latitude: 23.4366, Longitude: 91.7212).

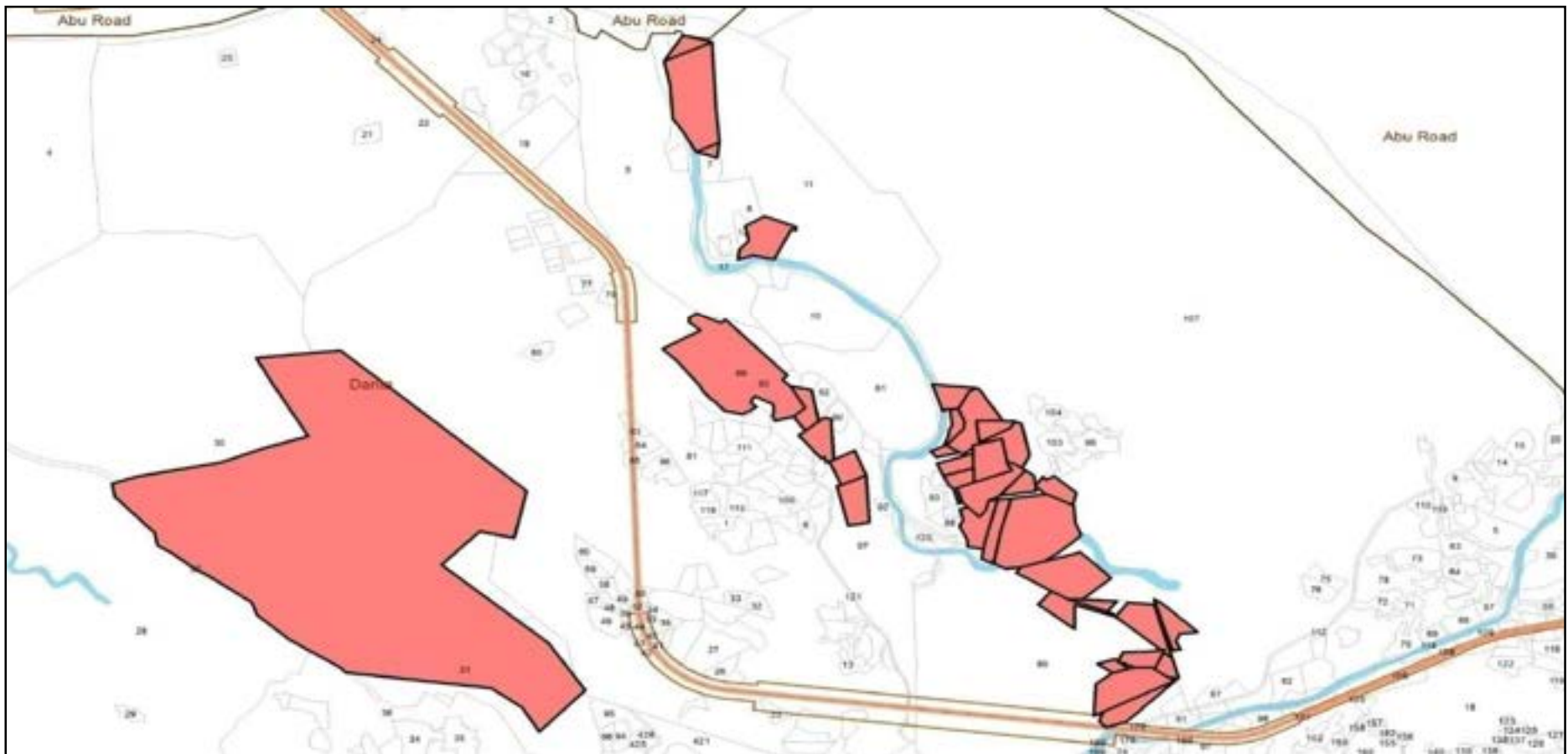
Contd... 3. Query builder: Specific data display with use of QB

The screenshot displays the PM-GatiShakti Ministry of Mines web application. The interface includes a top navigation bar with the PM-GatiShakti logo and the text 'Ministry of Mines'. Below this is a toolbar with various icons for map navigation and data management. On the left, a 'Layers' panel lists several data layers: High Resolution Image, Administrative Boundary, Logistics, Forest, Economic Zones, Infrastructure, Up Coming Project, Report, Existing Mineral Concessions Report, Mineral Auction Block Report, G2 & G3 Level Blocks Report, G4 Level Blocks Report, Ministry Of Steel Report, ThreeDTerrain, Legend, and NDC Surface Report. The main map area shows a map of India with state boundaries and names. A 'Query Builder' dialog box is open in the center, allowing users to filter data. It contains the following fields: 'select table*' with a dropdown menu showing 'Existing Mineral Concessions', 'select field*' with a dropdown menu showing 'mineral_na', 'select operator*' with 'OR' and 'AND' buttons, and 'Select value*' with a dropdown menu showing 'Iron Ore'. Below these fields is a text area containing the query: 'Query*: select * from india_major_lease_2022 where mineral_na = Iron Ore'. At the bottom of the dialog are 'SUBMIT' and 'RESET' buttons. On the right side of the map, a 'Mining' panel lists several categories: Major Leases Concession(IBM), Exploration Block(GSI to State), Data Sharing with other Ministry, and PSU. The map also shows a scale bar at the bottom left with the text '1:18,672,640' and a coordinate display at the top right showing 'Latitude :32.2035 Longitude :88.9728'.

. How the data in portal contributes/May contribute towards National Logistic Policy/ Other economic activities

- . Gap analysis: Example: Consistent off-take/evacuation of mineral produced. (Bulk loose quantity)
- . Alignment/Site Selection of new infrastructure projects w.r.t. Existing Mineral concessions and forthcoming mineral concessions (like Auction Blocks, Prospected area put up for auction etc.) :
 1. DSS and better co-ordination for Faster alignment as all data available at one place
 2. Well planned sustainable alignments without affecting Mineral Potential areas appropriately
 3. Facilitate optimal extraction of mineral from a mine
 4. Mineral conservation, minimizing/avoiding the Resources being blocked under or within Statutory barriers
- . Facilitate Mineral concession granting authorities to visualize GO : NO-GO areas while deciding the mineral concession boundaries of probable / upcoming concessions.w.r.t. Existing roads, power lines, railway lines, dense habitat area, rivers, forest, sanctuaries, National Parks, CRZ etc.
- . Optimal extraction of mineral from Existing Mineral Concessions
- . Logistic analysis w.r.t. nearby Mineral Processing, Beneficiation Plants, Smelters etc

Latest example: Taranga hill – Ambaji - Abu Road Broad Gauge New Railway line Alignment passing through Mining Area using PMGS portal



Latest example: Taranga hill – Ambaji - Abu Road Broad Gauge New Railway Line Alignment passing through Mining Area using PMGS portal





वसुधैव कुटुम्बकम्
ONE EARTH • ONE FAMILY • ONE FUTURE



धन्यवाद



Wind Energy Turbines within ML





GatiShakti

- **PM Gati Shakti- Nation Master Plan** for Infrastructure development was launched by Hon'ble PM in October 2021
- **Vison** : To enable a mechanism for coordinated planning and to provide a bird's eye view of planned development to all the ministries for holistic and integrated development .
- **Objective** :To bring different Ministries together and for integrated planning and coordinated implementation of infrastructure connectivity Projects. It will incorporate the infrastructure schemes of various Ministries and State Governments and will also leverage technology extensively by using spatial planning tools.
- To bring down the overall logistics cost .



Ways and Means

Different infrastructures viz. railways, roads, waterways etc. have been mapped on the single portal of Gatishakti National Master Plan.

Bhaskaracharya Institute for Space Applications and Geoinformatics (BiSAG-N) enabled the mapping of infrastructure and the ministries have uploaded their Rail, Road, Port networks etc. on PM Gatishakti National Portal.

User Ministries like coal, steel, fertilizer etc. were asked to identify critical infrastructure gap projects based on their requirements and future projections.



Critical Infrastructure Gap Projects

Ministry of Steel has identified 22 high impact projects (5-MoR, 5-MoRTH, 6-MoPSW and 6-MoPNG) to develop multimodal connectivity and to bridge the missing infrastructure gaps.

These have been identified after consulting the industries in view of their requirements.

Planned expansion of railway lines, creation of new Inland Waterways, roads, ports, gas pipeline etc. will result in creating much needed logistic solution which will drive the steel sector towards achieving its targeted goals by 2030-31 as delineated in NSP 2017.



Action by Ministry of Steel

Ministry of Steel has Created its first layer of data by uploading Geo locations of more than 2000 steel units functioning in the country.

The Geo location of all the Iron ore Mines and Manganese ore mines which are relevant to the steel sector, have also been uploaded.

In addition, Ministry of steel also initiated mapping of slurry pipeline along with other infrastructures .

The Geo location of all laboratories related to iron and steel industries are being uploaded

The GatiShakti Area Approach

An approach for growth accelerating trustworthy infrastructure, through synchronized, holistic, integrated and comprehensive planning based on knowledge, technology and innovation to create a cluster dedicated to one or more industrial activities.

The upcoming Kalinganagar Steel hub in Odisha, has been identified to develop under area approach of PM Gatishakti .

This will facilitate development of upstream as well as downstream industries around the industrial hub by enabling appropriate logistic planning .



The Beginning

In its initial avatar PM-Gatishakti NMP is basically mapping all the infrastructure existing in the country so that an informed decision can be taken regarding infrastructure requirement in future when a plan is proposed to establish a factory, constructing a new rail line or a pipeline etc.

In future with mapping of other attributes, it will be much easier for a planner to decide a specific project for a specific location .

This will nullify the duplication of infrastructure projects for a specific area.

The Portal

<https://api3.ncog.gov.in/gatishakti/login>

Thank You

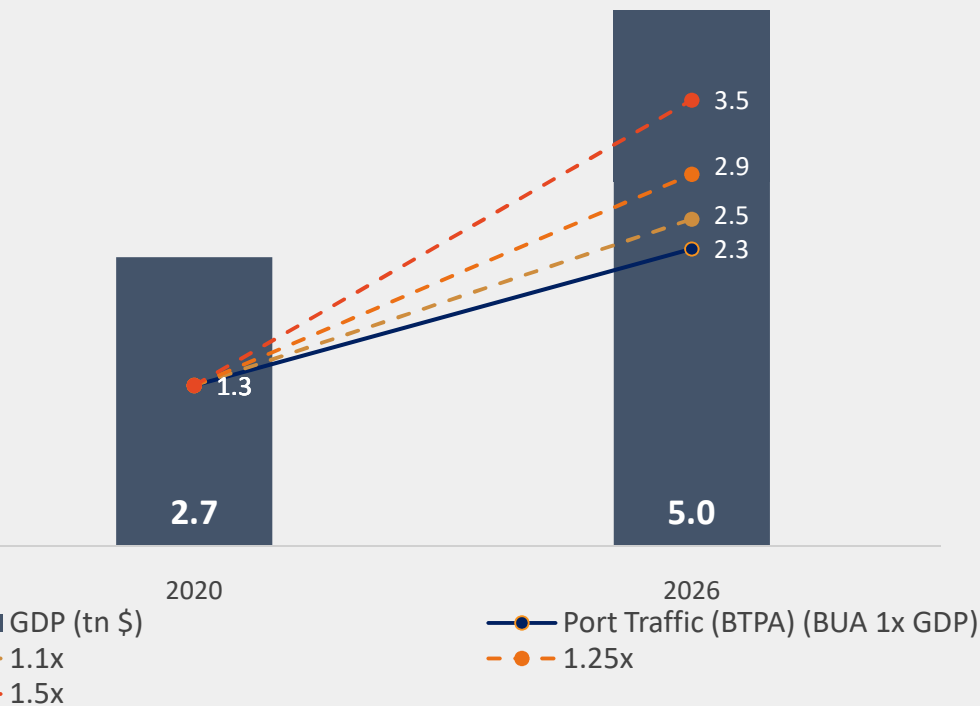
Paradip Port: Unleashing Thermal Coal Coastal Shipping



Indian Maritime Growth Story – The Big Picture

one of the fastest growing economies in the world. It aims to become a USD 5 tn economy by FY2025 (from USD 2.7 tn in 2020)

Total Traffic Scenarios

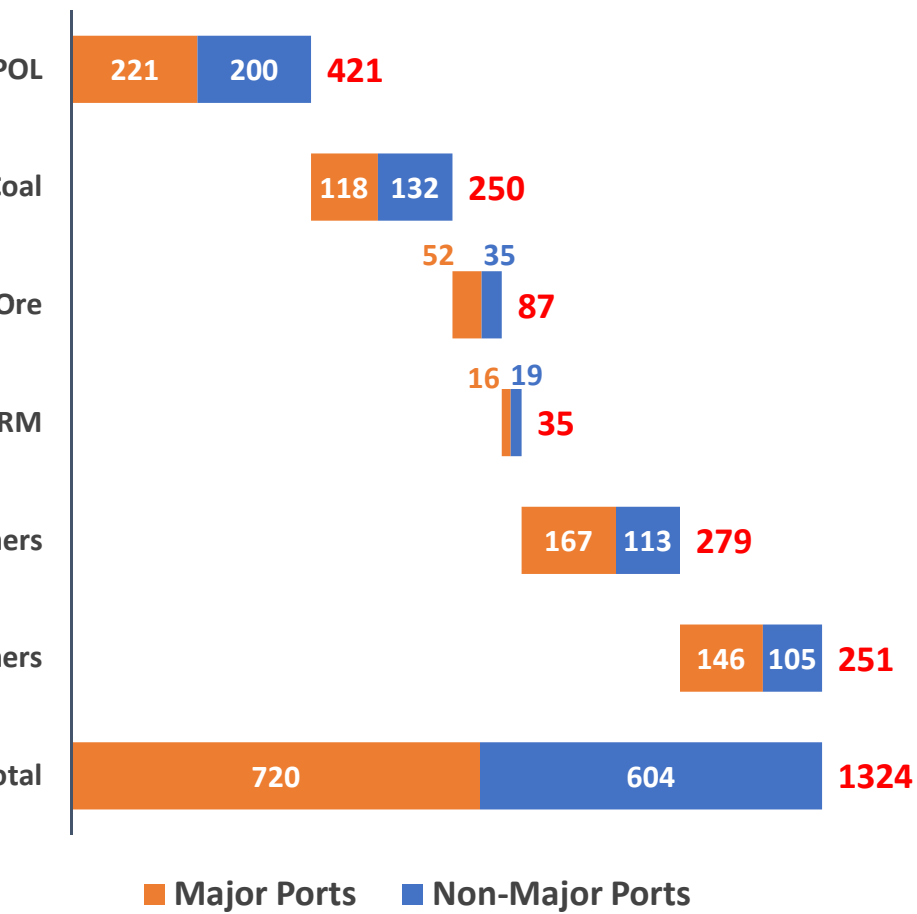


- Total Port traffic in FY 22 was 1.32 bn tons across all Indian Ports
- Normally port growth rate to GDP growth rate ranges from 1.1x to 1.5x
- Even if port traffic grows at 1x, the total port traffic would reach 2.3 BTPA by 2026
- However, given the government led push, port traffic grows faster it could increase in the range of 2.9 – 3.5 BTPA by 2026

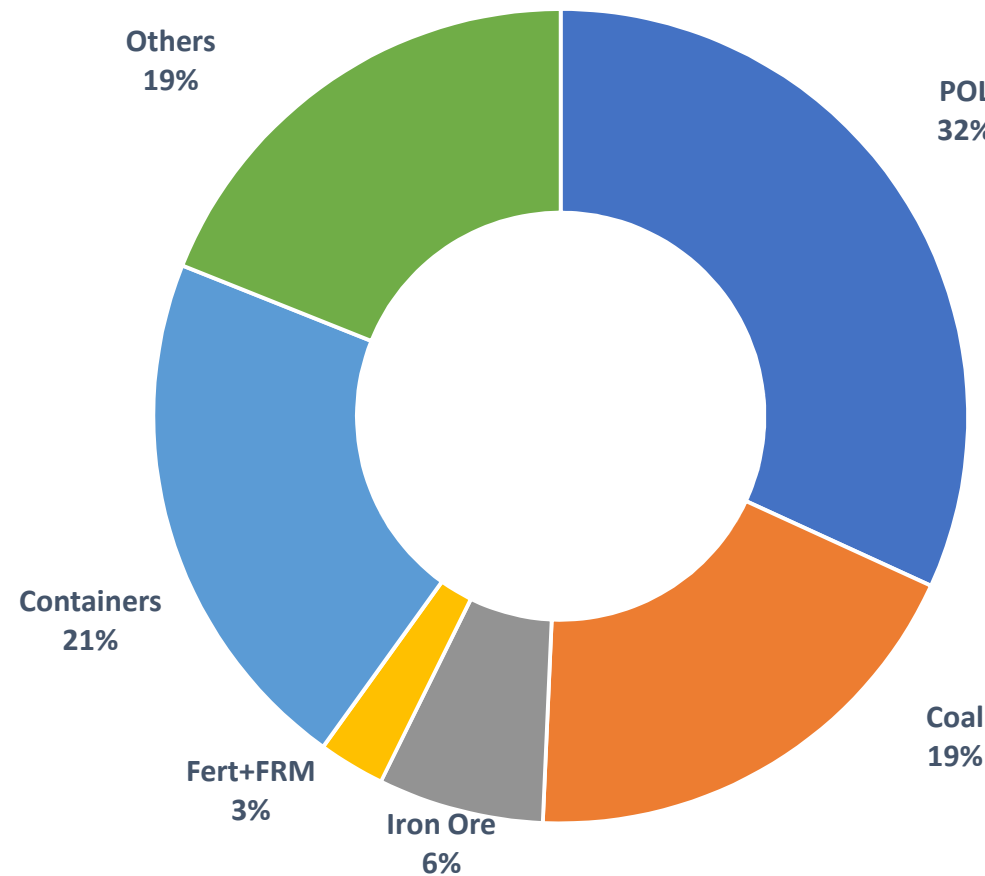
Commodity Wise Break-Up of Traffic Handled at Indian Ports

Major commodities constitute ~ 51% of the total cargo handled across Indian Ports in FY 2022

Major Commodities Handled at Indian Ports in FY 2022 (in MMT)

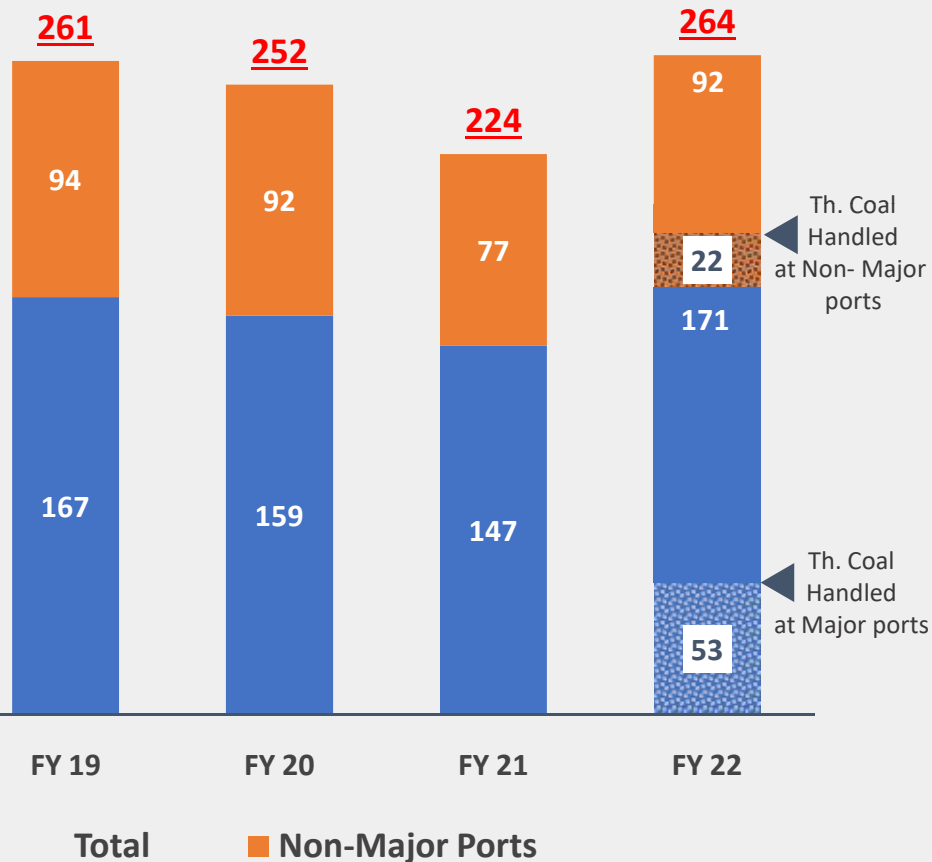


Major Commodities Shares at Indian Ports in FY 2022

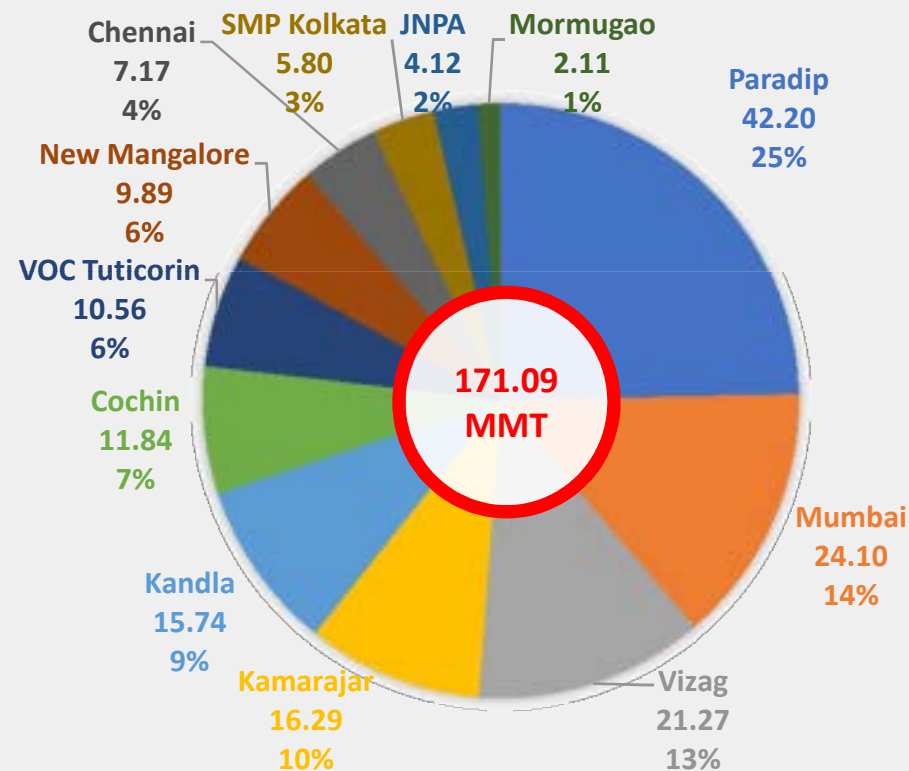


Coastal Cargo Volume Handled at Indian Ports

Year-wise Coastal Cargo Volume Handled at Indian Ports (in MMT)



Major Port wise Coastal Cargo Handled In FY 22 (in MMT, % share)

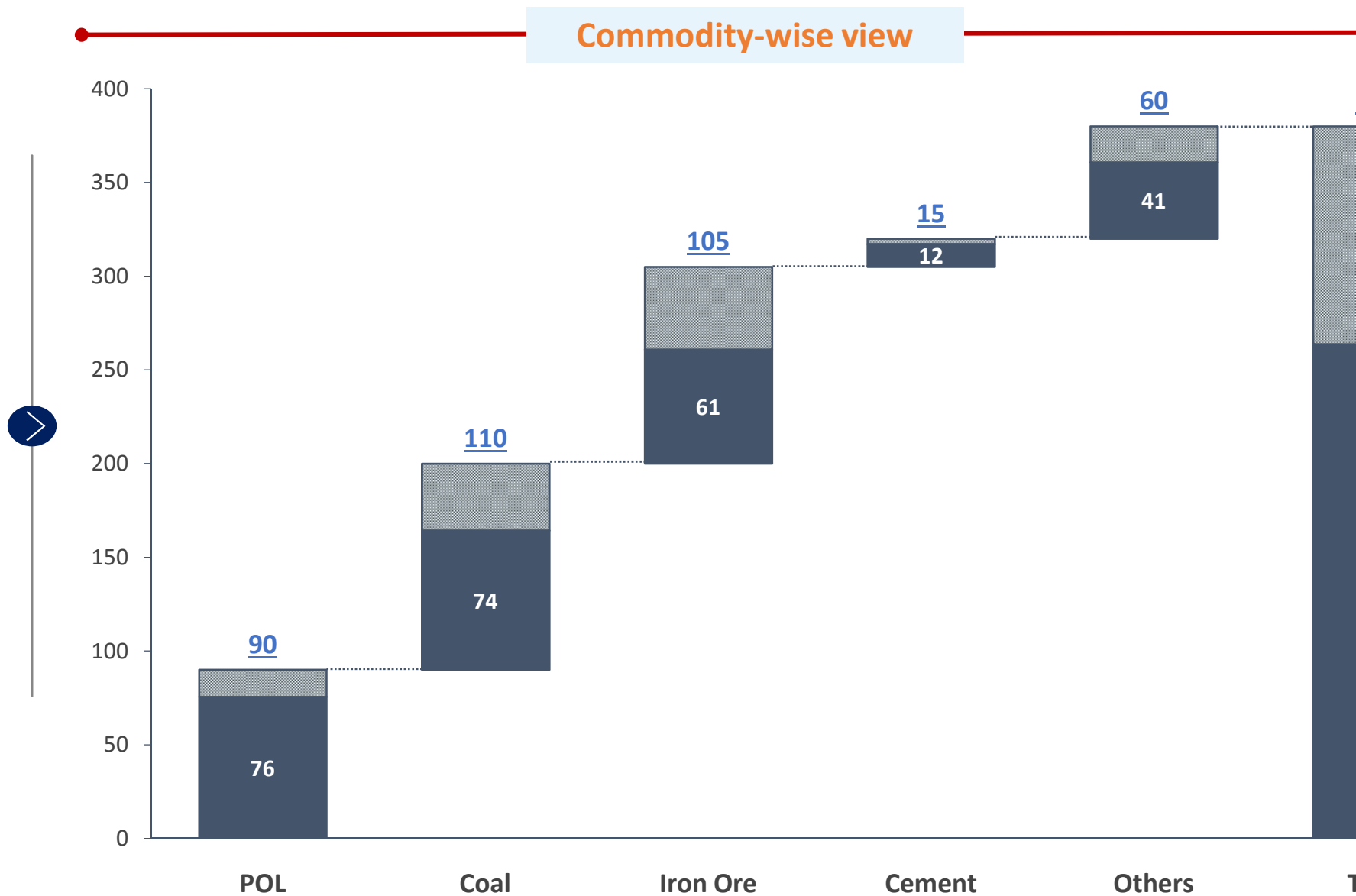


Paradip Port handled the highest coastal cargo volume of 42 MMT among Major Ports in FY 22

With Opportunity 2030: Commodity wise Coastal Cargo Potent

264
ent coastal
fic (MTPA)

380
0 potential
fic (MTPA)



Key Changes in Indian Port Sector

Major Port Authority Act, 2021

- Greater autonomy for Major Ports & professionalism in port sector

Blue Economy Programme, 2015 – To harness economic potential of India's coastline

- 802 projects @ Rs 5.41 Lakh Crs in port sector
- 220 completed projects | 231 under implementation | 391 under development

Maritime India Vision 2030

- This blueprint envisions overall investment of Rs 3.3 Lakh Crs in port sector

National Monetisation Pipeline

- Infrastructure investment of Rs 6 lakh Crs over the four-years period of FY 2021-25
- 32 projects @ Rs 12,828 Crs in port sector

PM GatiShakti Master Plan

- Integrated planning & execution of projects to address the issues of multi-modal connectivity
- 101 port projects worth Rs 59,930 Crs are identified under PMGS-NMP to be implemented

National Logistics Policy

- Framework to bring down logistics cost of India and boost EoDB, quickening last mile-delivery

Paradip Port ?



~ Rs 13/MT
Lowest VRC & Cheapest
Cargo handling Port in
the Country

6



300 MTPA (by 2025)
Largest Indian Major Port
in terms of Rated Capacity

1

80+ MTPA

Current Coastal Capacity
Coastal shipping hub of
the country

5



2

~50,000 MT/Day
Port with highest berth
productivity for Th. Co



18+ m draft
Cape Handling Capacity
by 2025

4

3

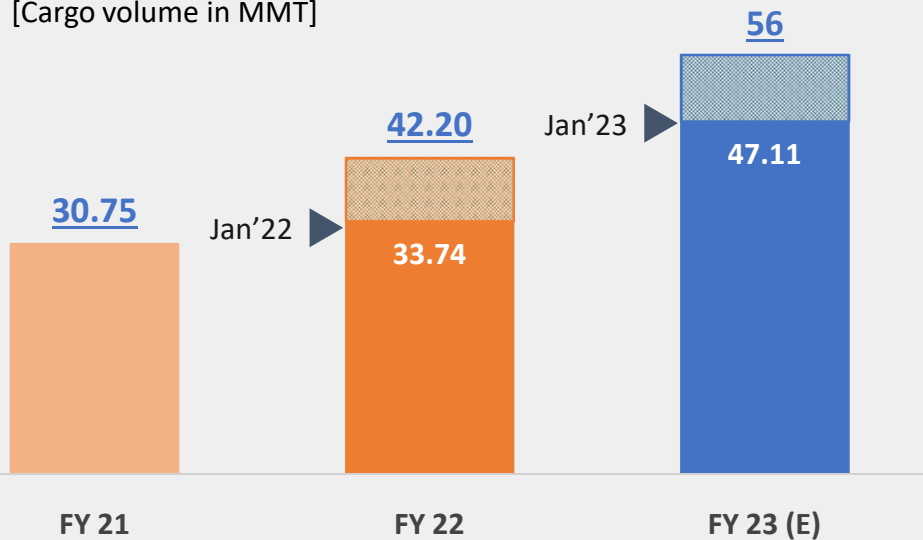
~ 80(U) / 30(L)
rakes/day potential
Largest Railway Terminal
handling capacity Port



Adip Port: Coastal Shipping Hub of the Country

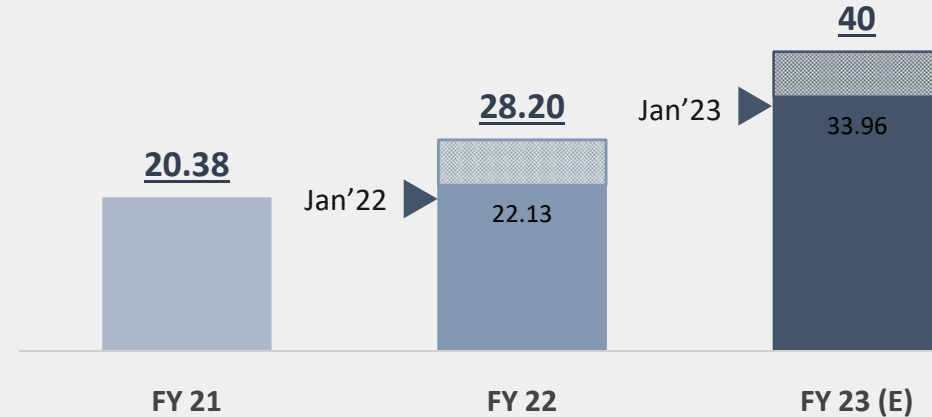
Total Coastal Cargo

[Cargo volume in MMT]



Coastal Thermal Coal

[Cargo Volume in MMT]



SOP in operation of Mechanized Coal Handling Plant, resulting in 8 MTPA additional Th. coal coastal shipping

commissioning of New Coal Terminal for Thermal coal coastal shipping of 30 MTPA Capacity

Improvement in rail infrastructure, track electrification & enabling handling of Long-Haul Rakes

Coal Handling At Paradip Port

Available Infrastructure

Berth	Berth Capacity	Draft	Berth Length	Stackyard Area
MCHP (2 berths)	41.2 MTPA	14.5 m	520 m (Continuous)	1.22 Lacs Sqm
PEQCTPL- JSW (3 berths)	30 MTPA	14.5 m	685 m (Continuous)	1.45 Lacs Sqm
IOHP	3/15.6 MTPA	13 m	275 m	1.04 Lacs Sqm

74.2 MTPA

Rake Handling Capacity (Rakes/day)

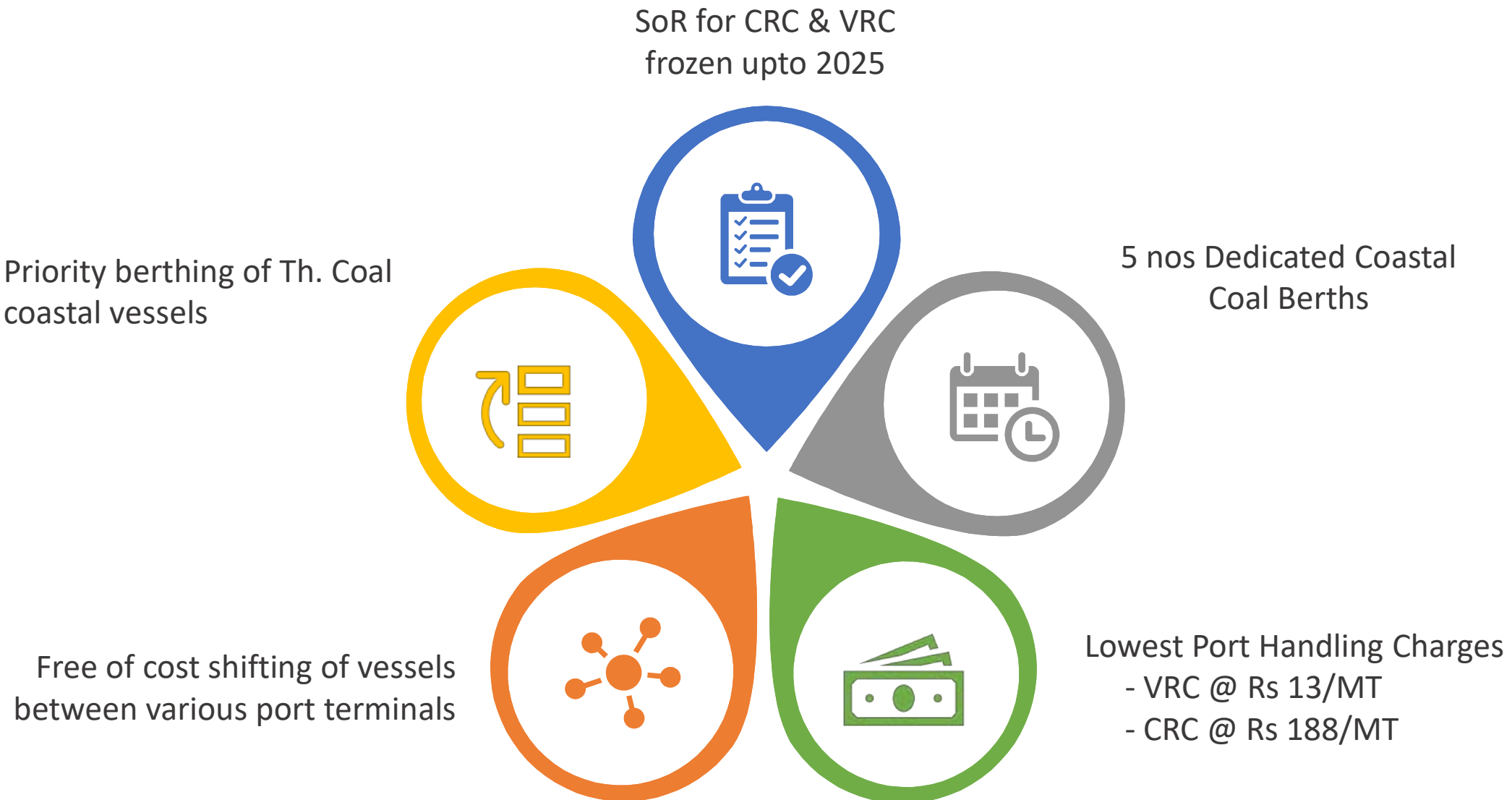
Category	MCHP	PEQCTPL (JSW)	IOHP	MANUAL	TOTAL
Current	25	26	3	3	57
2023	30	26	3	3	62

Vessel Handling Capacity

Berth	Vessel Loading Capacity (MT/day)
MCHP (2 berths)	0.90 Lacs
PEQCTPL- JSW (3 Berths)	1.40 Lacs
IOHP	0.20 Lacs

2.5 Lacs MT/day

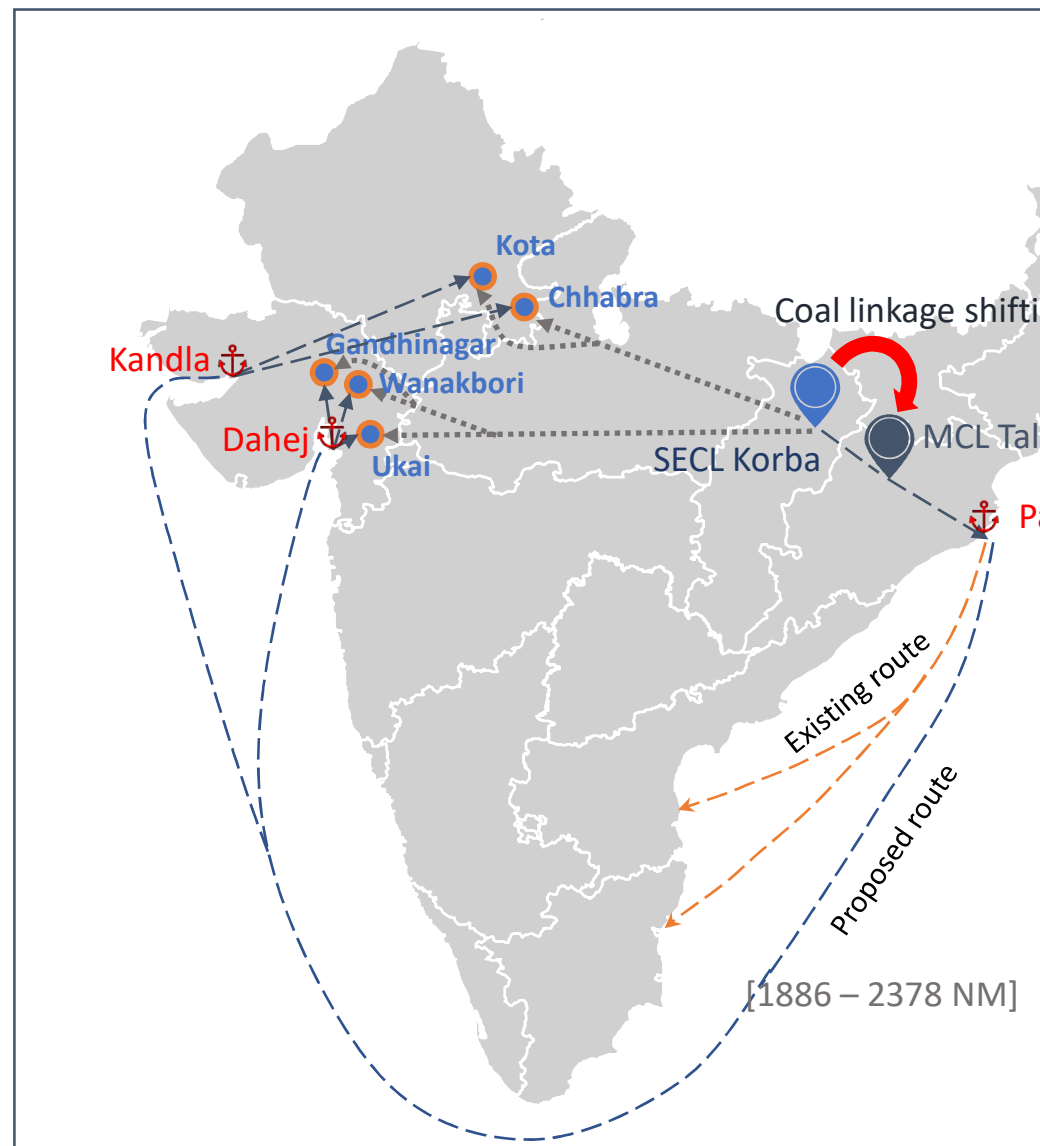
Facilities Extended by Paradip Port for Thermal Coal Coastal Ship



Optimal Coal Coastal Shipping Plan to West Coast Power Plants

TRANSPORTATION OF COAL TO GUJARAT (UKAI TPS) VIA RAIL-SEA-RAIL (VIA DAHEJ PORT) & ALL RAIL ROUTE

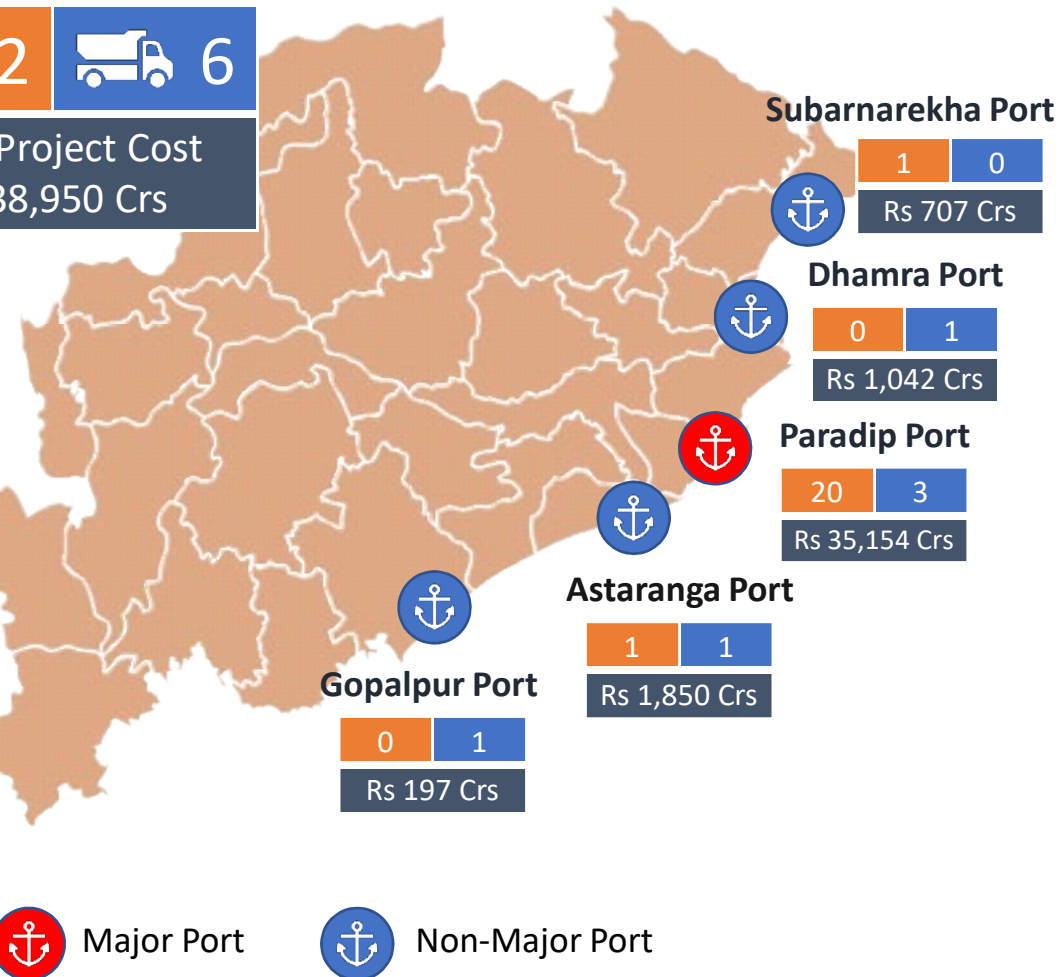
From SECL Coal to Dahej Port	VIA PARADIP	ALL RAIL (FROM SECL)
Distance to Dahej Port	2187 nm	-
12- Coal cost (INR)	1835	1835
Freight - from Talcher (INR)	672	2126
Handling Charges (INR)	190	-
Mean freight charges – Paradip to Dahej (INR)	800 (USD 10)	-
Port handling charges (INR)	200	-
Cost - Dahej Port to Plant (INR)	490	-
Added cost at Plant end (INR)	4187	3961
Mid point of GCV	3850	3850
Per GCV per ton (in INR)	1.09	1.03
CV per ton of Imported Coal	~ INR 2.3	



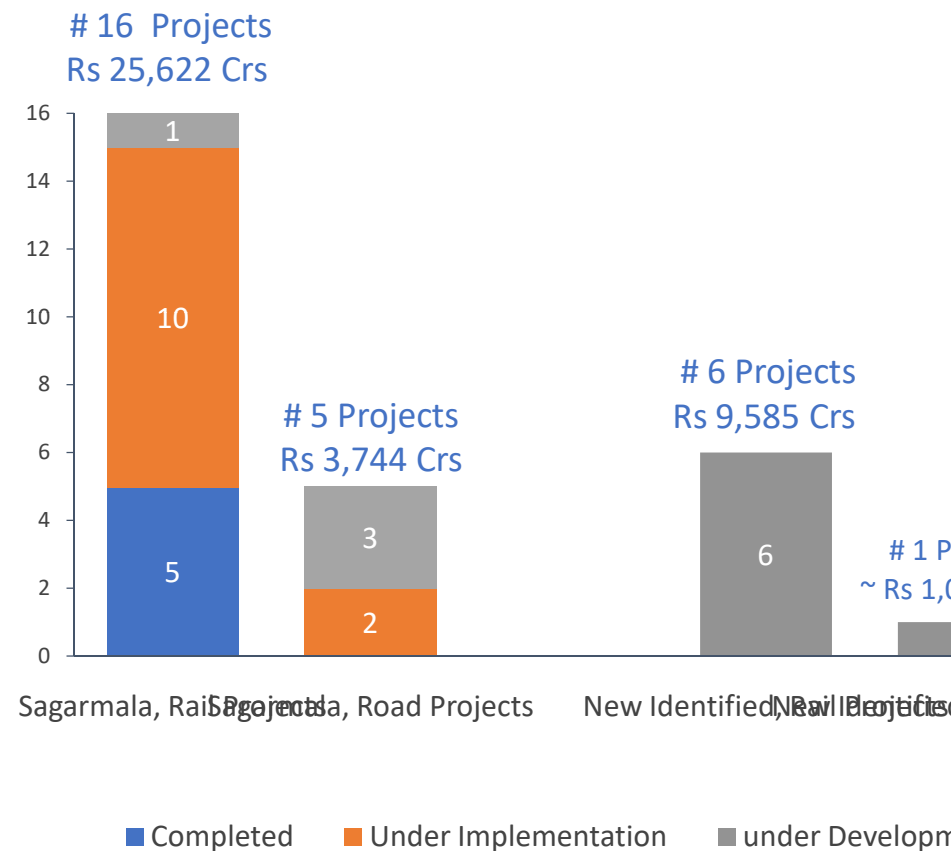
Comprehensive Action Plan for Port Connectivity on GatiShakti NMP

connectivity projects worth Rs 38,950 Crs for Odisha ports

Port-wise Connectivity Projects



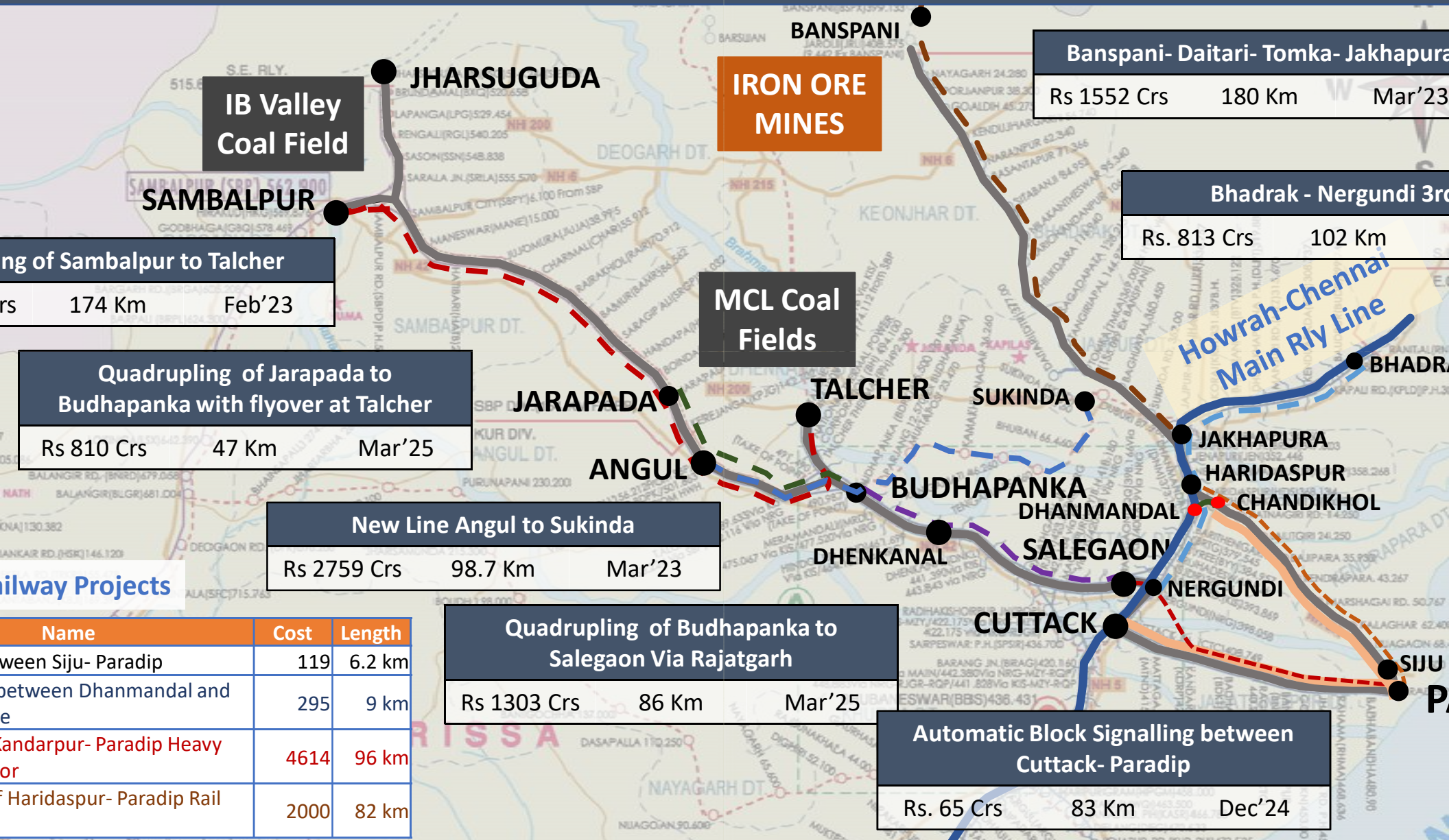
Status of Port Connectivity Projects of Odisha




[Source: Comprehensive Action Plan for Port Connectivity on Gatishakti NMP 2022, DPIIT]

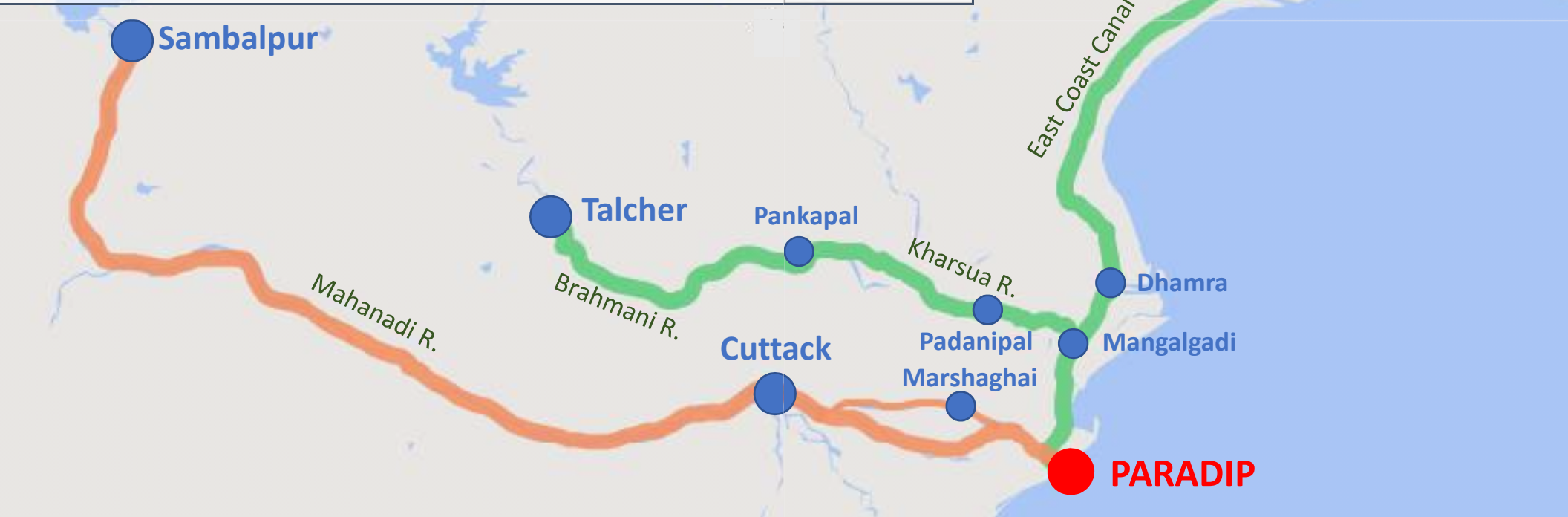
* Project Cost-Rough estimate not

Enhancing Port Connectivity of Paradip Port



Land Waterways Connectivity in Odisha

INTERNATIONAL WATERWAY	STATUS	
NW-5 	EoI issued by IWAI for developing following stretches of NW-5 <ul style="list-style-type: none">• Padanipal-Paradip (89 Km)• Padanipal-Dhamra (50 Km)	
NW-64 	EoI issued by IWAI for developing Marshaghai-Paradip (35 km) stretch of NW-64	



onal Coastal Mission for Thermal Coal

development of 100 MTPA capacity for coastal shipping of thermal coal
the proposed 400 MTPA capacity expansion planned by 2030

n to earmark dedicated quay length of 500 m in the proposed S
estern Dock, in addition to existing 1.5 km approx. quay length

oU for commitment of thermal coal coastal shipping among Coal
, Power Gencos, Railways, IWAI and Paradip Port Authority

THANK YOU



PM Gati Shakti National Logistic Policy 2023

Challenges and opportunities for National Waterways in Odisha

Presentation on

Development of NW-5 and NW-64
(Action plan and activities planned for FY 2022-23)

INLAND WATERWAYS AUTHORITY OF INDIA
(Ministry of Ports, Shipping & Waterways)

16th February, 2023

P. S.
DIR

AL WATERWAYS IN ODISHA

River (NW-5).

ni River (NW-14).

Badi Genguti River (NW-22).

Salanga River (NW-23).

li River (NW-64).

marekha River (NW-96).



earth

Survey: NCA, GEBCO

Scale:

100 km

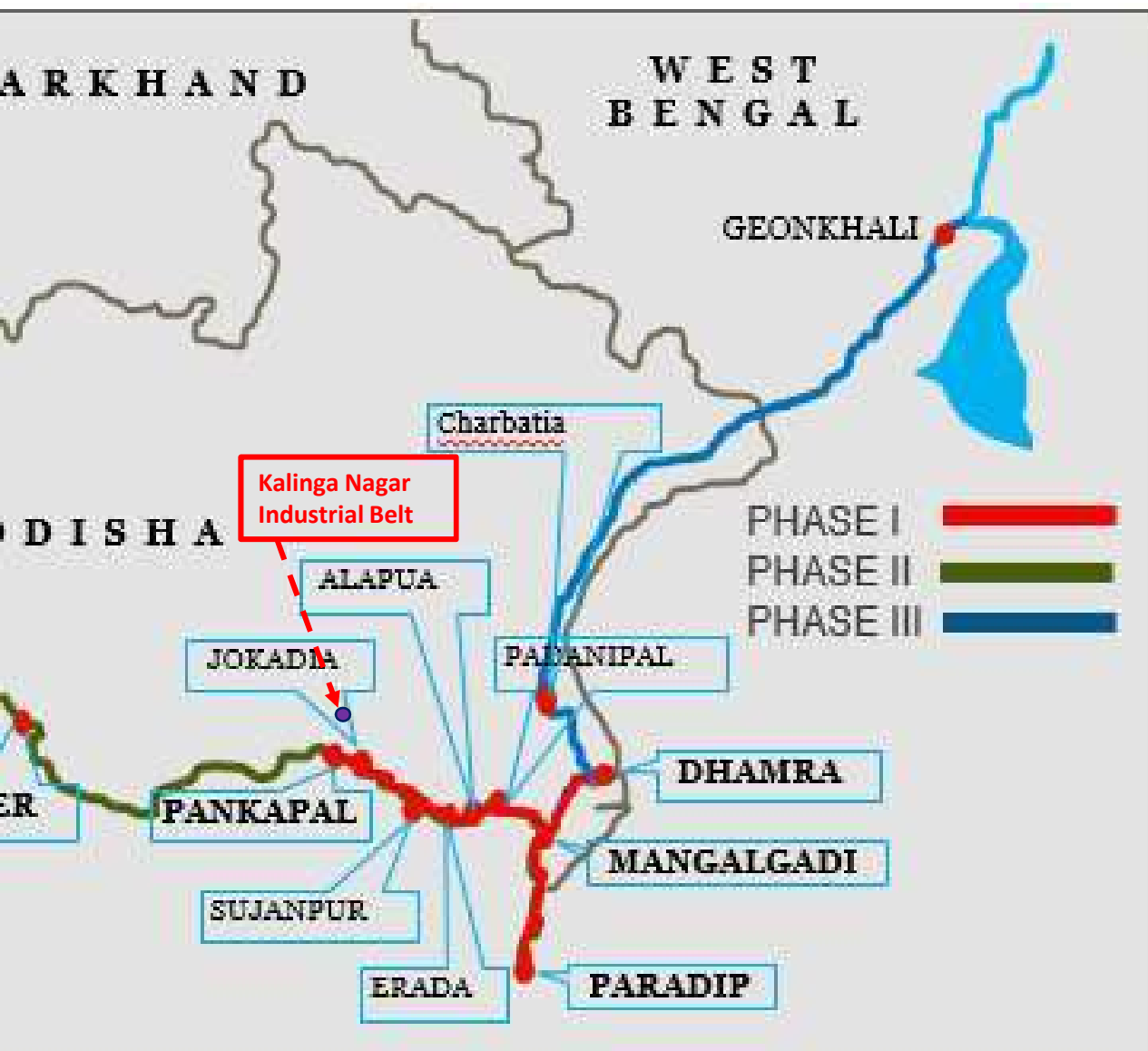
National Waterway-5

East Coast Canal integrated with Brahmani and Mahanadi delta river systems



Estimated cost- Rs 4210 cr (2010 prices)

Map of NW-5



National Waterway-5 was declared on 25.11.2002. It covers the Mahanadi / Brahmani delta, Matai River & Eastern Canal (ECC) for a length of 588 KM.

DPR prepared by WAPCOS in March 2010.

DPR updated by WAPCOS in Jan., 2016.

Breakup details of stretches are as below:

Stretches	Length	Length of P-1 / P-2/ P-3	
Mangalgadi to Paradip (P-I)	67 Km	212 Km	
Mangalgadi to Dhamra (P-I)	28 Km		
Mangalgadi to Pankapal (P-I)	117 Km		
Talcher to Pankapal (P-II)	120 Km	120 Km	0.8
Dhamra to Charbatia (P-III)	39 Km	256 Km	Pr
Charbatia to Geonkhali (P-III)	217 Km		
Total		588 Km	

(* In addition, 1m tidal advantage between Dhamra

activity planned under PPP with action plan and tentative timelines (Phase-I)

Major Projects	Estimated Cost (Rs. in Cr.)	Action Plan	Tentative
Construction of: Weirs on River Kharsua Navigation locks at weirs Check Dams to close off channels Rubber Dam with Lock Schematic Diagram)	2,243.00	<ul style="list-style-type: none"> ➤ Draft DPRs submitted to Central Water Commission for vetting of hydraulic structures which is withdrawn by IWAI. ➤ Execution by JV / SPV jointly with Govt. of Odisha and private stakeholder. ➤ Cargo study and evaluation of suitable PPP project structure entrusted to M/s KPMG by H.O. 	Dec 2
Construction of 9 no. of road bridges	804.11	<ul style="list-style-type: none"> ➤ DPRs accepted by IWAI. ➤ Vetting is under process by Govt. of Odisha. ➤ Execution by JV/ SPV jointly with Govt. of Odisha and private stakeholders. 	Dec 2
Laying of High-Tension Lines	45.08	<ul style="list-style-type: none"> ➤ Work entrusted to Govt. of Odisha on deposit basis. Additional cost of Rs.1.10 Cr paid on 31.03.2022. ➤ 90% progress achieved. 	March
Construction of Multimodal terminal at Kaptipal (near Kalinganagar)	85.00	<ul style="list-style-type: none"> ➤ As per DPR (2016), the cost of construction projected excluding land cost. ➤ Land to be acquired(Ac.115) by Govt. of Odisha. 	Dec 2

Map for operationalization

Paradip to Pankapal via Mangalgadi and Mangalgadi to Dhamra (212Km)

Activity	Status - Action	Time line
MOU with CWC for vetting of design of structures (weirs, Locks)	MOU signed by IWAI with CWC on 25.1.2022. <ul style="list-style-type: none">Project proposal briefed to CWC.Site visit planned by CWC, TEPL and IWAI team.Being monitored by IWAI along with DPR Consultants.	CWC to complete vetting by Dec 2022. However, not yet achieved. The Competent Authority has decided to vet the design by IIT.
Completion of Design & drawing / DPRs by Govt of Odisha.	State Govt confirmation to be obtained after vetting of designs by CWC. <ul style="list-style-type: none">IWAI is co-ordinating with CWC for expeditious action.	3 months post completion of vetting i.e., by March 2023.
Finalization for modification of bridge structures & vetting by Govt of Odisha.	DPR completed in Nov 2021. 9 Nos bridges required modifications to have required clearances. <ul style="list-style-type: none">The consultant shared the DPRs with State Govt for	Vetting by Odisha Govt by March, 2023.

Map for operationalization

Activity	Status - Action	Tentative Time
erection of HT Lines with quired clearances	Work in progress by Govt of Odisha. 90% completed. <ul style="list-style-type: none"> State Govt., is being pursued for early completion 	March, 2023
paration of project proposal for elopment.	Draft proposal is under preparation.	To be finalised in after vetting of State Govt.
mation of SPV for execution of ject.	To be taken up by IWAI/ Govt of Odisha and other private Stake holders.	March 2023
go study and evaluation of able PPP project structure trusted to M/s PwC	Proposal forwarded to PwC for submission Rate / price to undertake study (Phase-I & II).	March,2023

Scenarios of Annual Cargo projected in DPR of WAPCOS (2016)

(Low, Medium, High Cases)

Source of Cargo	Ultimate cargo for year 2030 (MTPA)	Low case (10%) (MTPA)	Medium case (30%) (MTPA)	High case (50%) (MTPA)
Kalinganagar Industries	3.53	0.353	1.059	2.118
OPCL (Adani)	10.40	1.040	3.120	6.240
Paradip Port Trust	5.18	0.518	1.554	3.108
Total Cargo (MTPA)	19.11	1.911	5.733	11.466

Commodities identified for transportation through IWT in NW-5:

Iron ore / Mahanadi river basins extending in Madhya Pradesh, Jharkhand, and Odisha have rich deposits of iron ore and large production of various industrial and agricultural products.

Major commodities to be transported through proposed NW-5 mode could be divided into three groups namely Iron Ore), Agricultural products (Paddy, Rice, Straw, Animal fodder, fish, Jute) and Finished goods / Manufactures (from Kalinganagar industries, textiles and forest)

Traffic in NW-5 and NW-64 during FY:2021-22 and FY:2022-23

Financial Year	Month of Movement	Qty of Cargo Moved (Metric Ton)	Commodity	Remarks
2021-22	February, 2022	14,538	Gypsum	❖ Gypsum Trial Movement held on 02/02/2022 from IFFCO River Mahanadi River to Paradip Port (NW-5 & NW-64).
2022-23	April, 2022	15,614		
	May, 2022	23,175		❖ "Gypsum Movement Flag-off Ceremony held by Hon'ble Minister, PSW" on 25.04.2022.
	June, 2022	22,111		
	July, 2022	20,459		
	Aug., 2022	15,609		❖ Approx. 90,000 Metric Ton per month is expected by IWT mode.
	Sept., 2022	26,702		
	Oct., 2022	16,973		
	Nov., 2022	36,986		
	Dec., 2022	37,171		
	Jan., 2023	45,585		
		2,60,385		
	March, 2022	385	Outer & inner drum assembly (ODC movement)	❖ ODC cargo moved from Paradip Port to Luna Jetty in River Mahanadi from 12/03/2022 to 13/03/2022. ❖ ODC moved to <u>Tata Steel plant</u> expansion project at Kalinganagar.
2022-23	April, 2022	930	Ammonia converter cell and Ammonia unitized chiller (ODC movement)	❖ ODC (Ammonia converter cell & Ammonia unitized chiller) loaded on DB ALAACRITY with 930 Tons mobilized in Mahanadi River (NW-5 & NW-64) from Paradip sea mouth to Luna Jetty with the help of 3 no. vessels and 17/04/2022. ❖ The ODC moved further by road from Luna Jetty.
Total (2021-22)		14,923		
Total (2022-23 up to January, 2023)		2,61,315		

Movement of Sand, Bricks & Stone chips on the O-D pairs; viz, (i) CHANDBALI - DHAMRA (40 Km), (ii) CHANDBALI - NALITAPATIA (27 Km) & (iii) CHANDBALI - DHAMRA (40 Km) are expected for which WMA is touch with the suppliers & vessel operators for diverting the cargo to IWT mode.

EoI invitation from Firms to participate and develop infrastructures such as, terminals, fairway & navigational aids

has been issued by the Chairman IWAI to the Secretary to Govt of India, MoPS &W for inviting Expression of Interest(EoI) and eligible firms to participate and develop infrastructures such as, terminals, fairway & navigational aids along the stretch NW-64 to augment the cargo handling capacity . The EoI approved by IWAI Board and published in Central Public Procurement (CPP portal) and IWAI website for inviting the “Business Portal for Operationalization of select stretches of NW-5 and NW-64 on DBFOT basis” with copy to following Officials/Agencies.

Chief Secretary & Chief Development Commissioner to Govt., Govt of Odisha.

Chief Executive Officer, NITI Aayog.

Secretary, CWC.

Joint Chief Secy. to Govt. WRD, Govt. of Odisha.

Principal Secy. to Govt., Industries Department, Govt. of Odisha.

Principal Secy. to Govt., Commerce &Transport Department, Govt. of Odisha.

Chairman, Paradip Port Authority.

Chief Executive Officer, Dhamara Port company Ltd.(DPCL)

Chief Engineer, Mahanadi & Eastern Rivers Organisation (MERO),CWC.

Directorate of Ports &IWT, Govt of Odisha.

Pranod Agrawal, CMD, CIL and Director.

Anjan Sinha, GM,Tata Steel, Kolkata.

Prashant Mishra,.President,Jindal Stainless steel &Power.

MD, NALCO.

MD,Tata Steel Kalinga Nagar.

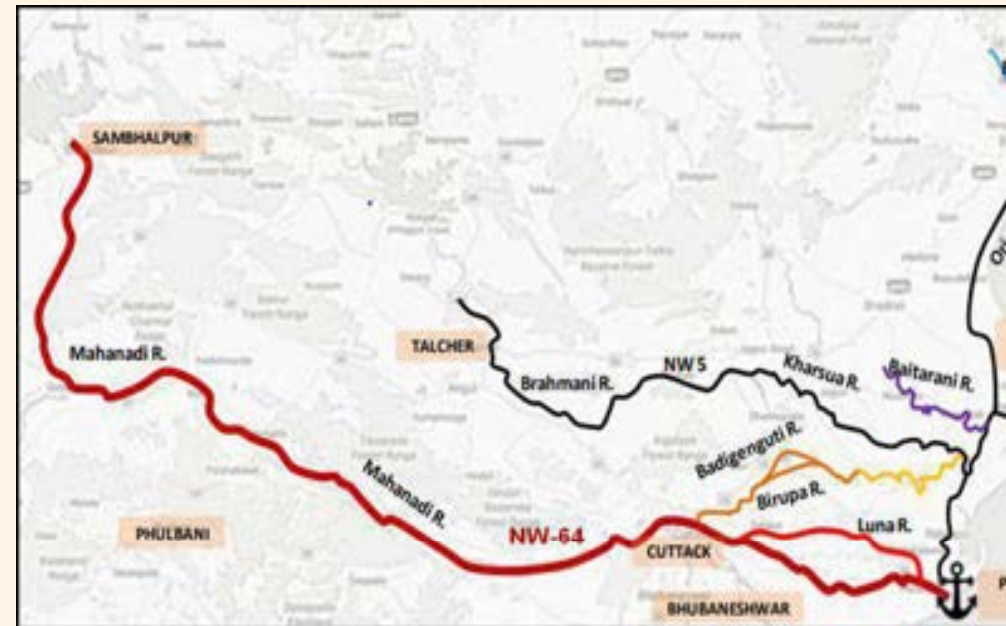
Joint General Manager (Tech),IFFCO, Paradip.

MD.M./C (Institutional Business), OSO, Indian Oil, BBSR

Group General Manager,TEPL.

MD Odisha Stevedors Limited.

Invitation from Firms to participate and develop infrastructures such as, Term Fairway & Navigational aids



proposal has been displayed. Agencies may study and suggest for revised proposal for any terminals. Questions to develop any type of terminal in suitable location is awaited from the prospective bidders.

Inauguration of IFFCO Riverline Jetty and Flag-off Ceremony by Hon'ble Minister of MoPSW Shri Sarbananda Sonowal ji.



of Inauguration & flag-off ceremony by Hon'ble Minister of MoPS&W at IFFCO on 25.04.2022

ODC Cargo movement carried out from Paradip Port to Luna Jetty in NW-64 w.e.f 12/03/22



D – PARADIP IWT NAVIGATION ROUTE MAP (GYPSUM MOVEMENT)



Gypsum Movement from IFFCO Plant to Paradip Port in



Barge at IFFCO



Gypsum trial-run movement from IFFCO to Paradip Port



Gypsum loading point at IFFCO plant



Unloading of Gypsum at Paradip



Unloading of Gypsum at Paradip

enges

annel depth at IFFCO Jetty is less and operations depends on the tide to s
, sailing only during high tides period).

ailed survey has been carried out at Jetty by IWAI and IFFCO carried out dred
erine mouth where barge enters the sea is having shallow patches.

ailed survey has been carried out at sea mouth and dredging is being planned

Navigational aids / marks available, causing difficulty in night navigation.

ng included in the current years scheme)

l fishermen placing fishing nets on waterway, causing challenges to navigation

issue is being taken up with Govt. of Odisha)

life Clearance for movement of cargo vessel in Kharnasi Creek to Hukitola B

for Ro-Ro vessel operation between Dhamra to Talchua



M.V. BHUPEN HAZARIKA AT DHAMRA



DHAMRA JETTY-BRHMANI RIVER (NW-5)



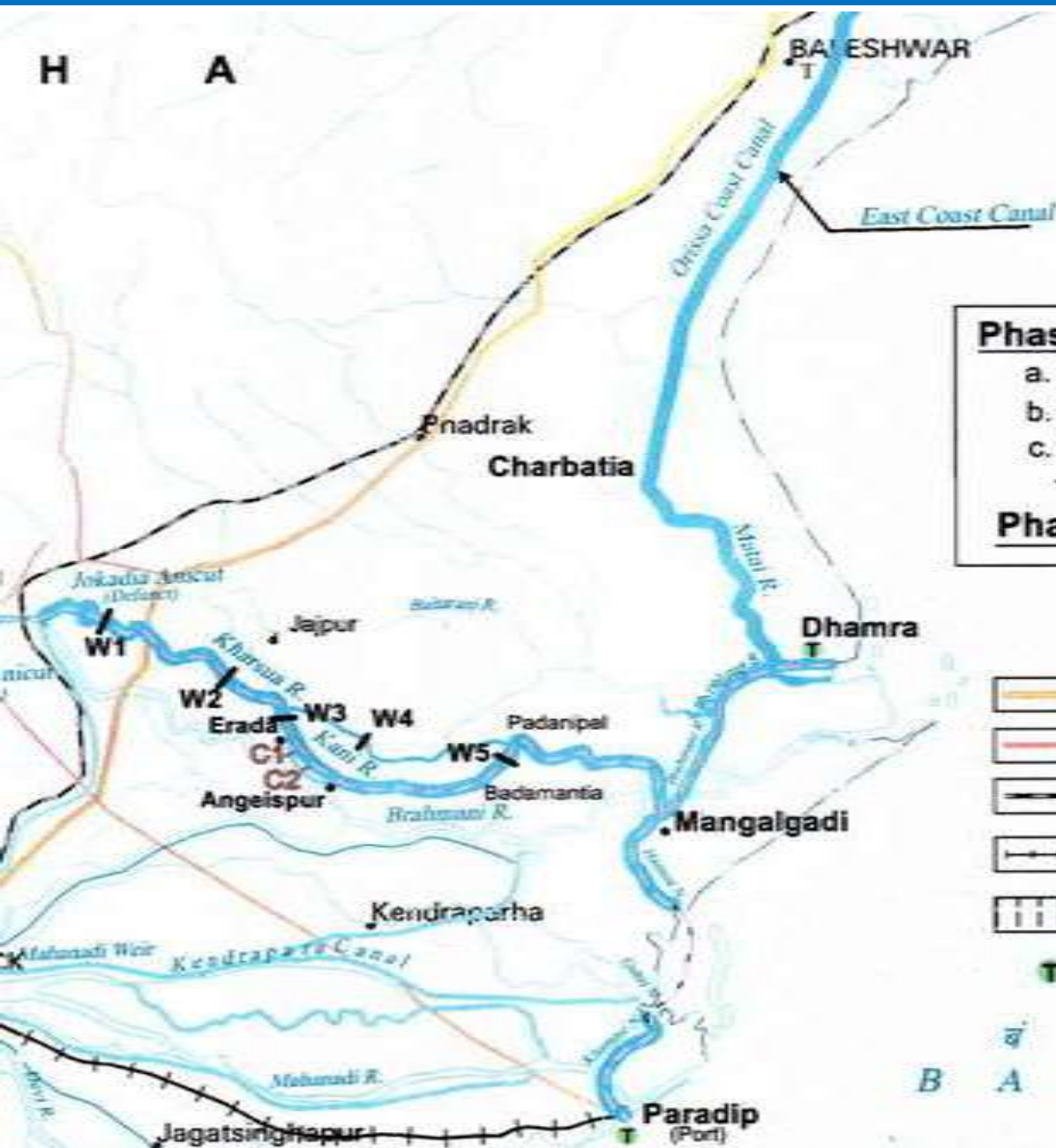
TALCHUA JETTY (front and side view)





Thank You

Index Map, indicating proposed cross-structures (Phase-I)





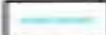













Proposed Weir with Navigational Lock (W1, W2, W3, W4, W5)
 Proposed Weir (W4)
 Proposed Rubber Dam with Navigational Lock (W1, W2, W3, W4, W5)
 Proposed Check Dam (C1 & C2)

Phase-I - Dhamra / Paradip to Pankapal

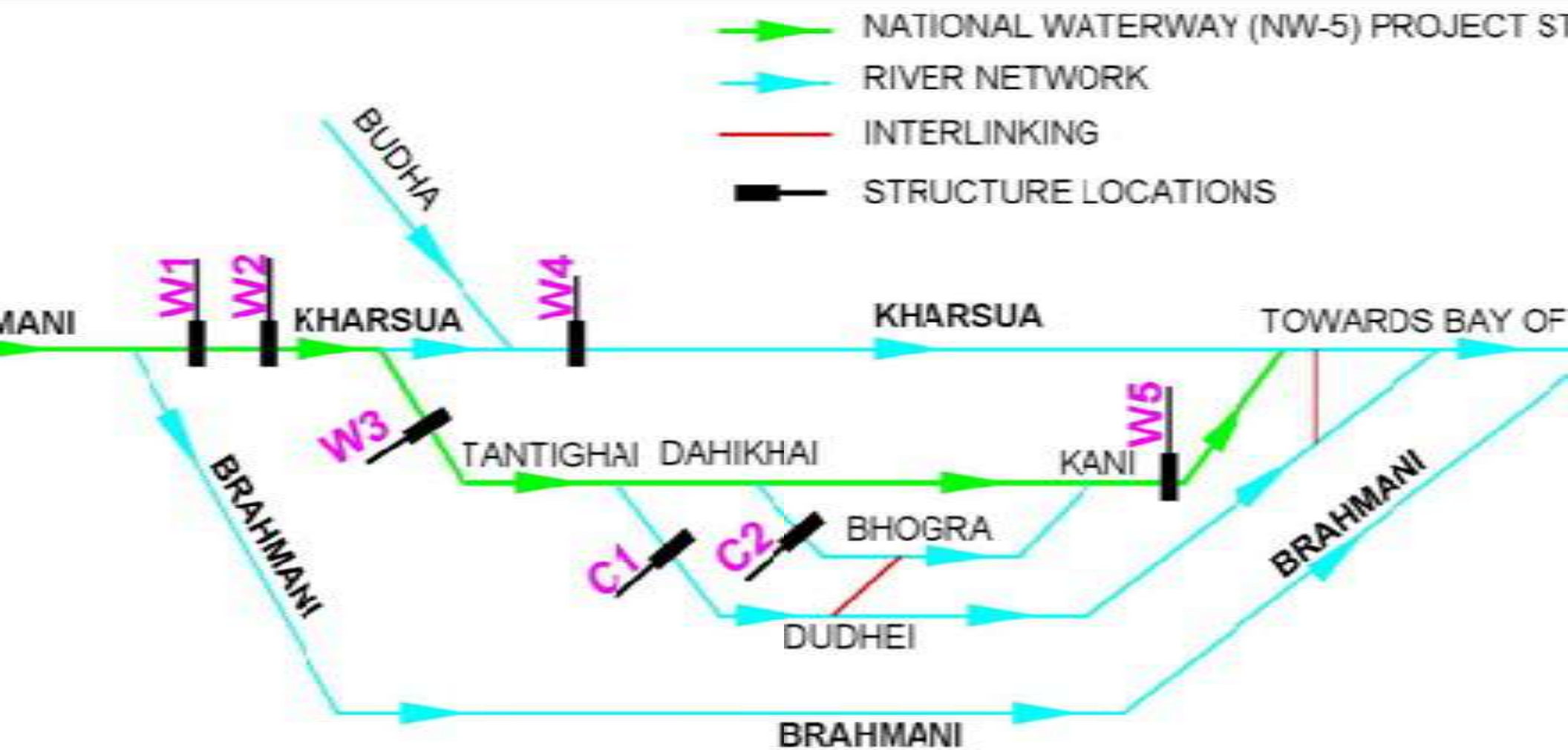
- Dhamra - Mangalgadi
- Paradip - Kharanasi - Hansua Mouth - Rajnagar - Mangalgadi
- Mangalgadi - Padanipal - Badamanatia - Angeishpur - Rajnagar - Erada - Sujapur - Jokadia - Pankapal

Phase-II - Pankapal to Talcher

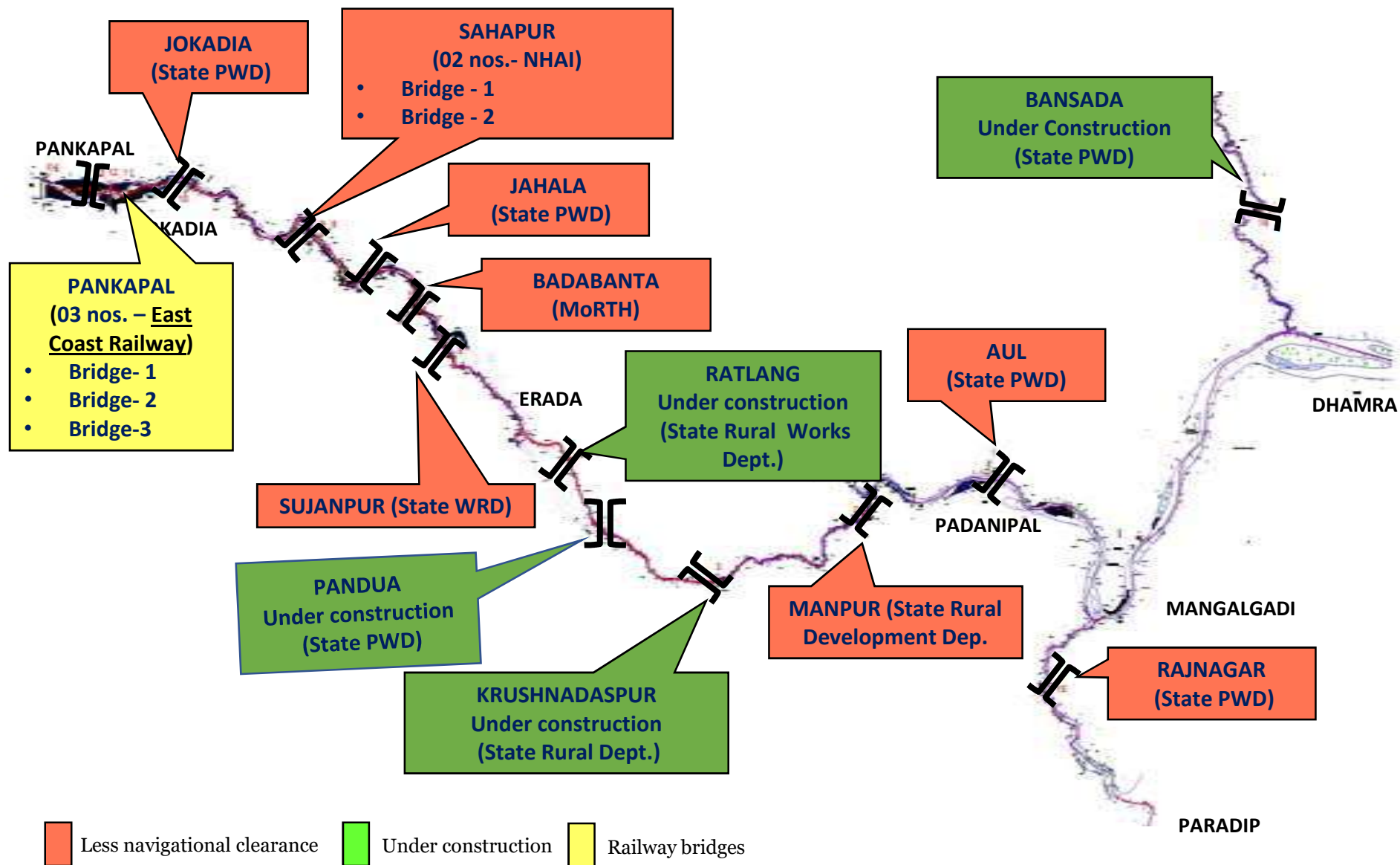
Legend					
	Golden expressway		Stream		Declared waterway
	Road		Canal		Water body
	Rail broad gauge		District boundary		River island
	Rail single		State boundary		National Waterway
	Marshy		Sand		Proposed IWT terminal
	Existing IWT terminal location				

बंगाल की खाड़ी
 B A Y O F B E N G A L

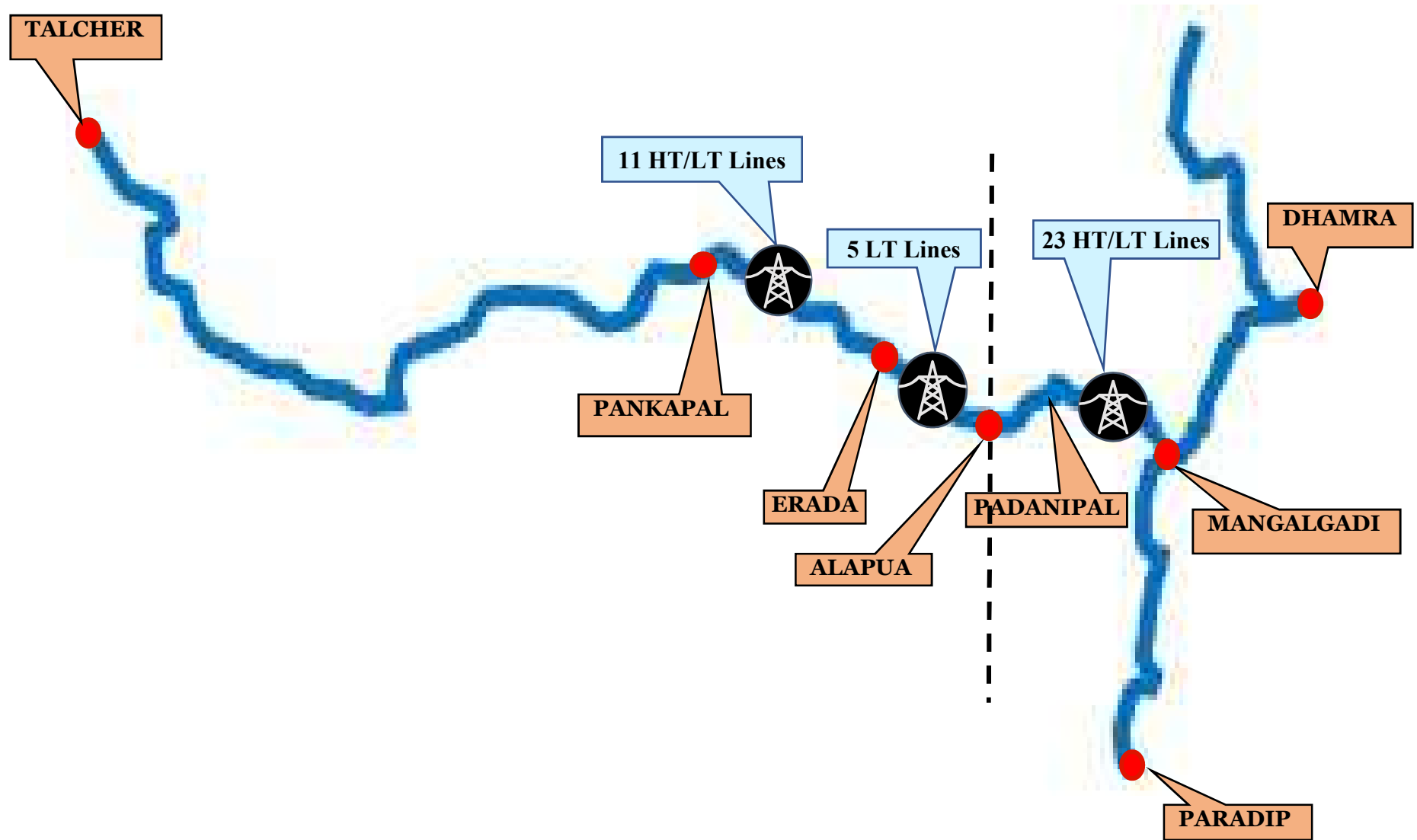
Schematic Diagram of Weir Locations on NW-5 (Phase I)



on of Bridges on NW-5 (in Phase-I)



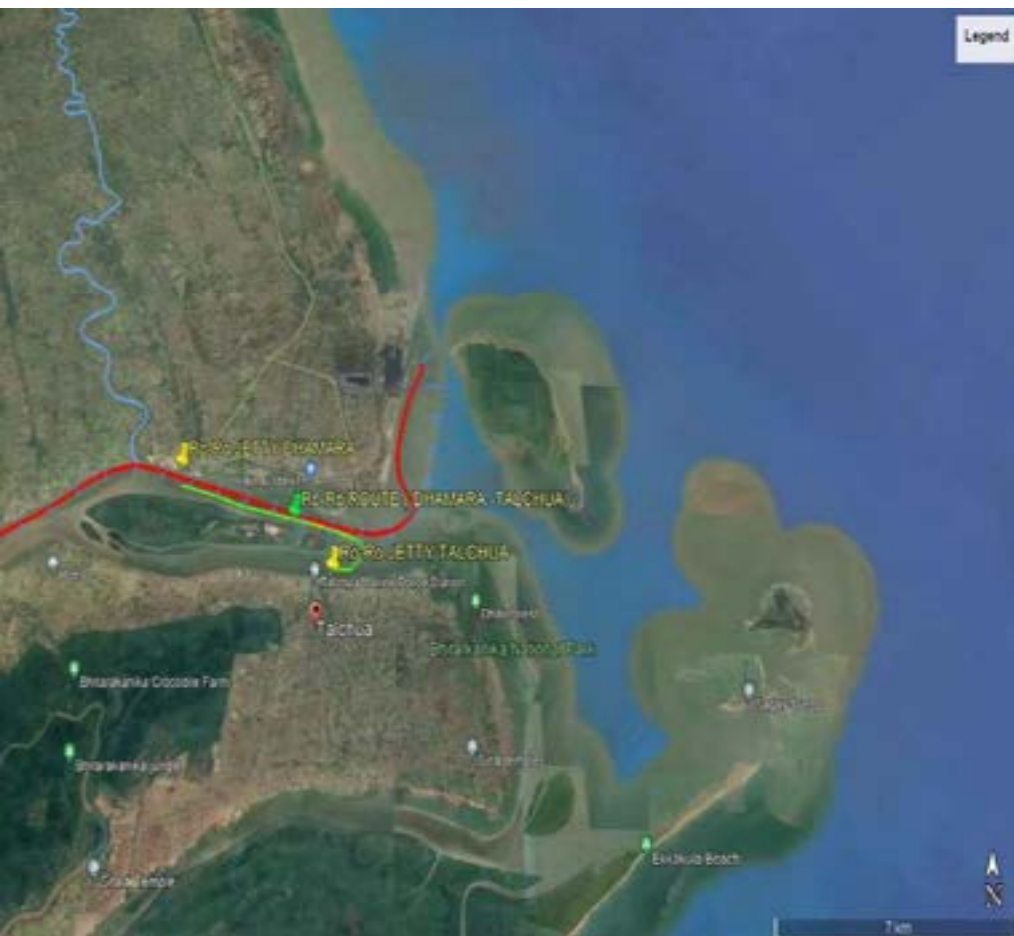
Shifting of low lying HT/LT Powerlines (Phase-I)



Ro-Ro vessel operation between Dhamra to Talchua in NW-5 – Route

AI has handed over a Ro-Ro Barge to Govt. of Odisha on 28th April 2021.

Govt yet to start the operations





**East Zonal Conference on
PM Gati Shakti & National Logistic Policy
Case of Jharkhand
16.02.2023**



By:
Aboobacker Siddiqui
Secretary, Department of
Mines & Geology



GatiShakti : Overview

The Minister launched Gati Shakti – National Master Plan on **13th October 2021**

Gati Shakti – a **Digital platform** which is bringing 16 Ministries including Railways and Roadways together for integrated planning and coordinated implementation of infrastructure connectivity projects

Integration of infrastructure schemes of various Ministries and State governments like Bharatmala, Sagarmala, inland waterways, dry/land ports, UDAN etc.

Economic Zones like textile clusters, pharmaceutical clusters, defence corridors, electronic parks, industrial corridors, fishing clusters, agri zones will be covered to improve connectivity & make Indian businesses more competitive

Use of technology including spatial planning tools with ISRO imagery developed by BiSAG-N (Bhaskaracharya National Institute for Space Applications and Geoinformatics)



Gatishakti : status of Jharkhand on pre-requisites



Data Layers

Primary Data Layers:

layers integrated into
total out of total 30

Functional Data Layers:

layers integrated into
total.



Institutional Framework

Empowered Group of Secretaries (EGoS), Network Planning Group (NPG) and Technical Support Unit (TSU) are constituted in Jharkhand.



Policy Framework

Jharkhand Industrial Park and
Logistic Policy -2022 has been
gazetted on dated 17.10.2022



Gati Shakti – Jharkhand : Annual Action Plan

Name of the project	Location	Technically Approved Cost	Capital Expenditure Approved by DoE	State Share (4-5)
2	3	4	5	6
Construction of Logistic Park	Nirsa, Dhanbad	98.04	98.04	0.00
Development of Transport Nagar-Phase	Ranchi	61.72	61.72	0.00
Construction of road development work from State highway to Industrial compound	Kulhi, Ormanjhi, Ranchi	9.95	5.24	4.71
Total		169.71	165.00	4.71

- **Annual Action Plan** submitted by Jharkhand has been approved by Finance State Division, Department of Expenditure, Ministry of Finance, Government of India and on the recommendation of DPIIT.
- Total **03 projects** are approved under PM Gati Shakti National Master Plan.



Gati Shakti-Jharkhand: Project 01

Construction of Logistic Park at Nirsa Dhanbad



- **NEAREST STATE HIGHWAY- GRAND TRUNK ROAD**
- **NEAREST RAILWAY STATIONS:**
 1. Kumardubi- 9.97 KM
 2. Barakar- 12.44KM
 3. Kulti-15.62KM
 4. Rupnarayanpur - 18.92KM
 5. Chittranjan- 19.49KM
 6. Sitarampur- 20.75KM
 7. Jamtara- 21.99KM
- **NEAREST CARGO AIRPORT- BALLIYAPUR AIRPORT(NON-OPERATIONAL)**



Gati Shakti-Jharkhand: Project 02 Development of Transport Nagar, Phase-II

Project site for the proposed Transport Nagar lies about 450m northwest of the newly developed Ring Road, near Sukurhuttu Village, Kanke Block; about 15 km away from Ranchi City.

Project site measures to approximately 49.80 acres of land including the land for the proposed approach road and the existing road passing through the site.

Project Area - 49.80 Acres

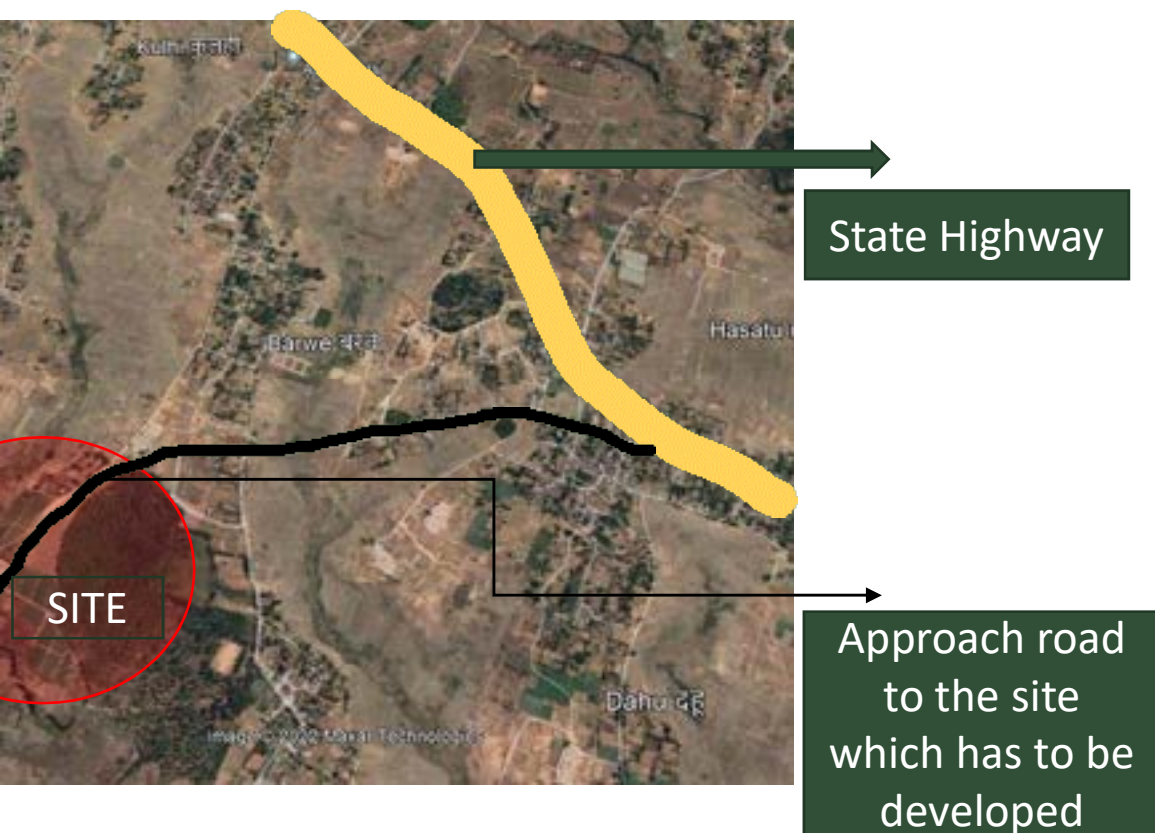
Phase I of Transport Nagar, Ranchi is under development in 40.68 Acres out of the 49.80 Acres of land





Gati Shakti-Jharkhand: Project 03

Construction of road development work from state highway to industrial compound





Gati Shakti-Jharkhand: State Master Portal



Home Page of State Master Portal

Master Portal for Jharkhand is created by BISAG-N on the GIS portal of PM Gati Shakti National Master Portal.



Gati Shakti-Jharkhand: State Master Portal



Mining Areas in Jharkhand



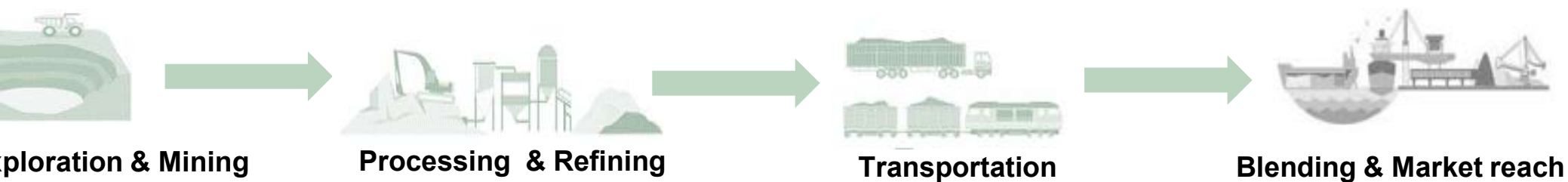
Mining Resources in Jharkhand



Opportunities for Integrated Infra Under PM Gati Shakti in Jharkhand

Jharkhand accounts for 40% mineral reserves of the country

Ranks 5th in terms of mineral production in India

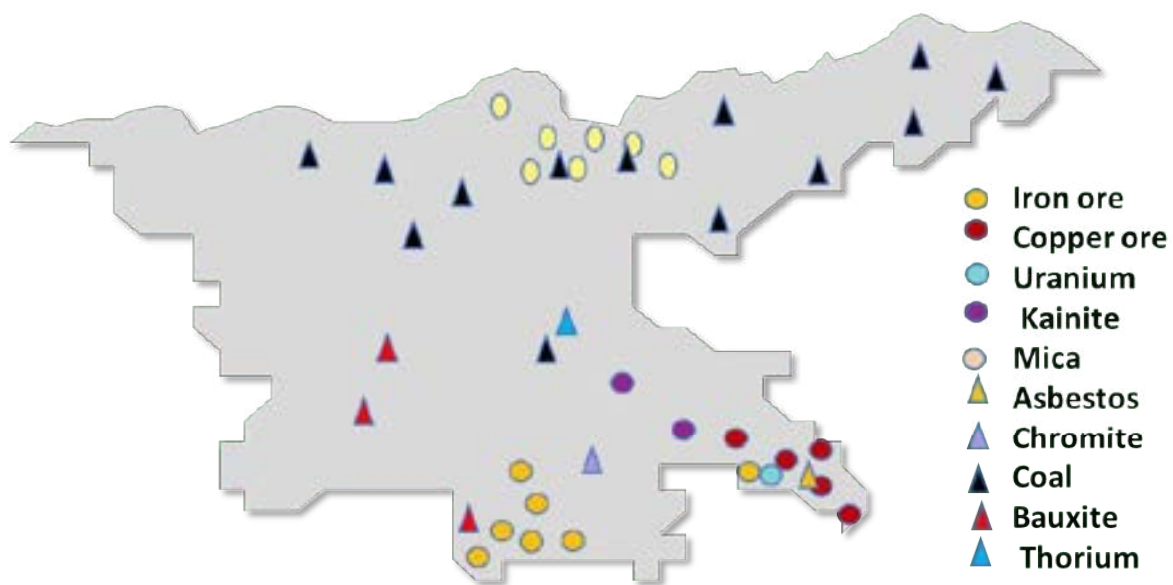


Infrastructure projects may be planned in line with Gati Shakti to cater to the increased coal dispatch from Jharkhand.

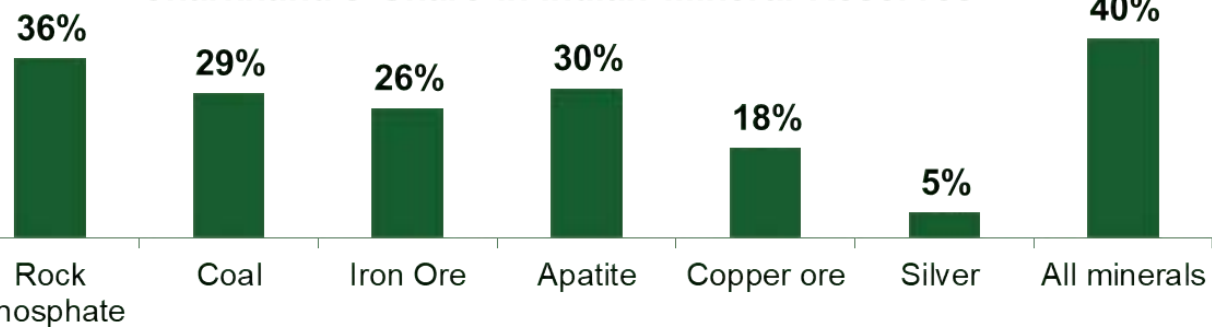
Integrated infrastructure and coordinated efforts under PM Gati Shakti National Master Plan will help in augmenting mineral production in Jharkhand.



Natural Resources in Jharkhand- A land of Mines and Minerals



Jharkhand's Share in Indian Mineral Reserves

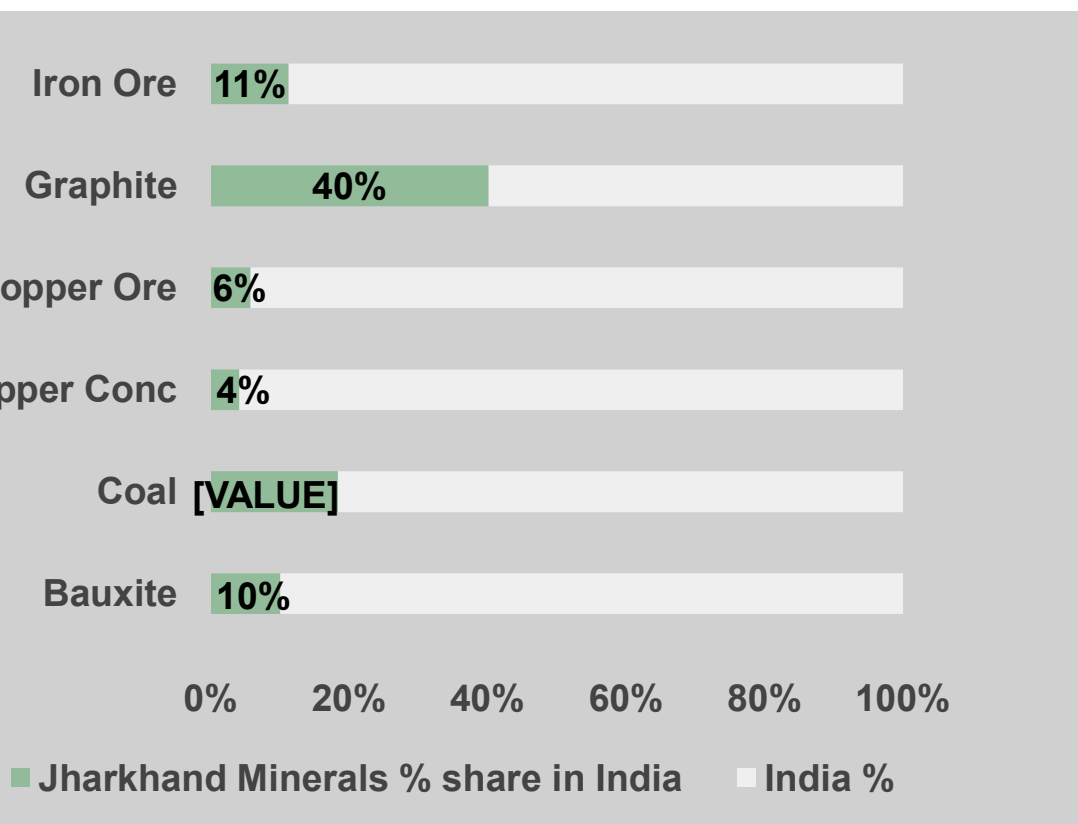


Mineral	Rank in Jharkhand
Uranium	1
Coal	
Asbestos	
Cobalt	
Iron Ore	2
Nickel	
Mica	3
Asbestos	
Copper	



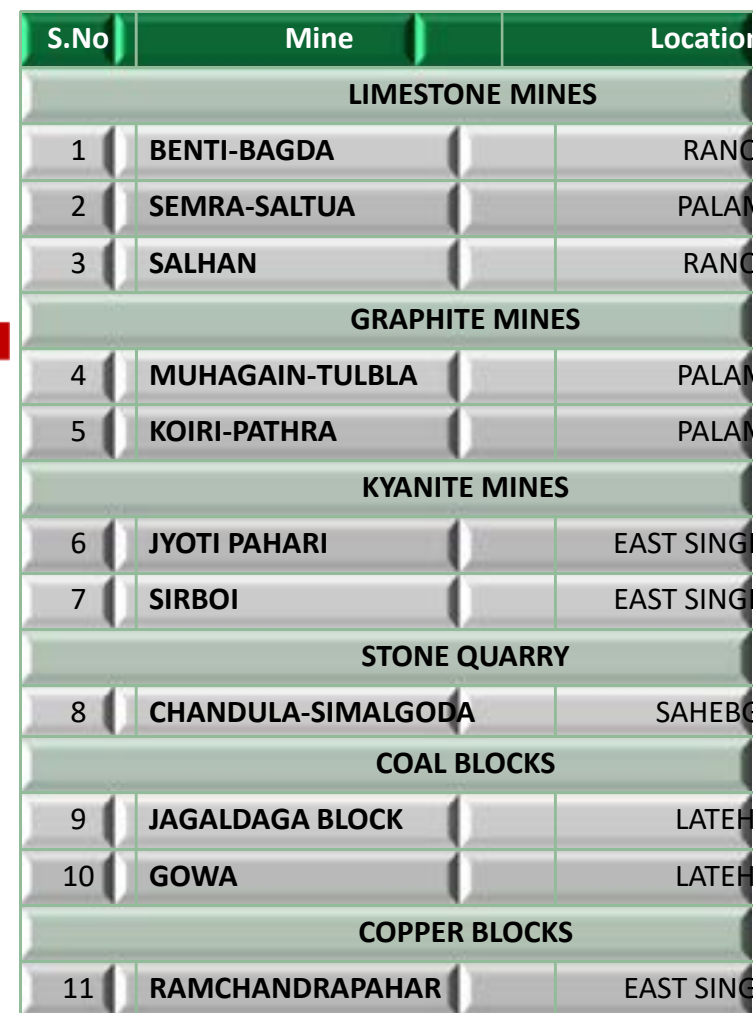
es and Minerals Scenario in Jharkhand

Share of Jharkhand's Major Mineral Production



Minerals Reserves in Jharkhand

Mineral	Reserves (in Mn tonne)
Black & Colored Granite	8875340.
Coal	80356.20
Iron Ore	4596.62
Limestone	634.41
Copper Ore	288.12
China clay/Kaolin	198.69
Quartz/Silica	156.52
Bauxite	146.32
Fireclay	66.61
Dolomite	41.43
Silver Ore	23.84
Manganese Ore	13.7
Graphite	12.91
Magnetite	10.54
Cobalt	9.00
Nickel	9.00
Gold Ore	8.15
Kyanite	6.03
Apatite rock	7.27





Minerals in Jharkhand



Coal	Iron and Steel	Alumina & Aluminium	Limestone	Barytes	Clay
<u>Capacity:</u>	<u>Capacity:</u>	<u>Capacity:</u>	<u>Capacity:</u>	<u>Capacity:</u>	<u>Capacity:</u>
<i>15.4 Billion Tonnes</i> <i>of coal of all categories</i>	<i>3700 Million Tonnes</i> <i>of Hematite deposits</i>	<i>Bauxite reserve of 68.1 MT</i>	<i>Total reserve is 511.104 MT</i>	<i>Total reserve is 15 thousand tonnes</i>	<i>Total reserve of China and Fire is 49 MT</i>
<u>Availability:</u>	<u>Availability:</u>	<u>Availability:</u>	<u>Availability:</u>	<u>Availability:</u>	<u>Availability:</u>
<i>Dhanbad, Ramgarh, Giridih</i>	<i>East Singhbhum, West Singhbhum, Latehar & Palamu</i>	<i>Lohardaga, Latehar, and Gumla</i>	<i>Hazaribagh, Singhbhum, Pakur, Garhwa, Ranchi and Giridih</i>	<i>Singhbhum, Palamu, Ranchi</i>	<i>Dhanbad, Dumka, Giridih, Hazaribagh, Palamu, Singhbhum and Ranchi</i>



Minerals in Jharkhand



Felspar	Garnet	Graphite	Kyanite	Dolomite	Quartz and Sand
<u>Reserve:</u>	<u>Reserve:</u>	<u>Reserve:</u>	<u>Reserve</u>	<u>Reserve</u>	<u>Reserve</u>
<i>9 Metric Tonnes of all categories</i>	<i>72 thousand Tonnes</i>	<i>Total reserve is 6.39 MT</i>	<i>Total reserve is 0.9 MT</i>	<i>Total reserve is 29.86 MT</i>	<i>Total reserve 0.96 MT</i>
<u>Availability:</u>	<u>Availability:</u>	<u>Availability:</u>	<u>Availability:</u>	<u>Availability:</u>	<u>Availability:</u>
<i>Hazaribagh, Jharkhand, Kodarma, Jharkhand, Giridih and Dhanbad</i>	<i>East of Hazaribagh</i>	<i>Palamu, Garhwa & Latehar district.</i>	<i>East Singhbhum and Kharsawan- Saraikela districts</i>	<i>Garhwa, Palamu</i>	<i>Dhanbad, Raipur, Deoghar, Palamu, Dumka, Giridih, Kodarma and Hazaribagh</i>



Jharkhand Industrial Park and Logistic Policy -2022

Objective

- to develop a robust infrastructure for industries in the State for their sustainable development
- to promote private investment in setting up industrial parks, logistic park and logistic units in the State
- to upgrade and improve the existing warehousing and logistics infrastructure to boost economic activities and generate mass employment opportunities
- to enhance the warehousing capacity to promote the interests of both primary and secondary sectors.

Policy Coverage

- ✓ Private Industrial Parks, Joint Venture and PPP mode Industrial Park
- ✓ Multi Modal Logistic Park
- ✓ Logistic Park
- ✓ Logistic Unit



Jharkhand view on National Logistics Policy (NLP)

The main objective of the National Logistics Policy is to make the logistics industry more efficient and lower its costs. Acknowledging the importance of Logistics sector in the rapid growth of Industries, the state of Jharkhand introduced Jharkhand Industrial Park and Logistic Policy 2022.

Jharkhand Industrial Park and Logistic Policy 2022 is inline with the National Logistics Policy 2022 as it has following

• Customized package of incentive for Multi Modal Logistics Park and Logistics Parks

• Facilitating of Warehousing and storage by providing special incentive to modern warehouses

• Facilitating of Export by providing customized incentives for Dry ports and Container Freight Stations (CFS).

• Formation of empowered committees in line with PM Gati Shakti Mandate for quick decision making on matters related to Logistics



Challenges & Way Forward



Challenges

on of approved fund
Y 2022-23 keeping the
tion period of the
ed projects into
ration.



Way Forward

- Identification of New projects to be implemented under PM Gati Sha Master Plan.
- Development of Applications/Tools with the help of BISAG-N as requirement of various departments.
- Identification of New data layers and integration into GIS portal of PM Gati
- Capacity Building of officers/Stakeholders for operationalization of PM Ga State Master Plan.

Thank You



Role of CCO in Coal Logistics (Planning & Approval)

16th February

CCO : Profile of Business

CCO Overview

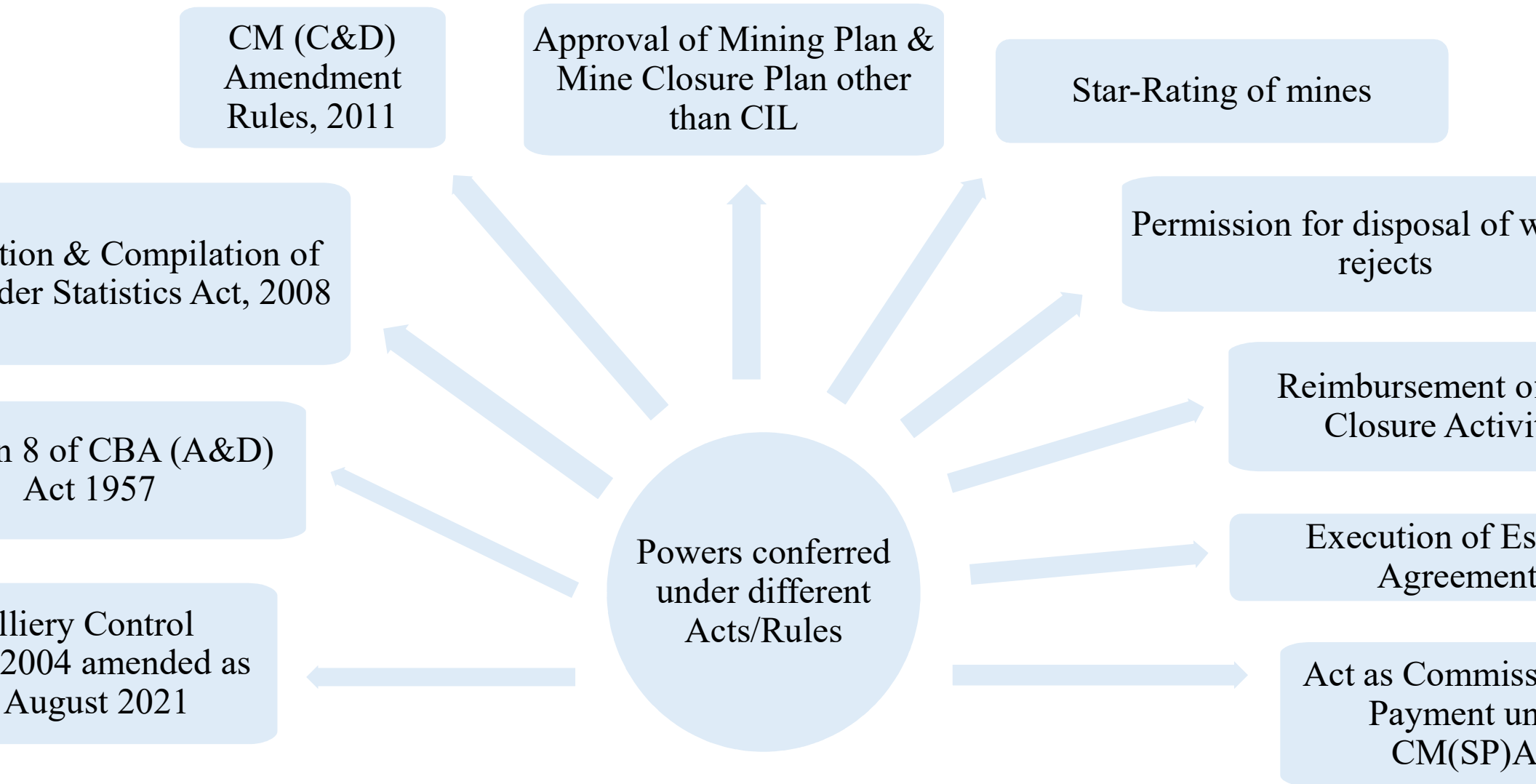
Subordinate Office under M/o Coal (Established in 1911)

Head office situated in Kolkata (Now at Delhi) and several other field offices:

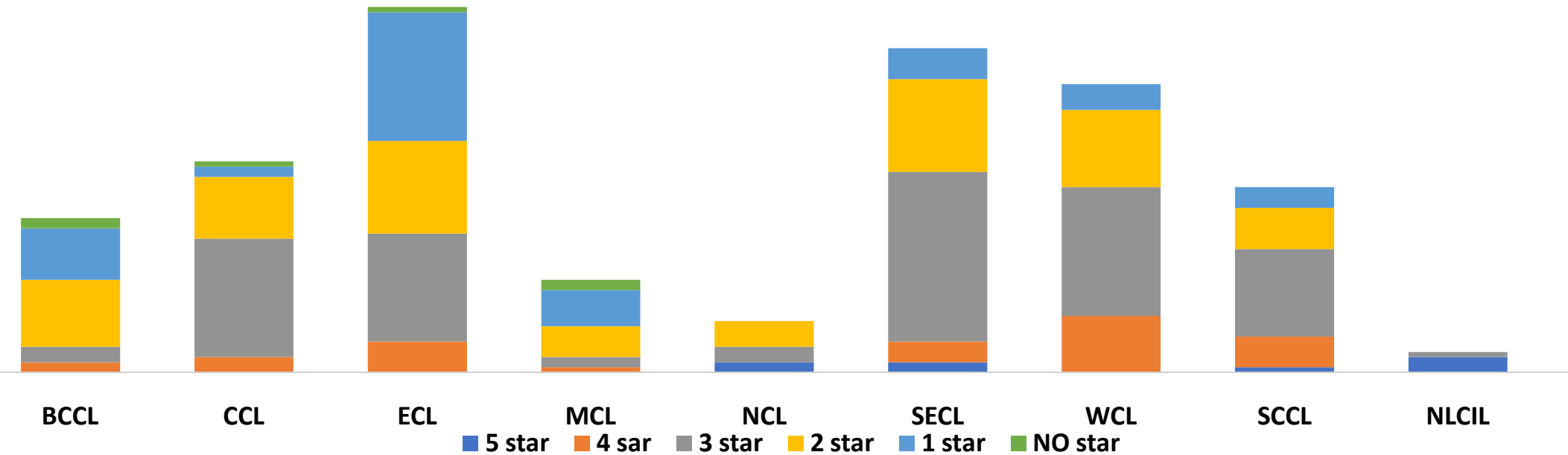
Dhanbad, Ranchi, Bilaspur, Nagpur, Sambalpur, Asansol and Kothagudem

- Opening permission of mines
- Responsible for grading of coal
- Approval of Mining Plan & Mine Closure Plan other than CIL
- Permission for disposal of washery rejects
- Collection and compilation of Statistical Data on Coal and Lignite mines
- Star-Rating of all Coal and Lignite mines
- Acts as Commissioner of Payments

Statutory & Non-statutory activities of CCO under different Acts/Rules/Policy



Star Rating of Coal Mines during 2019-20



Mines using upgraded material conveying technology such as high angled conveyors, roller and conveying system etc. are awarded higher Star Rating.

Mines with better logistics for coal evacuation are being promoted in conformity with Shakti.

*Star rating of mines for 2020-21 and 2021-22 are under process

Grading of Coal

CO is mandated to lay down procedure and method of sampling and analysis of coal for the purpose of declaration and maintenance of grades of coal.

Under PM Gati-Shakti every tonne for coal will be under surveillance.

Reduced human intervention by mechanization (RLS, CHP Silos)

Minimize deterioration of coal quality & reduce grade slippage.

Mining Plan & Mine Closure Plan

ers of PM Gati-Shakti Portal; Administrative Layer, Fore
er, Logistic Layers will help as planning tool for block allottees. (wheth
other existing infrastructure can be utilized or new infrastructure will
ired).

al will also help CCO to scrutiny the Mining Plans by checking t
lapping of Blocks, Legal Issues, Issue related with Forest areas

ti-Modality use through the Gati-Shakti portal will expedite the clearan
operationalization of Coal Blocks

Development of Transport Infrastructure in Coal Mines

CCDA Committee: Constituted to advise the Central Government on the disbursement of the funds under financial assistance for the purpose of conservation of coal and infrastructure development (like roads and infrastructure).

Coal companies submit their claims for reimbursement which are scrutinized at CCO and are placed to CCDA Sub-Committee for recommendation to CCDA Committee.

139 Rail & Road projects funded under the Scheme.

Way Ahead

Linking of Mine clearances in PM Gati-Shakti portal will expedite COA and opening permission.

Implementation of FMC & mechanised coal evacuation further reduces cost of coal.

1. Logistic Infrastructure should be properly planned keeping in view the fact that mines are to be closed after exhaustion of coal. Gatishakti Portal will help in developing multi-model use of coal mine related logistic Infrastructure.



सत्यमेव जयते

Thank You

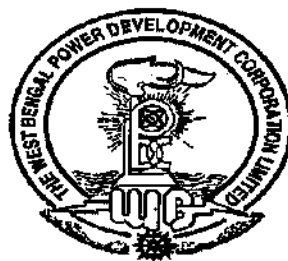


WBPDC

POWERING BENGAL

THE WEST BENGAL POWER DEVELOPMENT CORPORATION LTD

24X7 POWER FOR ALL



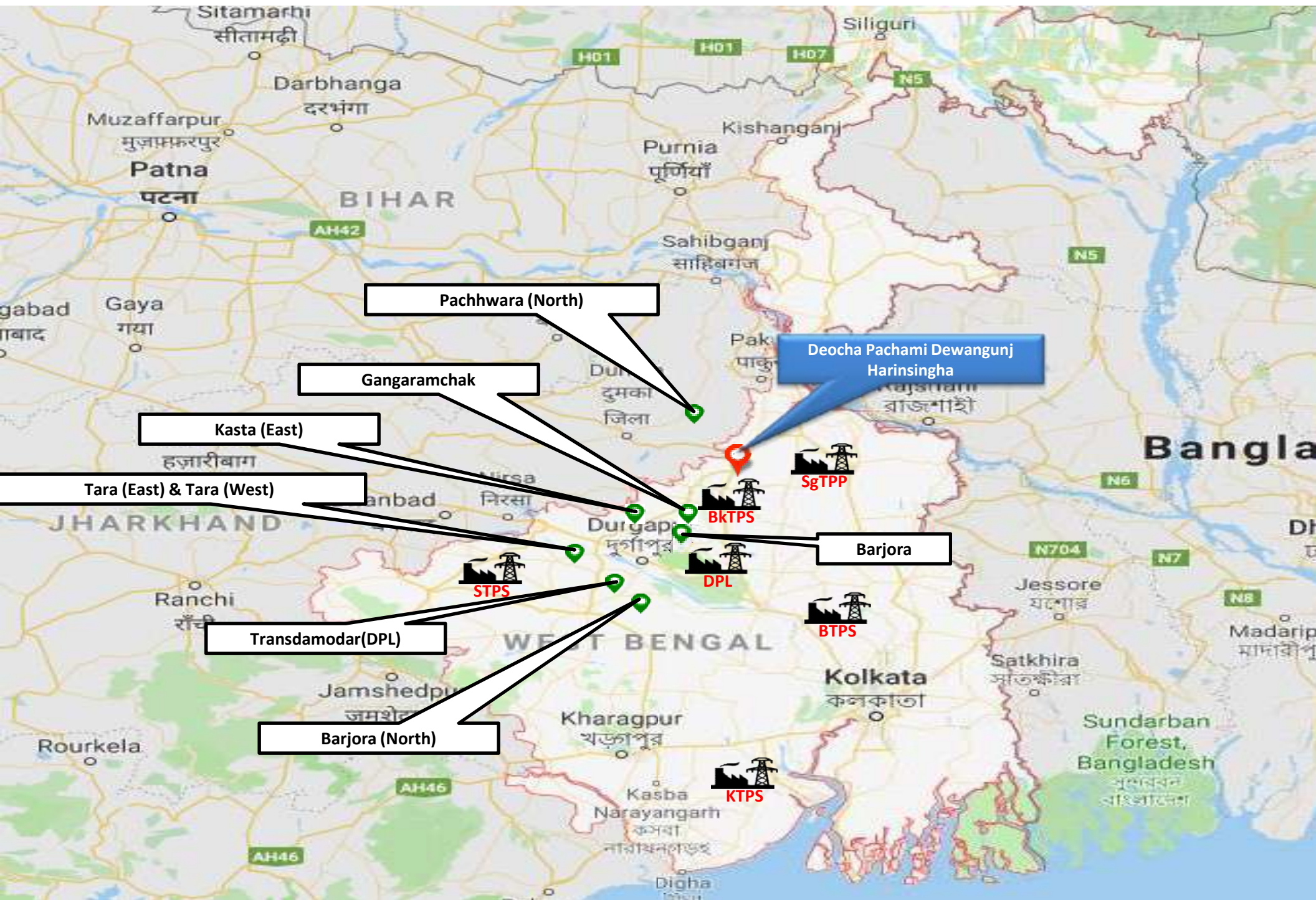
THE WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED



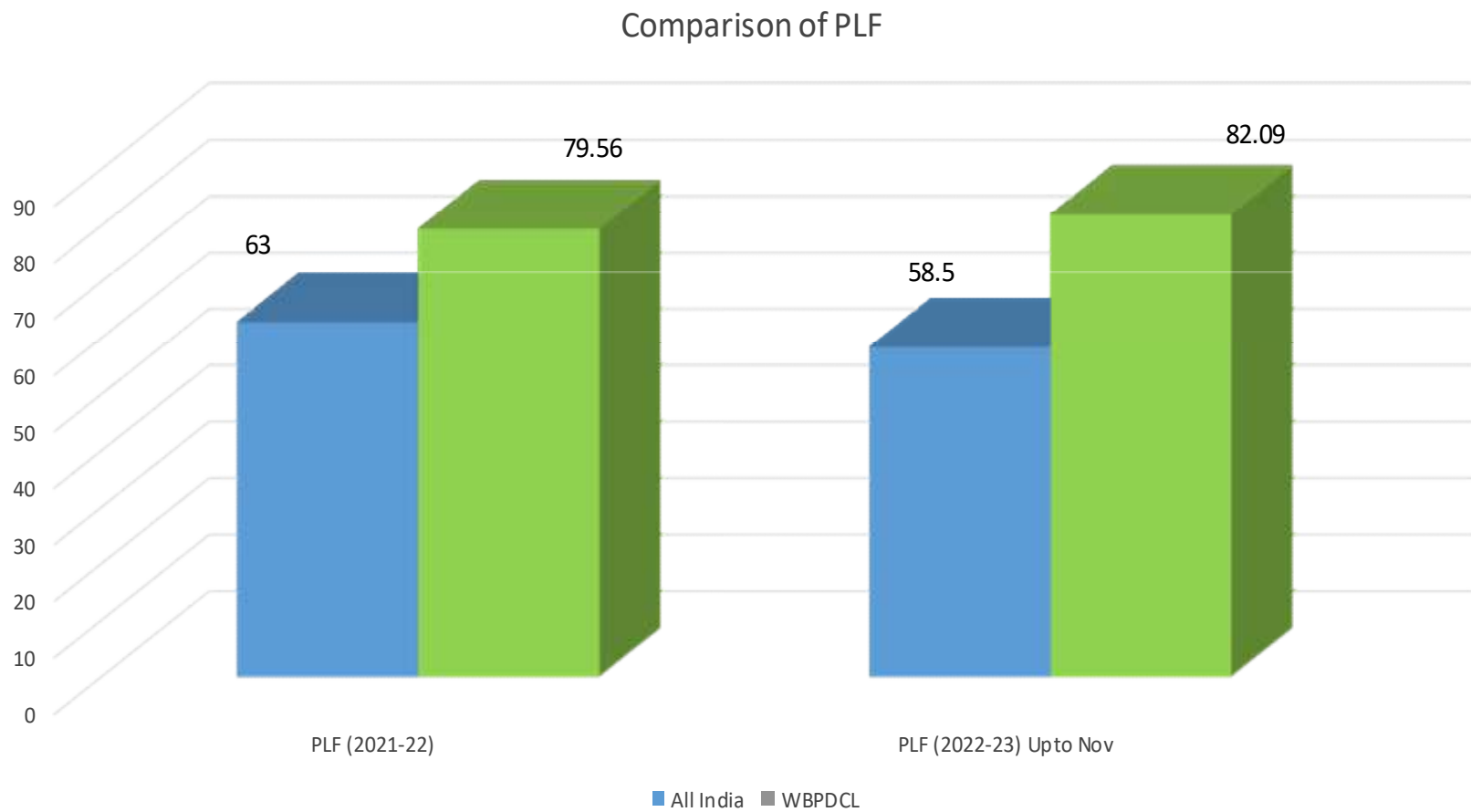
- *WBPDC is the leading power generating company in the state of West Bengal.*
- *Installed capacity 4265 MW consisting of 5 thermal power plants*

Thermal Power Generation Plants of WBPDC

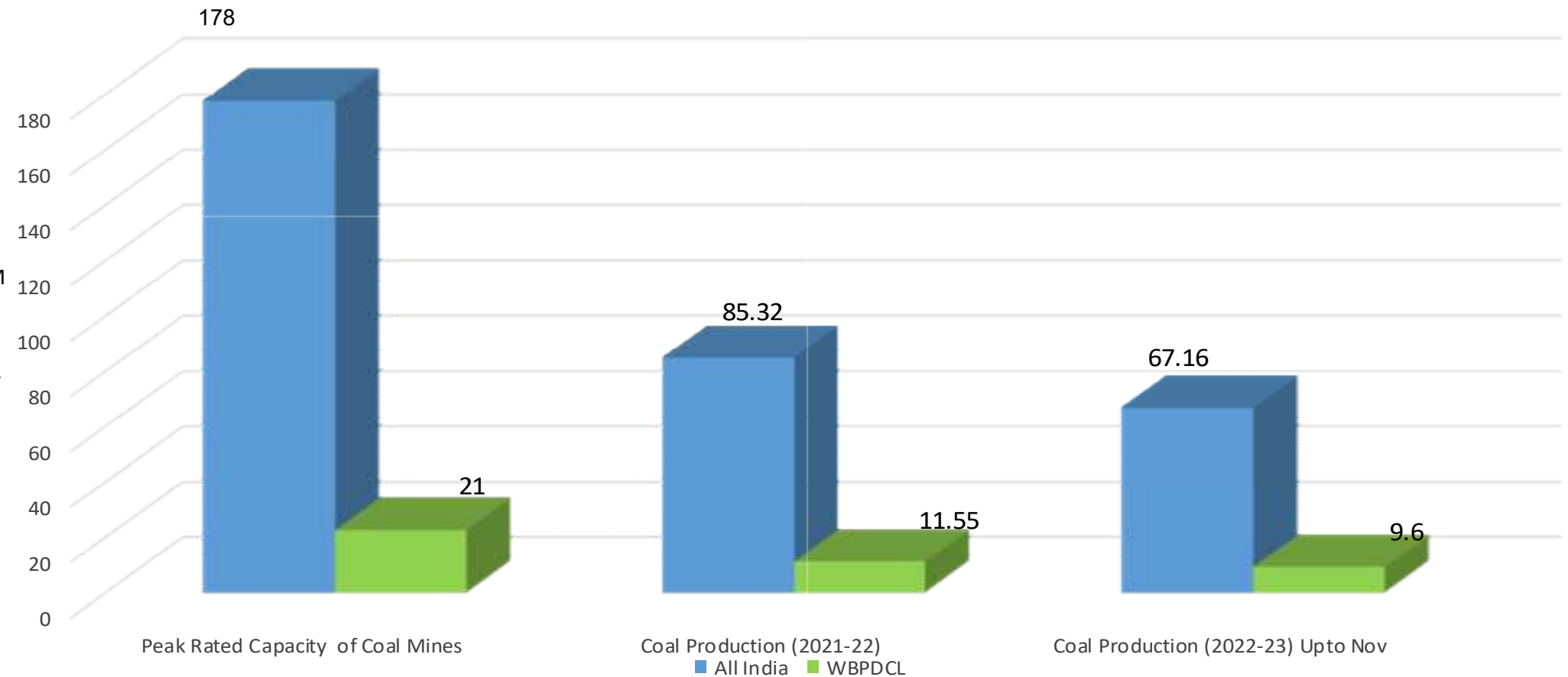
PLANTS	CONFIGURATION	CAPACITY
STPS	2 X 250 MW	500 MW
KTPS	4 X 210 MW	840 MW
BKTPP	5 X 210 MW	1050 MW
BTPS	1 X 60 MW 1 X 215 MW	275 MW
SgTPP (Unit #1 &2)	2X 300 MW	600 MW
SgTPP (Unit #3 &4)	2X 500 MW	1000 MW



Comparison of PLF



Comparison of Coal Production





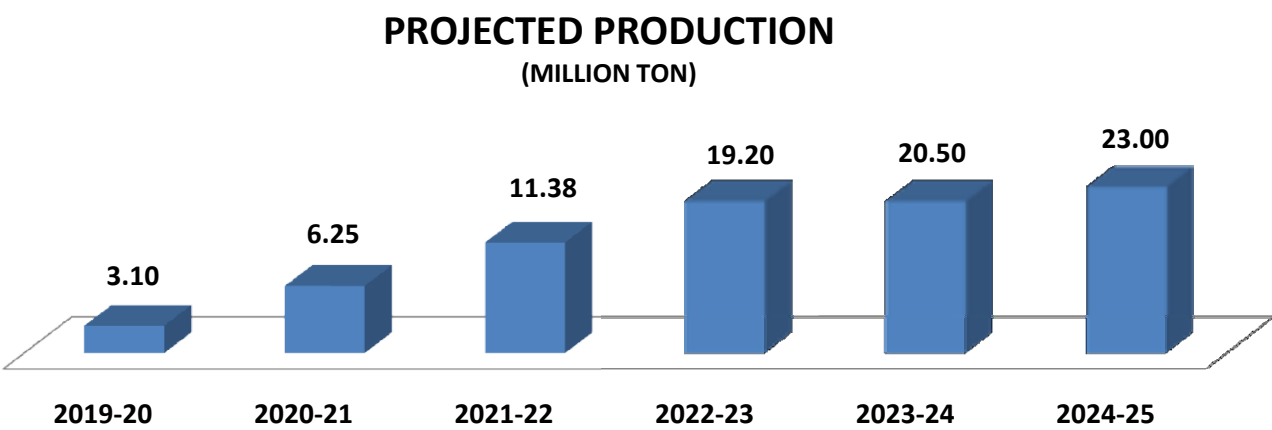
WBPDC has been allotted 6 coal mines by Ministry of Coal, Government of India for supplying coal to its end use Thermal Power Plants



Coal Mines of WBPDC :

- (1) Pachhwara (North) Coal Mine (Location: Dist- Pakur, Jharkhand).**
- (2) Barjora (North) Coal Mine (Location: Dist- Bankura, West Bengal).**
- (3) Barjora Coal Mine (Location: Dist- Birbhum, West Bengal).**
- (4) Gangaramchak & Gangaramchak- Bhadulia Coal Mine (Location: Dist- Birbhum, West Bengal).**
- (5) Tara (East) & Tara (West) Coal Mine (Location: Dist - Paschim Burdwan, West Bengal).**
- (6) Deocha- Pachami -Dewanganj –Harinsingha Coal Mine (Location: Dist-Birbhum, West Bengal)**

PRODUCTION OF COAL FROM CAPTIVE BLOCKS OF WBPDCCL (MILLION TON)						
	Actual Production			Projected Production as per Mining Plan		
COAL MINES	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
RA(NORTH)	1.00	4.13	9.04	15.00	15.00	15.00
NORTH)	0.60	0.81	1.03	3.00	3.00	3.00
	0.50	0.31	0.31	Nil	Reserve will exhaust	
MCHAK & GANGARAMCHAK -BHADULIA	1.00	1.00	1.00	1.20	2.00	3.00
)&TARA(WEST)	0	0	0	0	0.5	2.00
DUCTION	3.10	6.25	11.38	19.20	20.50	23.00



PACHHWARA (NORTH) COAL MINE



Coal Production Status

Mine opening permission obtained from CCO on 07.12.2018.

After obtaining all the required permissions, Pachhwara (North) Coal Mine has been declared open on 12.12.2018.

Coal production started from 11.11.2019.

After obtaining Forest Clearance from MoEF & CC on 27.10.2022, approval of Mining Plan, Mining Lease and handover of forest land is in the process.

Combined CTE / CTO for enhancement from 9 MTPA to 12 MTPA of Pakur Siding has been submitted to JSPCB is in the process of approval.

FY	Production (Million Tonnes)	Despatch (Million Tonnes)
2019-20	1.0	0.83
2020-21	4.14	4.28
2021-22	9.04	8.92
2022-23 (Till Jan)	10.13	9.77

BARJORA (NORTH) COAL MINE



Coal Production Status

- Mine opening permission obtained from CCO on 12.06.2018. The mine has already been re-opened on 13.06.2018.
- Coal production started from 16.05.2019.
- Mine is having constraint for not having Stage-II Forest Clearance as total required CA Land is not yet obtained.

FY	Production (Million Tonnes)	Despatch (Million Tonnes)
2019-20	0.60	0.52
2020-21	0.81	0.67
2021-22	1.03	1.20
2022-23 (Till Jan)	1.56	1.47

GANGARAMCHAK & GANGARAMCHAK – BHADULIA COAL MINE



opening permission obtained from CCO on 24.04.2019. The mine has already been re-opened on 25.04.2019.

Production started from 26.02.2020.

The mine has achieved its PRC of 1 MTPA in the month of July' 2022.

The mine stopped its production from August' 2022 till end of Jan' 2023 relating to issues of approval of additional 20% EC / CTO / CTE. After obtaining additional 20% EC / CTO / CTE, the Mine started its production from 27.01.2023.

A fresh application for further EC enhancement of another 20% has been submitted on 10.02.2023. It is extremely urgent to obtain EC on the earliest, so that production from Gangaramchak is not stopped again.

FY	Production (Million Tonnes)	Despatch (Million Tonnes)
2019-20	1.00	0.045
2020-21	1.00	1.42
2021-22	1.00	1.38
2022-23 (Till Jan)	1.04	1.17

TARA (EAST) & TARA (WEST) COAL MINE



red appointed date 19.03.2020,

, M/s Sical Mining Limited started OB removal from 01.10.2020, but afterwards the MDO has been terminated due to non-performance.

has been selected and finalization of Coal Mining Agreement is under process.

Present Coal Evacuation Plan of WBPDCL

WBPDCL Life	Road Distance from Mines to Railway Siding (KM)	Name of Railway Siding	Present Loading Status (Rakes / Day)	Future Loading Plan (Rakes / Day)	Remarks
	55	Pakur (ER)	8.00	8.00	<ul style="list-style-type: none"> ➤ Combined CTE / CTO for enhancement from 9 MTPA to 12 MTPA of Pakur has been submitted to JSPCB and is in the process of approval. ➤ Action taken so far for development of coal transportation road: <ul style="list-style-type: none"> ▪ Repair / Renovation work of 40 KM in stretches is going on – valuation of the work is 32 Crores ▪ Work of Reconstruction of Road under deposit basis through Road & Buildings Dept., GoJH is under process – Tender Floated – valuation of the work is 68 Crore ▪ Proposal for Development of a new road of 12 KM (exclusively for WBPDCL) is also on pipeline – Valuation of the work is 68 Crore + Land value (47 Crores)
	71	Dumka (ER)	4.00	5.00	<ul style="list-style-type: none"> ➤ Dumka Station yard remodeling to be done towards improvement of flexibility of operations / movement ➤ Split up long block section (24 KM) between Dumka – Shikaripara section to improve sectional capacity ➤ Doubling / patch doubling of Dumka – Rampurhat single line section (64 KM) ➤ Commissioning of IBH signaling system between Dumka & Shikaripara to speed up block section ➤ Installation of in-motion rail weighbridge at Dumka.
	74	Kurva (ER)	N.A.	--	It is proposed to develop the siding under Gati Sakti Scheme for which help from Railways is sought.
	65	Harinsing (ER)	N.A.	--	<ul style="list-style-type: none"> ➤ 6 KM road widening needs to be done by WBPDCL ➤ Necessary infrastructure to be developed by Railways.

Railway connectivity from Pakur to Pachhwara Mine

Development of rail connectivity for transportation of coal from Pachhwara (North), Pachhwara(Central), Pachhwara (South) blocks of WBPDCCL, PSPCL & NUPPL, respectively of Eastern Railway between Nagarnabi Station and Pachhwara.

Quantity of commodities to be handled 31 MMT(per year) of Coal (Pachhwara-South of NUPPL Peak production 9 MTPA, Pachhwara-Central of PSPCL - 7 MTPA & Pachhwara-North of WBPDCCL -15 MTPA).

Length of SPV line Route length -56.891KM and total Track length of 121.50 KM.

Cost:

Civil Engg Cost Rs 1331.44 Crore

Electrical Eng -143.90 Crore

Electrical Engineering -261.96 Core

Total 1737.31 Crore

Members : PSPCL , NUPPL, WBPDCCL & RVNL

Prepared the DPR and Bankability Report prepared by SBI Caps.

Submitted To Eastern Railway for obtaining approval of Railway Board which is yet to be obtained.

Agreement is yet to be signed by the SPV members.

Present Coal Evacuation Plan of WBPDCCL..... Contd

Coal Mines of WBPDCCL & Remaining Life	Road Distance from Mines to Railway Siding (KM)	Name of Railway Siding	Present Loading Status (Rakes / Day)	Future Loading Plan (Rakes / Day)	Remarks
Bankura (h)	42.70	Bankura Railway Siding (SER)	2.00	3.00	
Bankura & Bank-Bhadulia	15.00	Hazratpur Railway Siding (ER)	2.00	3.00	
Bhanora (West)	14.00	Bhanora Railway Siding (ER)	--	2.00	



ANK YOU

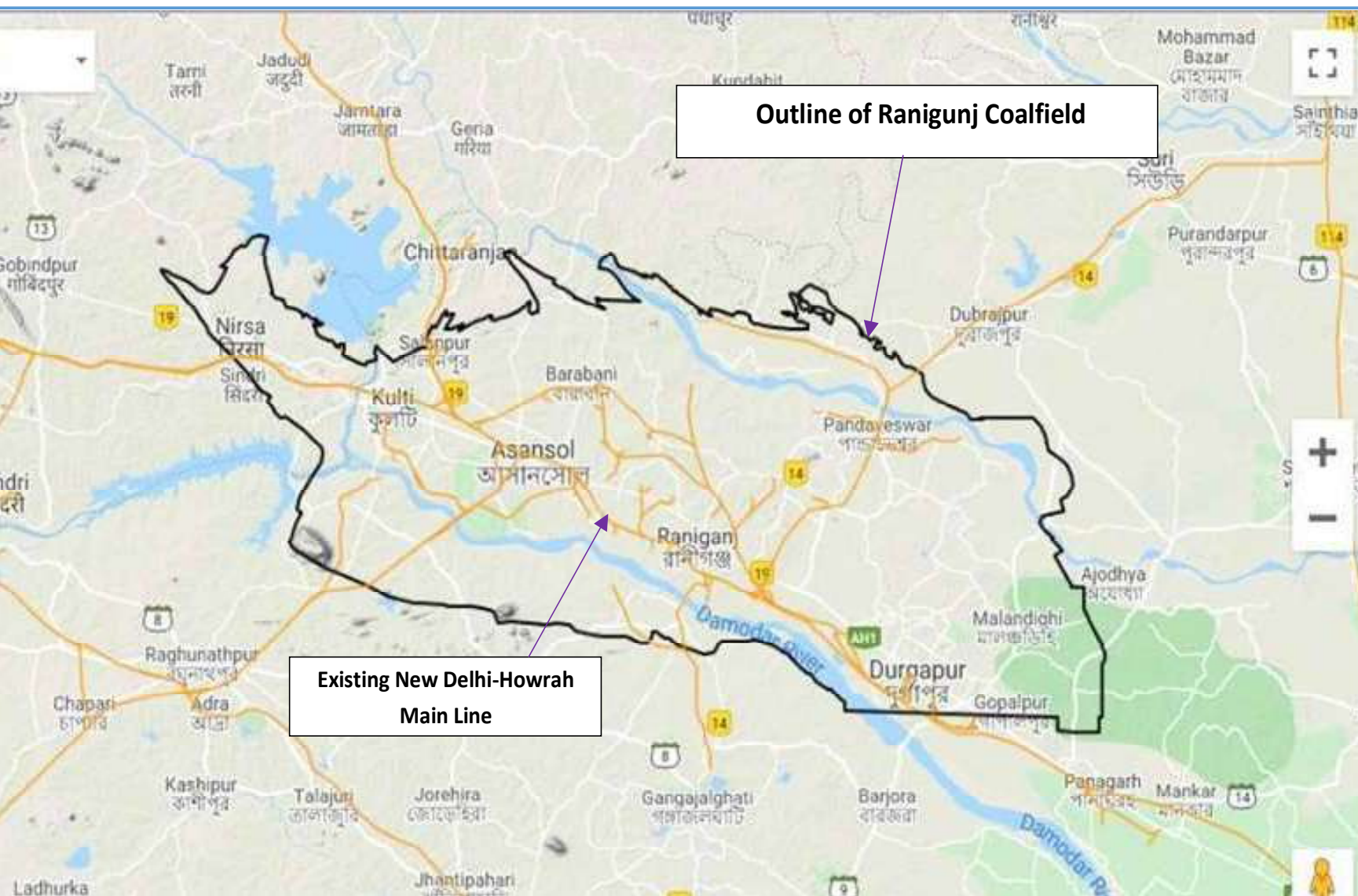
CIL's
PRODUCTION PROJECTION
AND
PROJECTED RAIL DESPATCH
IN
25-26 (1 BT)

SIDIARY-WISE PRODUCTION PROJECTION AND PROJECTED RAIL DESPA IN 25-26 (1 BT)

Coalfield	2021-22		2025-26 (1 BT)	
	Actual Prodn. (MT)	Qty. dispatched through Rail (MT)	Prodn. Projn. (MT)	Projected to be dispatched by rail (MT)
ECL	32.43	26.68	65.00	61.19
BCCL	30.41	18.67	45.00	33.97
CCL	68.85	52.44	135	119.40
WCL	57.71	37.99	70.00	47.71
SECL	142.52	58.00	260.00	213.00
NCL	122.43	44.83	130.00	57.00
MCL	167.68	115.21	295.00	229.00
Total CIL	622.64	353.81	1000.00	761.28

ECL - Coalfield-wise Rail Dispatch Projection in 2025-26 (1 BT)

Coalfield	2021-22		2025-26 (1 BT)	
	Actual Prodn. (MT)	Qty. dispatched through Rail (MT)	Prodn. Projn. (MT)	Projected Qty. to be dispatched by rail (MT)
RANIGANJ CF	25.97	24.43	40.00	36.52
SAHARJURI CF	0.99	0.89	2.50	2.17
RAJMAHAL CF	5.47	1.36	22.50	22.50
Total ECL	32.43	26.68	65.00	61.19



RANIGANJ	
FID	0
CF_NAME	RANI
AREA	1975
*Area in (Sq Km)	

NOTE:

PROD IN 21-22 = 25.97 M

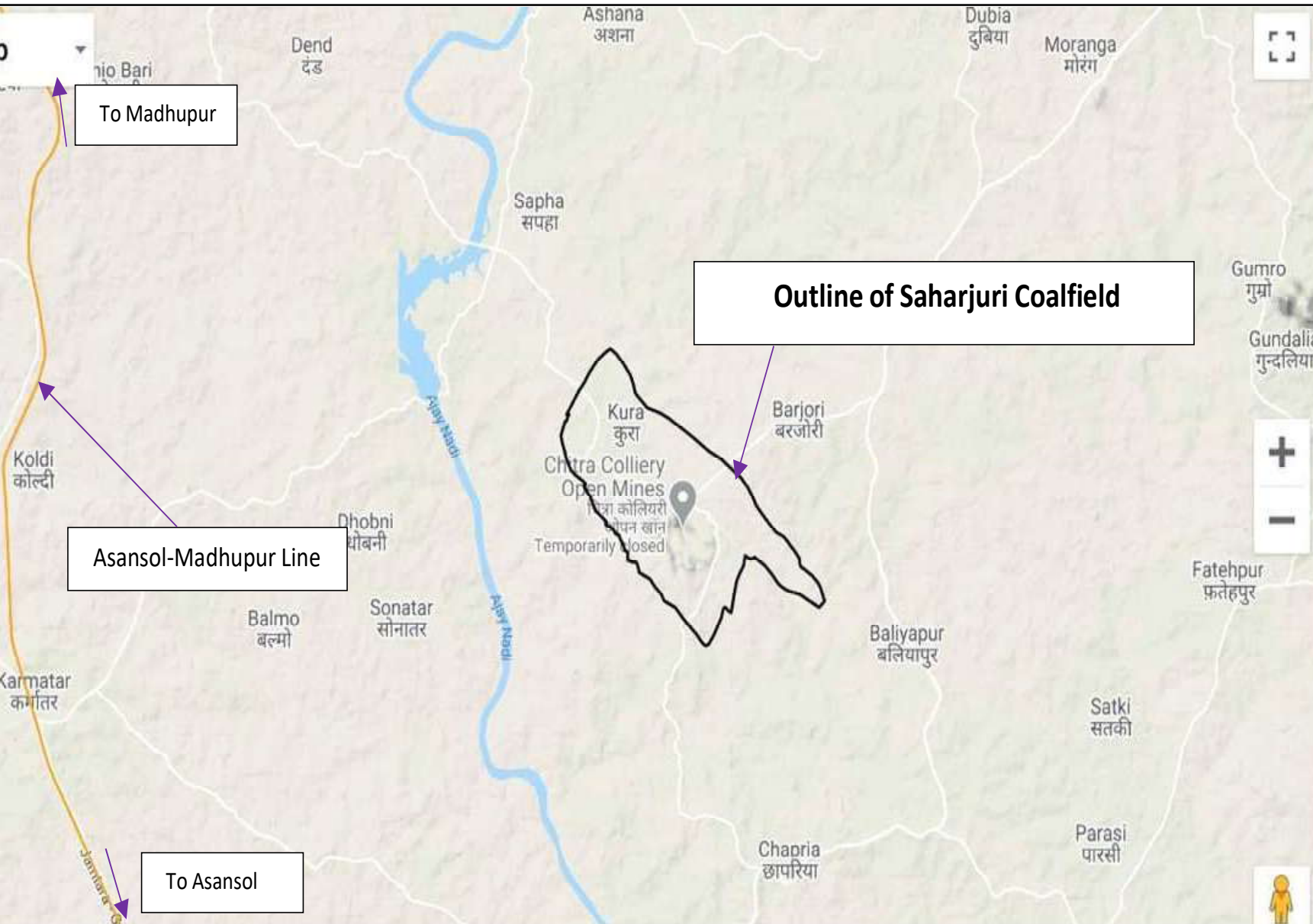
RAIL DESP IN 21-22 = 24

PROJ PROD IN 25-26 = 4

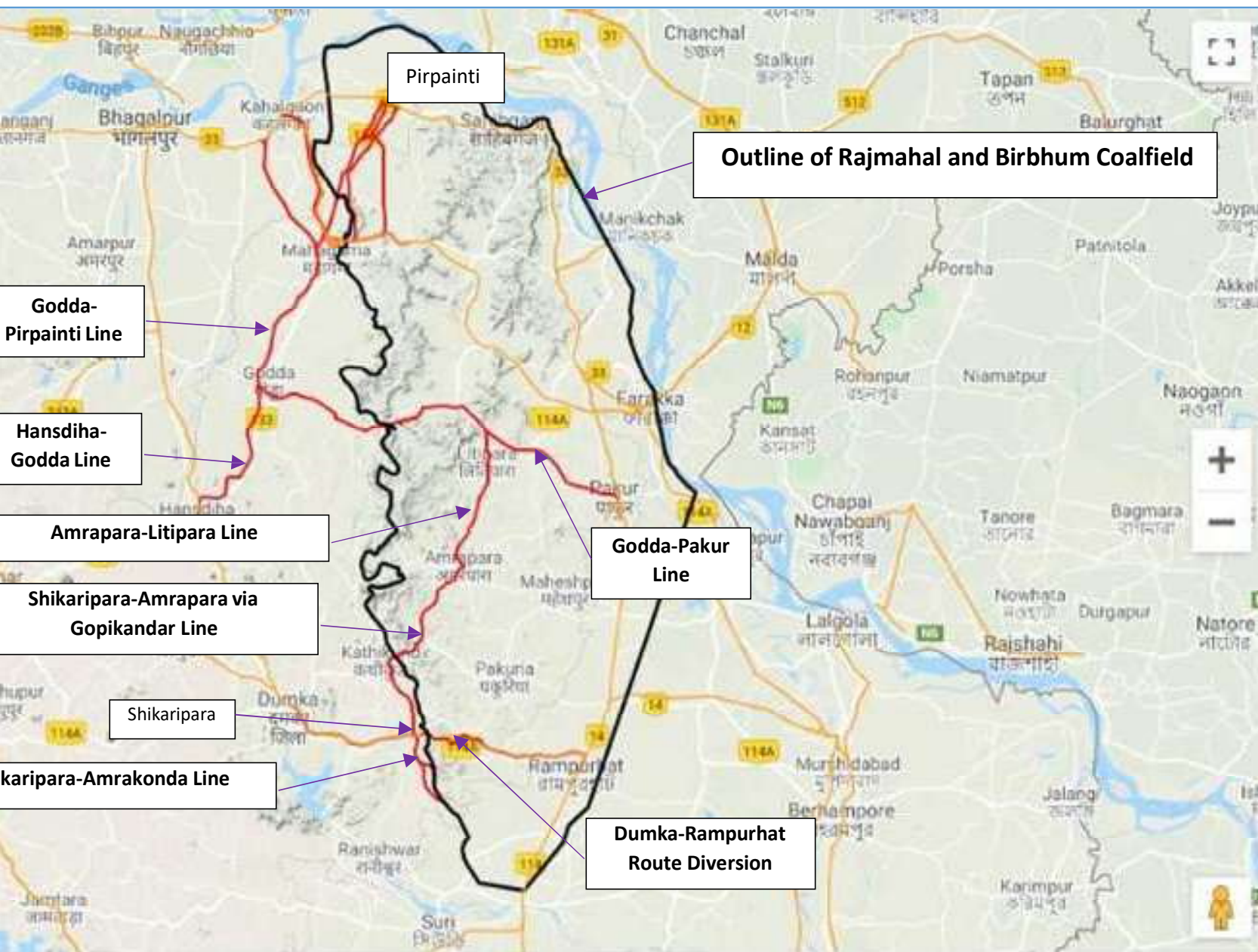
PROJ RAIL DESP IN 25-2

36.52 MT

Orange Line = Existing R



SAHARJURI	
FID	0
CF_NAME	SAHAR
AREA	16.57
*Area in (Sq Km)	
NOTE:	
PROD IN 21-22 = 0.99	
RAIL DESP IN 21-22 =	
MT	
PROJ PROD IN 25-26	
MT	
PROJ RAIL DESP IN 2	
= 2.17 MT	
Orange Line = Existing	
line	



RAJMAHAL & BIRBHUM	
FID	0
CF_NAME	RAJMAHAL & BIRBHUM
AREA	6524.34
*Area in (Sq Km)	

NOTE:

PROD IN 21-22 = 5.47 MT
 RAIL DESP IN 21-22 = 1.36 MT

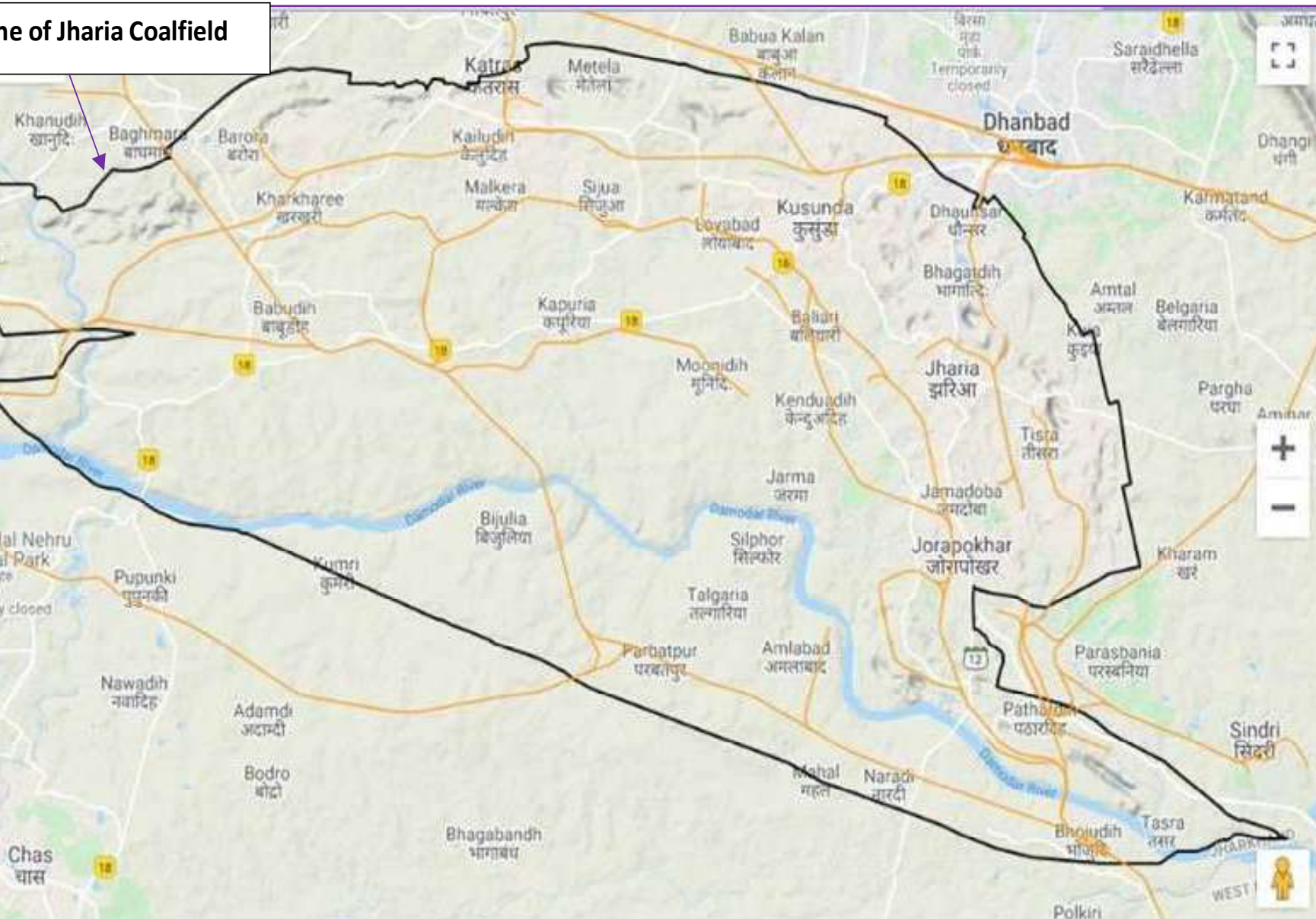
PROJ PROD IN 25-26 = 22.50 MT
 PROJ RAIL DESP IN 25-26 = 2.36 MT

Orange Lines = Existing Rly line
 Red Lines = Proposed Rly line

BCCL - Coalfield-wise Rail Dispatch Projection in 2025-26 (1 BT)

Coalfield	2021-22		2025-26 (1 BT)	
	Actual Prodn. (MT)	Qty. dispatched through Rail (MT)	Prodn. Projn. (MT)	Projected Qty. to be dispatched by rail (MT)
Jharia CF	29.80	18.18	43.05	32.49
Raniganj CF	0.61	0.49	1.95	1.48
Total BCCL	30.41	18.67	45.00	33.97

Location of Jharia Coalfield



JHARIA COALFIELD

FID 0

NAME JHARIA COALFIELD

AREA 379.38

*Area in (Sq Km),Reserves in

NOTE:

PROD IN 21-22 = 29.80 M

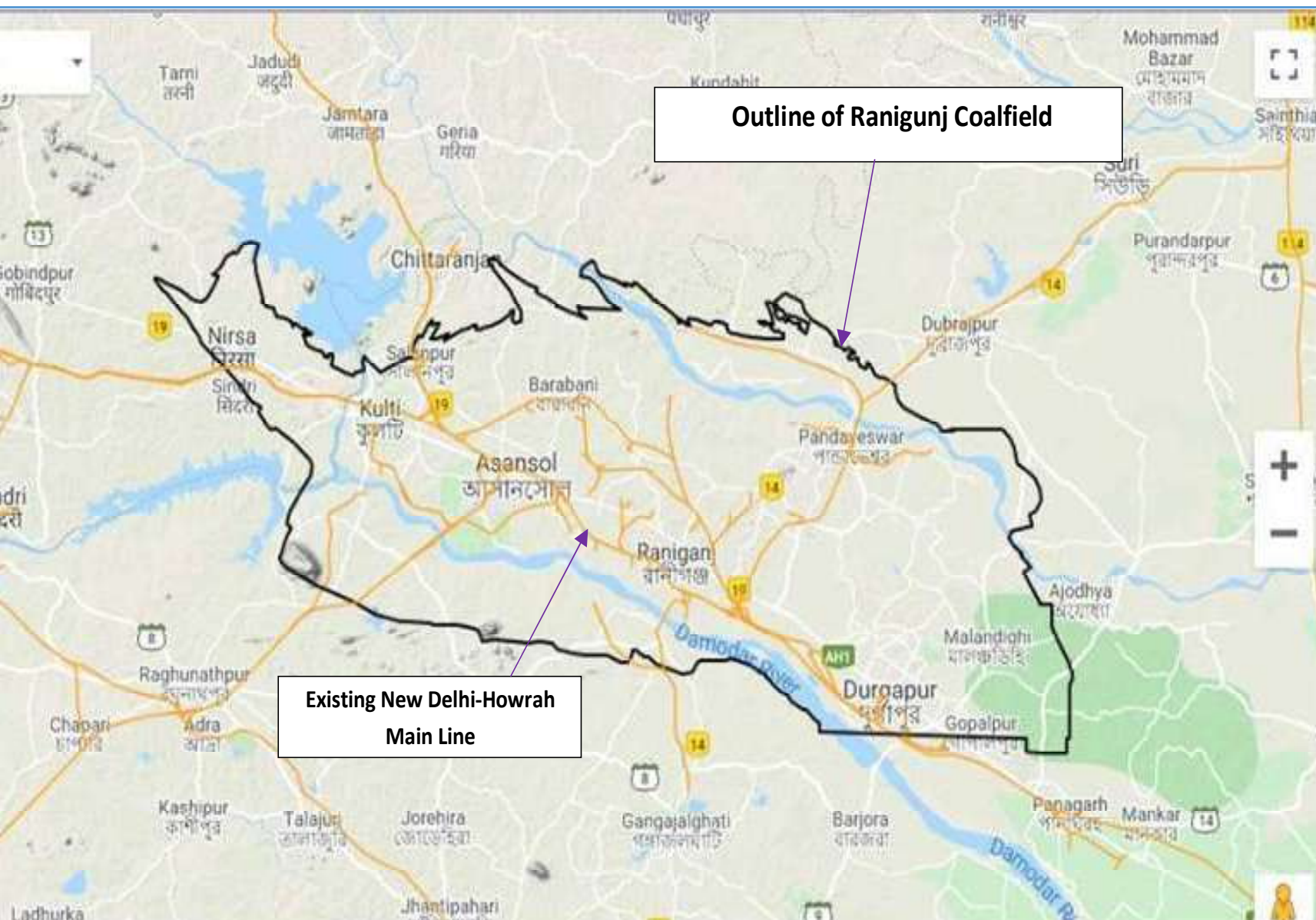
RAIL DESP IN 21-22 = 18

PROJ PROD IN 25-26 = 4

PROJ RAIL DESP IN 25-26

MT

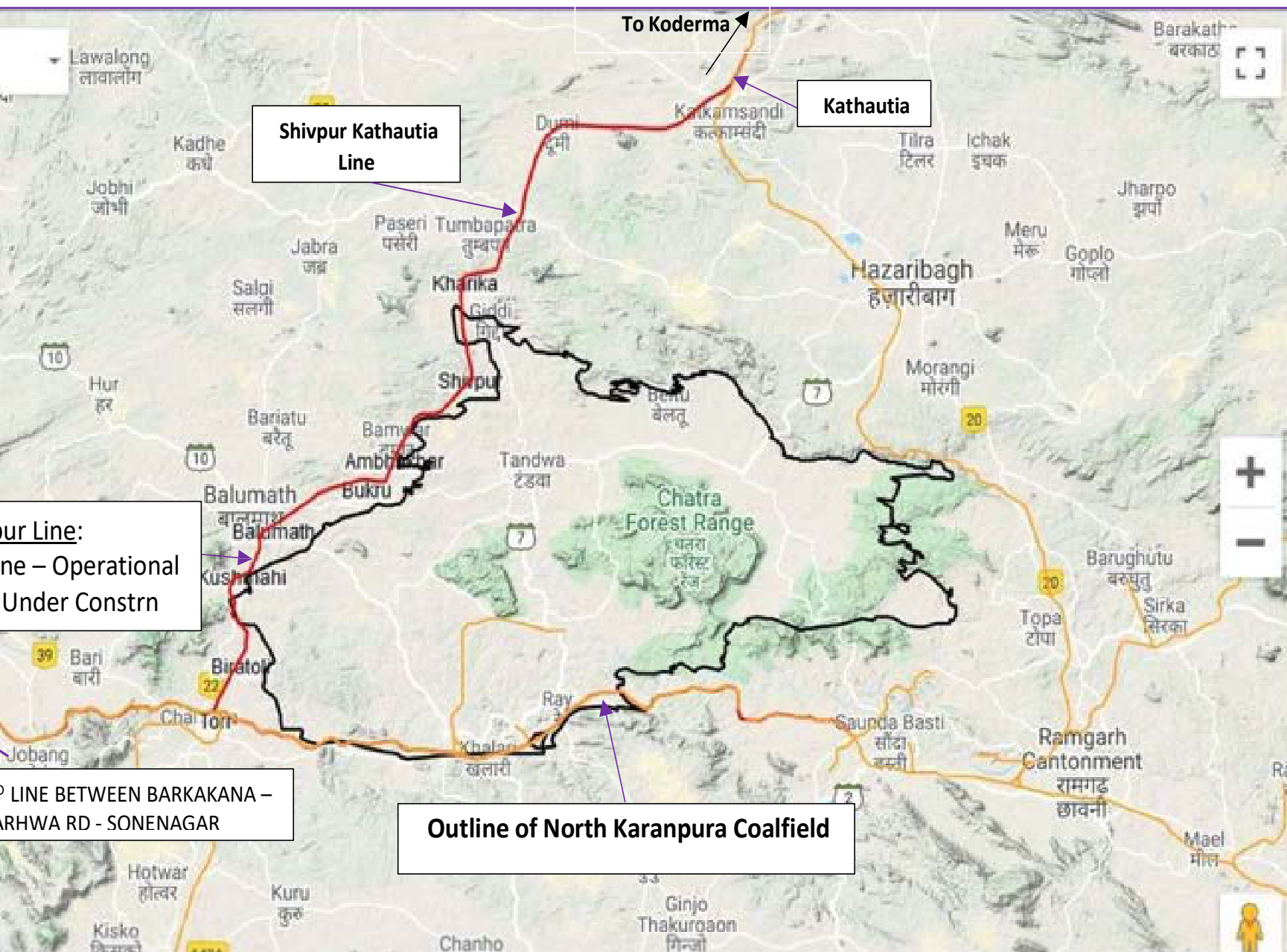
Orange lines = Existing R



RANIGANJ	
FID	0
CF_NAME	RANIG
AREA	1975.9
*Area in (Sq Km)	
NOTE: FOR BCCL MINES RANIGUNJ CF	
PROD IN 21-22 = 0.61 MT	
RAIL DESP IN 21-22 = 0.49	
PROJ PROD IN 25-26 = 1.9	
PROJ RAIL DESP IN 25-26	
MT	
Orange Lines = Existing R	

CCL - Coalfield-wise Rail Dispatch Projection in 2025-26 (1 BT)

Coalfield	2021-22		2025-26 (1 BT)	
	Actual Prodn. (MT)	Qty. dispatched through Rail (MT)	Prodn. Projn. (MT)	Projected Qty. to be dispatched by rail (MT)
South Karanpura CF	5.41	3.08	10.05	8.05
Daltonganj CF	1.02	0.00	0.05	0.05
East Bokaro CF	12.58	8.78	27.45	24.50
Giridih CF	0.10	0.09	0.30	0.30
North Karanpura CF	44.32	35.76	83.60	75.00
Ramgarh CF	0.88	1.20	3.00	3.00
West Bokaro CF	4.54	3.53	10.55	8.50
Total CCL	68.85	52.44	135	119.40



NORTH KARANPURA

FID	0
CF_NAME	NORTH KARANPURA
AREA	1237.08

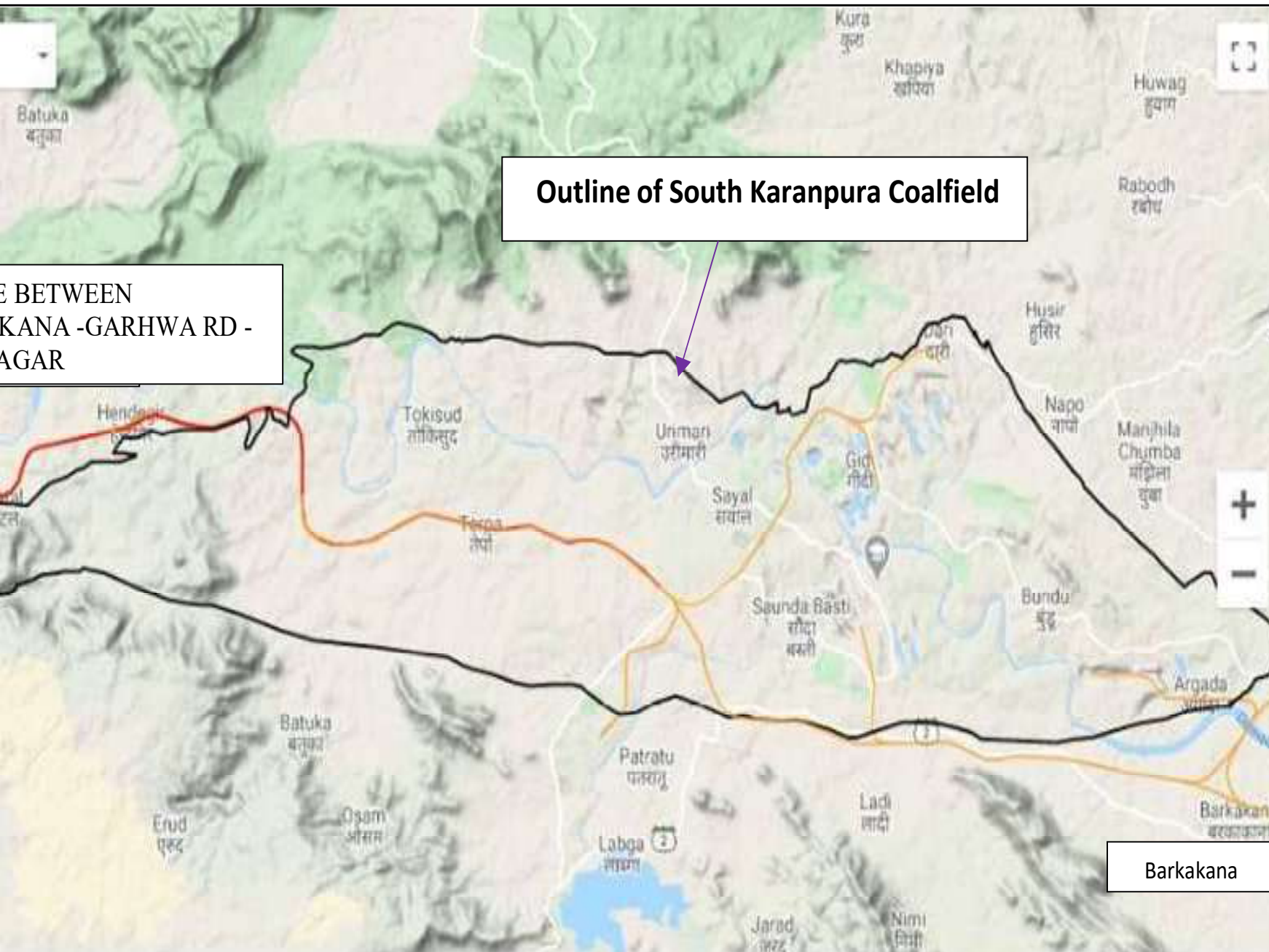
*Area in (Sq Km)

CF: NORTH KARANPURA

PROD IN 21-22 = 44.32
 RAIL DESP IN 21-22 = 35

PROJ PROD IN 25-26 = 8
 PROJ RAIL DESP IN 25-26 = 8
 MT

Orange Lines = Existing
 Red Lines = Proposed R



Outline of South Karanpura Coalfield

E BETWEEN
KANA -GARHWA RD -
AGAR

SOUTH KARANPURA

CF: SOUTH KARANPURA
AREA: 194 SQ.KM.

PROD IN 21-22 = 3.08 MT

RAIL DESP IN 21-22 = 3.08 MT

PROJ PROD IN 25-26 = 10.05 MT

PROJ RAIL DESP IN 25-26 = 8.05 MT

Orange Lines = Existing
Rly lines

Red Lines = Proposed
lines

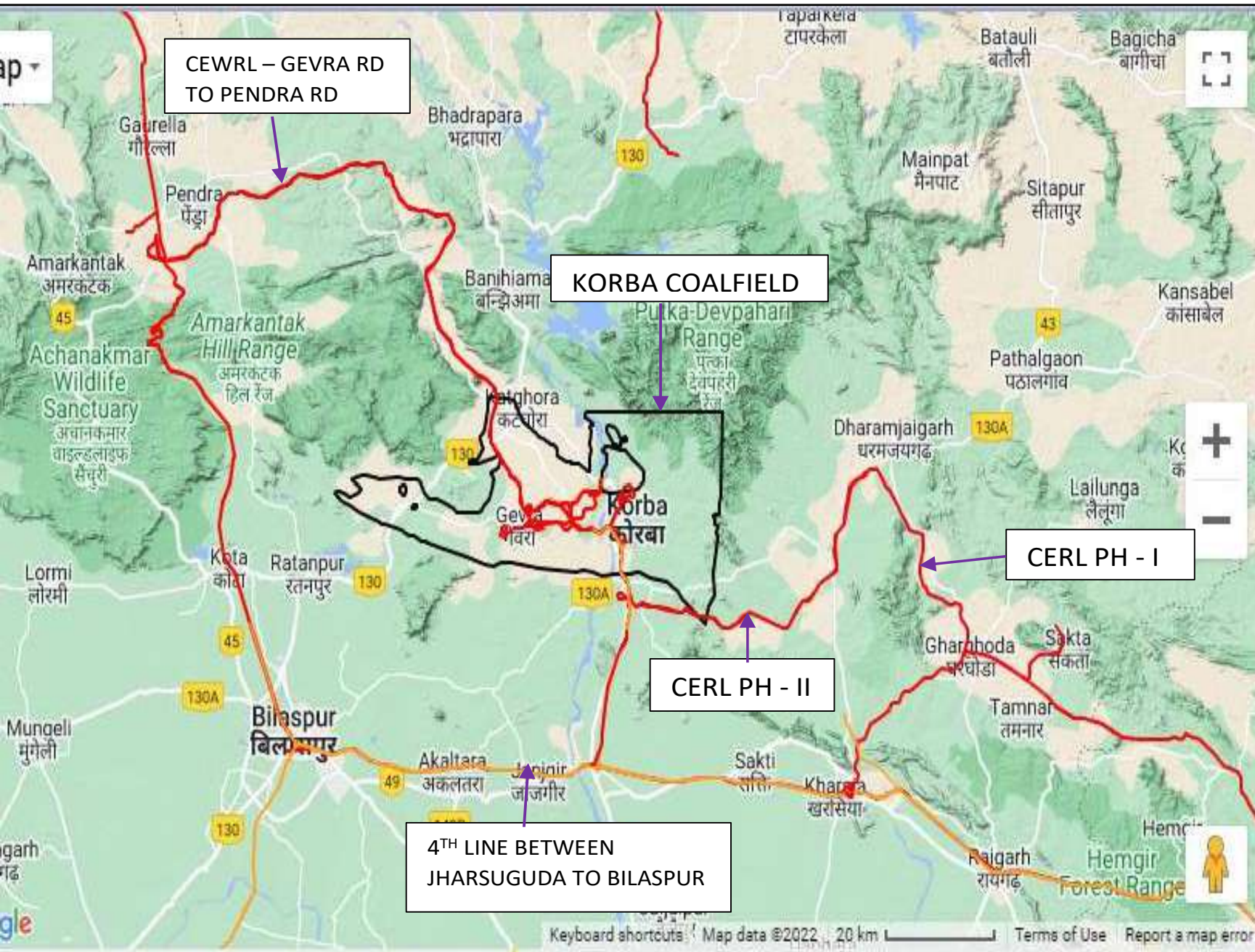
Barkakana

WCL - Coalfield-wise Rail Dispatch Projection in 2025-26 (1 BT)

Coalfield	2021-22		2025-26 (1 BT)	
	Actual Prodn. (MT)	Qty. dispatched through Rail (MT)	Prodn. Projn. (MT)	Projected Qty. to be dispatched by rail (MT)
Kamptee CF	8.61	4.08	10.49	5.70
PKT (Pench Kanhan+Tawa+Mohpani+Pathakhera)	2.97	0.99	4.58	1.47
Umrer Bander CF	10.35	8.63	12.20	8.78
Wardha Valley CF	35.77	24.29	42.73	31.77
Total WCL	57.71	37.99	70.00	47.71

SECL - Coalfield-wise Rail Dispatch Projection in 2025-26 (1 BT)

Coalfield	2021-22		2025-26 (1 BT)	
	Actual Prodn. (MT)	Qty. dispatched through Rail (MT)	Prodn. Projn. (MT)	Projected Qty. to be dispatched by rail (MT)
Korba CF	111.99	45.00	186.40	150.00
Mand Raigarh CF	12.80	2.00	35.00	33.00
Bisrampur/Lakhanpur CF	2.92	2.00	12.56	10.00
Jhilimili, Tatapani-Ramkolka, Sonhat CF	2.07	2.00	2.74	2.00
Chirimiri/Sendurgarh CF	2.46	1.00	2.89	2.00
Sohagpur CF	8.61	5.00	17.66	14.00
Johilla/Umariya CF	1.67	1.00	2.75	2.00
Total SECL	142.52	58.00	260.00	213.00



Korba

FID	0
Coalfiled	Korba
Area	1091

*Area in (Sq Km),Reserves

NOTE:

PROD IN 21-22 = 111 MT

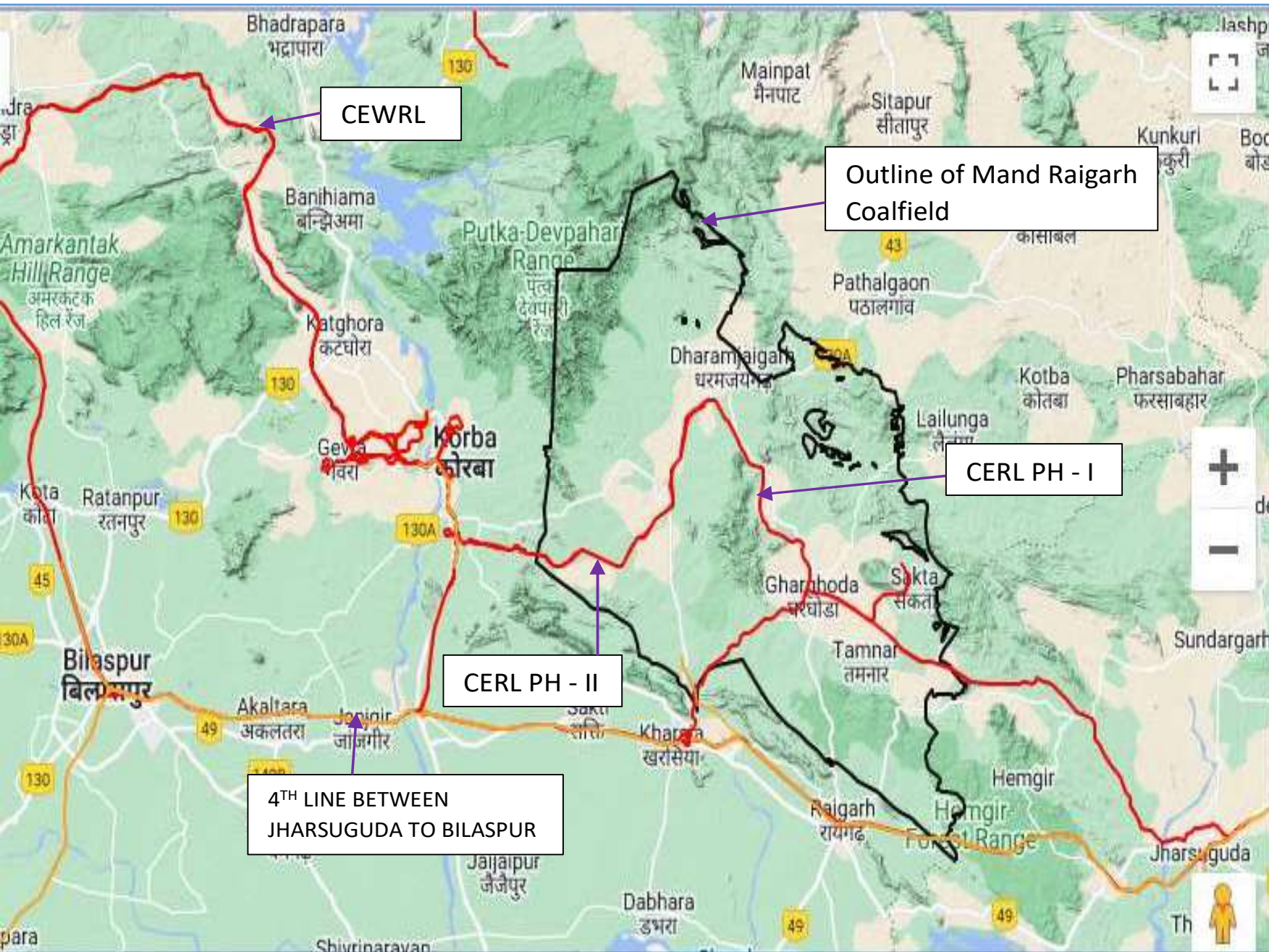
RAIL DESP IN 21-22 = MT

PROJ PROD IN 25-26 = 186.40 MT

PROJ RAIL DESP IN 2 = 150 MT

Orange Lines = Existing lines

Red Line = Proposed lines



Mand-Raigarh	
FID	0
Coalfiled	Mand-Ra
Area	3662

*Area in (Sq Km).Reserv

NOTE:

PROD IN 21-22 = 12

RAIL DESP IN 21-22

PROJ PROD IN 25-26

MT

PROJ RAIL DESP IN 2

33 MT

Orange Lines = Exist

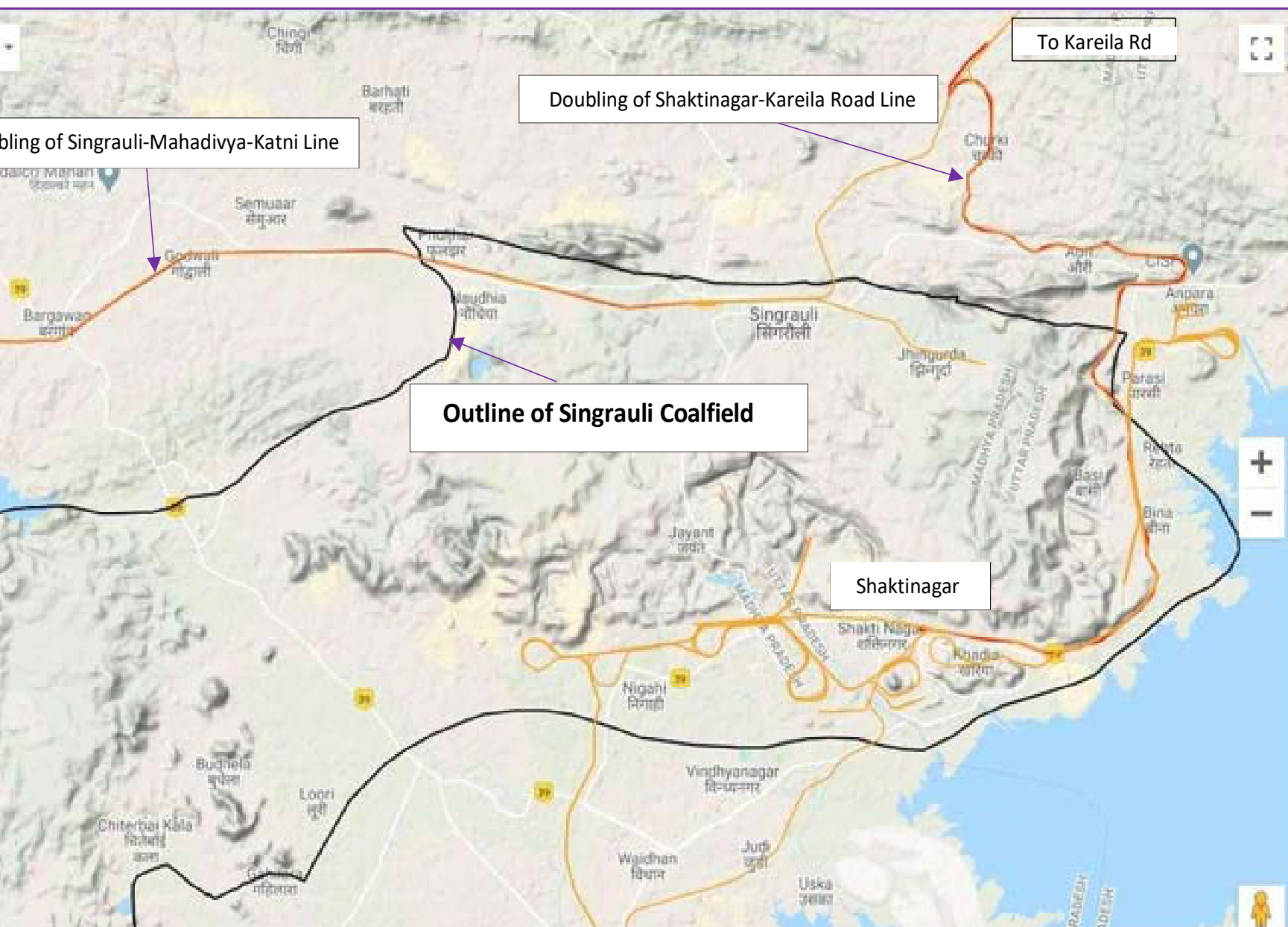
lines

Red Lines = Propose

lines

NCL - Coalfield-wise Rail Dispatch Projection in 2025-26 (1 BT)

Coalfield	2021-22		2025-26 (1 BT)	
	Actual Prodn. (MT)	Qty. (MT) dispatched through Rail	Prodn. Projn. (MT)	Projected Qty. to be dispatched by rail(MT)
Singrauli CF - Moher Sub basin	122.43	44.83	130.00	57.00
Singrauli CF - Main basin	0.00	0.00	0.00	0.00
Total NCL	122.43	44.83	130.00	57.00



SINGRAULI	
FID	0
CF_NAME	SINGRAULI
AREA	2376.02
*Area in (Sq Km)	
LATITUDE	24°0'0"
LONGITUDE	82°15'0"

Note:

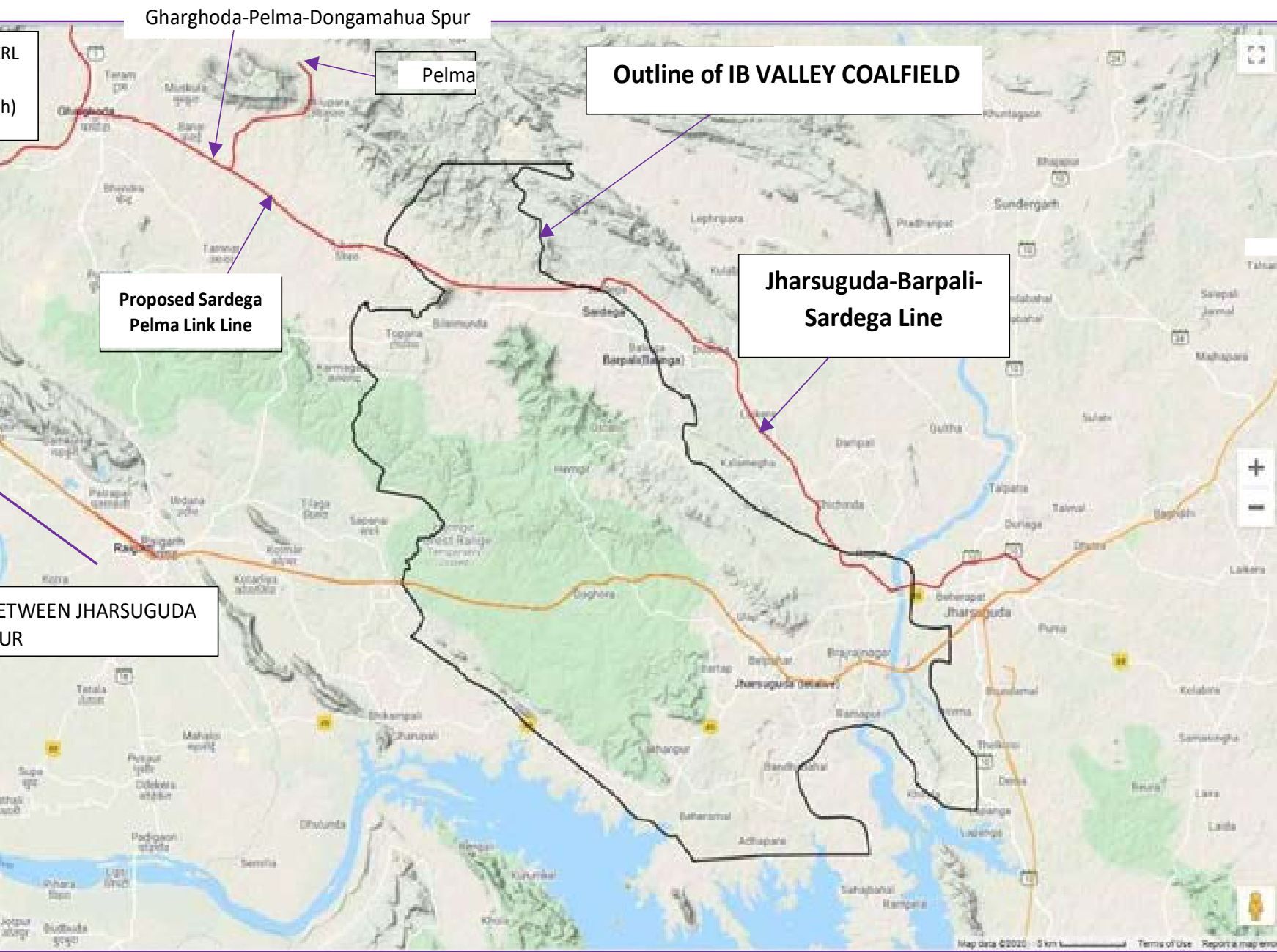
PROD IN 21-22 = 122.43 MT
 RAIL DESP IN 21-22 = 44.83 M

PROJ PRODN IN 25-26 = 130
 PROJ RAIL DESP IN 25-26 = 5

Orange lines = Existing Rly line
 Red lines = Proposed Rly Line

MCL - Coalfield-wise Rail Dispatch Projection in 2025-26 (1 BT)

Coalfield	2021-22		2025-26 (1 BT)	
	Actual Prodn. (MT)	Qty. (MT) dispatched through Rail	Prodn. Projn. (MT)	Projected Qty. to be dispatched by rail(MT)
IB Valley CF	70.99	48.00	129.94	103.00
Talcher CF	96.69	67.21	165.06	126.00
Total MCL	167.68	115.21	295.00	229.00
Total CIL	622.03	412.47	1000.00	849.88



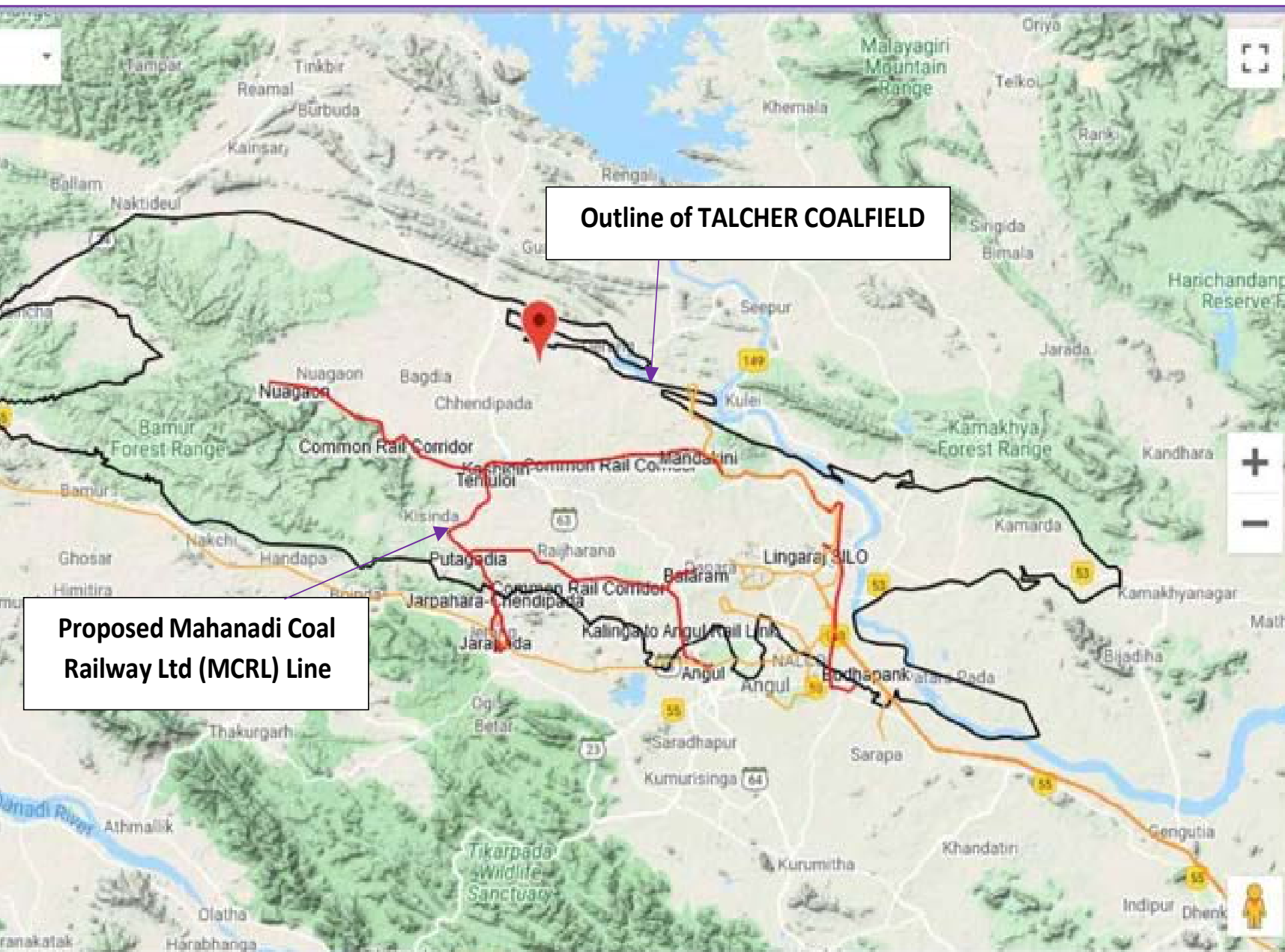
IB VALLEY	
FID	0
CF_NAME	IB VALLEY
AREA	1220.2

Note:

PROD IN 21-22 = 70.99 MT
RAIL DESP IN 21-22 = 48 MT

PROJ PROD IN 25-26 = 129.94
PROJ RAIL DESP IN 25-26 = 10

Orange lines = Existing Rly line
Red lines = Proposed Rly Lines



TALCHER

FID	0
CF_NAME	TALC
AREA	2342.

*Area in (Sq Km)

Note:

PROD IN 21-22 = 96.69 MT
RAIL DESP IN 21-22 = 67.21 MT

PROJ PROD IN 25-26 = 165.06
PROJ RAIL DESP IN 25-26 = 120.00

Orange lines = Existing Rly line

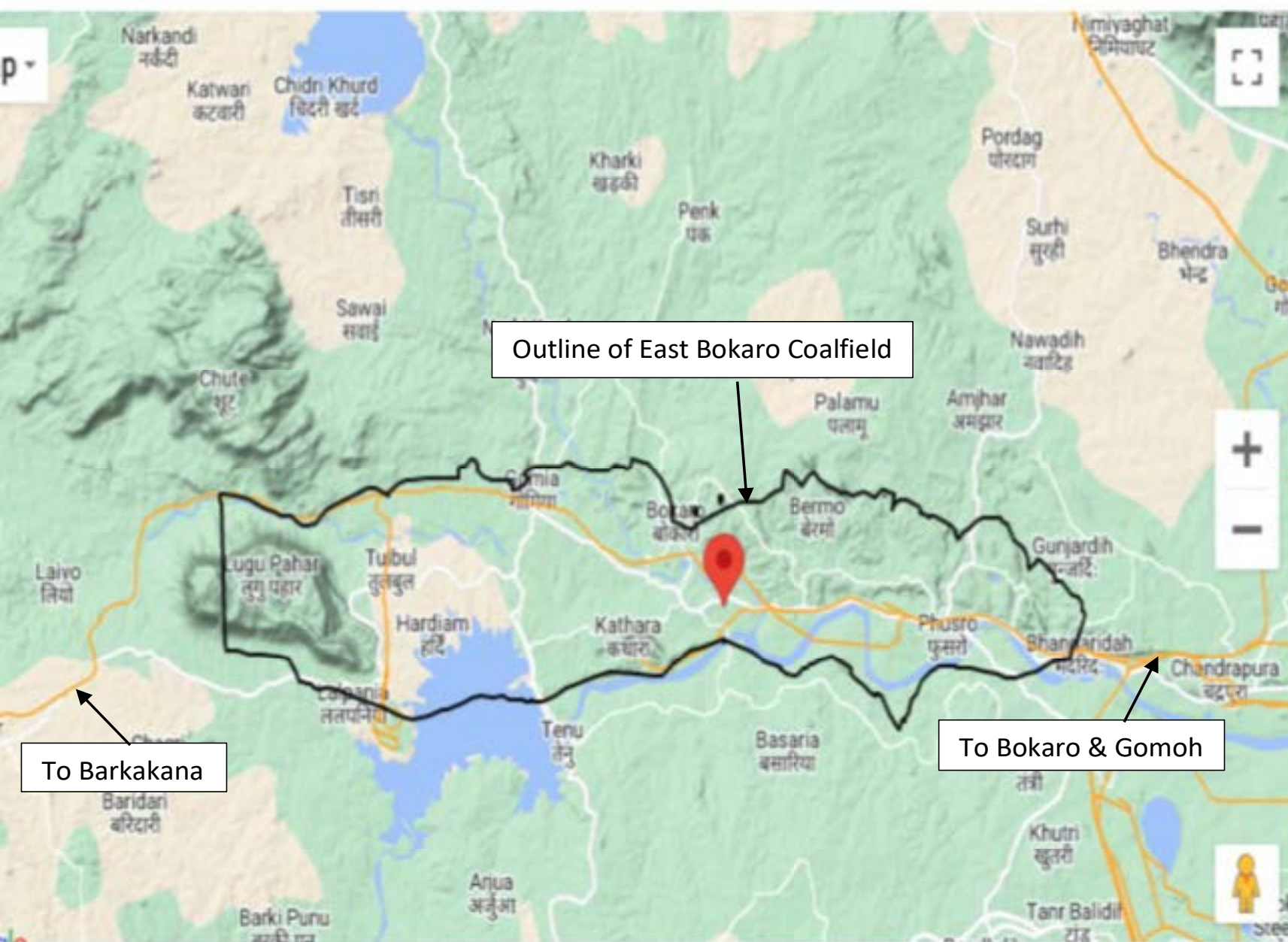
Red lines = Proposed Rly Lines

Thank You

SUBSIDIARYWISE PRODUCTION PROJECTION - 1BT PLAN

Sub	2021-22*	2022- 23	2023-24	2024- 25	2025- 26	Growth (%)**	CAGR (%)*
CL	32.43	50.0	50.0	53.0	65.0	100%	19%
CL	30.51	32.0	38.0	43.0	45.0	47%	10%
CL	68.85	76.0	82.0	106.0	135.0	96%	18%
CL	122.43	122.0	128.0	130.0	130.0	6%	2%
CL	57.71	62.0	66.0	68.0	70.0	21%	5%
CL	142.51	182.0	200.0	225.0	260.0	82%	16%
CL	168.17	176.0	196.0	225.0	295.0	75%	15%
IL	622.64	700.0	760.0	850.0	1000.0	61%	13%

Actual Production **Growth calculated with base year 21-22



East Bokaro	
FID	0
Coalfiled	East Bokaro
Area	242
*Area in (Sq Km),Reserves in	

NOTE:

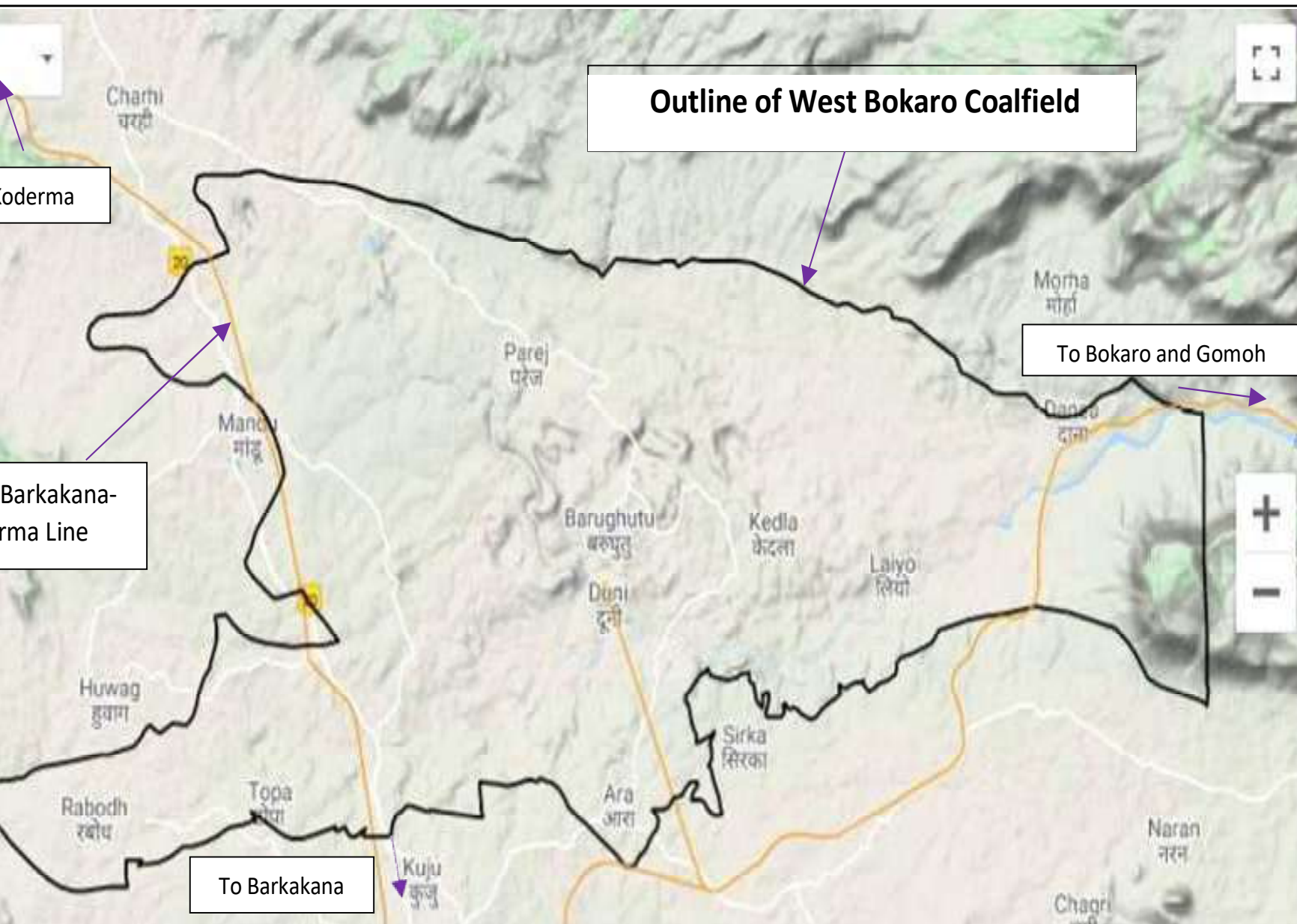
PROD IN 21-22 = 12.58

RAIL DESP IN 21-22 = 8.00 MT

PROJ PROD IN 25-26 = 12.58 MT

PROJ RAIL DESP IN 25-26 = 24.50 MT

Orange Lines = Existing lines.



WEST BOKARO

CF: WEST BOKARO
AREA = 194 SQ.KM

PROD IN 21-22 = 4
MT

RAIL DESP IN 21-
3.53 MT

PROJ PROD IN 25
10.55 MT

PROJ RAIL DESP
26 = 8.50 MT

Orange Lines = Ex
Rly lines



GIRIDIH	
FID	0
CF_NAME	GI
AREA	28
*Area in (Sq Km)	

CF : GIRIDIH

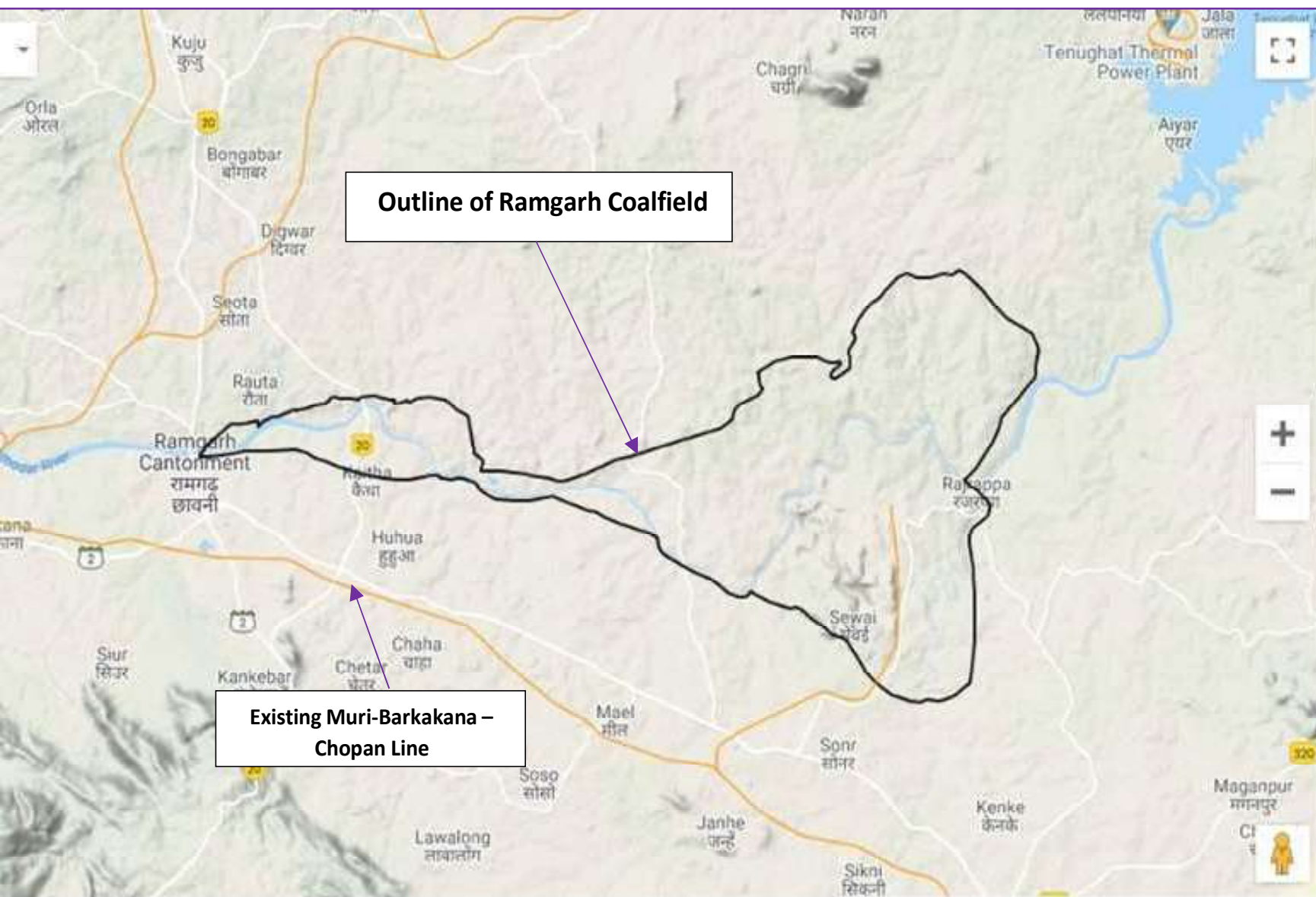
PROD IN 21-22 = 0.1

RAIL DESP IN 21-22
MT

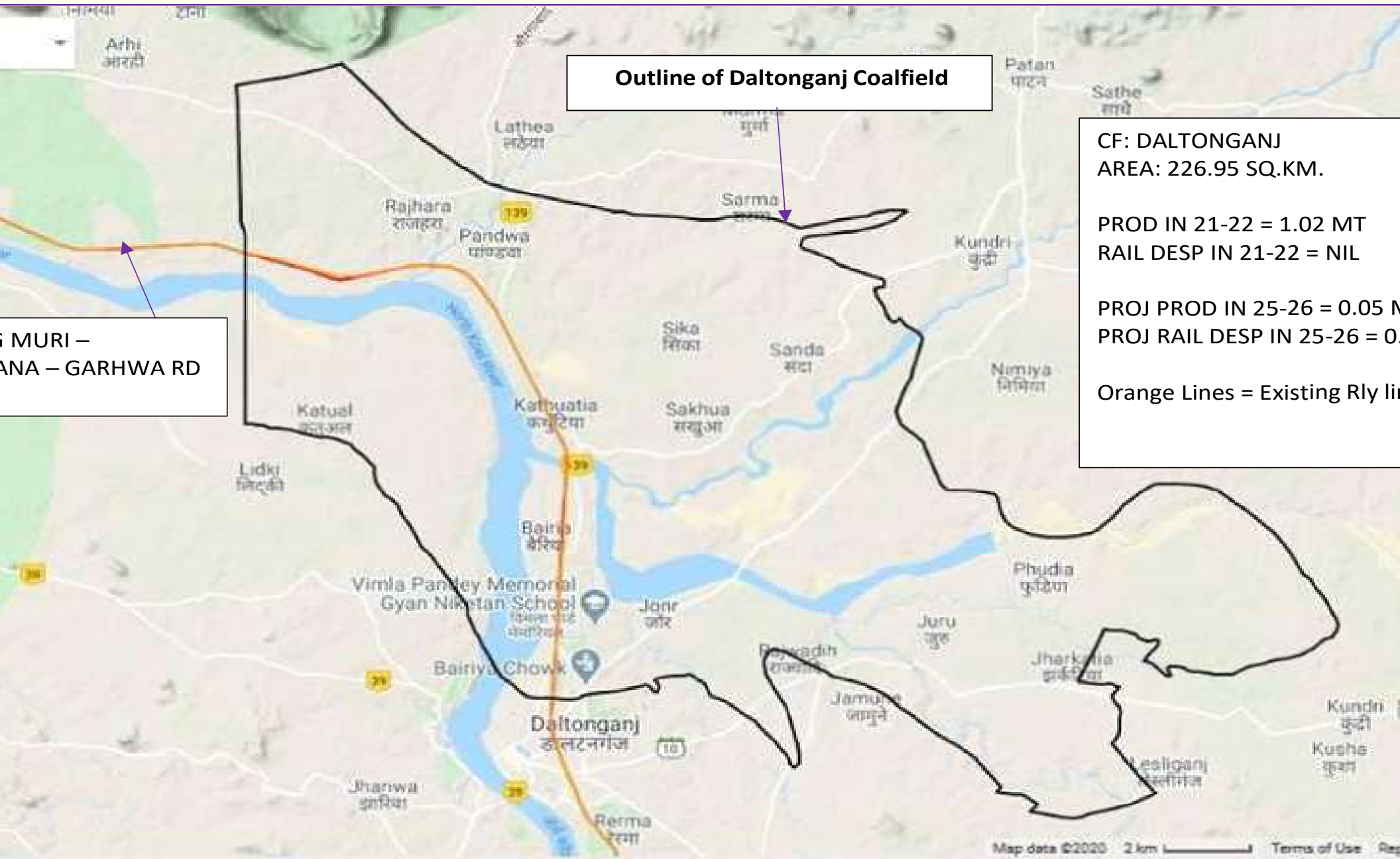
PROJ PROD IN 25-26
MT

PROJ RAIL DESP IN
0.30 MT

Orange Lines = Existing
lines



RAMGARH	
FID	0
CF_NAME	RAMGARH
AREA	74.45
*Area in (Sq Km)	
CF: RAMGARH	
PROD IN 21-22 = 0.88 M	
RAIL DESP IN 21-22 = 1	
PROJ PROD IN 25-26 = 3	
PROJ RAIL DESP IN 25-26 = 3 MT	
Orange Lines = Existing R	



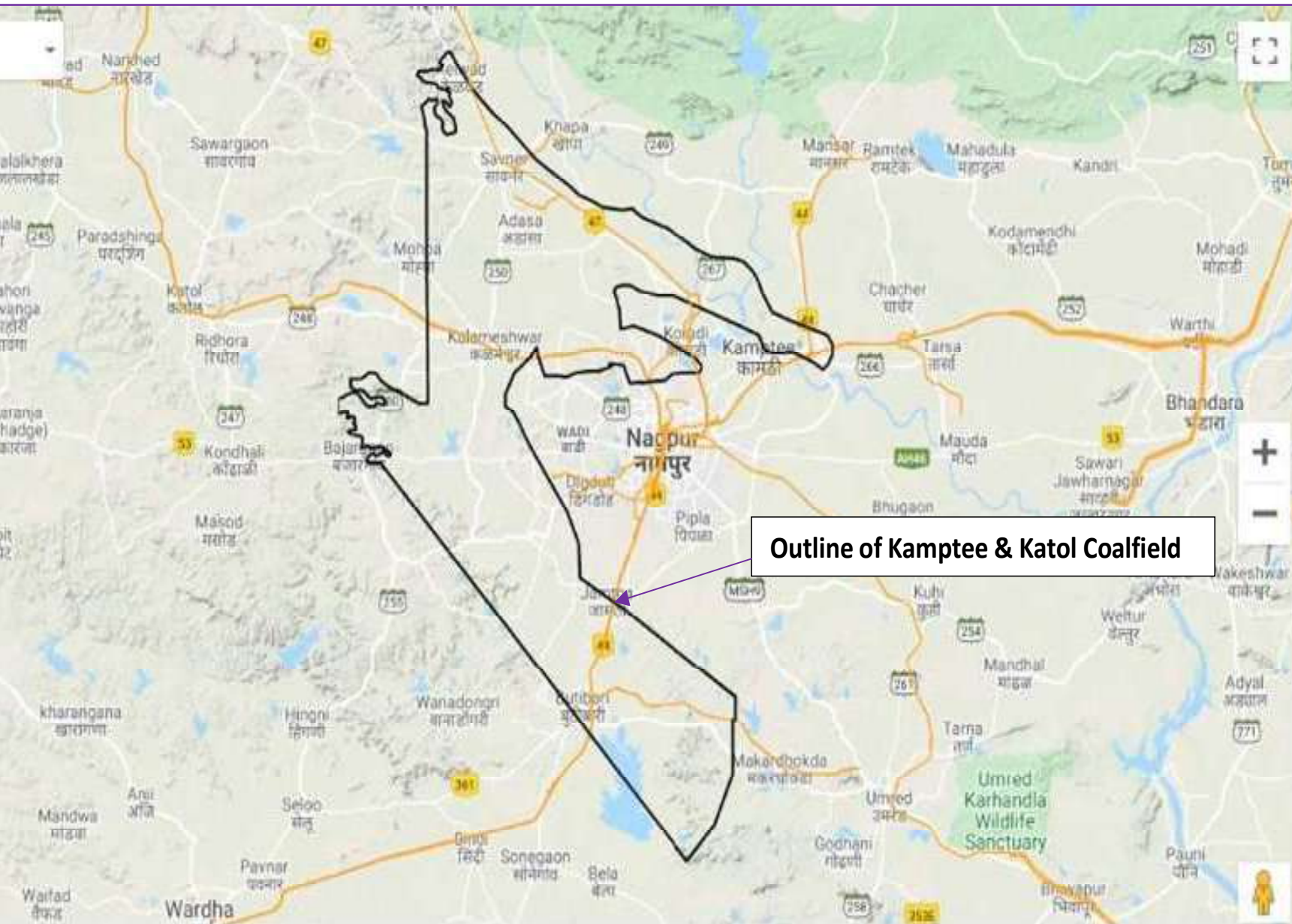
Outline of Dalitonganj Coalfield

CF: DALITONGANJ
AREA: 226.95 SQ.KM.

PROD IN 21-22 = 1.02 MT
RAIL DESP IN 21-22 = NIL

PROJ PROD IN 25-26 = 0.05 M
PROJ RAIL DESP IN 25-26 = 0

Orange Lines = Existing Rly line



Outline of Kamptee & Katol Coalfield

KAMPTEE & KATOL

FID	0
CF_NAME	KAMPTEE &
AREA	1248.22

*Area in (Sq Km)

LATITUDE	21°8'2"
LONGITUDE	79°0'2"

Note:

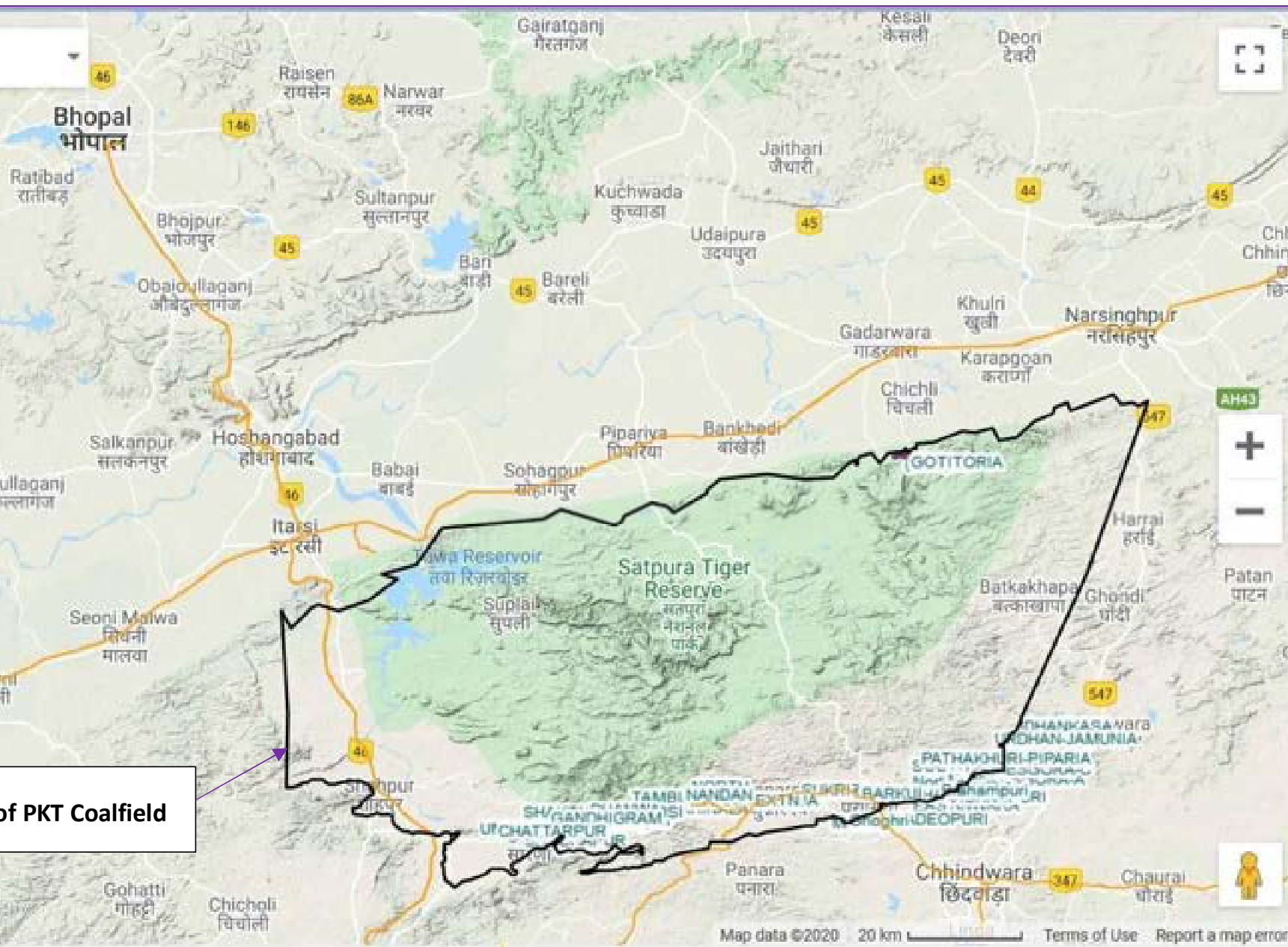
PROD IN 21-22 = 8.61 MT

RAIL DESP IN 21-22 = 4.08 MT

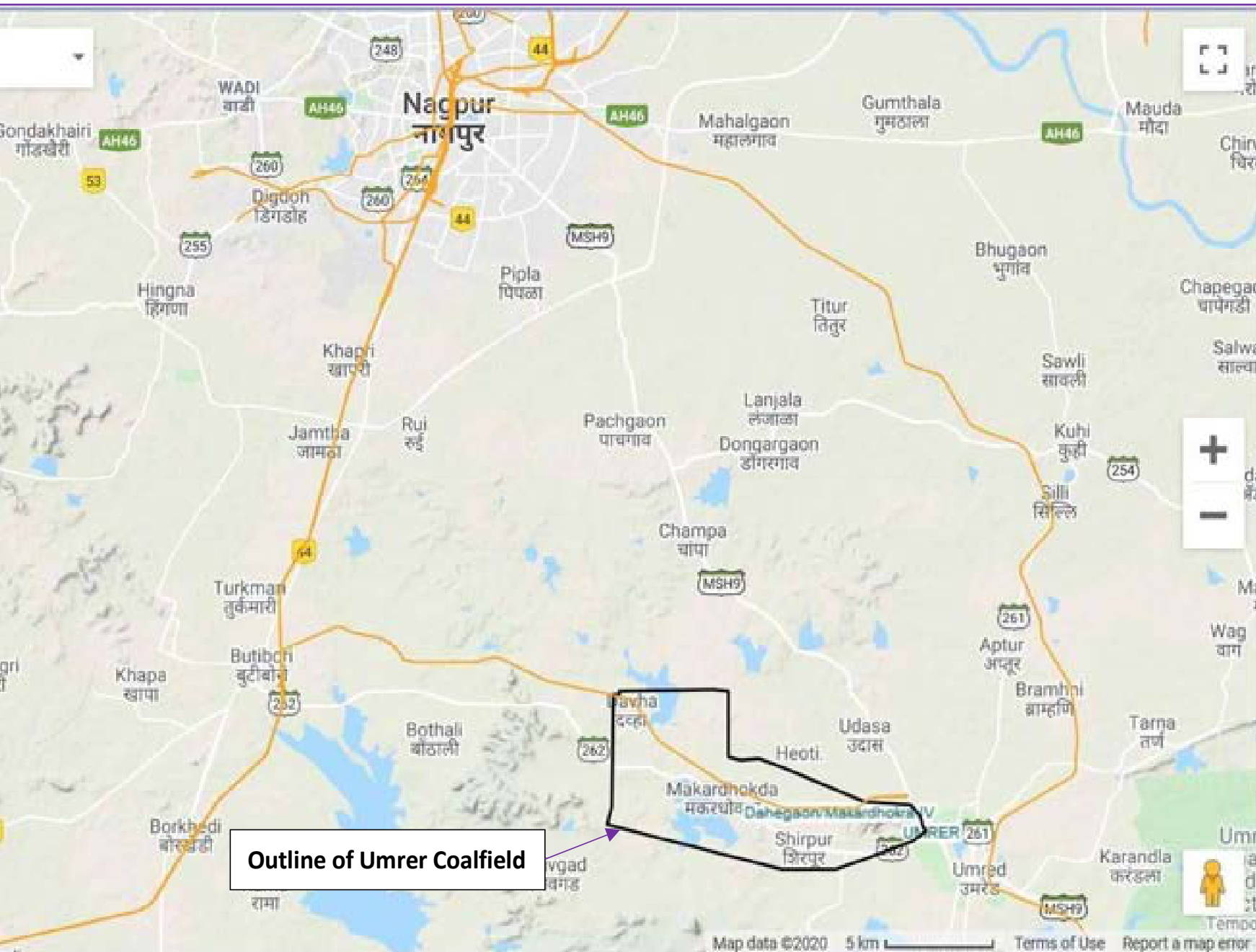
PROJ PROD IN 25-26 = 10.49 M

PROJ RAIL DESP IN 25-26 = 5.7

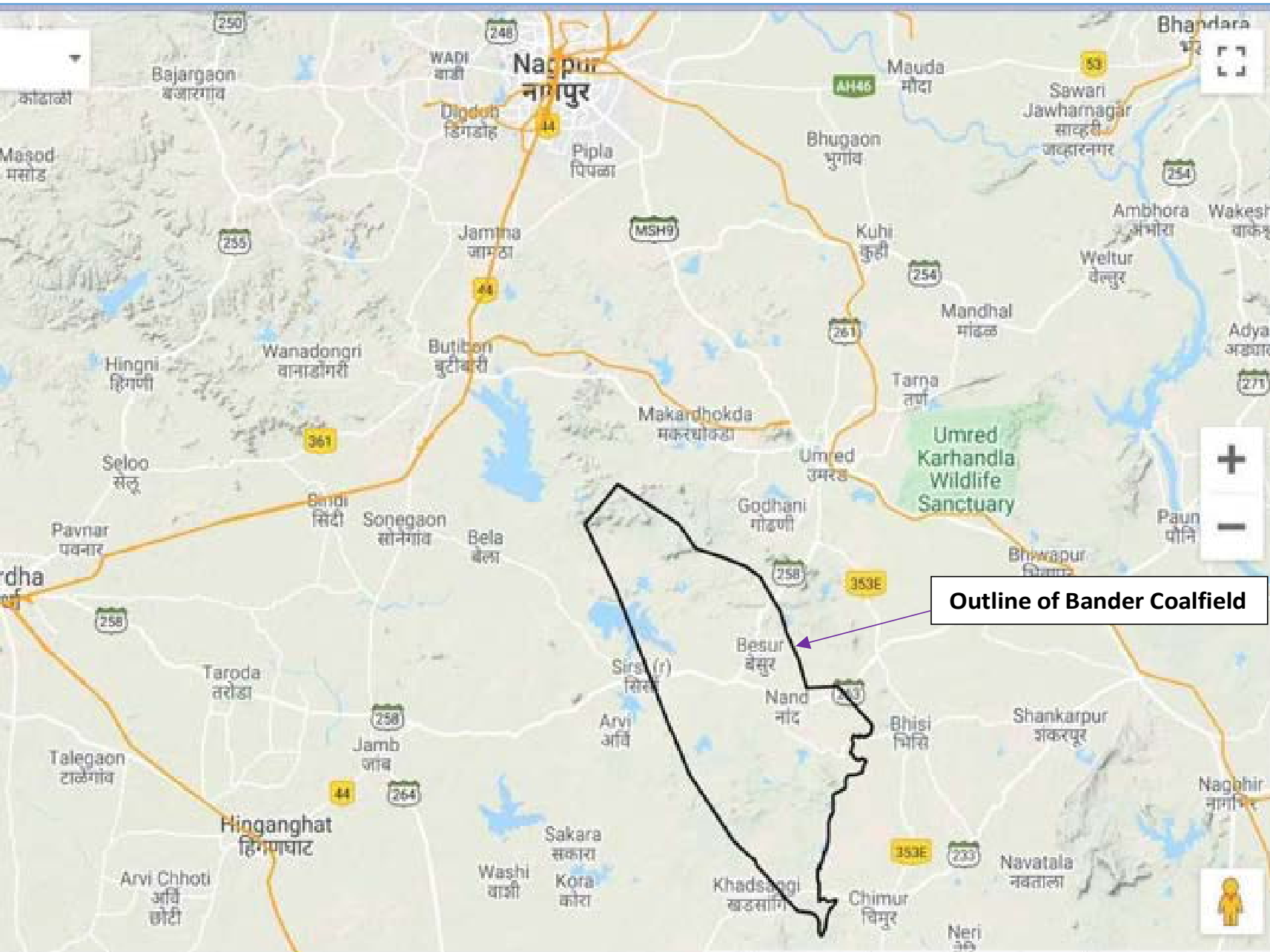
Orange lines = Existing Rly line



PKT	
FID	0
CF_NAME	PKT
AREA	802
*Area in (Sq Km)	
PKT CF = PATHAKHERA, P...	
KANHAN, TAWA & MOHI...	
CFs	
PROD IN 21-22 = 2.97 MT	
RAIL DESP IN 21-22 = 0.99 MT	
PROJ PROD IN 25-26 = 4.59 MT	
PROJ RAIL DESP IN 25-26 = 1.4	
Orange lines = Existing Rly line	

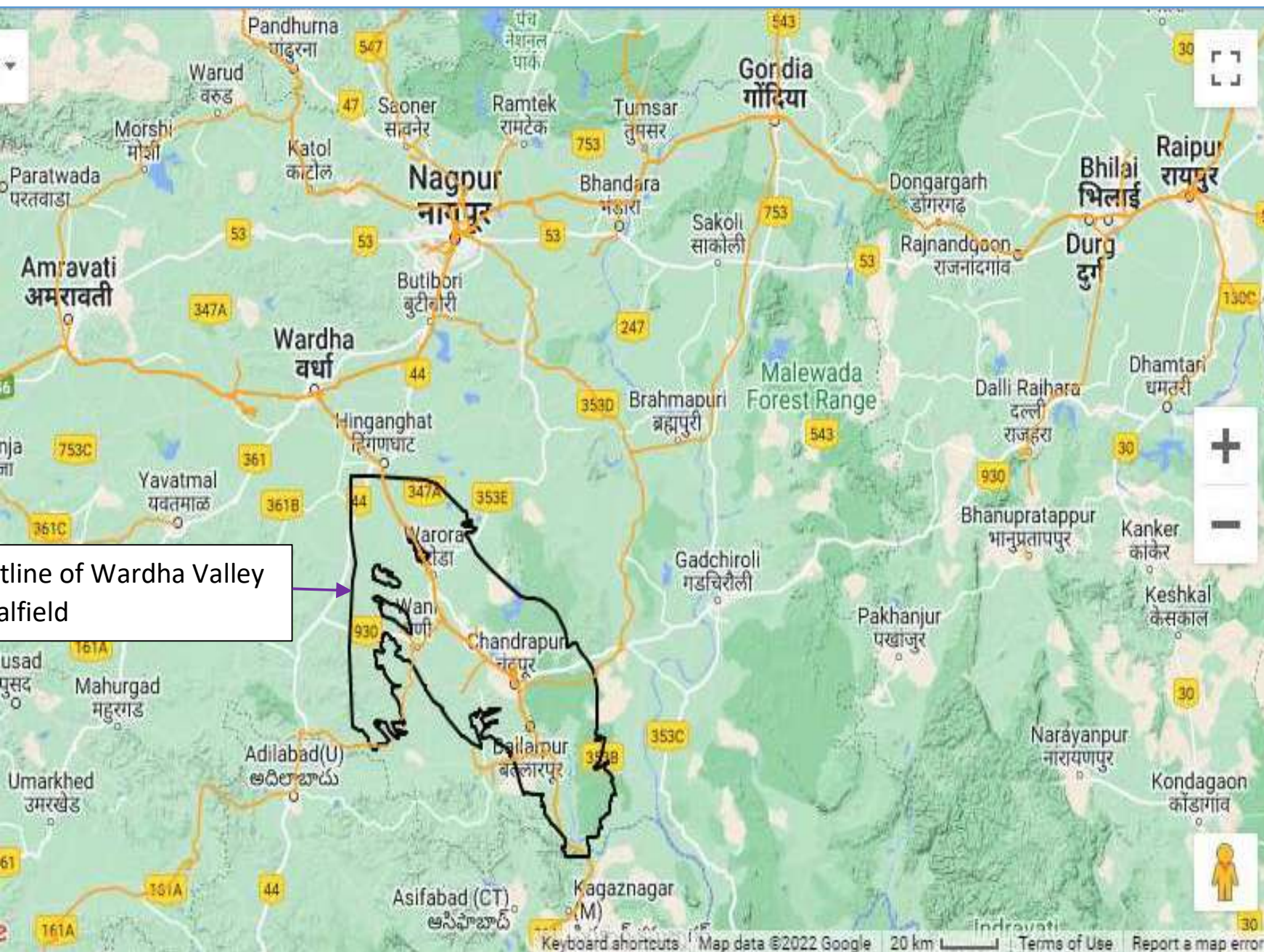


UMRER	
FID	0
CF_NAME	U
AREA	60
*Area in (Sq Km)	
NOTE:	
PROD IN 21-22 = 10.35	
RAIL DESP IN 21-22 = 8.	
PROJ PROD IN 25-26 = 1	
PROJ RAIL DESP IN 25-2	
MT	
Orange Line = Existing R	
Red Line = Proposed Rly	
Production and rail disp	
include figs. of Bander C	



Outline of Bander Coalfield

BANDER	
FID	0
CF_NAME	BANDER
AREA_SQ_KM	427.0
*Area in (Sq Km)	
NOTE:	
PRODUCTION & RAIL DESP	
(21-22) AND PROJECTED	
PRODUCTION & PROJECT	
RAIL DESPATCH (25-26) C	
BANDER COALFIELD HAV	
SHOWN IN UMRER COAL	
Orange Lines = Existing R	



Outline of Wardha Valley Coalfield

Wardha Valley

FID	0
Coalfiled	Wardha V
Area	5326

*Area in (Sq Km),Reserv

NOTE:

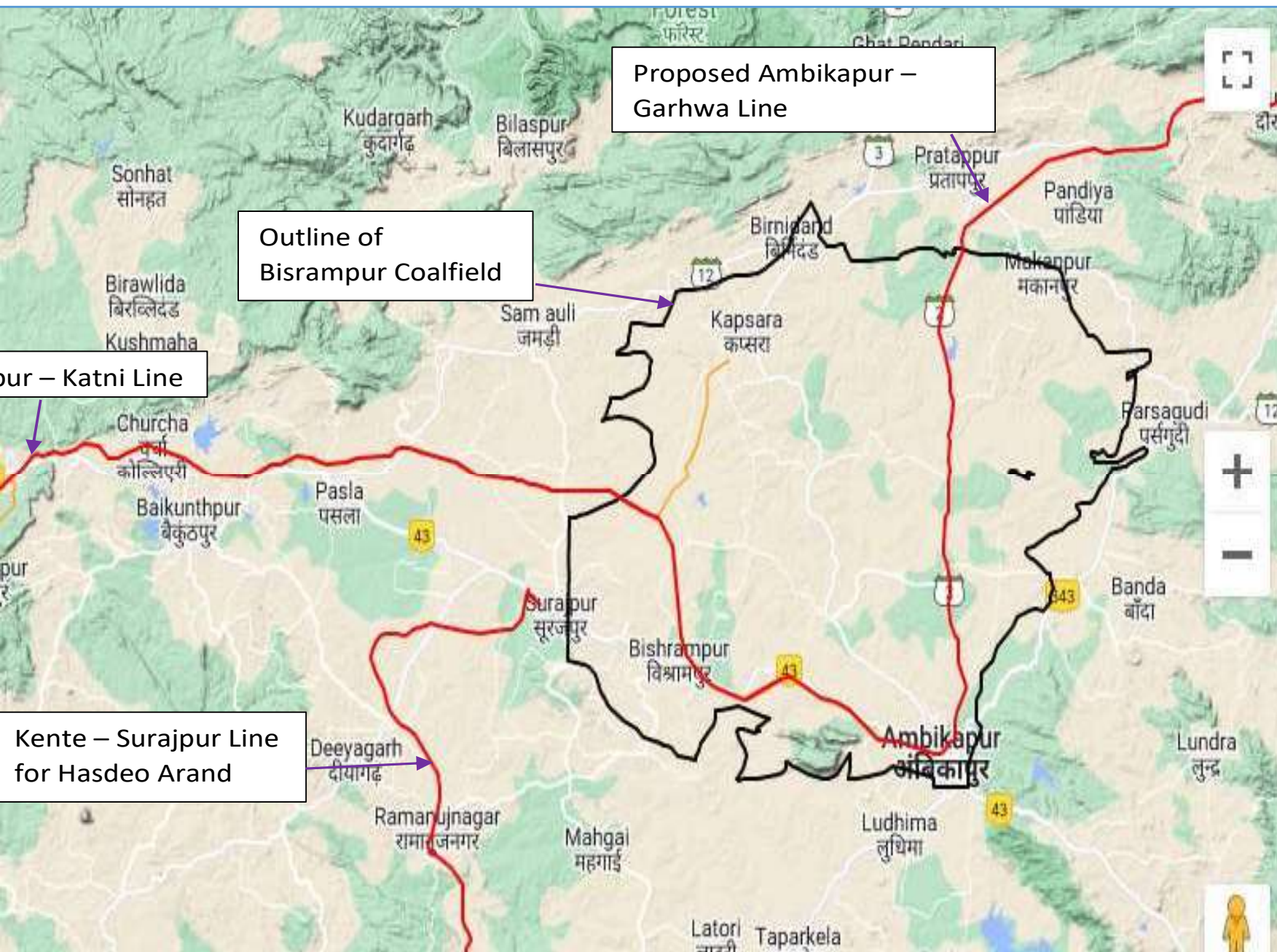
PROD IN 21-22 = 35

RAIL DESP IN 21-22 =
MT

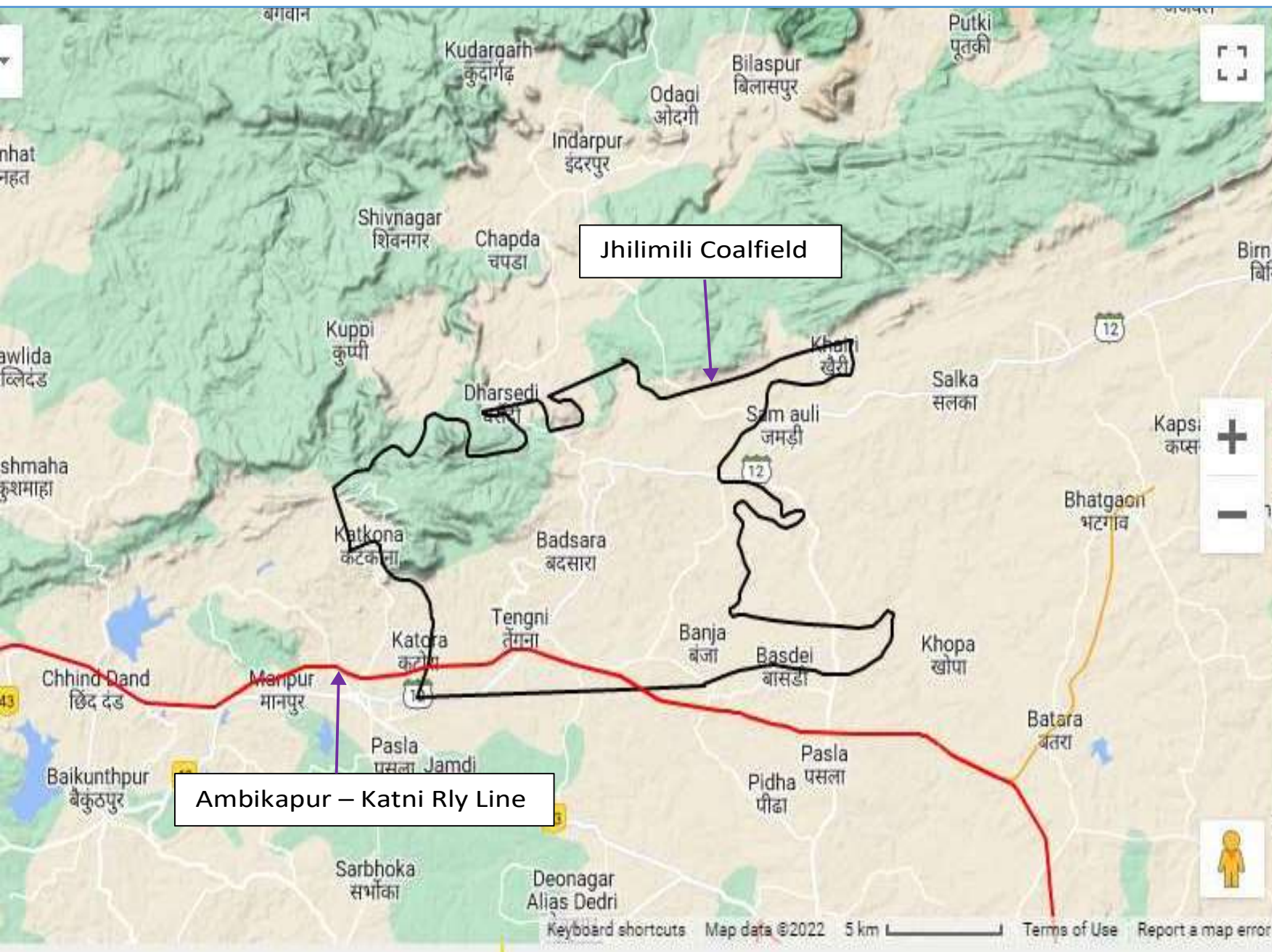
PROJ PROD IN 25-26
MT

PROJ RAIL DESP IN 2
31.77 MT

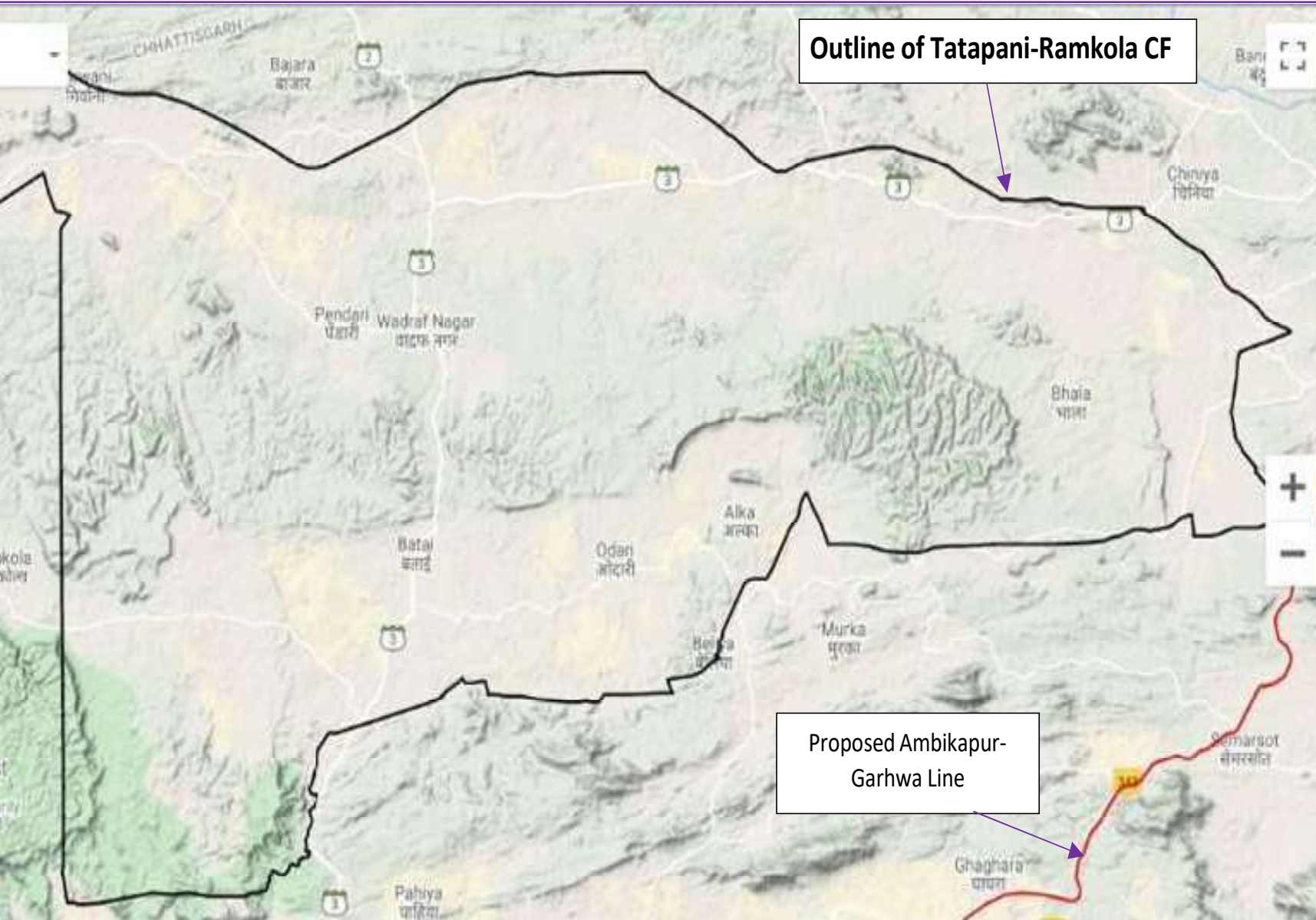
Orange Lines = existi
lines.



Bisrampur	
FID	0
Coalfiled	Bisra
Area	1289
*Area in (Sq Km). Reser	
NOTE:	
PROD IN 21-22 = 2.	
RAIL DESP IN 21-22	
PROJ PROD IN 25-2	
12.56 MT	
PROJ RAIL DESP IN	
10 MT	
Orange Lines = Exis	
lines	
Red Lines = Propos	
lines	



Jhilimili	
FID	0
Coalfiled	Jhil
Area	176
*Area in (Sq Km),Reserv	
NOTE:	
PROD IN 21-22 = 2.	
RAIL DESP IN 21-22	
PROJ PROD IN 25-2	
MT	
PROJ RAIL DESP IN	
2 MT	
Orange Line = Exist	
Red Line = propose	
line	



Outline of Tatapani-Ramkola CF

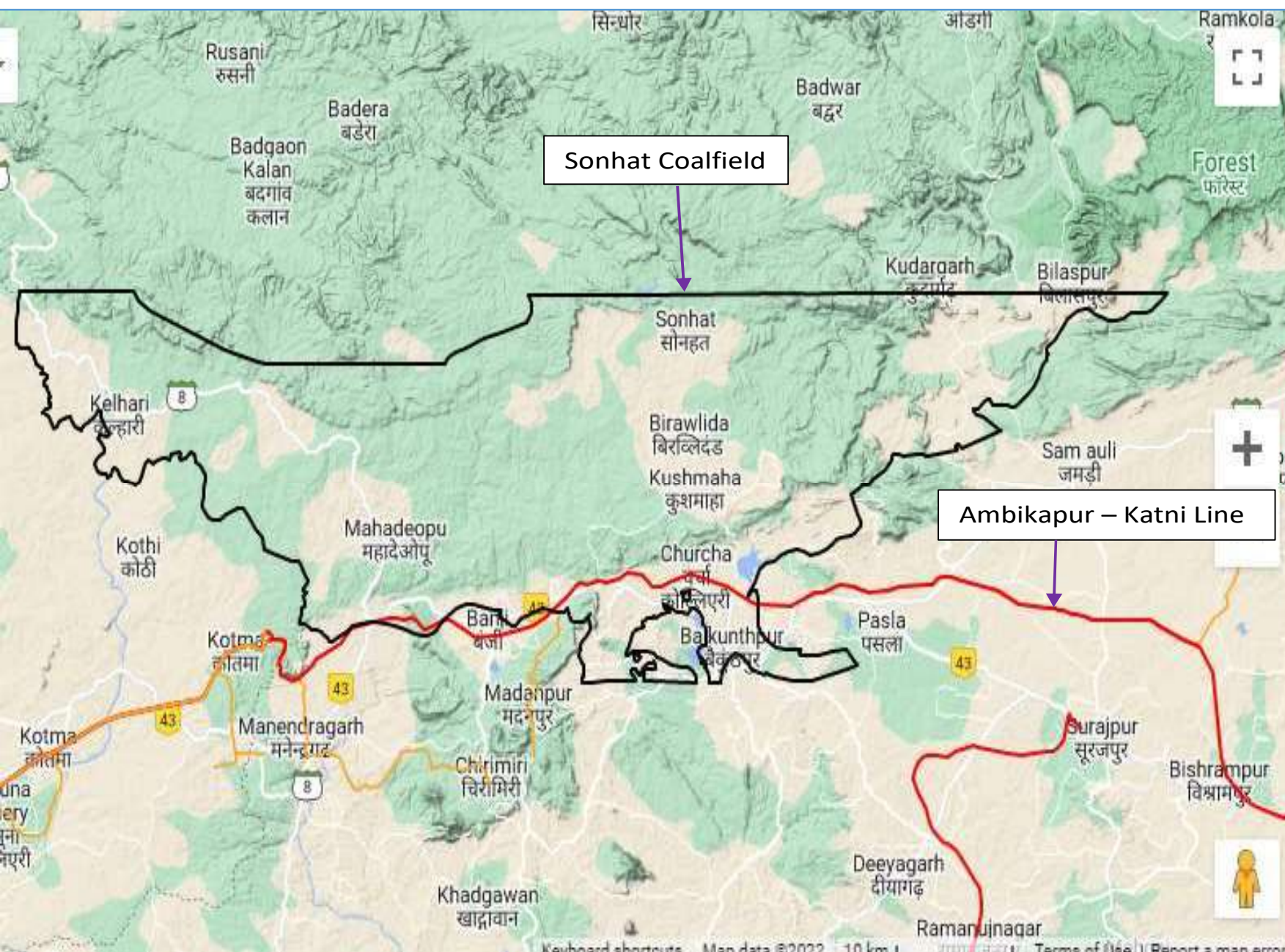
Proposed Ambikapur-Garhwa Line

TATAPANI-RAMKOLA

FID	0
CF_NAME	TATAPANI-RAMKOLA
AREA	1440.75

*Area in (Sq Km)

NOTE:
PRODUCTION & RAIL
DESPATCH (21-22) AND
PROJECTED PRODUCTION
& PROJECTED RAIL
DESPATCH OF TATAPANI-
RAMKOLA COALFIELD
HAVE BEEN SHOWN
JHILIMILI COALFIELD
Red Line = Proposed RL



Sonhat

FID

0

Coalfiled

So

Area

14

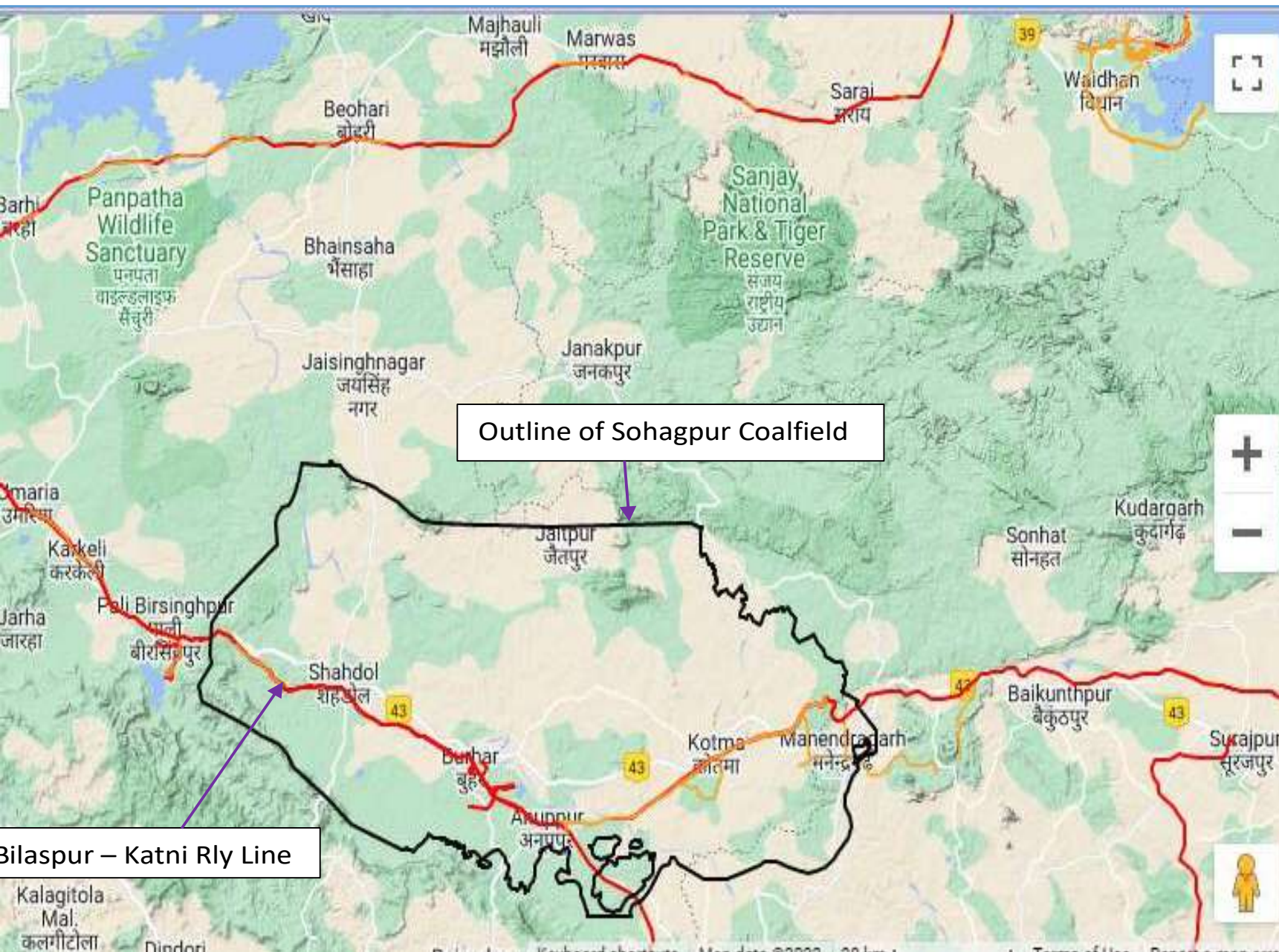
*Area in (Sq Km),Reser

NOTE:

PRODUCTION & RA
DESPATCH (21-22)
PROJECTED PRODU
PROJECTED RAIL D
(25-26) OF SONHA
HAVE BEEN SHOW
JHILIMILI CF.

Orange Line = Exist
line

Red Line = Propose
line



Outline of Sohagpur Coalfield

Bilaspur – Katni Rly Line

Sohagpur

FID	0
Coalfiled	Sohagpur
Area	4633

*Area in (Sq Km),Reserve

NOTE:

PROD IN 21-22 = 8.6

RAIL DESP IN 21-22 =

PROJ PROD IN 25-26
MT

PROJ RAIL DESP IN 2
14 MT

Orange line = Existing
line

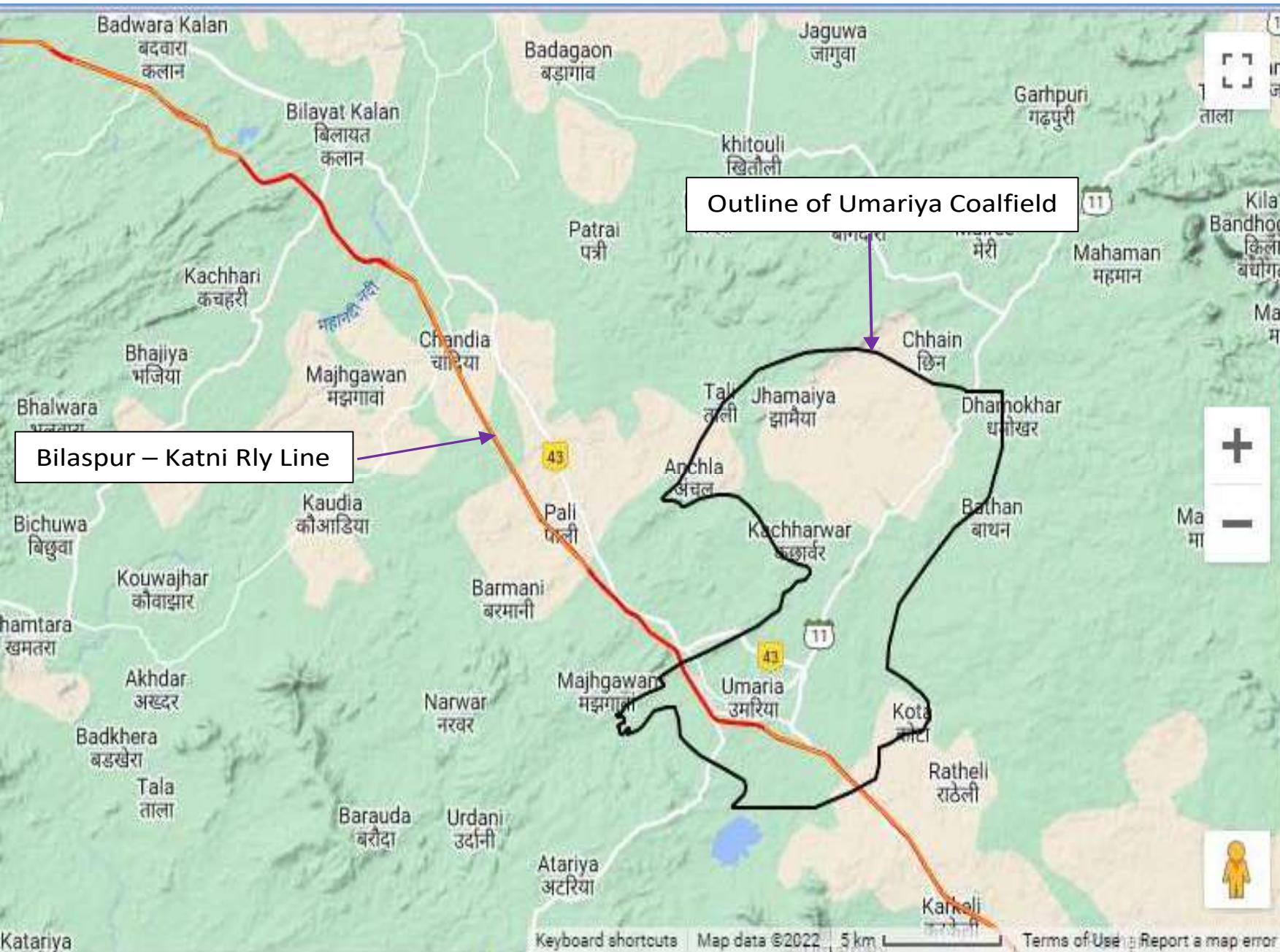
Red Line = Proposed



Bilaspur – Katni Rly Line

Outline of Johilla Coalfield

Johilla	
FID	0
Coalfiled	Joh
Area	359
*Area in (Sq Km),Reserve	
NOTE:	
PROD IN 21-22 = 1.	
RAIL DESP IN 21-22	
PROJ PROD IN 25-2	
MT	
PROJ RAIL DESP IN	
=2 MT	
Orange line = Existi	
line	
Red Line = Propose	
line	



Umariya-Korar

FID 0

Coalfiled Umariya

Area 145

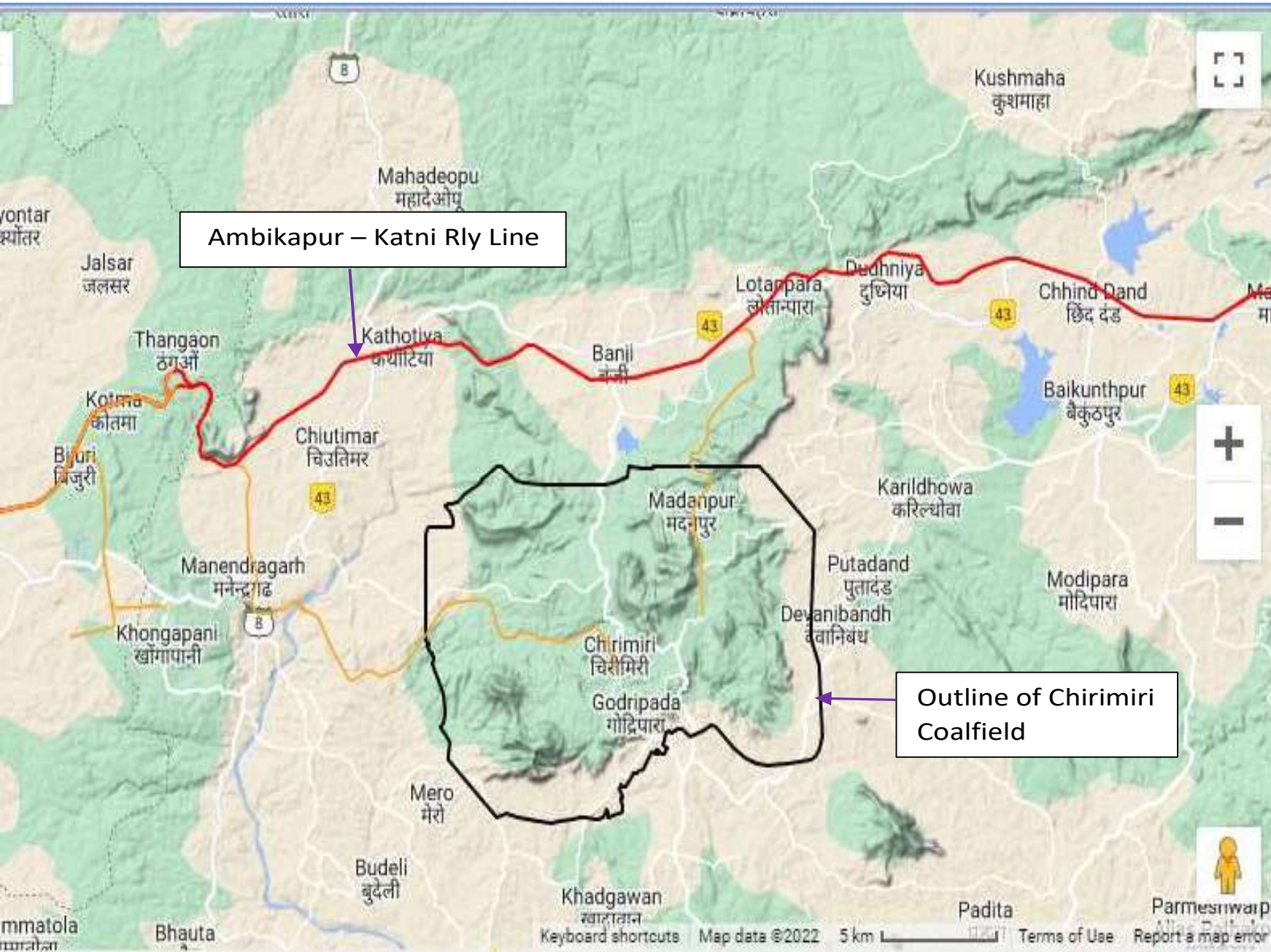
*Area in (Sq Km),Reser

NOTE:

PRODUCTION & RA
DESPATCH (21-22)
PROJECTED PRODU
PROJECTED RAIL DI
(25-26) OF UMARIY
HAVE BEEN SHOWI
JOHILLA CF.

Orange Line = Exist
line.

Red Line = Propose
line.



Chirimiri

FID 0

Coalfiled Chirimiri

Area 180

*Area in (Sq Km), Reserve

NOTE:

PROD IN 21-22 = 2.4

RAIL DESP IN 21-22

PROJ PROD IN 25-26

MT

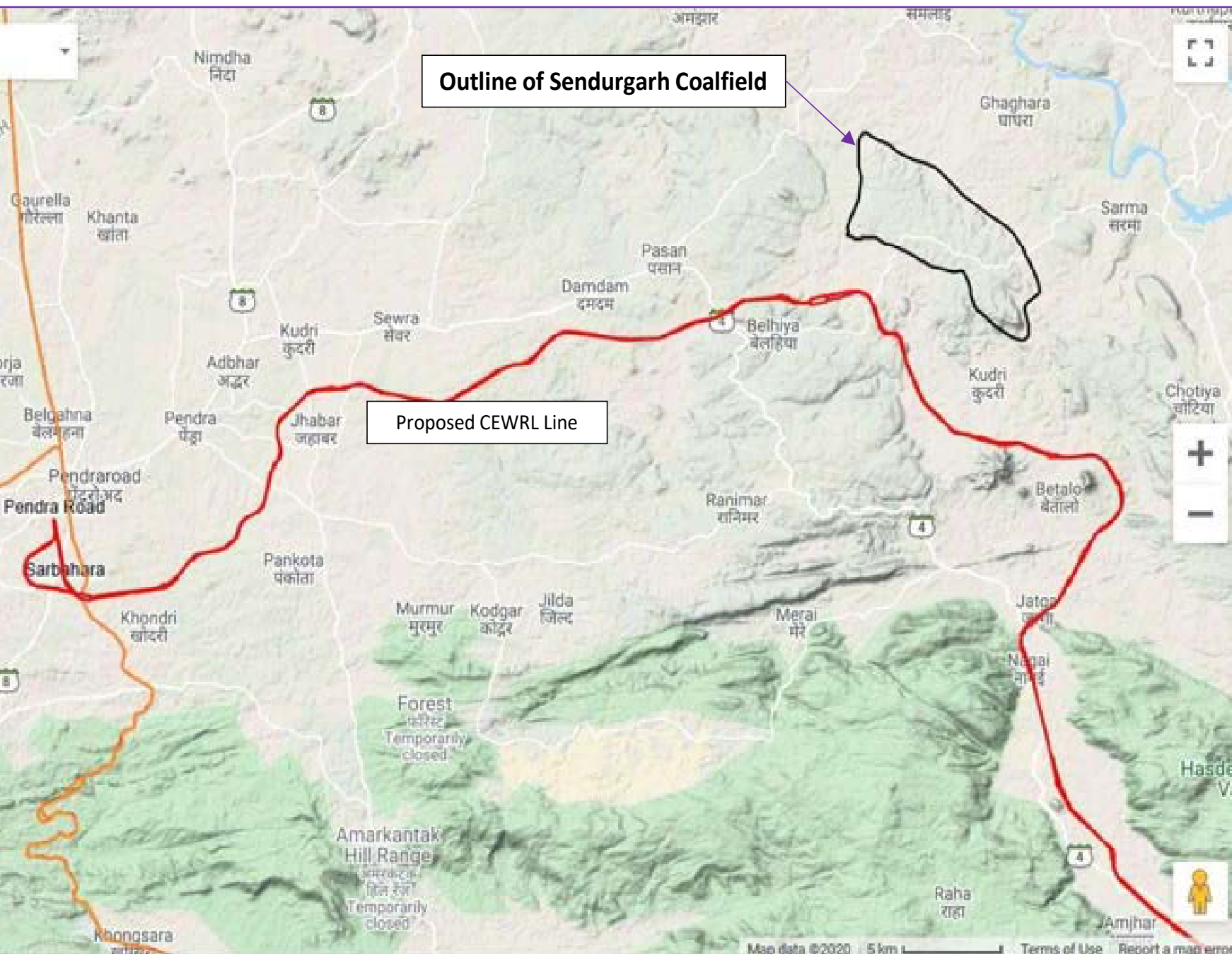
PROJ RAIL DESP IN 25-26

MT

Orange Line = Existing

line

Red Line = Proposed



Outline of Sendurgarh Coalfield

Proposed CEWRL Line

SENDURGARH	
FID	0
CF_NAME	SENDU
AREA	41.03

*Area in (Sq Km)

NOTE:

PRODUCTION & RAIL D
(21-22) AND PROJECTED
PRODUCTION & PROJEC
DESPATCH (25-26) OF
SENDURGARH COALFIE
BEEN SHOWN IN CHIRIM
COALFIELD.

Orange Line = Existing F
Red Line = Proposed Rly