





## Government of India Ministry of Commerce & Industry



# **LEADS 2022**

Logistics Ease Across Different States





#### पीयूष गोयल PIYUSH GOYAL



वाणिज्य एवं उद्योग, उपमोक्ता मामले, खाद्य और सार्वजनिक वितरण तथा वस्त्र मंत्री, भारत सरकार MINISTER OF COMMERCE & INDUSTRY, CONSUMER AFFAIRS, FOOD & PUBLIC DISTRIBUTION AND TEXTILES, GOVERNMENT OF INDIA





**FOREWORD** 

India's strengthened position in the global economic & geopolitical scenario, presents an excellent opportunity for the nation to play a pivotal role in working towards redesigning the global supply chains. The Government led by Prime Minister Narendra Modi is determined to ease the supply chain bottlenecks and expedite the development of an integrated logistics ecosystem.

The PM GatiShakti National Master Plan launched last year will enable fast tracking development of large-scale infrastructure. The recently launched National Logistics Policy (NLP) builds the pathway for developing a resilient, inclusive and sustainable logistics ecosystem in the country. The Unified Logistics Interface Platform, a key pillar of NLP, is poised to potentially enhance visibility for logistics stakeholders and adopt digitization at a much larger scale.

With a premise that strong states make a strong nation, Logistics Ease Across Different States (LEADS) is a successful example for strengthening cooperative federalism in India. LEADS has now become a robust and reliable indicator of results of various initiatives for improving the logistics ecosystem across the country. LEADS 2021 gave several important points to the States/UTs on how to foster improvement in the logistics sector. The current LEADS 2022 provides an update on the progress achieved by the states and fosters a spirit of competitive federalism between them.

I strongly believe that the LEADS 2022 report will help all the logistics stakeholders in conceptualising, planning and implementing new initiatives in their respective domains. I urge the logistics fraternity to cohesively work towards becoming a developed nation in the *Amrit Kaal* for fulfilling the aspirations of every Indian.

Piyush Goyal





राज्य मंत्री वाणिज्य एवं उद्योग मंत्रालय भारत सरकार Minister of State Commerce & Industry Government of India

India achieved all-time high annual merchandise exports of USD 417.81 billion in FY 2021-22 clocking an increase of 43.18% over USD 291.81 billion in FY2020-21. Inching closer to the position among the top 3 largest trading partners would require improving India's logistics sector with the added support of robust and well-integrated logistics policies.

By introduction of National Logistics Policy 2022, the Government of India (GOI) has laid down a comprehensive policy framework for the development of India's US\$200 billion logistics sector. The policy provides for seamless integration of multiple modes of transportation by leveraging technology, processes and skilled manpower, which are key to India's ambitions to become a US\$5 trillion economy by 2025.

With the launch of PM Gati Shakti - National Master Plan for Multi-modal Connectivity, the Government will be able to mitigate the challenges that arise because of lack of coordination between different departments. This digital platform will integrate all the major Ministries including Roadways, Railways, Ports & Waterways, etc. for planning and implementation of high-level projects.

Logistics Ease Across Different States (LEADS) as an initiative of GOI, has been instrumental in identifying challenges faced by the stakeholders and the key areas of improvement. It will further provide a way-forward to States and UTs for enhancing their logistics efficiency. Galvanised by the efforts of LEADS 2021, 13 States/UTs have prepared and notified their logistics policies whereas other States/UTs are under the process of preparing their policies. LEADS has facilitated continuous dialogue between Central and State Governments equipping States/UTs to define and formulate institutional mechanism for coordination with different stakeholders.





(SOM PARKASH)

#startupindia

#### अनुप्रिया पटेल ANUPRIYA PATEL



#### वाणिज्य एवं उद्योग राज्य मंत्री भारत सरकार

Minister of State for Commerce & Industry
Government of India



#### **FOREWORD**

As India endeavours to become *Atmanirbhar*, there is an inherent need to develop a robust, well-integrated, and efficient logistics ecosystem. Logistics is not only a critical determinant of trade within the country but, also a determinant of India's overall trade competitiveness and has consistently been recognized as a key enabler in fulfilling growth aspirations across all sectors of the economy.

With this backdrop, the time is now opportune to continue the development of more enabling regulation & operating environment, infrastructure and services for the overall growth of the Logistics sector. Recognizing the importance of logistics and the need to reduce logistics costs, a flurry of structural reforms has been introduced in India to enhance and propel the efficiency of the sector manifold.

Last year on 13th October 2021, the Hon'ble Prime Minister launched PM Gati Shakti NMP to provide an integrated platform that depicts all the economic zones and their multimodal connectivity infrastructure. This will be necessary to boost regional and overall development as it shall offer a bird's eye view of infrastructure development with completion timelines. By depicting the economic zones and the infrastructure linkages required to support them, holistic integration of all the multimodal connectivity projects and removing missing gaps for the seamless movement of people, goods & services can be achieved. As India pushes the case of more enhanced logistics operations, the Indian logistics industry is also looking forward to being sustainable, carbon-neutral and climate neutral in the long run. Alternative fuels such as biodiesel, ethanol, electricity, methanol, hydrogen etc. are being explored and adopted by the industry.

The "Logistics Ease Across Different States – LEADS" report has now become a milestone which helps the States and UTs to gauge the performance of their logistics ecosystem. It acts as a litmus test for the State governments to determine the actual impact of recent programmes and policies for promoting logistics vis-à-vis the perception feedback received from the stakeholders.

I am positive that the LEADS 2022 report will give a directional headway to the States and UTs for consolidating their efforts in the development of the logistics sector in a bid to fare better in the coming years.

(ANUPRIYA PATEL)

11<sup>th</sup> October 2022 New Delhi. अनुराग जैन, भा.प्र.से. सचिव ANURAG JAIN, I.A.S. Secretary



भारत सरकार उद्योग संवर्धन और आंतरिक व्यापार विभाग वाणिज्य एवं उद्योग मंत्रालय GOVERNMENT OF INDIA DEPTT. FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE MINISTRY OF COMMERCE & INDUSTRY

#### Foreword

India has achieved a major milestone of becoming the 5th largest economy in the world and is constantly improving the competitiveness of Indian goods and services, the crucial enabler for bolstering India's economy and for achieving our target of crossing \$2 trillion exports by 2030.

Incentivizing manufacturing sector to achieve size and scale, improving India's logistics ecosystem and reducing logistics cost across supply chain is central to enhance India's competitiveness. This will not only help to achieve vision of a \$ 5 trillion economy but also will give a thrust to achieve the goal of "Atma Nirbhar Bharat.".

Department for Promotion of Industry and Internal Trade (DPIIT) has undertaken many important steps for improving the logistics ecosystem. PM GatiShakti National Master Plan (NMP) has progressed in fast-track mode and is addressing infrastructure and procedural gaps, identification of interventions for improving linkages with global value chains and development of Green Channels for EXIM trade. Network mapping of transport and logistics infrastructure on PM GatiShakti-NMP platform is enabling Central and State Governments to identify and fill infrastructural gaps and achieve last mile multimodal connectivity in a comprehensive manner. To complement PM-Gati Shakti-NMP, National Logistics Policy (NLP), 2022 was recently launched by Hon'ble Prime Minister. The NLP envisions providing an overarching interdisciplinary, cross-sectoral and multi-jurisdictional framework for the development of the logistics ecosystem in the country.

To help full benefit of NLP and PM GatiShakti-NMP's ambitious framework, it is essential for the Central and State Governments to collaborate on multiple fronts. In many ways, while the Centre broadly acts as the facilitator, the States have a significant role in implementation. LEADS (Logistics Ease Across Different State), a joint effort of the DPIIT, State Governments and logistics stakeholders has helped in enabling a continuous dialogue between the Central and State Governments to address complex issues faced by logistics sector in respective States/UTs.

LEADS 2022 survey identifies issues and bottlenecks which need immediate action and can help synergize supply chain. Like previous editions, LEADS 2022 report aims to identify areas of improvement and provides a way-forward to States and UTs for enhancing their logistics efficiency.

I sincerely hope that this feedback coupled with the PM-Gati Shakti-NMP framework will be used by all stakeholders to plan and implement projects to transform India's logistic ecosystem.

(Anurag Jain) 11th October 2022





भारत सरकार वाणिज्य एवं उद्योग मंत्रालय उद्योग संवर्धन एवं आंतरिक व्यापार विभाग वाणिज्य भवन, अकबर रोड, नई दिल्ली–110 001

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE & INDUSTRY
DEPARTMENT FOR PROMOTION OF
INDUSTRY AND INTERNAL TRADE
Vanijya Bhawan, Akbar Road, New Delhi-110 001
http://dpiit.gov.in



07th October, 2022

#### **FOREWORD**

Efficient logistics is the bed rock for a growing economy. Movement of goods across the country and beyond its borders has created opportunities for millions of Indians. At the macroeconomic level, logistics costs are regarded as one of the main factors influencing competitiveness, policy effectiveness, infrastructure development and other investments.

Multiple initiatives by Government of India are targeted to develop an integrated and tech enabled logistics ecosystem for bridging the efficiency gap and reducing India's logistics cost. The PM GatiShakti National Master Plan endeavours a holistic transformation of infrastructure .The recently launched National Logistics Policy (NLP) is poised to bring global standards to Warehousing, multimodal digital integration, ease of logistics services, Human Resources and skill enhancement and Logistics as priority focus by central ministries and at states level.

Globally, Ease of Doing Business (EoDB) and Logistics Performance Index (LPI) are key metrices relied on by companies and businesses in choosing a country for capital investment. State level indices are the next level enablers in helping investors choose an appropriate location for their investments within a particular country.

The first (2018), second (2019) and third (2021) editions of the Logistics Ease Across Different States (LEADS) reports have been a milestone in analysing the logistics sector across different states of India. LEADS 2022 is a joint effort of Department of Promotion of Industry and Internal Trade (DPIIT), State governments and other stakeholders. Carrying forward from the earlier editions of LEADS, the current edition will further help state governments realise their strengths, weaknesses, opportunities, and threats in the logistics domain.

LEADS has already introduced healthy competition amongst states in a constructive way. This has resulted in a lot of action in respect of integrated development of logistics sector by the States and UTs. In addition to the preparation of State logistics policies, constitution of state level institutional mechanism, preparation of state logistics master plans and city level logistics plans are also getting initiated.

LEADS 2022 survey takes into account PM GatiShakti National Master Plan launched by Government of India as well as the current developments in the logistics sector in the wake of the CoVID19 pandemic. It brings together a cohesive framework taking inspiration from previous exercise to gauge the effectiveness of States/UTs in enabling and supporting the logistics sector.

LEADS 2022 is led by learnings and lessons taken from the previous years' exercises. The survey instrument has been redesigned and made more robust based on the respondent's experience with the previous editions. I would like to extend my gratitude to the Logistics fraternity and all the State Governments for their commitment in active participation in LEADS 2022 Perception and Objective Surveys.

I am sure the LEADS report 2022 will be helpful in bringing healthy competitive spirit among stakeholders which ultimately will help in realising vision of efficient logistics ecosystem.

(Amrit Lal Meena)

Special Secretary (Logistics)





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

#### Foreword

The Logistics Division under the Ministry of Commerce and Industry (MOCI) is focused on playing a pivotal role in coordination with the Central Ministries and States/UTs for streamlining policy, procedures, identification of bottlenecks and gaps and introduction of technology between the States/UTs and the Centre for integrated development of the logistics sector in the country.

Key initiatives such as the National Logistics Policy with its Comprehensive Logistics Action Plan are conceptualized to provide an integrated platform that can be effectively utilized by the stakeholders to enhance efficiency, utilize technology, and reduce the cost of logistics in India. To date, 13 States have formulated State Logistics Policies and the remaining 23 States/UTs have been directed to expedite their formulation for improving logistics sector efficiency and time-bound development of the sector.

To launch launched an annual study in 2018 called "Logistics Ease Across Different States (LEADS)" for informed policymaking, planning for improving logistics performance, enabling constructive competition among States to support and facilitate logistics in their respective jurisdiction by promoting policies initiatives and regulatory interventions.

A total of 34 States/ UTs actively participated in LEADS 2022 exercise through the Objective survey (which was disseminated physically and virtually) wherein States/ UTs are asked questions about the current logistics environment and the status of upcoming initiatives towards logistics. LEADS 2022 witnessed the highest-ever participation from the private sector through a perception survey (which was disseminated physically and virtually).

LEADS 2022 comprises the various initiatives by the GOI which can be the focal points for the States in chalking out their policy and strategy their planning and strategy for an improvised logistics system. The report also enumerates the key gaps in the logistics ecosystem which are reducing efficiency the efficacy. The initiatives undertaken by States/UTs are taken into account in preparing the report and they are an integral part of ranking parameters.

The aim of the annual LEADS exercise continues to examine the health of the logistics ecosystem in the country through discussion with all concerned stakeholders.

(Surendra Kumar Ahirwar)





Efficient logistics is the bed rock for a fast-growing economy like India. Movement of goods across the country and beyond its borders has created opportunities for millions of Indians. At the macroeconomic level, logistics is regarded as one of the main factors influencing competitiveness, policy effectiveness, infrastructure development and other investments. Improvement in logistics ecosystem has become a cornerstone for achieving Government's vision of a \$5 trillion economy including push towards achieving Atmanirbhar Bharat and becoming a manufacturing hub for the world.

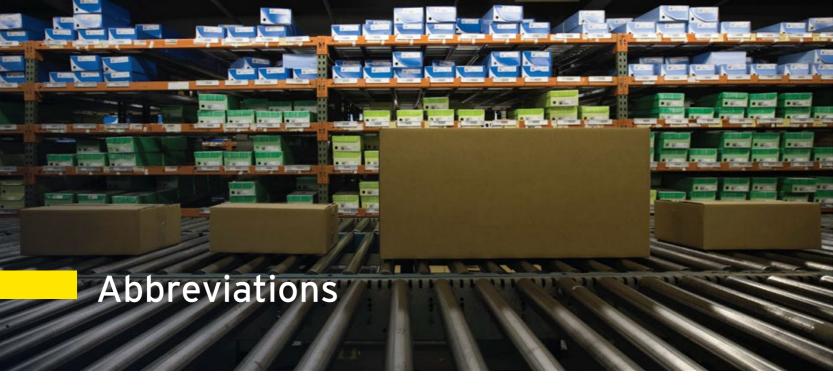
Government of India has prioritised development of a robust, cost-efficient, and high-quality logistics ecosystem with is a judicious blend of technology, regulation, standardisation, and highly skilled human resource. A comprehensive exercise of mapping all existing/planned infrastructure initiatives of various Ministries and State Governments has been initiated under pioneering initiative of PM GatiShakti National Master Plan (PMGS-NMP). The National Logistics Policy (NLP) provides an overarching cross functional, cross jurisdictional and interdisciplinary framework for improving logistics ecosystem in the country.

LEADS survey is one of the many initiatives taken by Government of India to collaboratively improve the logistics ecosystem in the country in partnership with States/UT. LEADS is an indigenous data driven index which practically measures performance of States/UTs on Logistics. It focuses on providing a common platform for a consultative and collaborative framework for Central and State Governments to work in a coordinated manner in logistic sector.

EY is pleased to have supported Logistics Division, Ministry of Commerce and Industry (MOCI), Government of India with preparation of the LEADS 2022 report. I would like to thank Shri Anurag Jain - IAS, Commerce Secretary; Shri Amrit Lal Meena - IAS, Special Secretary - Logistics Division, Ministry of Commerce and Industry; Dr. Surendra Ahirwar - IRTS, Logistics Division, Ministry of Commerce and Industry; and Shri Shlok Bhardwaj - IES, Deputy Director General - Logistics Division, Ministry of Commerce and Industry; for their continuous support throughout the LEADS exercise and guidance.

Finally, I would like to acknowledge the support provided by all the States / UTs and various stakeholders of the logistics industry who participated in the LEADS 2022 survey. Their inputs accompanied by the willingness to improve the logistics ecosystem in the country has been a source of constant encouragement and motivation.

Mihir G. Shah Partner, Ernst & Young LLP



Abbreviations	Full form
Abbreviations	Full form
LEADS	Logistics Ease Across Different States
UT	Union Territory
EY	Ernst & Young
MOCI	Ministry of Commerce & Industry
IAS	Indian Administrative Services
IRTS	Indian Railway Traffic Service
IES	Indian Engineering Services
РМ	Pradhan Mantri Gati Shakti National Master Plan
PMGS-NMP	Pradhan Mantri
NLP	National Logistics Policy
LLP	Limited Liability Partnership
US	United States
PLI	Production Linked Incentive Scheme
GOI	Government of India
DPIIT	Department for Promotion of Industry and Internal Trade
ADB	Asian Development Bank
GDP	Gross Domestic Product
USA	United States of America
EU	European Union
WEO	World Economic Outlook
UK	United Kingdom
JNPT	Jawahar Lal Nehru Port Trust
WTO	World Trade Organization
PPP	Public Private Partnership
EXIM	Export and Import
CLAP	Comprehensive Logistics Action Plan
ULIP	Unified Logistics Integrated Platform
SEM	Structural equation modeling
CFA	Confirmatory Factor Analysis

Abbreviations	Full form			
ICD	Inland Container Depot			
CFS	Container Freight Station			
MMLP	Multi Modal Logistics Park			
LCS	Land Customs Station			
LCP	Land Customs Port			
RTO	Regional Transport Office			
GPS	Global Positioning System			
SIM	Subsriber Indentity Module			
CLU	City Logistics Unit			
NOC	No Objection Certificate			
IMC	Inter-Ministerial Committee			
FOIS	Freight Operations Information System			
MoCA	Ministry of Civil Aviation			
MoCAF&PD	Ministry of Consumer Affairs, Food and Public Distribution			
WDRA	Warehousing Development and Regulatory Authority			
MoSDE	Ministry of Skill Development and Entrepreneurship			
MoSDE	Ministry of Skill Development and Entrepreneurship			
DPIIT	Department for Promotion of Industry and Internal Trade			
MT	Million Tonnes			
TIES	Trade Infrastructure for Export Scheme			
GSVA	Gross State Value Added			
MOSPI	Ministry of Statistics and Programme Implementation			
FRI	Forest Research Institute			
CAPEX	Capital Expenditure			
PFT	Private Freight Terminal			
TSP	Transport Service Providers			

Abbreviations	Full form
	Terminal Infrastrcuture Service
TISP	Providers
AFS	Air Freight Station
PMGS	PM GatiShakti
BISAG-N	Bhaskaracharya Institute for Space Applications and Geoinformatics
NER	North Eastern Region
RMSEA	Root Mean Standard rror of Approximation
CFI	Conformatory Fix Index
NH	National Highway
NHAI	National Highway Authority of India
SH	State Highways
CBIC	Central Board of Indirect Taxes and Customs
MTPA	Million Tonnes Per Annum
CCTV	Closed-Circuit TeleVision
PTZ	Pan, Tilt & Zoom
ASPRTC	Andhra Pradesh State Road Transport Corporation
IDTR	Institute of Driver Training and Research
NIC	National Informatics Centre
ODC	Over Dimensioned Cargo
EGoS	Empowered Group of Secretaries
NPG	Network Pkanning Group
TSU	Technical Support Unit
PGA	Participatory Government Agency
PCS	Port Community System
AAI	Airports Authority of India
IWT	Inland Waterway Terminal
AFCONS	Asia Foundations and Construction Limited.
GMB	Gujarat Maritime Board
СОТ	Commissioner of Transport
GPCB	Gujarat Pollution Control Board
XGN	Xtended Green Node
CCTV	Closed-Circuit TeleVision
VISWAS	Village based Initiative to Synergise Health, Water And Sanitation.
GSDM	Gujarat Skill Development Mission
NSDC	National Skill Development Corporation
PMKVY	Pradhan Mantri Kaushal Vikas Yojna
FY	Financial Year
MBKVY	Mukhyamantri Bhavishyalakshi Kaushalya Vikas Yojana
NMPA	New Mangalore Port Authority
ANPR	Automatic Number Plate Recognition
MoSPW	Ministry of Port Shipping & Waterways
NCTF	National Committee on Trade Facilitation

Abbreviations	Full form
CI	Confidence Interval
MIDC	Maharashtra Industrial Development Corporation
МРСВ	Maharashtra Pollution Control Board
INR	Indian National Rupee
RFID	Radio Frequency Identification
MSME	Micro, Small and Medium Enterprises
SLSWCA	State Level Single Window Clearance Authority
DLSWCA	District Level Single Window Clearance Authority
SPMG	State Project Monitoring Group
SIPCOT	State Industries Promotion Corporation of Tamil Nadu Ltd
TIDCO	Tamil Nadu Industrial Development Corporation
SIDCO	Small Industries Development Corporation
CRZ	Coastal Regulation Zone
DPR	Detailed Project Report
CRIDP	Crescent Resources Incentive Deferral Plan
IEF	Information Engineering Facility
NABARD	National Bank for Agriculture and RuralDevelopment
FPO	Farm Produce Organization
TNIAMP	Tamil Nadu Irrigated Agriculture Modernization Project
TNRDC	Tamil Nadu Road Development Company
TNRSP	Tamil Nadu Road Sector Project
CII	Confederation of Indian Industry
CMRL	Chennai Metro Rail Limited
TNEB	Tamil Nadu Electricity Board
CGTA	Calcutta Goods Transport Association
AIS	All India Services
RTA	Road Transport Authority
PAB	Project Approval Board
MoR	Ministry of Railway
BBN	Baddi Barota Nalagarh
SEZ	Special Economic Zone
MPLWC	Madhya Pradesh Warehousing & Logistics Corporation
FICCI	Federation of Indian Chambers of Commerce and Industry
СМ	Chief Minister
MOU	Memorandum of Understanding
NIDC	Nagaland Industrial Development Corporation Limited
MoRTH	Ministry of Road Transport and Highways

Abbreviations	Full form
SLC	State Logistics Cell
SLCC	State Logistics Coordination Committee
CLC	City Logistics Committee
AQ	Animal Quarantine
PQ	Plant Quarantine
ICP	Integrated Check Post
ACC	Air Cargo Complex
IBDP	Industrial and Business Development Policy
PBGRAM	
EV	Electric Vehicle
TSRTC	Telangana State Road Transport Corporation
FSSAI	Food Safety and Standards Authority of India
PWD	Public Works Department
AQCS	Animal Quarantine and Certification Services
ATMS	Advanced Traffic Management Systems
UPSIDA	Uttar Pradesh State Industrial Development Authority
IIT	Indian Institute of Technology
NICDC	National Industrial Corridor Development Corporation Limited
СНА	Customs House Agent
UPEIDA	Uttar Pradesh Expressways Industrial Development Authority
NIAIMT	National Institute For Automotive Inspection Maintenance & Training
MTI	Driver Training Institute
DTI	Mechanics Training Institute
IMS	Inspection Maintenance Station
NW	National Waterway
ROB	Road Over Bridge
RUB	Road Under Bridge
SFPO	Sub Foreign Post Office
SMP	State Master Plan
MDR	Major District Road
MSDE	Ministry of Skill Development and Entrepreneurship
GST	Goods and Services Tax
CLU	City Logistics Unit
NVOCC	Non Vessel Opertaing Common Carrier
GSTN	Goods and Service Tax Network



# Contents hain loading

## ogistics

2. 3.	<ol> <li>Changing landscape of logistics</li></ol>					
4.						
	Coastal	Landlocked	North-Eastern Region	Union Territories		
	Andhra Pradesh	Bihar	Arunachal Pradesh	Andaman & Nicobar		
	Goa	Chattisgarh	Assam	Chandigarh		
	Gujarat	Haryana	Manipur	Daman & Diu and Dadra &		
	Karnataka	Himachal Pradesh	Meghalaya	Nagar Haveli		
	Kerala	Jharkhand	Mizoram	Delhi		
	Maharashtra	Madhya Pradesh	Nagaland	Jammu & Kashmir		
	Odisha	Punjab	Sikkim	Ladakh		
	Tamil Nadu	Rajasthan	Tripura	Lakshadweep		
	West Bengal	Telangana		Puducherry		
		Uttar Pradesh				
		Uttarakhand				
5.	Way forward and Cor	nclusion		183		



India envisions a US\$ 2 trillion export figure by 2030., As a result the Government has been taking a number of initiatives to spur export trade, support domestic consumption and bring in logistics efficiencies. Make in India, Production Linked Incentive Schemes (PLI), increased Government spending on capex, flagship programs such as PM GatiShakti and launch of National Logistics Policy are few a reforms tools to mould the vision. Given the high Logistics cost in India competition in Global markets becomes extremely challenging and thus more scientific approach has been adopted by the Government of India (GOI) to create a Cost Effective, Data Driven and Technically Robust Logistics Ecosystem across the country.

PM GatiShakti and recently launched National Logistics Policy in particular along with many other initiatives such as Unified Logistics Interface Platform (ULIP), E-LogS - Dashboard for Ease of Logistics Services, Standards for Warehousing and physical assets and Training Courses on IGoT Platform are aimed at holistically developing Logistics Ecosystem. Given the federal system of our country, States & UTs are the most important Partners and have a critical role as enablers and work in tandem alongside the Central Government for implementation of these initiatives.

Monitoring / audit of various sectors, identifying impediments and recommending course correction to streamline processes is thus a reliable mechanism to bring in efficiencies., Thereby since 2018, the Logistics Division, DPIIT, Ministry of Commerce & Industry, has undertaken

an annual "Logistics Ease Across Different States (LEADS)" survey in all States/ UTs to assess logistics ecosystem in the country at State/UT level. It's a combination of perception and objective data to arrive at a grading system for States/UTs using a statistical model. It further, assesses viewpoints of various users and stakeholders in the value chain (through perception survey) to identify bottlenecks, and suggest appropriate measures to rectify the same. LEADS acts a feedback mechanism for the administrative ecosystem to take a coordinated approach to develop cost effective and efficient logistics system.

LEADS 2022 survey garnered meticulous insights through a much wider reach and deeper penetration into key markets across State/UTs. A total of 6,583 responses were received from 2,140 respondents through 600+ meetings facilitated through 20+ National and 75+ regional associations. LEADS 2022 continues to focus on indicators introduced across 3 established pillars -Infrastructure, Services and Operating & Regulatory Environment. These pillars are further divided into 19 indicators. Corroborative evidence collected through stakeholder discussion along with inputs from the States and UTs through an evidence-based objective survey to map their initiatives forms core of the study. LEADS 2022 also considers the facilitation provided by State/UTs in logistics sector through various policy initiatives, interventions and actions taken by the states on the suggestions made under LEADS 2021.



Previously, States/UTs were ranked based on their logistics ecosystem. However, it was felt that the phenomenal work which has been done in the last one year by States towards logistics ecosystem improvement cannot be properly appreciated through a ranking framework. The scores and resultant ranks of States/UTs have in all previous occasions been arrived at using different sample sizes and intra-category compositions, varying weights applied to the broader Indicator categories (Infrastructure, Services and Regulation) as also to stakeholder groups. All these issues, mostly uncontrollable because of a constantly shifting stakeholder profile and a very strong 'recency bias', make differentiation in perceptions of logistics competence among States/UTs very unclear and indistinct.

Adapting the evaluation framework of the recently released Business Reforms Action Plan 1, in LEADS 2022 there is a shift from one uniform ranking. All the States / UTs in their respective clusters (based on geographical profile), are grouped into three grades based on the percentage score ranges. A percentage score

indicates how well a State or UT has performed in comparison to the Top State/UT within the specific cluster. The States/UTs with similar percentage score range have been graded in a common group.

LEADS 2022 categorizes States based on their geographic demographics into 4 categories of Landlocked, coastal, north-eastern regions and Union Territories. For grading each of these categories in into three categories. The "Achievers" are States which have shown exemplary logistics ecosystems with exceptional infrastructure and transparent regulatory processes. The "Fast Movers" are States who are moving towards becoming Achievers by notifying progressive policy and legislatives initiatives along with new infrastructure projects. Finally, we have the "Aspirers" - States which have initiated their journey towards logistics ease and excellence by adopting national best practices to further improve their contribution towards India's emerging position as a global manufacturing and logistics hub.

Results of the exercise are as shown in the exhibit-1 below:

Exhibit 1: Result of LEADS 2022

Categories	Achievers	Fast movers	Aspirers
Landlocked states	Haryana, Himachal Pradesh, Punjab, Telangana, Uttar Pradesh, Uttarakhand,	Madhya Pradesh, Rajasthan	Bihar, Chhattisgarh, Jharkhand
Coastal states	Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Odisha, Tamil Nadu	Kerala	Goa, West Bengal
North-Eastern Region	Assam	Sikkim, Tripura	Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland
UTs	Chandigarh, Delhi	Puducherry	Andaman & Nicobar, Daman Diu & Dadara and Nagar Haveli, Jammu & Kashmir, Ladakh, Lakshadweep

<sup>&</sup>lt;sup>1</sup> <u>Business Reforms Action Plan (dpiit.gov.in)</u> accessed at <u>Business Reforms Action Plan (dpiit.gov.in)</u>





### 1. Changing landscape of logistics

Global Supply Chains have been through rough weather in the Covid19 era and recovery from the pandemic has not been a smooth ride either. World economies will continue to brace for economic and geopolitical headwinds ahead. Moreover, there have been some important global developments in the recent past that are also not encouraging from macroeconomic perspective. Declining populations in large number of countries have impacted demographic patterns, random bailouts for the Covid-affected have indiscriminately encouraged inefficient enterprise, de-globalisation as basis of policymaking in many countries has made trade and industry suffer, and reliance on excessive debt-financing has now come to bite over-indulgent economies. Apart from these trends, the war in Europe, galloping inflationary trends in most economies, and the unprecedented energy crisis in Europe are the current woes of the world. Central Banks, the world over, have turned aggressive policy hawks in trying to control unprecedented inflationary trends, even declaring that growth will have to be sacrificed so that aggregate demand reduces in the economy.

While the global merchandise trade continues to be in the post-pandemic- recovery phase, the pace of recovery is projected to reduce in 2022 compared to 2021, extent of which for now seems difficult to assess.

The trade had seen a reduction of 5% in 2020, owing to pandemic-induced shock. The same increased significantly during post-pandemic recovery (10% in 2021). Hit by the Russia- Ukraine crisis and its impact on the supply of key commodities and global trade relations, the trade growth is estimated to be 3% for 2022 and 2023.

Further, as per World Economic Outlook (WEO)
July 2022 update, global growth is expected to
slow down owing to global inflation and the
recessionary monetary policies being aggressively
pursued by the developed economies. (Exhibit-2)

Further, as per World Economic Outlook (WEO) July 2022 update, global growth is expected to slow down owing to global inflation and the recessionary monetary policies being aggressively pursued by the developed economies These world events, both in terms of policy initiatives and resultant outcomes, could not have left the Indian economy untouched. But most economists and analysts accept that India has emerged from this global crisis as one of the more mature and stable economies, both in its policymaking, its post-pandemic recovery and the more recent well-calibrated response to the geopolitical crisis and the recessionary trends in the developed economies of the world.

The Asian Development Bank (ADB), in its September 2022 Asian Development Outlook Update, has projected India's growth at 7% for FY23, increasing to 7.2% in FY24. The World Bank has just recently revised India's growth projection for the year from 7% to 6.5%. Growth for Developing Asian economies has been forecasted at 4.3% in 2022 and 4.9% in 2023 while for China, the corresponding projections stand at 3.3% and 4.5% respectively. The ADB observed that in more than three decades, this has been the first time that the rest of Asia is expected to grow faster than China.

In the wake of ongoing geopolitical developments, key structural changes are happening in terms of international trade and capital flows. These call for major adjustments in relation to sourcing and composition of imports as well as destination and composition of exports, supplemented by substantive policy support. The Indian economy continues to exhibit vulnerability on account of enhanced inflation levels, reduced GDP growth rate, increasing current account deficit, reduced dollar reserves, and expectations of a higher fiscal deficit, mainly on account of geo-political disruptions, the oil price increase and the imminent recessionary conditions in the USA and EU. Still, India's economic recovery compares well with most large economies of the world. India's growth rate, despite an expected marginal decline, is projected to be significantly higher than other economies including the developed western world and China.

International Trade forms the backbone of the world's economies, spurring investment, job creation, economic growth, and raising standards of living. As Supply chains across the globe inevitably inch towards normalcy, India is



expected to take advantage of the increasing trading activity. India's real GDP has well exceeded \$3 trillion and has overtaken UK as the fifth largest economy recently. Emphasis on Government of India (GOI) policy initiatives, such as Make in India, Aatmnirbhar Bharat etc. has made domestic industry grow and fulfil domestic demand, and this will naturally expand into higher export potential. Further, the GOI initiative on the Productivity-Linked (PLI) schemes for select industries, has been well-patronised and is already showing gains by way of enhanced manufacturing which when scaled higher is likely to become much more efficient. Government of India is also increasing the size of Government expenditure relative to GDP and prioritizing public expenditure on education, health and physical infrastructure to sustain economic growth for scaling new heights of becoming a \$5 trillion economy coupled with crossing \$2 trillion exports in the next few years. In sum, India appears geared to counter global headwinds and to be well on road to recovery. India's own focused initiatives are likely to receive a boost from the recovery of the world trade and logistics environment. This recovery though, has again received a setback from the current ongoing war in Europe and the growing fears of recession in the world economies.

After more than two years of crippling delays, due to Covid 19 leading to high congestion across major ports, shippers are finally witnessing significant improvement in both transit times and in port detentions of vessels and containers. Having suffered from the steep rise in maritime freight prices during the pandemic period, the

industry is now on its path to normalization as rates have slowly crept lower in the last few months. This is thanks to the widespread improvement in asset-utilisation across major ports and a consequent decrease in congestion. Average contract rates of major container carriers for westbound bookings from India to Europe have dropped by double digits during the current month from the levels reported in June'22. The cost of shipping a 20ft container from Nhava Sheva/JNPT or Mundra ports to London Gateway is now \$4,200, which is 43% less than \$6,009 a couple of months ago. For a 40ft box, rates are down to \$5,200, from \$7,141 - a decrease of almost 37%.

India's commodity imports and exports are constantly increasing in value terms since Q1 of 2022. Exports registered a growth of 25% till Q4 over Q1, whereas for the same period the import bills increased by 38%, negatively impacting the trade balance.

However, the pace of growth of import bills is expected to slow down given the expected decrease in prices of key import commodities, mainly oil. But the gradual end of post pandemic supply crunch is bracing for headwinds of softer demand and tightening market conditions as a result of ongoing inflationary pressures in major global economies and increasing geopolitical tensions. Global trade is being increasingly disrupted due to tariff tensions, political unpredictability, protectionist policies and regulatory uncertainty challenge established business models and trade relationships.

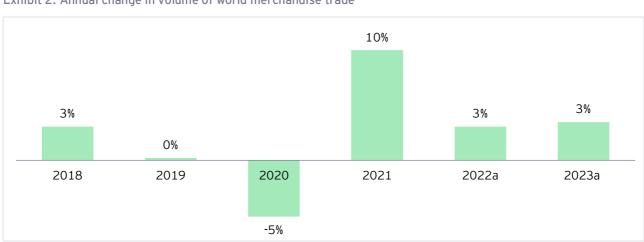
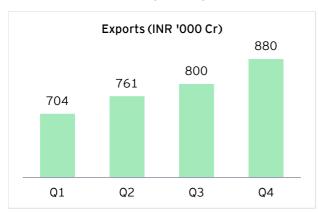


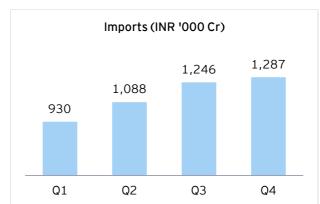
Exhibit 2: Annual change in volume of world merchandise trade

Source: Twenty-seventh WTO Trade Monitoring Report on G20 trade measures



Exhibit 3: Quarter-wise Exports-Imports (INR '000 Cr) from India FY 2022





Source: Ministry of Commerce and Industry, Gol

India is now among the world's five largest economies, doing even better when GDP is measured on PPP basis. In order to improve faster, International Trade will have to be given a strong leg up, with Indian manufacturing becoming efficient producers of comparatively advantaged exports. This competitiveness of Indian goods is a crucial enabler for bolstering India's economy and for achieving the target of \$2 trillion exports by 2030. Sustaining domestic consumption and enabling integration with global value chain is critical for India's economic growth and logistics holds the key to both. A strengthened logistics ecosystem is going to form the backbone of India's \$5 trillion economy vision. Government of India's vision to ease the supply chain bottlenecks and expedite the development of an integrated logistics ecosystem is reflected in the scale of decisions and initiatives which have been undertaken in the recent past. The Government of India is now adopting specific strategies to improve the global competitiveness of Indian goods by targeting to position itself among the top 25 countries in the Logistics Performance Index, reducing logistics cost comparable to global benchmarks and creating a technology enabled and data-driven logistics ecosystem in coming years.

Envisaging the need of a network-wide collaboration on a marble-cake federalism theme, Government of India has launched the National Logistics Policy (NLP) on 17th September 2022, which will guide States/UTs in formulating and implementing their respective Logistics Policies. The Policy will be implemented through a Comprehensive Logistics Action Plan (CLAP) that proposes interventions in key action areas of

Integrated Digital Logistics Systems,
Standardization of Physical Assets &
benchmarking service quality standards in
warehousing sector, Logistics Human Resources
Development and Capacity Building, State
Engagement, EXIM Logistics, Service
Improvement framework, and Sectoral Plan for
Efficient Logistics. These key pillars are
envisioned to boost EXIM as well as domestic
trade and help reduce logistics cost.

While NLP will strengthen Logistics Services and Systems, Government of India's pioneering initiative of the PM GatiShakti National Master Plan (PMGS-NMP) will focus on creation and improvement of multimodal logistics infrastructure in coordination with States/UTs and their agencies under one common platform unifying all decision-making levels, by removing silos. PMGS-NMP is a transformative approach towards integration and synchronization of efforts, prioritization of projects and optimization of cost and time so that the lack of coordination in infrastructure projects does not result in time and cost overruns.

The Department of Expenditure, Government of India (GOI) has issued guidelines on "Scheme for Special Assistance to States for Capital Investment" to provide financial assistance to the State Governments of Rs 1 lakh crore in the form of 50-year interest free loan for capital investment. Part-II of this Scheme is aimed at facilitating PM GatiShakti-related expenditure in the States for which a total amount of Rs. 5,000 crores have been earmarked. Additional amount may further be reallocated to Part II of the Scheme based on the response of the States and utilisation of funds.



All The States have been sensitized about the Guidelines of Part-II of the Scheme, including institutional arrangements to be put in place, guiding principles for selection of projects and suggestive list of eligible categories of projects. For more details, please refer Annexure-7

Unified Logistics Interface Platform (ULIP) and E-Logs initiatives are two key pillars of NLP. ULIP is conceptualized to provide an integrated platform that can be effectively utilized by the stakeholders to enhance efficiency, utilize technology, and reduce the cost of logistics in India while E-Logs - is a dashboard for ease of logistics services envisages registering, coordinating, and monitoring resolution of logistics stakeholders' issues

E- handbook on Warehousing Standards recently published by DPIIT, intends to bring in standardization of physical assets and benchmarking of Service Quality Standards by adoption - of incentives, system of grading, rating and certification of excellence to promote optimization of assets and minimize handling of risks.

#### The context of LEADS...

Keeping in mind the important role of States/UTs in the overall Logistics competence of the country, the GOI initiatives has set a roadmap of Logistics excellence for States/UTs to adopt suitably in their own special environment. Yet, basic principles of logistics ease and efficiency are universal, and when they are converted to a set of Indicators which together form an Index, the comparative assessment of States/UTs assume significance. The Logistics Division of DPIIT, Ministry of Commerce & Industry, undertakes an annual "Logistics Ease Across Different States (LEADS)" survey; based both on User/Service Provider perception and on Objective data; in all States/ UTs to assess their logistics ecosystems and uses a robust statistical model to grade them on performance. This is the fourth attempt in five years after 2018, 2019 and 2021 survey, to enumerate and analyse the LEADS survey results and seek learnings that will improve the logistics ecosystem of the entire network and reduce logistics cost for all stakeholders.







# 2. Logistics Ease Across Different States (LEADS) 2022

#### A. LEADS context:

The Government of India (GOI) has prioritised development of a robust, cost-efficient and highquality logistics ecosystem through blend of technology, digitalisation, regulation, and standardisation coupled with highly skilled human resource. Envisaging the need of a network-wide collaboration on a marble-cake federalism theme, the Government of India has launched the National Logistics Policy (NLP) on 17<sup>th</sup> September 2022, which will guide States/UTs in formulating and implementing their respective State Logistics Policies. While NLP will strengthen Logistics Services, Government of India's pioneering initiative of the PM GatiShakti National Master Plan (PMGS-NMP) will focus on creation and improvement of multimodal logistics infrastructure in coordination with States/UTs and their agencies under one common platform by unifying all decision-making processes and removing silos.

in continuation of the spirit of Centre-State cooperation, the NLP sets a standard of Logistics excellence for States/UTs to be adopted suitably in their own special environment. Yet, basic principles of logistics ease and efficiency are universal, and when they are converted to a set of Indicators which together form an Index, the LEADS comparisons among States/UTs assume significance. The Logistics Division of DPIIT, Ministry of Commerce & Industry, undertakes an annual "Logistics Ease Across Different States (LEADS)" survey; based both on User/Service Provider perception and Objective data provided by States/UT; in all States/ UTs to assess the logistics ecosystem and uses a robust statistical model to grade them on performance.

The LEADS study focuses on providing a common platform for a consultative and collaborative framework for the Central and State Governments

#### B. Evolution of LEADS) over the years:

LEADS is an annual study conducted by Logistics Division, Department for Promotion of Industry and Internal Trade, which is entrusted with the to work in a coordinated manner in the logistic sector. The objective of LEADS is to channelize focus on bringing out the existing challenges and issues, the States/UTs are facing with regard to their logistics ecosystems and acts as a feedback mechanism to address the inefficiencies via policy or physical interventions, as may be required. The study provides an opportunity to identify the interplay among various stakeholders engaged in the fragmented logistics sector. It is also a reflection of ground reality, as the subjective perceptions of users and service providers, obtained through a carefully designed sampling technique which are comprehensive enough to provide a clear picture of State's/UT's logistics ecosystem.

This perception is further blended with Objective data and the concerned State's/UT's feedback to arrive at an Index-based grouping. LEADS is therefore a combination of both objective data and perception of relevant stakeholders in logistics, based on identified indicators, which constitute an Index. LEADS also provides indicator-level assessments of performance and logistics ecosystem on specific dimensions. Ministry of Commerce & Industry (MoCI) undertook LEADS study to gauge the experience of industry players and stakeholders involved in key value chains. While the gains from this exercise are important, in that they help analyse, monitor and plan logistics efficiency and its improvement, it still does not account for the varying operating circumstances, resource availability, geographical factors, among other things, across all States/UTs. But this study certainly acts as an informed perceptive guide to further deliberations, identification of potential focus areas, and setting priorities for strategic plans.

responsibility to measure the logistics performance of States, to help in informed policy



interventions and action plans and to implement them strategically.

"LEADS 2018" focused on international trade (EXIM) and provided a useful starting point in assessing the efficiency of logistics ecosystem in each State and UT. In the second edition of the study - "LEADS 2019", the Ministry expanded coverage to include both international and domestic trades. The two LEADS exercises have served the purpose of initiating a dialogue amongst all stakeholders, including Central and State Governments, as also the private sector, to improve the efficiency of the States'/UTs' logistics ecosystem.

The LEADS initiative had already introduced constructive competition and excitement amongst States. This is now to be taken to the next level though greater engagement with the States / UTs. In this regard, the Logistics Division of MoCl initiated the third edition of the study - "LEADS 2021". Like "LEADS 2019", the 2021 edition focuses on both international and domestic trade. However, while LEADS 2018 and 2019 editions were perception-based, "LEADS 2021" introduced objective parameters in the index formulation by engaging with all the States/UTs for the first time.

#### LEADS 2022 framework:

LEADS 2022 continues to focus on indicators introduced across three established pillars as

- 1. Infrastructure covers 4 indicators related to quality of available Logistics Infrastructure
- Services covers 7 indicators related to quality of service, price reasonableness (freight rates & terminal services), timeliness (transportation & terminal services), safety

- and security (transportation & terminal services) and track & trace
- Operating & Regulatory Environment covers 4 indicators related to extent of facilitation offered by the State/ UT, ease of obtaining all approvals, inter-state border movement and clearance and last, efficiency of regulatory services.

The LEADS 2022 survey assesses viewpoints of various users and stakeholders across the value chain viz Shippers, Terminal Infrastructure Service Providers, Logistics Service Providers, Transporters and Government agencies, to understand the 'enabler' and 'impediment' elements to the logistics ecosystem in the country. Anecdotal evidence, gathered on the basis of industry interactions, also forms a key part of the framework. These would be a guide to key issues and challenges in the industry.

The annual survey processes data received from stakeholders and States/ UTs. It grades logistics ecosystem of each State/ UT based on perception inputs from stakeholders and objective data for respective States / UTs using a statistical model. The LEADS Study considers inputs from the States and UTs through an evidence-based objective survey to map their initiatives and improvements in all three categories.

It has been considered prudent to utilize the same statistical methodology as in the last round, LEADS 2021. The Structured Equation Modelling (SEM) methodology for undertaking a Confirmatory Factor Analysis (CFA) has been found useful for preparation of LEADS 2022 index.

#### C. Learnings from 2021 LEADS exercise and resultant modifications made to LEADS 2022:

- i. LEADS 2021:\_LEADS 2021 successfully established a robust mechanism to capture key issues and challenges of the stakeholders through its comprehensive set of 17 perception-based indicators (covering infrastructure, services, and the regulatory framework) dovetailed with State/UT specific objective (data based) indicators. Anecdotal evidence (gathered on the basis of industry interactions) is embedded in the study as a key part of the framework to understand
- issues further. LEADS 2021 was conducted predominantly on a virtual platform owing to the Covid-19 pandemic related travel restrictions. LEADS 2021 exercise garnered a total of 3,771 responses out of which 3,363 responses were considered after data cleaning.
- ii. LEADS 2021 key findings: In LEADS 2021, Gujarat, Haryana and Punjab emerged as the top three performers. Western India led by



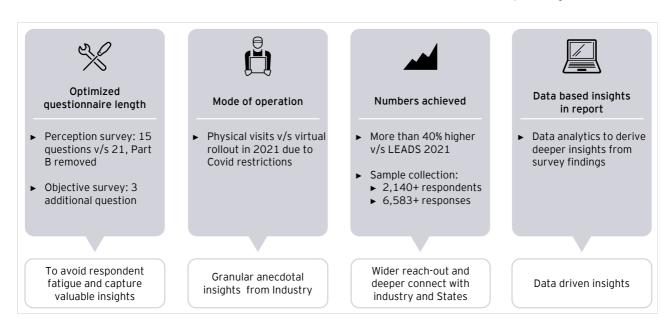
Gujarat and Maharashtra exhibited good performance on nearly all perception indicators leading to understanding that these States have a well-established logistics ecosystem in relation to the current demand of such services. Southern India on the other hand fared in the average to good range across indicators. Eastern States depicted an average rating across parameters in LEADS 2021 index. Except few States, overall Operating and Regulatory Environment across States was registered in average to good range. Northern States such as Haryana, Punjab and Uttar Pradesh endorsed good scores (highest in few individual indicators) across categories. Uttar Pradesh clocked the highest jump in ranking compared to the previous year with a leap of 7 places to claim 6<sup>th</sup> Rank.

#### iii. Learnings from LEADS 2021

LEADS 2022 is led by learnings and lessons taken from the previous years' exercises. The questionnaire has been revised based on respondents' feedback. It has been consolidated into a robust survey instrument and pilot tested with key stakeholders for suitability in terms of data collection and relevant trends being captured. New questions have been added to reflect major initiatives undertaken over the past year and cover the evolving spread of issues and challenges. The number of perception-based indicators have been revised to 15 from 17 (in 2021) whereas objective indicators have been retained at the earlier 4.

#### a) Value addition in LEADS 2022:

Following revisions were undertaken in the latest study based on feedback from stakeholders and operating environment:



#### D. Perception Indicators

Three Pillars of LEADS study, i.e., Infrastructure, Services and Regulatory environment define the basic structure of Logistics ecosystem. These pillars have independent identities but, play a conjoined role in deciding overall Logistics cost and user experience. Therefore, it is imperative to extensively study all three pillars. To achieve the vision of LEADS study, these three pillars are further broken into various sub indicators.

LEADS 2022 not only assesses perception of private stakeholders but also the facilitation provided by State/UTs in logistics sector through various policy initiatives and interventions. Another important aspect of State Engagement that has been captured through this survey is action taken by States/UTs in respect of the recommendations made in LEADS 2021 report and State feedback on observations indicated by stakeholders in existing survey.



Apart from the data available in public domain on key parameters like road/rail network, warehouse capacity, etc., it was also captured from States/UTs and Line Ministries in respect of terminal infrastructures like ICD, CFS, Air cargo terminals, etc. Given the nature of this study, the focus was only on infrastructure related data sets.

The perception survey questionnaire was circulated to industry stakeholders in the form of physical as well as online survey. In LEADS 2022, 52% more responses have been collected as compared to the previous year's reports, taking the overall number of responses to 6,583 from 2,140 respondents. LEADS Study has established itself as a validated and accepted mechanism for measuring efficiency of the logistics ecosystem of the State/UT. Hence, LEADS 2022 continues with the Index being a combination of perception and

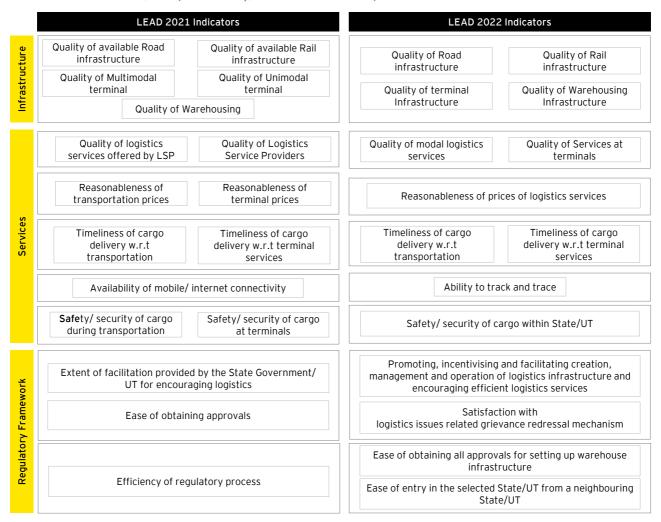
objective data-based indicators. Perception questions are administered to private players and objective data queries to the State/ UT Governments.

#### Survey instrument (perception-based):

## Comparison and Revisions undertaken to the survey instrument

The perception-based questions focus on the now well-established framework of Infrastructure, Services, and Regulatory and operating environment. A detailed comparison of the Indicators in LEADS 2021 and the respective changes in LEADS 2022 Perception based Survey questionnaire and associated indicators are listed in Annexure-1

Exhibit 4: LEADS 2022 (Perception Survey) - Indicators and Comparison with LEADS 2021





#### Perception based Indicators definition:

The three Pillars of LEADS 2022 study (Infrastructure, Services and Operating and

Regulatory Environment) are covered through 15 Indicators. The indicators and their coverage area for study are listed below in Exhibit 5:

Exhibit 5: Perception based indicators and their coverage

Pillars	Indicators	Coverage
Φ	Quality of Road Infrastructure	Road network and associated physical infrastructure such as road condition, Capacity utilisation, signage, lighting, vehicle refuelling services, toll, Parking, Lay-bys, State border points, etc.
ctur	Quality of Rail Infrastructure	Sufficiency of Rail tracks, congestion on rail networks etc.
Infrastructure	Quality of Terminal Infrastructure	ICDs, CFSs, AFSs, PFTs, MMLP, port terminals, airport terminals, logistics parks, inland waterway terminals, dry ports, Land Custom Stations, Road-based terminals, transport nagar, LCS/LCP etc.
	Quality of Warehousing Infrastructure	Warehouses including silos/bulk storage, consolidation centres, cold storages, packhouses, ripening chambers, reefer vans etc.
	Quality of Modal Logistics Services	Haulage/transportation by different modes, terminal operations including handling and storage of cargo, customs broking, and value-added services like consolidation, repackaging, labelling, last-mile connectivity, etc.
	Quality of Services at terminals	Competency of transport providers, truck drivers, freight forwarders, custom house agents, MTOs etc.
es	Reasonableness of prices of logistics services	Road Freight Rates, Terminal Charges, Charges by Service providers such as Shipping Lines, Transporters and Freight Forwarders etc.
Services	Timeliness of cargo delivery w.r.t transportation	Delivery within schedule/expected time within a State/ UT
	Timeliness of cargo delivery w.r.t terminal services	Reasonable time taken for terminal operations viz., time taken in stuffing up a cargo, customs broking time, dispatch waiting period, etc.
	Ability to track and trace	Ease of tracking and tracing of the cargo movement and condition from First mile to last mile.
	Safety/ security of cargo within State/UT	Consistency in delivery without damage/deterioration/pilferage/loss of cargo and to the truck due to logistics inefficiencies or accidents or thefts during transportation of goods
Promoting, incentivising, a facilitating creation, management and operatio logistics infrastructure and encouraging efficient logis services  Satisfaction with logistics i related grievance redressa mechanism  Ease of obtaining all approfor setting up warehouse infrastructure  Ease of entry in the selected State/LIT from a neighbour		Existence and effectiveness of policies related to single window clearances, logistics/ labour, ease of availing land and ancillary facilities, maintenance of law and order, and provision and implementation of tax breaks/subsidies/access to credit etc.
Regulator)	Satisfaction with logistics issues related grievance redressal mechanism	Provision of effective system to ensure grievance redressal and dispute resolution etc.
ating and F	Ease of obtaining all approvals for setting up warehouse infrastructure	Approvals related to Warehouses including silos/bulk storage, consolidation centres, Cold storages, packhouses etc.
Opera	Ease of entry in the selected State/UT from a neighbouring State/UT	Presence of Check posts, easy RTO and Police regulations and implementation of Smart enforcement system



#### Quality of available Infrastructure (Rail, Road, Terminals and Warehouses):

The quality of available Infrastructure in terms of accessibility, connectivity, cargo handling and storage is the preliminary parameter in root-cause analysis of logistics ecosystem. Infrastructure drives the overall quality of logistics services such as timeliness, prices being paid and safety security of cargo and while in-transit. Infrastructure quality also creates the perception about the proactive approach by States/UTs for betterment of Logistics ecosystem.

Quality of modal logistics Services and Service Providers (Modal Logistics Services and Services at Terminal): Extensive deliberations with multiple expert groups from industry and Government to develop LEADS 2021 indicators helped establish how the logistics ecosystem could be evaluated in a holistic way and bottlenecks be identified. The root cause analysis (deliberations) ultimately led to the basic premise of availability and quality of logistics. it was concluded that availability is necessary but not sufficient for logistics infrastructure. Hence, to understand the ecosystem, it is imperative to understand the "quality" of logistics. The quality of available infrastructure dictates the price being paid for the service, thereby driving service levels. Hence the shift in indicators from availability (in "LEADS 2019") to quality of infrastructure. Since the objective was to identify at which leg of the supply chain issues were being faced, infrastructure construct was further broken into infrastructure subgroups of transportation (rail, road) and terminal infrastructure (multi-modal, unimodal, and warehousing).

#### Reasonableness of Prices of Logistics Services:

The indicator aims to determine the respondents' perception of reasonableness of cost for services being availed. Pricing is a derivative of multiple factors like infrastructure available, nature of market (fragmented or organized), demand for the service etc. Continuing with the aim to identify at which leg of supply chain is the issue being faced, the indicator is further broken down in terms of reasonableness of prices for transportation and for terminal service.

Timeliness of Cargo Delivery with respect to Transportation and Terminal Services: This indicator dictates the bottlenecks in the logistics ecosystem. Any delay in delivery of goods occurs mainly at two stages, first when the cargo is in transit and the second at storage/transit centre such as depots, warehouses, and freight terminals. Both these aspects have been considered in the study.

Ability to track and trace: Track and trace is enabled by GPS or SIM-based tracking, which depends on the availability of the cellular mobile network for accuracy. Better the network services in a State, lesser the blind spots in connectivity and the higher the real-time cargo visibility. Ease of track and trace is enabled by strong mobile network strength in the States/UTs.

Safety/Security of Cargo: It has been observed that cargo pilferage happens during transportation or during storage at terminals. The indicator maps user perception about any such experience (in the recent past) to accurately identifying gaps in safety and security and help the responsible agency to implement counter measures to reduce such instances.

Promoting, incentivising, facilitating and investing in creation, management and operation of logistics infrastructure and encouraging efficient logistics services: LEADS 2021 identified the extent of facilitation provided by State/UT for enabling logistics while LEADS 2022 took an extensive study to understand the perception in Users' mind regarding the action taken by the states / UTs in promoting, incentivising, and facilitating for creation, management and operation of logistics infrastructure and encouraging efficient logistics services in the State. State policies are the driving force for any sector to thrive in the State in an organised and efficient manner.

Satisfaction with logistics issues related grievance redress mechanism: This Indicator helps in understanding perception about the promptness of the State in handling the users' grievances and disputes through effective and responsive redressal mechanism.

Ease of obtaining all approvals for setting up warehouse infrastructure: This indicator was part of LEADS 2021 and has been retained in the study. Warehousing Infrastructure is an important component in terms of extent of services, capital investment, required land and approvals.



Perception about State's policies and ease of documentation for obtaining approvals for setting up Warehouses such as CLU, Pollution NOC, Fire department approval etc. is the essence of this indicator.

Ease of entry in the selected State/UT from a neighbouring State/UT: In India, diverse policies across States play a major role in determining the interstate cargo movement. Ease of entry from any State depends upon various factors such as policy by the State for checking, number of check posts, effective policy enforcement by police and RTO officials, use of Smart Enforcement System etc. Perception under this category encapsulates both the effectiveness of checks, as also delays that it entails.

#### E. Objective Indicators:

The Objective indicators diagnose the logistics ecosystem in the State/UT through enabling initiatives undertaken by respective State/UT and use of available secondary data points.

Part I - Part I of the survey comprises 13 binary Questions, which collectively are considered as a single indicator for Statistical analysis. Questions under this indicator are used to assess various initiatives undertaken by States such as policy formation, institutional set up, regulatory improvements, and other related initiatives for promoting and facilitating efficient logistics infrastructure and services. As a part of data authenticity process, States/UTs had to also provide documentary evidence against the binary questions where the response was mentioned as "Yes". This survey was administered to all 36

States and UTs. The framework for binary questions is presented in the Annexure-3

Part II - Secondary data sets: A set of 20 questions related to availability of logistics infrastructure, services and facilities in the States were included in the objective survey to map available logistics at State/UT level. To ensure authenticity and reduce variation, all responses from States/UTs were reconfirmed with respective States/UTs before using the data in Statistical analysis. Received data variables were also compared with the data sourced from the repository of different Central Line Ministries and Government organizations. A detailed matrix of secondary data used in statistical modelling, normalizing parameter and for state analysis is represented in Exhibit 6 below:

Exhibit 6: Details of Secondary data

Sr. No.	variables		Year	Source
		Used for statistical anal	ysis	
1	Total Length of State Highways	Replaced with proxy		
2	Total Length of District Roads	variable - State wise	2018-19,	
3	Total Length of Urban Roads	Capital Outlay on Roads and Bridges Average of	2019-20,	States/ UTs budget data
4	Total Length of Rural Roads	(2018-19, 2019-20,	2020-21	
5	Total Length of Village Roads	2020-21)		
6	Total no. of registered Goods Commercial Vehicles (GCVs)		2020-21	MoRTH (VAAHAN data) and State data
7	No. of CFSs		2020-21	IMC List and State Data
8	No. of ICDs		2021-22	IMC List
9	No. of PFTs		2020-21	FOIS
10	No. of Railway Good sheds		2020-21	FOIS and State Data
11	No. of Air cargo terminals / AFSs		2020-21	MoCA and State data
12	Capacity of cold storages (MT)		2020-21	MoCAF&PD and State data
13	Capacity of warehouses (MT)		2020-21	WDRA and State Data
14	Total number of training centres for logistics		2019-20	MoSDE and State data
15	Number of individuals, trained in logistics training		2019-20	MoSDE and State data
16	Subsidy data from TIES, State wise average of (2017-18, 2018-19, 2019-20, 2020-21)		2017-18, 2018-19,	DPIIT, MoCI



Sr. No.	Variables	Year	Source
		2019-20, 2020-21	
17	Ease of Doing Business (EoDB)	2019-20	DPIIT - Business Reform Action Plan
18	Number of road accidents during the year of Goods Commercial Vehicles	2019-20	MoRTH
	Used as normalizing para	meter	
1	Gross State Value Added (GSVA)	2019-20	MOSPI
2	Total geographical area of the State/UT	2020-21	FRI Dehradun website
	Used for States' analysis/ i	nsights	
1		nsights 2020-21	MoRTH (SARATHI data) and State data

In line with the idea of introducing objectivity to the index, proxy variables were utilised in case the direct, quantifiable measures were not available for all the objective parameters. For instance, for road infrastructure (State Highway / District / Urban / Rural / Village), the available data was outdated and not available for every State. Hence total CAPEX on roads and bridges done by States/UTs has been considered as a proxy measure of infrastructure creation. On the terminal infrastructure availability front, number of CFS/ICD/PFT/Railway goods sheds have been used to assess the extent of logistics network that has been developed at the State / UT level

Critical support infrastructure in terms of capacity of cold storage, general warehouse and available capacity has been used as provided by States and available with Warehouse Development and Regulatory Authority. Ease of Doing Business (EoDB) rankings and Trade Infrastructure for Export Scheme (TIES) - a subsidy provided by Centre to the States/UTs for development of export infrastructure - have been retained as a parameter. Gross State Value Added (GSVA) and geographical areas have been used as normalising factors.

#### Survey instrument (Objective):

## Comparison and revisions undertaken to the survey instrument:

LEADS 2022 Objective-based questions also deepdive into the aspects of logistics policy framework, institutional mechanism, first/last mile connectivity, bottlenecks/choke-points and PM-GatiShakti-led initiatives and reforms. Few changes in Objective Survey Questionnaire have been undertaken in LEADS 2022. A detailed comparison of LEADS 2021 and LEADS 2022 Objective Questionnaire is attached in Annexure-3

As a result of the above exercise, four indicators were arrived at for objective data set using the following methodology:

- ► Indicator I consolidation of part I of the Objective questionnaire (binary questions).
- Indicator II Out of these 20 questions in Part II of the Objective questionnaire, 11 data variables on availability of logistics infrastructure, services and facilities have been clubbed together as a single indicator. Annexure-3 illustrates the usage of parameters and its normalisation factor. The usage of data in statistical model including normalisation factors were finalised with the expert committee. After normalisation, a total score was generated, which was categorised using a class interval of 1-5. This objective score was considered a measure of the quality of infrastructure data to be included in the Infrastructure construct and was named "Assessment of variables of logistics ease".
- Indicator III Range Scaled EoDB Ranks: EoDB is considered as an index to rank the States on the regulatory policies and ecosystem which directly affects businesses in the State. The EoDB Index for individual State was included in the overall model. The rankings of the States were categorised into separate class intervals before including them in the model. This objective variable was named "Range Scaled EoDB Ranks" and was included in the Operating and Regulatory Environment.



Indicator IV - Trade Infrastructure Export
Subsidy (TIES) Outlay: Trade Infrastructure
Export Subsidy (TIES) Outlay: It is a
Government of India Scheme to assist Central
and State Government agencies for creation
of appropriate infrastructure for growth of
exports from the States/UTs. TIES was
launched in the year 2017. This parameter
was also considered as one of the objective
variables included in the Operating and

Regulatory Environment. An average of the subsidy across multiple years was calculated. Class intervals were calculated based on the average amount of subsidy for the States. This objective variable was named as "TIES Outlay".

A detailed matrix of data used for statistical modelling, normalizing parameters and State / UT level analysis is presented in Annexure -4

#### F. Overall indicator set for LEADS 22 index including perception and objective data:

Overall, combining 15 perception indicators and 4 objective indicators, a total of 19 indicators have

been used for Statistical analysis which is represented in the Exhibit 7 below.

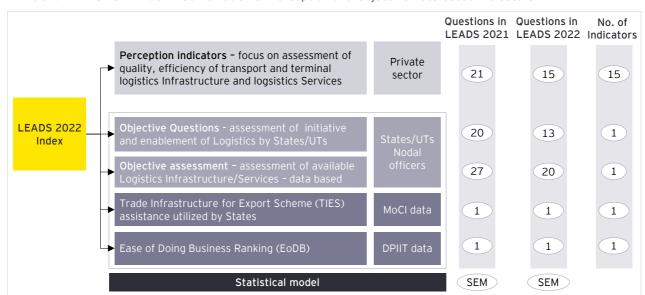


Exhibit 7: LEADS 2022 Index - Combination of Perception and Objective Data based Indicators

#### G. Framework, data & methodology including statistical modelling

- i. Sampling: The table below enlists industry stakeholders which were covered for the perception-based survey under four broad categories:
  - Traders and Shippers (TS) (Exporters/Importers)
  - Transport Service providers (TSP)- Road hauliers, Rail operators, Container train operators, Airlines, and Shipping lines
  - ➤ Terminal Infrastructure Service Providers (TISP) - Surface transport based terminal operators (CFS/ICD/PFT/AFS), Warehouse operators, Cold storages, Port terminal operators, Air cargo Terminal operators, etc.

- Logistics Service Providers freight forwarders, express carriers, customs brokers, multimodal transport operators, and air cargo agents, etc.
  - With ease in travel restrictions, the LEADS 2022 Survey was initiated in April 2022. Physical meetings were held with more than 20 National Associations of Logistics sector and more than 75 Regional Associations across the country operating in the sector. Their active participation resulted in more than 6,000 responses being collated. The States/ UTs extended their support by providing necessary data pertaining to the objective survey (in addition to 8 Central Line Ministries). The list below shows a comparison of LEADS 2021 and LEADS 2022 data collection:



Description	LEADS 2021	LEADS 2022	% Change
Respondents	1,405	2,140	+52%
Responses	3,771	6,583	+75%
Meetings	500+	600+	+20%

The LEADS 2022 survey also involves a component of PM-Gati Shakti initiative (PMGS), as PMGS is playing a crucial role in developing a robust logistics visualisation platform in close coordination with BISAG-N. As on date, more than 900 essential data layers have been integrated by the States/UTs on the PMGS National Master Plan platform. The States of Gujarat, Karnataka, Tamil Nadu and Uttar Pradesh have been leading in the process of integration of essential data layers

#### Survey Instrument finalization:

Discussions were held with experts to design the perception and objective survey instruments. The design of the survey instrument is one of the

critical aspects of successful capture of respondents' perceptions accurately. The designed survey instruments went through multiple iterations to make them accurate, pinpointed, and comprehensive so as to elicit a proper response from the stakeholders. The survey instruments were then subjected to pilot testing sessions with actual stakeholders from the logistics sector to understand their perspectives. After multiple rounds of iterations and modifications, the survey instrument was finalized.

Perception survey questionnaire is enclosed as Annexure-1 to this report. Objective survey is enclosed as Annexure-3 to this report.

#### Database of respondents

Exhibit 8: Stakeholder categories for LEADS survey



#### Sampling

The next step was to arrive at the right sample size, across States and stakeholders. Considering that the sampling frame was segregated as per State and different stakeholder groups / sub-

groups, the sample size needed to be customised. Cochran's formula<sup>2</sup> was used to calculate sample sizes for each State's stratum (category of stakeholders).

(Cochran, W. G, "Sampling Techniques", John Wiley and Sons,  $3^{\rm rd}$  Edition, 1991)

 $<sup>^2</sup>$  Cochran's formula for sample size determination is an accepted practice in the domain of statistics for small or large population sizes



Sample Size (n) = 
$$\frac{NZ^2 P(1-P)}{d^2(N-1) Z^2 P(P-1)}$$

N: Population Size

Z: Critical Value of desired Confidence Level (min: 90%, max: 99%)

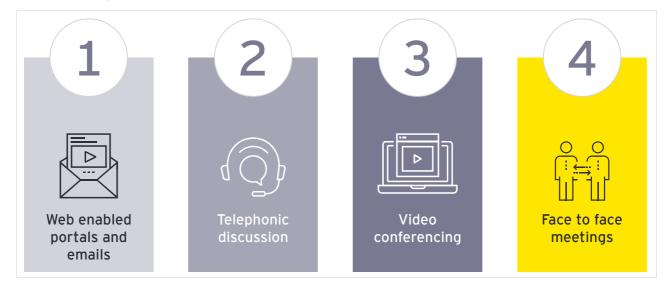
P: Population proportion with homogeneous characteristics (90%)

d: Margin of error (Sampling error

#### Exhibit 9: Survey administration tools

#### **Data Collection**

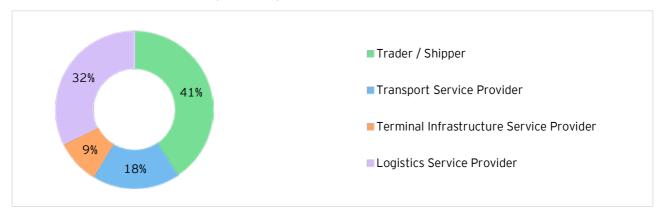
To collate a population set of the above categories, industry and trade associations and chambers of commerce were approached. Respondents were contacted through multiple means. The exhibit 6 below represents the mode of capturing responses.



A total of 6.583 responses from 2,104 respondents were collected as part of the LEADS 2022 exercise. Data was collected from all the

four categories of respondents identified earlier. Distribution of responses is presented in the Exhibit 10 below:

Exhibit 10: Respondents data sharing percentage



#### **Data Analysis**

For all of 6,583 responses, data was cleaned, and only valid responses, i.e., responses where more than 50% of the data exists, totalling 5,130 were used for analysis.

Each of the objective parameters used for statistical analysis was normalised either using Gross State Value Addition (GSVA) for Industry and Agriculture or the State's Geographical Area. Annexure-4 illustrates the usage of parameters and its normalisation factor. After normalisation, a total score was generated, which was categorised using a class interval of 1-5. This objective score was considered a measure of the quality of infrastructure data to be included in the infrastructure construct.



EoDB index for individual States was included in the overall model. This Index is meant to measure regulations directly affecting businesses. The rankings of the States were categorised into separate class intervals before including them in the model. This objective variable was included in the Operating and Regulatory Environment.

TIES outlay was also considered as one of the objective variables included in the Operating and Regulatory Environment. An average of the subsidy across multiple years was calculated. Class intervals were calculated based on the average amount of subsidy for the States/UTs.

#### Statistical modelling

In this edition of the LEADS report, latent variables, or constructs (dimensions of Infrastructure, Services and Regulatory) have been defined in a way that they are composed of a number of indicators/questions, making the measurement more detailed in nature. The perception questions and the objective variables, illustrated in previous sections, were considered as observable variables. A confirmatory factor analysis approach using Structured Equation Modelling (SEM) was adopted where the measurement models and paths were defined to depict the relationship between constructs, the respective observed variables, and the overall dependent variable. The model was executed using Latent Variable Analysis (LAVAAN) package in R - a statistical analysis software package.

The "Assessment of Variables of Logistics Ease" variable that reflected the quality of infrastructure was included in the infrastructure latent construct. The other objective variables such as the" Range scaled EoDB ranks", subsidy and the regulatory policy indicated by States "States' logistics enabling initiatives" were included in the Regulatory Environment latent construct. For parameter estimation, the Pairwise Maximum Likelihood Estimation method 34 was used.

During model implementation, goodness-of-fit indices such as chi-square, root mean standard error of approximation (RMSEA), Confirmatory Fit Index (CFI) were examined at every iteration. The CFI was observed to be 0.912, and RMSEA was

found to be 0.078. The factor scores of the 3 constructs: Infrastructure, Services and Regulation were utilised to arrive at gradings for States/UTs.

#### Weighting

In this round of LEADS survey the highest number of responses have been collected compared to the past editions. However, collecting a greater number of responses could possibly introduce biases due to over-representation of respondents with particular characteristics. Consequently, the current round of data has been weighted to maintain similar proportion as in LEADS 2021.

#### **Cluster-based Grading**

LEADS 2022 has shifted from a purely rank-based listing to a much more holistic grading system. The primary classification is based on geographies or clusters. Within this classification, the States have been graded based on buckets; the ranges of which are derived from the scores formulated using the SEM model.

Given the vast demographic profile of India, each State / UT has its own enablers and challenges related to its geographical characteristics. Thus, it is important to assess the States/UTs with respect to their profile. Insights in the LEADS report are presented with due consideration to the context (influenced largely by Geography) in which stakeholders and States have to deliver Logistics services. It is imperative that this aspect is reflected in grading as well. As a result, 4 separate clusters have been formulated within which the States/UTs have been categorized:

- Landlocked: States that are landlocked and are away from the coast
- Coastal: States that are on the coastline of the country
- North-Eastern Region (NER): States that are considered to be part of political and administrative part of North East Region
- Union Territories (UT): Territories that are governed, in part of whole, by the Government of India

https://users.ugent.be/~yrosseel/lavaan/pml/PL\_Tutorial.pdf

<sup>&</sup>lt;sup>3</sup> Katsikatsou, M, Moutaki, I and Jamil, H, "Pairwise Likelihood estimation for confirmatory factor analysis models with ordinal variables and data that are missing at random", British Journal of Mathematical and Statistical Psychology, November 2018,

<sup>&</sup>lt;sup>4</sup> "The Pairwise Likelihood Method for Structural Equation Modelling with ordinal variables and data with missing values using the R package lavaan",

https://www.ugost.bo/pyracson/lavaan/pml/Pl.\_Tutorial.pdf



Exhibit 11: The list of the states within each clusters:

	Land	ocked	
Bihar	Chhattisgarh	Haryana	Himachal Pradesh
Jharkhand	Madhya Pradesh	Punjab	Rajasthan
Telangana	Uttar Pradesh	Uttarakhand	
	Coa	estal	
Andhra Pradesh	Goa	Gujarat	Karnataka
Kerala	Maharashtra	Odisha	Tamil Nadu
West Bengal			
	North-East I	Region (NER)	
Arunachal Pradesh	Assam	Manipur	Meghalaya
Mizoram	Nagaland	Sikkim	Tripura
	Union Terr	itories (UT)	
Andaman & Nicobar	Chandigarh	Daman & Diu / Dadra & Nagar Haveli	Delhi
Jammu & Kashmir	Ladakh	Lakshadweep	Puducherry

#### Shift from ranking to grading in LEADS 2022:

Previously, States/UTs were ranked based on their logistics ecosystem. However, it was felt that the phenomenal work which has been done in the last one year by States towards logistics ecosystem improvement cannot be properly appreciated through a ranking framework. The scores and resultant ranks of States/UTs have in all previous occasions been arrived at using different sample sizes and intra-category compositions, varying weights applied to the broader Indicator categories (Infrastructure, Services and Regulation) as also to stakeholder groups. All these issues, mostly uncontrollable because of a constantly shifting stakeholder profile and a very strong 'recency bias', make differentiation in perceptions of logistics competence among States/UTs very unclear and indistinct.

Adapting the evaluation framework of the recently released Business Reforms Action Plan<sup>5</sup>, in LEADS 2022 there is a shift from one uniform ranking. All the States / UTs in their respective clusters (based on geographical profile), are grouped into three grades based on the percentage score ranges. A percentage score indicates how well a State or UT has performed in comparison to the Top State/UT within the specific cluster. The States/UTs with similar percentage score range have been graded in a common group.

LEADS 2022 categorizes States based on their geographic demographics into 4 categories of Landlocked, coastal, northeastern regions and Union Territories. For grading each of these categories in into three categories. The "Achievers" are States which have shown exemplary logistics ecosystems with exceptional infrastructure and transparent regulatory processes. The "Fast Movers" are States who are moving towards becoming Achievers by notifying progressive policy and legislatives initiatives along with new infrastructure projects. Finally, we have the "Aspirers" - States which have initiated their journey towards logistics ease and excellence by adopting national best practices to further improve their contribution towards India's emerging position as a global manufacturing and logistics hub. Accordingly, three percentage-based grades are as follows:

- Achievers: Above 90% of the highest scoring state (at 100%)
- ► Fast Movers: 80% to 90% of the highest scoring state (at 100%)
- Aspirers: Below 80% of the highest scoring state (at 100%)

Based on the above approach, results of clusterbased grading are illustrated below. The States and UTs are listed in each group in alphabetical order.

<sup>&</sup>lt;sup>5</sup> <u>Business Reforms Action Plan (dpiit.gov.in)</u> accessed at <u>Business Reforms Action Plan (dpiit.gov.in)</u>



Exhibit 12: LEADS 2022 grading of States/UT across cluster

Categories	Achievers	Fast movers	Aspirers
Landlocked states	Uttarakhand, Himachal Pradesh, Haryana, Punjab, Telangana, Uttar Pradesh	Madhya Pradesh, Rajasthan	Bihar, Chhattisgarh, Jharkhand
Coastal states	Maharashtra, Odisha, Andhra Pradesh, Gujarat, Karnataka, Tamil Nadu	Kerala	Goa, West Bengal
North Eastern Region	Assam	Sikkim, Tripura	Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland
UTs	Chandigarh, Delhi	Puducherry	Andaman & Nicobar, Daman Diu & Dadara and Nagar Haveli, Jammu & Kashmir, Ladakh, Lakshadweep

#### Creation of separate North-eastern States

In the NER states, the geographical positioning, terrain, resource base and economic activity at large act as natural deterrents to development of a robust logistics infrastructure and its effective management. Hence, the region is considered as a separate category for ranking. Limited access points, mostly via the (inefficient) ecosystems in West Bengal and centred primarily around Assam within the NER, only increase time and cost of cargo movement to/from the region. Lack of major industries / production centres across the entire region discourage logistics infrastructure development and the States' difficult terrain makes operation and management of logistics challenging.

NER is a consumption-based economy with little to offer for return cargo. This fact itself makes the region a high-cost logistics territory. The entire region encounters similar kinds of challenges, and it appears as though it is one large homogeneous territory with its centre in Assam. Though efforts are underway to develop connectivity and build infrastructure in States other than Assam, it will take time for the focus to shift. The NER has a

unique status in the national economy, and it currently enjoys a determined developmental focus.

Putting these States at the bottom of all States' ranking would be discouraging for them, as also an unfair comparison. In any case, the model applied for determining grading for NE States and others is the same. Keeping all the points above in view, putting these States as a special and exclusive set, in one lot and grading them within was therefore considered as justified.

#### Creation of other Union Territories

The regulatory set-up in UTs is different as compared to other States. Limited area, and lack of industrial zones are factors that reduce scope of development of logistics infrastructure and robust service deliveries. As a result, the demand in these centres is largely catered by support from infrastructure / service providers in adjacent States. As a result, UTs as a group was treated separately.

Puducherry, Ladakh, Daman & Diu and Dadra & Nagar Haveli, Andaman & Nicobar Islands and Lakshadweep have been excluded from grading due to inadequacy of responses in the survey.





Exhibit 13: LEADS 2022 - indicator-wise grading and heat maps

				Legend															
						Achi	ever	F	Fast N	lover		Asp	irer						
			9	90% -	100%		80%-	90%		<80%									
	Bihar	Chhattisgarh	Haryana	Himachal Pradesh	Jharkhand	Madhya Pradesh	Punjab	Rajasthan	Telangana	Uttar Pradesh	Uttarakhand	Andhra Pradesh	Goa	Gujarat	Karnataka	Kerala	Maharashtra		
Road infrastructure																			
Rail infrastructure																			
Terminal infrastructure																			
Warehousing infrastructure																			
Modal logistics services																			
Quality of services at terminals																			
Reasonableness of prices of logistics services																			
Timeliness - transportation services																			
Timeliness - terminal services																			
Track and trace cargo movement																			
Safety/security of cargo																			
Promoting, incentivising, facilitating																			
Ease of obtaining all approvals																			
Ease of entry																			
Issues related grievance redressal																			

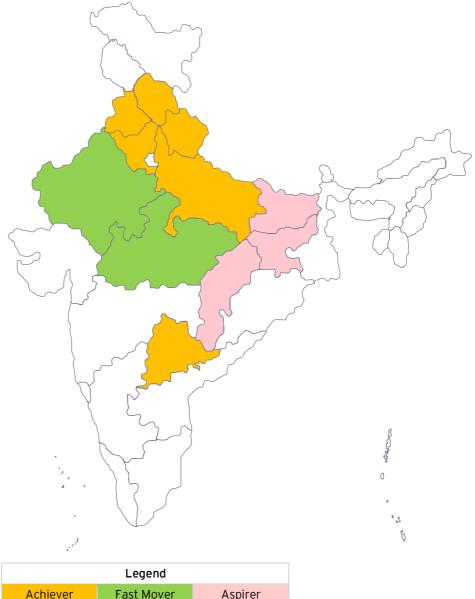


Odisha	Tamil Nadu	West Bengal	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Andaman & Nicobar	Chandigarh	Daman & Diu / Dadra & Nagar Haveli	Delhi	Jammu & Kashmir	Ladakh	Lakshadweep	Puducherry



### **Cluster: Landlocked States**

- Punjab
- Haryana
- Uttar Pradesh
- Uttarakhand
- Himachal Pradesh
- Madhya Pradesh
- Rajasthan
- Bihar
- Jharkhand
- Chhattisgarh
- Telangana

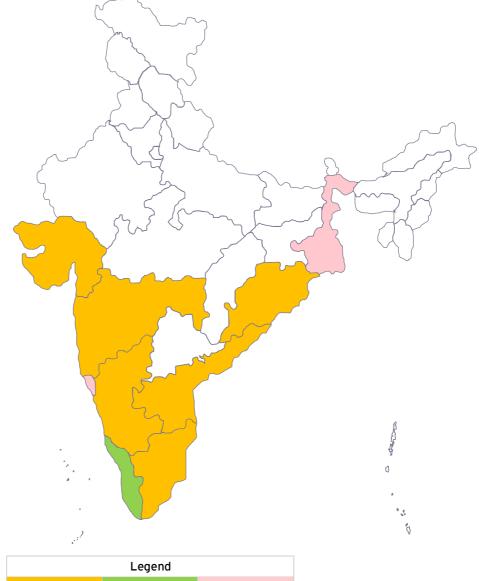


Legend								
Achiever	Achiever Fast Mover Aspirer							
90% - 100%	80%-90%	<80%						



### **Cluster: Coastal States**

- ► Tamil Nadu
- ▶ Gujarat
- Karnataka
- Andhra Pradesh
- Odisha
- Maharashtra
- Kerala
- ▶ West Bengal
- ▶ Goa

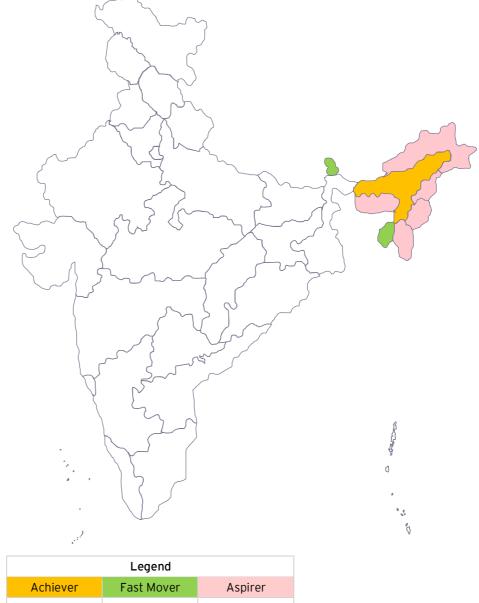


Legend							
Achiever	Fast Mover	Aspirer					
90% - 100%	80%-90%	<80%					



## Cluster: North-Eastern Region

- Assam
- Sikkim
- Tripura
- Meghalaya
- Manipur
- Mizoram
- Arunachal Pradesh
- Nagaland

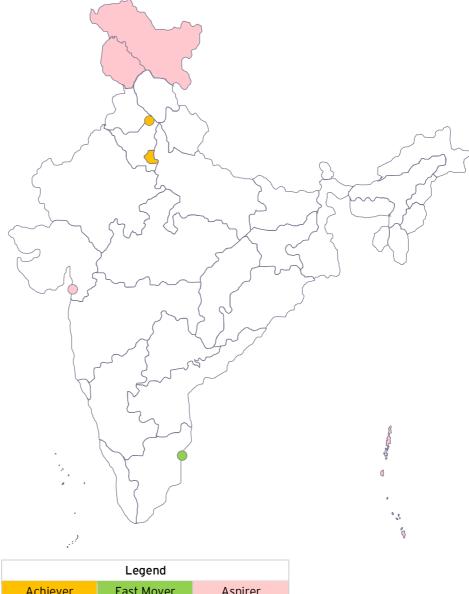


Legend								
Achiever	Fast Mover	Aspirer						
90% - 100%	80%-90%	<80%						



## **Cluster: Union Territories**

- Delhi
- Chandigarh
- Puducherry
- Daman & Diu and Dadar & Nagar Haveli
- Jammu & Kashmir
- Ladakh
- Andaman & Nicobar Islands
- Lakshadweep



Legend								
Achiever	Achiever Fast Mover Aspirer							
90% - 100%	80%-90%	<80%						





# 3. Cluster insights on overall indicators - infrastructure, services and regulatory

Globalization has led to convergence of supply chain across borders with raw materials being sourced from one part of the World and finished products being supplied to another. As a result, being competitive and agile, in terms of efficient supply chains, is need of the hour. What it means for the domestic industry is that States/UTs and Central agencies have to work in unison to facilitate seamless movement of goods. Given the vast geographical demographics of India, every State/UT has a certain advantage / disadvantage inherent to deal with. Adjoining sub-regions of two or three States/UTs may exhibit a common ecosystem, only differentiated by varying policy measures undertaken by the concerned States/UTs.

The flow of goods from origin to destination is almost always across more than one State, traversing various geographies. The presence of production and consumption centres are not bound by the logic of administrative units such as a State or a UT. Multiple interactions with industry stakeholders have indicated that a broader geographic lens must be used to examine the performance of logistics ecosystem. Therefore, States/UTs have been clustered as per geographic demography and their performance, indicator wise

has been studied to better understand the underlying cause / effect of existing supply chain.

Clustering approach highlights that the logistics ecosystems depend on many variables, of which geographical position of a State/UT is only one factor. Though geographical position might provide an initial impetus to logistics, its sustenance is based on a number of underlying factors for an efficient ecosystem.

As detailed earlier, the States/UTs have been clustered into 4 segments as follows:

- Landlocked States
- Coastal States
- North-Eastern States and
- Union Territories

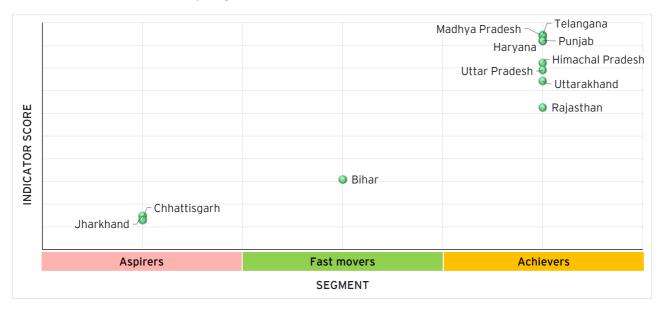
Performance of States/UTs, in each of these clusters, was based on their individual scores (respondents' ratings) across pillars of - "overall quality of logistics infrastructure, quality of logistics services; and operating and regulatory environment". These three indicators were part of the perception questionnaire administered to private stakeholders (as Question no. A, B and C). Detailed analysis is presented below:



#### 3.1 Landlocked States

#### Quality of overall infrastructure -

Exhibit 14: Landlocked - Overall quality of infrastructure



As shown in the exhibit below, all States barring three fall in Achievers category, indicating that the respondents perceive that infrastructure is good in the cluster. Telangana, Madhya Pradesh, Punjab, Haryana, lead the cluster. A deep dive into sub indicators of road, rail, terminals, and warehouse indicates that the achievers maintain their leadership across all the indicators. Especially in roads, all the achievers retain their position. Further highlighting majority of the cargo is shipped via road mode and thus having good road infrastructure augurs well for States logistics ecosystem.

In terms of "Quality of rail infrastructure", Punjab, Uttar Pradesh, Haryana, Telangana are the leaders. Madhya Pradesh which has the largest warehousing capacity in the country features in Fast Movers' category for "Quality of warehousing infrastructure".

Bihar is the only State to feature in the Fast Movers segment, mainly as the respondents have indicated high confidence in "Overall rail infrastructure" which puts it in the Achievers category for the said indicator. Respondents' feedback indicate that the State's in Aspirers segment need to improve logistics infrastructure i.e. road, rail, terminal and warehousing infrastructure. Bihar may specifically focus on

further improving roads infrastructure which will help advance its overall logistics ecosystem.

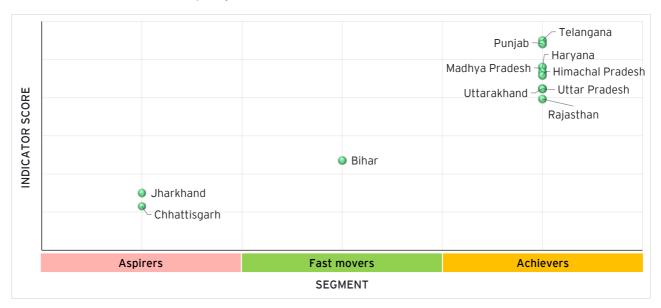
#### Quality of overall logistics services:

Telangana, Punjab, Haryana, Madhya Pradesh score high in "Overall Services indicator". Telangana in particular features in Achievers segment in most of the sub-indicators like "Quality of modal services, Quality of services at terminals, Timeliness of transportation services, Timeliness of terminal services". Primary interactions indicate that well developed road connectivity in Telangana (with ring roads to bypass city traffic) especially in consuming hub of Hyderabad has made supply chains efficient, timely and reliable. In terms of "Reasonableness of prices of logistics services" also, the State features in Achiever's category. Bihar is the only State to feature in Fast Movers segment mainly on account of scoring high in "Reasonableness of logistics prices" indicator and progressive steps being undertaken by the State towards improving logistics ecosystem.

Jharkhand and Chhattisgarh have scored low on all sub-indicators of "Quality of logistics service indicator", particularly on "Timeliness and Safety and Security of cargo" aspects. States may look into immediate interventions to improve quality of logistics services and further improve logistics ecosystem.



Exhibit 15: Landlocked - Overall quality of services

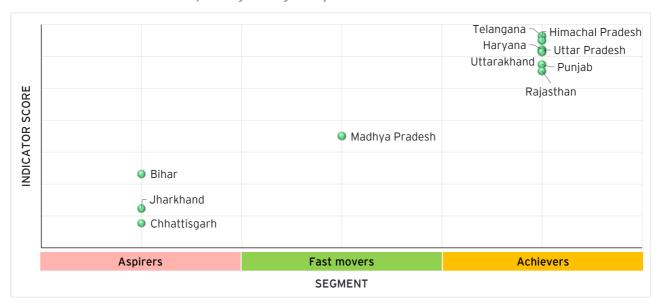


## Overall operating and regulatory environment

Telangana continues to maintain its leadership position even in the "Overall Operating and regulatory environment" indicator, followed by Himachal Pradesh and Haryana. States featuring in the Achievers segment are the ones who have formulated their Logistics Policy barring Uttarakhand, Punjab and Rajasthan, whose policy is in final stage of being notified.

Madhya Pradesh is the only State to feature in Fast movers segment as it is one of the high scorers in each of the sub indicators, a reflection of its progressive policies. States in Aspirers segment have been perceived to have poor operating and regulatory environment. Thus, the States may look at immediate interventions to resolve relevant issues. Over the long term, formulation of logistics policy and providing a favourable business environment will help States to improve regulatory perception.

Exhibit 16: Landlocked - overall operating and regulatory environment





#### 3.2 Coastal States

#### Quality of overall infrastructure

All States in coastal cluster barring two (West Bengal and Goa) feature in the Achiever's segment lead by Tamil Nadu, Gujarat, Karnataka, Andhra Pradesh. Gujarat and Karnataka score high in subindicator - road infrastructure. Gujarat leads in "Quality of rail and Terminal infrastructure" which also reflects in positive feedback from primary interactions indicating that the State has one of the best terminal infrastructure across country. Karnataka on the other hand tops in quality of warehousing infrastructure.

Goa fares particularly low in "Overall quality of logistics infrastructure". As per primary interactions, warehousing and terminal infrastructure needs major improvements to cater to the trade demands. West Bengal too has been perceived with similar observations and improvement areas, with the exception of having good rail infrastructure as per feedback from industry and hence it features in Fast Movers segment.

West Bengal

Aspirers

Fast movers

SEGMENT

Tamil Nadu
Gujarat
Karnataka
Odisha
Karnataka
Odisha
Karnataka
Andhra Pradesh
Odisha
Karnataka
Andhra Pradesh
Akarnataka
Andhra Pradesh
Odisha
Karnataka
Andhra Pradesh
Akarnataka
An

Exhibit 17: Coastal - quality of overall infrastructure

#### Quality of overall logistics services

All States barring two (Goa and West Bengal - in Fast Movers) feature in Achievers category.
Odisha, Gujarat, Karnataka, Tamil Nadu lead the cluster. Odisha leads in sub - indicators of "Modal

logistics services, Quality of service at terminals, Reasonableness of prices and Track and Trace".

Goa and West Bengal have been rated low on all sub-indicators of logistics services, particularly "Quality of services at terminals, Timeliness and Track & Trace".



Exhibit 18: Coastal - quality of overall services



## Overall operating and regulatory environment

Karnataka, Tamil Nadu, Odisha, Andhra Pradesh lead the cluster. South India States featuring in Achiever's segment have undertaken a collaborative approach with industry stakeholders, whereby regular interactions are being held to understand issues faced on ground and devise necessary resolutions. This has helped create a positive environment in the States and support

State machinery with necessary feedback to optimise and take appropriate policy interventions.

Goa and West Bengal have been rated low on all sub-indicators of operating and regulatory environment. The States need to particularly focus on ease of obtaining approvals and ease of entry to/from neighbouring States where multiple issues have been highlighted.

Exhibit 19: Coastal - Overall operating and regulatory environment





#### 3.3 North - Eastern States

#### Quality of overall infrastructure

Assam features in the Achievers segment, barring which all other States are categorized in Aspirers with Arunanchal Pradesh in Fast Movers. Assam's focus on developing logistics infrastructure, prepration of Logistics Policy has augured well for development of logistics ecosystem. For North Eastern States, limited access points, mostly via the long distance and inefficient ecosystems in West Bengal, logistics development centered primarily around Assam, only increases time and cost of cargo movement to/from the region. The States' difficult terrain makes operation and management of logistics challenging. As a result, development is seen in Assam barring which rest

of the States lack established logistics ecosystem as reflected in the grading.

Arunachal Pradesh on the other hand features in Fast movers category as it one of the high scorers in "Quality of services at terminal, Reasonableness of prices and timeliness".

Among all the States featuring in Aspirer's category, Manipur, and Mizoram in particular are rated low on road, rail and warehousing infrastructure. Considering difficult terrain of the region, State Governments may look at developing appropriate action plan or policy to create required infrastructure in coordination with Central agencies.

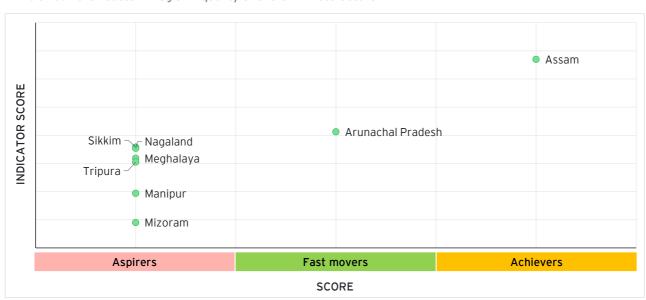


Exhibit 20: North-eastern Region - quality of overall infrastructure

#### Quality of overall logistics services

Nagaland and Assam lead the category of "Overall logistics services" in Achievers segment. Nagaland has been rated high in every sub-category indicator of quality of logistics services.

Arunachal Pradesh and Manipur feature in the Aspirers segment mainly on account of low ratings in "Reasonableness of prices and timeliness" indicators.



Nagaland

Nagaland

Assam

Tripura

Meghalaya

Mizoram

Arunachal Pradesh

Manipur

Aspirers

Fast movers

Achievers

**SEGMENT** 

Exhibit 21: Northeastern Region - quality of overall services

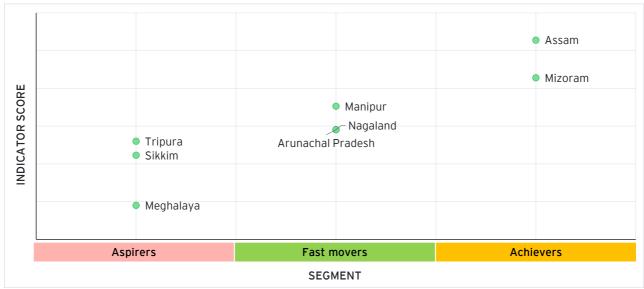
## Overall operating and regulatory environment

Assam and Mizoram lead the indicator. Assam especially on the back of its progressive polices reflected in the launch of its Logistics Policy and

proactive work towards building sustainable logistics infrastructure.

Tripura, Sikkim and Meghalaya have been rated low on operating and regulatory environment during primary interactions.

Exhibit 22: North-Eastern Region - overall operating and regulatory environment





### 3.4 Union Territories (UTs)

UTs have a different regulatory set-up as compared to the States. Limited area, and lack of industrial zones are factors that reduce scope of development of logistics infrastructure and robust service deliveries. As a result, the demand in these centers is largely catered by support from infrastructure / service providers in adjacent States. Hence they have been clubbed in a separate category.

#### Quality of overall infrastructure

Chandigarh, Puducherry, Delhi, Jammu & Kashmir, are leaders in this category. Chandigarh scores maximum in sub indicators of "Quality of road, terminal and warehousing infrastructure". Delhi tops in quality of rail infrastructure.

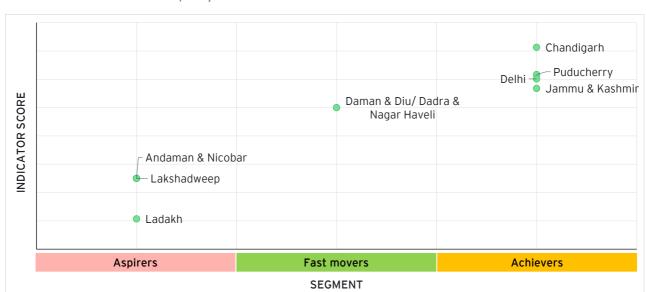


Exhibit 23: Union Territories - quality of overall infrastructure

#### Quality of overall logistics services

Chandigarh, Puducherry and Delhi lead in the category. Chandigarh scores maximum in sub indicators of "Quality of services at terminals,

Timeliness at terminal services, Track and Trace and Safety and security of cargo". Ladakh leads in sub indicator of reasonableness of prices of logistics services.



Exhibit 24: Union Territories - quality of overall services



## Overall operating and regulatory environment

Puducherry, Chandigarh, Andaman & Nicobar Island and Delhi lead the indicator. Chandigarh scores maximum in all the sub indicators related to operating and regulatory environment.

Exhibit 25: Union Territories - overall operating and regulatory environment







## 4. Category-wise State and UTs performance

### 4.1 Coastal



### Andhra Pradesh - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 26 below.

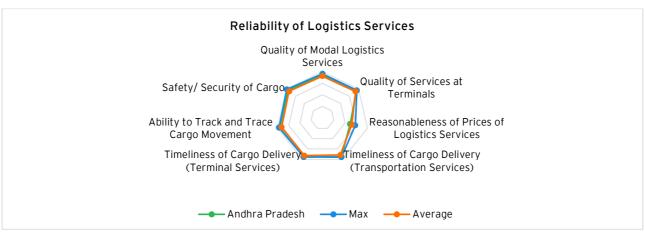
Exhibit 26: Brief logistics profile of Andhra Pradesh

Parameter	Unit	Value	Year	Source
Road Length	km	NH= 7,340/ SH= 13,500	2020-21	NH - MoRTH/NHAI SH - State data
Railway Track	Track-km	7,714	2019-20	MoR
Inland Container Depot (ICD)	nos.	1	2021-22	CBIC
Container Freight Station (CFS)	nos.	16	2020-21	State Govt.
Private Freight Terminal (PFT)	nos.	3	2020-21	State Govt.
Air Cargo Terminals	nos.	4	2020-21	State Govt.
Railway Goods Sheds	nos.	288	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	12,17,566	2020-21	State Govt.
Cold Storage Capacity	MT	11,56,759	2020-21	State Govt.
Logistics Training Centres	nos.	43	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	1,297	2020-21	State Govt.

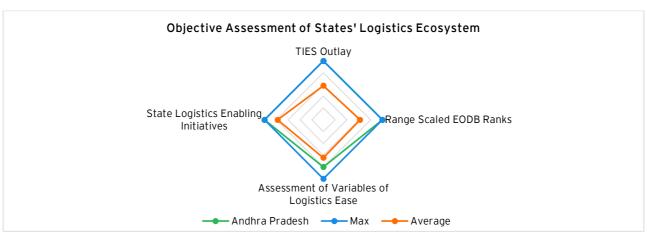


Exhibit 27: State's LEADS indicator wise performance











Andhra Pradesh has been graded as an Achiever within the Coastal cluster.

The State has scored above average across indicators related to Quality of Infrastructure except for Warehousing Infrastructure.

Like other Coastal states, Reasonableness of prices of logistics services has been identified as an area where the state could improve. The state has been rated above average on all indicators related to Reliability of Logistics Services.

State has scored high with regards to Ease of Entry and Grievance Redressal Mechanism related indicators.

Extent of Facilitation and Ease of Obtaining Approvals have been identified as areas where the state could improve.

#### Industry feedback

#### Infrastructure

- Truck lay-bys with ancillary facilities (security, food, washrooms, medical shop, repairs & maintenance areas) are required on important freight routes, at ports, and in industrial parks.
- First and last mile connectivity to railway sidings/good sheds is required.
- First and last mile road connectivity to Visakhapatnam port needs improvement. Elevated road access to the port is required and service roads need to be widened.

#### **Services**

Shortage of skilled drivers in the State is a concern.

#### Regulatory and Operating Environment

- Diesel theft on highways, especially on Vizag-Vijayawada and Vijayawada-Hyderabad routes is a concern.
- Speedy disbursement of fiscal incentives and grants for development of logistics infrastructure is required.
- Seamless integration of RTO with centralized Vaahan portal is required.
- Delays in statutory clearances and approvals from State Authorities have been witnessed. Process and paperwork for securing approvals needs to be simplified.
- Delays in ODC movements owing to multiple approvals from various agencies is an area of concern.

#### State feedback

Truck Parking terminals have been provided near Ports and Industrial Parks with ancillary facilities at Nellore, Gangavaram, Anantapur, Tirupathi, NTR District etc.

- ► More than 20 truck lay-bys and resting areas have been provided at regular sections of various NHs namely NH-16, NH-256, NH-65, NH-4, NH-544 & NH-40.
- Various works are under progress and at proposal stage for improving connectivity to Visakhapatnam port such as widening of East Break Water up to Convent Junction to Visakhapatnam Port and Convent Junction to Sheelanagar Junction, construction of fly over near Airport Terminal for MMLP connectivity, 4 lane highway connectivity at NH-16 etc.
- Technology interventions for Smart Enforcement, like Static Weighbridges, Weigh in Motion, CCTV/PTZ Cameras and Emergency Call Box are put in place at critical points connecting to various Highways (at Toll Plazas) namely NH-216-A, NH-16, NH-40, NH-65, and other State Highways.
- Driver training schools have been established at key logistics hubs. APSRTC a has taken up an initiative on establishment of driving schools in all major cities of the state. The Government of India has also sanctioned setting up Institute of Driving Training and Research (IDTR) at Darsi, Prakasham District and Dhone, Kurnool District.
- ► The State Government is in the process of devising zoning for freight movement in cities and district headquarters.
- ▶ Government is also implementing Grievances Redressal Mechanism in the name of INDUSTRIES SPANDANA' (<a href="http://apindustries.gov.in/industriesspandan">http://apindustries.gov.in/industriesspandan</a> a) on the Single Desk Portal to act as a one stop-shop for all investment/industryinfrastructure related Queries/Grievances.
- ➤ Transport Department of the State is integrating its software with Vahan and Sarathi of NIC.
- ➤ Transport Department has taken up various steps to improve transparency. All 83 services of RTO are online 24 X 7.



#### Initiatives undertaken by the State Government

#### State policy for logistics

Andhra Pradesh has formulated Andhra Pradesh Logistics Policy 2022-2027

#### Skill Development

- ▶ APSRTC, is establishing driving training schools in all the major cities of the state.
- ► Government of India has also sanctioned development of Institute of Driving Training and Research (IDTRs) at Darsi, Prakasham District and Dhone, Kurnool District.

#### Actions taken by the State against LEADS 2021 recommendations

The State has taken following actions against recommendations suggested in LEADS 2021 report.

- ► Formulation of Andhra Pradesh State Logistics Policy 2022-27 covering major aspects of logistics such as creation of institutional mechanism, development of logistics enabling infrastructure, fiscal Incentives etc.
  - The state has setup institutional mechanism (EGoS, NPG & TSU) which will focus on providing actionable program strategies to align the State with National Logistics Policy and develop state/city logistics plan.
- Disbanding of check posts and introduction of e-way bills across the state.
- NHAI is strengthening Icchapuram Narasannpeta section of NH-16
- ► MoRTH is strengthening flyover at Muthukur Road Junction on NH-67 and Kanakdurga Flyover on NH-9, Mirchi Yard Flyover on NH-544D. MoRTH has also constructed 7 ROB's; additionally, construction for 13 ROB's is ongoing and construction of 5 more ROB's is sanctioned
- ► The state has proposed 3 Institutes for Driver Training Research (IDTR) in Darsi (Prakasam District), Dhone (Kurnool District) and Rajapulova (Vizianagaram District).
- ▶ The state has developed amenities for drivers along highways.
- ► The state has developed multiple warehousing facilities in Vijaywada, Kakinada and Nellore. Presently 27,000 MT, 60,100 MT and 124,000 MT of storage facility is available at Vijwada, Kakinada and Nellore respectively
- Increasing draft depth at Kakinada Port is under implementation as part of Modernization of Infrastructure under Sagaramala program.
- Regular stakeholder interactions are conducted between transport unions and the industry to jointly address issues pertaining to logistics.
- Andhra Pradesh State Logistics Policy 2022-27 includes provisions for development of PGA laboratories.
- ▶ The state is in discussion with the central government to resolve frequent PCS portal failures.





## GOA - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 28 below.

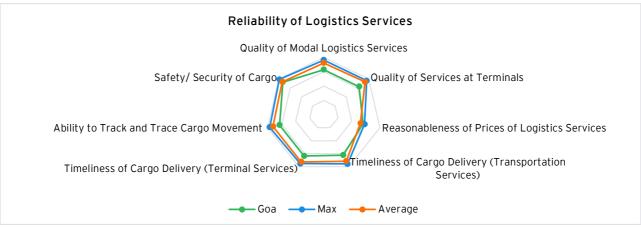
Exhibit 28: Brief logistics profile of Goa

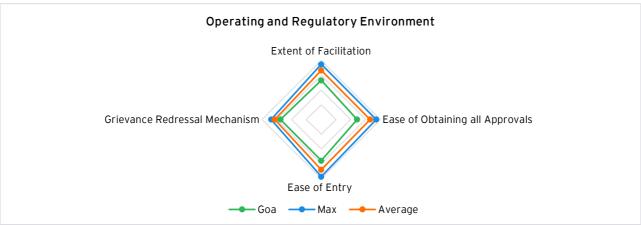
Parameter	Unit	Value	Year	Source
Road Length	km	NH=299 / SH= 143	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	111	2019-20	MoR
Inland Container Depot (ICD)	nos.	1	2021-22	CBIC
Container Freight Station (CFS)	nos.	1	2020-21	State Govt.
Air Cargo Terminals	nos.	1	2020-21	AAI
Railway Goods Sheds	nos.	19	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	12,902	2020-21	WDRA
Cold storage capacity	MT	7,705	2020-21	MoCAF&PD

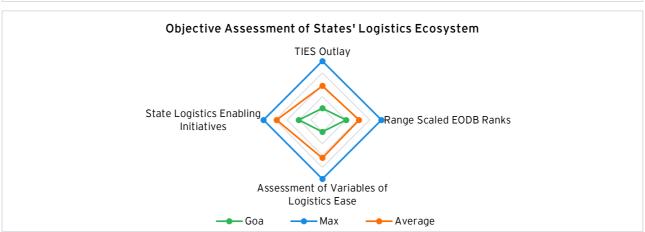


Exhibit 29: State's LEADS indicator wise performance











Goa has been graded as an Aspirer within the Coastal cluster.

The State has scored below average across all the indicators related to Quality of Infrastructure. As per primary interactions Warehousing and Terminal Infrastructure needs improvement.

The State has been rated below average on all other indicators related to Reliability of Logistics Services.

Similarly, the State has also scored below average with regards to all the Operating and Environment indicators.

#### Industry feedback

#### Infrastructure

- First mile connectivity to Industrial areas in Sankhwal, Pilerne, Cuncolim and Madgaon need widening.
- There are two bottleneck points while accessing Madgaon, Cuncolim industrial area, at Baithem and Salem which leads to high congestion.
- Road connecting Navelim to Balli terminal (Concor) needs widening to handle trailer traffic.
- ► Last mile connectivity from AFCONS jetty in Kothambi to main highway needs to be provided. The Jetty is 2 kms from the SH which is 1further 10 kms from NH i.e., Usgao mining road connecting Mollem on one side and Amona on the other side.

- Connectivity to Pune and Bangalore regions from the state needs to be improved.
- Goa to Ramnagar (Karnataka) repairs are ongoing on 15 kms stretch since a long time on NH748 leading to take an alternate route which is 150 kms more. Similar is the case with Panaji to Belgaum highway.
- ▶ Transport hub is required at Pilen or Mapsa.
- A bus stop (for state and other commercial buses) is required at Concor Balli terminal to ease out the travelling of workers to / from the terminal.
- Dredging is required at IWT channels of Mandovi and Zuari rivers. Immediate attention is required to deepen draft at Cortalim area, where barges crossing from Cortalim through Cumbarjua channel are often stuck / grounded.
- Cranes at Mormugoa port need to be upgraded for a faster handling.

#### **Services**

► Power supply to Industrial area is marred with fluctuations, spikes, and frequent cuts.

#### Operating and Regulatory Environment

- ► Unregulated land zoning in the state poses a challenge in land acquisition.
- Grievance redressal mechanism at State level is required.
- ► A comprehensive policy is required for the state to develop the infrastructure in a planned manner.

#### Initiatives undertaken by the State Government

#### State policy for logistics

- ▶ The Logistics Policy and Logistics Master Plan of the State is under preparation.
- ► Goa Export Strategy 2018 prepared by the State, highlights the aspects for improvement with regards to infrastructure and regulatory issues.

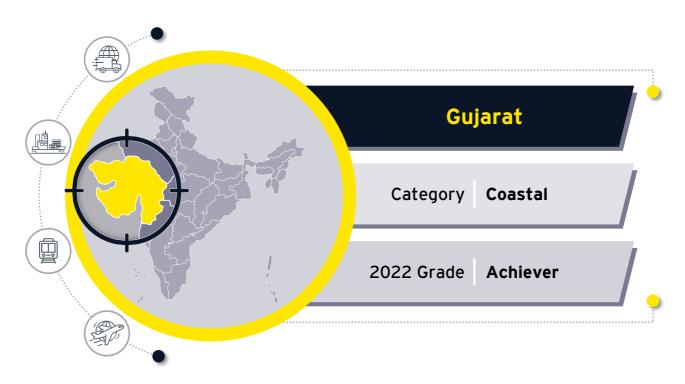
#### Institutional mechanism for logistics implementation

► The State has a robust institutional setup for logistics - Nodal officer for logistics has been appointed, State logistics cell, as well as State Logistics Co-ordination Committee, has been constituted.

#### Key initiatives under the regulatory regime

► The State has the single-window mechanism for hassle-free processing of approvals for setting-up logistics facilities.





## GUJARAT - a brief logistics profile

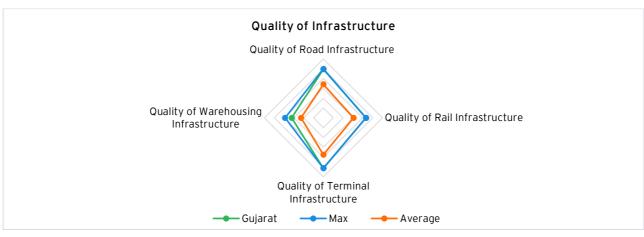
Brief overview of the logistics profile of the State is provided in the exhibit 30 below.

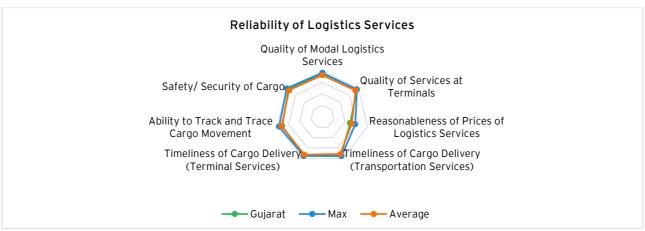
Exhibit 30: Brief logistics profile of Gujarat

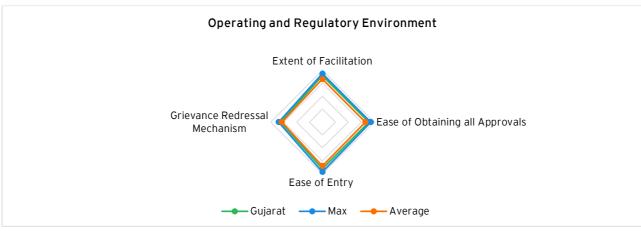
Parameter	Unit	Value	Year	Source
Road Length	Km	NH=7,744/ SH=16,386	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	7,938	2019-20	MoR
Inland Container Depot (ICD)	nos.	9	2021-22	CBIC
Container Freight Station (CFS)	nos.	19	2020-21	State Govt.
Private Freight Terminal (PFT)	nos.	8	2020-21	MoR
Air Cargo Terminals	nos.	10	2020-21	AAI
Railway Goods Sheds	nos.	119	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	7,97,254	2020-21	WDRA and State Govt.
Cold Storage Capacity	MT	38,22,112	2020-21	MoCAF&PD and State Govt.
Logistics Training Centres	nos.	10	2020-21	MoSDE and State Govt.
No. of Individuals trained in logistics	nos.	1,907	2020-21	State Govt.

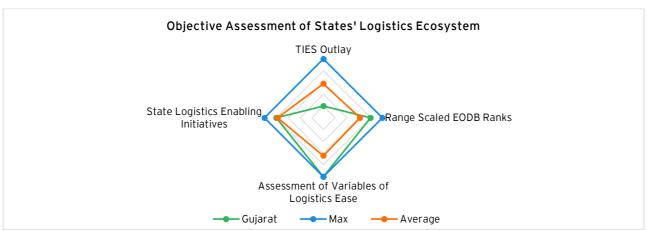


Exhibit 31: State's LEADS indicator wise performance











Gujarat has been graded as an Achiever within the Coastal cluster.

The State has scored high across indicators related to Quality of Infrastructure except for Warehousing infrastructure. The State has scored high on Quality of Road Infrastructure, and primary interactions have particularly highlighted about presence of Quality Terminal Infrastructure in the State. The State continues to undertake multiple measures to improve quality of infrastructure.

Like other Coastal States, Reasonableness of prices of logistics services has been identified as an area where the State could improve. The State has been rated high on all other indicators related to Reliability of Logistics Services.

State has scored above average with regards to all indicators related to Operating and Regulatory Environment.

#### **Industry Feedback**

#### Infrastructure

- Completion of road repair works at NH -8A road from Kandla to Surajbhari to be expedited.
- ► Road infrastructure in Amreli district, needs improvements.
- Dedicated truck parking zones with driver laybys (providing basic amenities) are required along the connecting road corridors outside Kandla and Mundra ports.
- Port warehouses (at Mundra, Kandla, etc.), should have mechanized handling.
- Several Gujarat Maritime Board (GMB) jetties are under-utilized or non-operational. A plan to improve their utilization can help reduce cargo handling / transit time and thus the logistics cost.

#### Services

- Shortage of truck drivers (medium, heavy commercial vehicles) and helpers is an issue.
- ► Shortage of skilled logistics workforce is an issue.

#### Regulatory and Operating Environment

Effective implementation of monitoring system to keep in check overloading of vehicles as it often results in road accidents.

- Check points at State borders often lead to truck stoppages, leading to informal payments and other complexities to truck transporters.
- No clear mechanism is available to track interstate grievances for logistics service providers.
- Clarity on warehouse categorization for environment clearances and compliance is required and process for renewal is to be simplified.
- ▶ Delays in obtaining approvals from State Pollution Control Board.

#### State Feedback

#### Infrastructure

- ▶ Roads: Length of surface road in Amreli district is 3,908 Kms. Out of this length around 5% length is damaged due to heavy rain. Road repairing is in progress and by the end of September 2022 repairing work will be completed.
- ► Truck parking: Enough Truck Parking Spaces and zones with amenities for drivers are provided inside Mundra Port.
- ► Warehousing: Mapping of existing warehouses and their state of infrastructure has been initiated as part of PM GatiShakti Gujarat.
- ▶ Storage at Mundra port: The multipurpose terminal in Mundra has multiple covered godowns and open yards for storage of large volumes of cargo. The covered godown can store over 630,000 MT of cargo. Open yards have been earmarked for minerals, timber, steel, and project cargo. Port along with allied warehousing facilities are already developed and being operated by private entities
- Non-operational GMB jetties: Jetties would be refurbished and made operational based on the clear demand forecast as to avoid burden in case of uncertainty in the future traffic.
- Grievance Redressal System: Grievance Redressal System has been established at the office of Commissioner of Transport (COT) for reporting issues related to logistics. This also addresses grievances raised through twitter and mail.
- Expediting pollution control approvals for warehousing: GPCB has implemented online system known as XGN, with minimum physical visits required.



- ➤ Awareness program: Awareness workshops in 32 Districts of Gujarat have been undertaken as part of Gujarat Integrated Logistics and Logistics Parks Policy 2021 wherein more than 2200 logistics stakeholders participated.
- Actions undertaken on LEADS 2021 observations: Gujarat has taken adequate actions against the recommendations as suggested in LEADS 2021 report.

#### Initiatives undertaken by the State Government

#### State policy for logistics

Gujarat has formulated Gujarat Integrated Logistics and Logistics Park Policy 2021

#### Smart Enforcement

- The state has implemented e-challan and 'POS' system to prevent unwarranted stoppages accompanying informal payments
- ▶ Border check posts have been abolished in Gujarat and online Over Dimension Carriage (ODC) and Tax exemption module have been implemented for online payments in advance for ODC vehicles and levy tax online from other state vehicles for seamless plying of inter-state movement
- ▶ Validation of digital documents through Mparivahan and Digilocker. Therefore, digital copy of the vehicle related documents is also valid.
- The state has taken up the process of identifying theft prone highway locations and implementing CCTV based surveillance and monitoring mechanism under VISWAS Phase-II

#### Skill Development

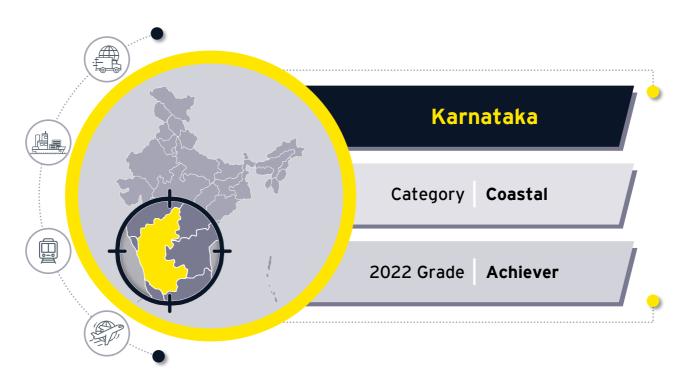
- ► Gujarat Skill Development Mission (GSDM) in association with National Skill Development Corporation (NSDC) has trained (Skilling and upskilling) around 25 thousand candidates in the logistics sector till date under Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 2.0 and 3.0, and Project Sankalp
- ► The candidates have been trained in more than 25 Job roles across the three segments of logistics value chain Transportation, Warehousing and Value-Added Services
- ► GSDM has announced to train more than 3,000 candidates in the logistics sector in FY 2022-23 through its flagship scheme Mukhyamantri Bhavishyalakshi Kaushalya Vikas Yojana (MBKVY) and Project Sankalp

#### Action taken by the State against LEADS 2021 recommendations

Gujarat has taken following actions against the recommendations as suggested in LEADS 2021 report:

- The state has implemented e-challan and 'POS' system to prevent unwarranted stoppages accompanying informal payments.
- ► The state has abolished all border check posts and implemented online ODC payment and tax exemption module for online payments in advance.
- The state has taken up the process of identifying theft prone highway locations and implementing CCTV based surveillance and monitoring mechanism under VISWAS Phase-II.





## KARNATAKA - a brief logistics profile

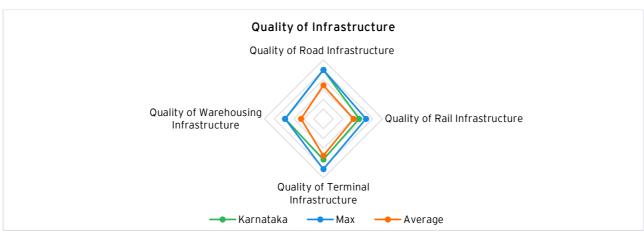
Brief overview of the logistics profile of the State is provided in the exhibit 32 below.

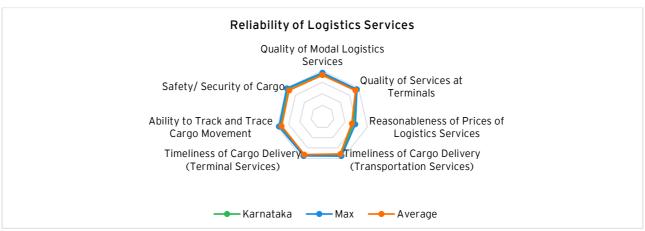
Exhibit 32: Brief logistics profile of Karnataka

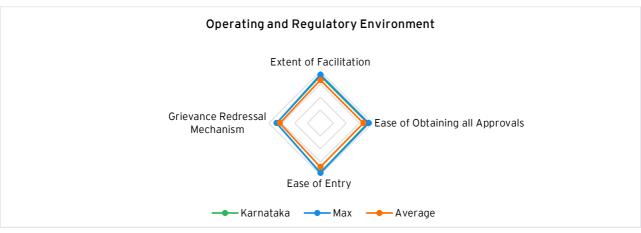
Parameter	Unit	Value	Year	Source
Road Length	km	NH= 7,412/ SH= 28,985	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	6,083	2019-20	MoR
Inland Container Depot (ICD)	nos.	4	2021-22	CBIC and State Govt.
Container Freight Station (CFS)	nos.	4	2020-21	State Govt.
Private Freight Terminal (PFT)	nos.	2	2020-21	MoR and State Govt.
Air Cargo Terminals	nos.	7	2020-21	State Govt.
Railway Goods Sheds	nos.	53	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	42,48,959	2020-21	State Govt.
Cold Storage Capacity	MT	6,76,832	2020-21	State Govt.
Logistics Training Centres	nos.	27	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	809	2020-21	State Govt.

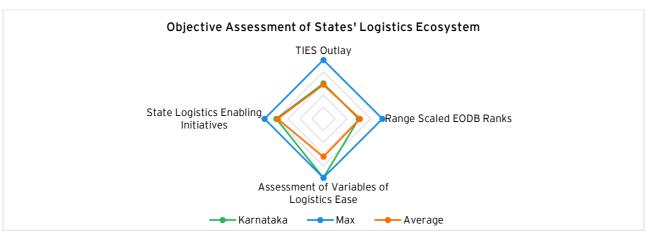


Exhibit 33: State's LEADS indicator wise performance











Karnataka has been graded as an Achiever within the Coastal cluster.

The State has scored high across indicators related to Quality of Infrastructure except for Rail and Terminal infrastructure. The State is rated high in Quality of Warehousing Infrastructure. The State has taken multiple measures to improve quality of infrastructure.

Like other Coastal states, Reasonableness of prices of logistics services has been identified as an area where the state could improve. Logistics stakeholders have highlighted that the sector suffers from unlawful profiteering of transporter/trucker's unions who do not allow trucks from other State to enter the States' border without charging extra money.

The State has been rated above average on all other indicators related to Reliability of Logistics Services

State has scored high with regards to all indicators related to Operating and Regulatory Environment.

#### Industry feedback

#### Infrastructure

- Connectivity to Mangalore Port:
  - Road and Rail connectivity needs to be improved. Mysuru to Madikeri stretch, enroute to Mangalore Port also needs to be augmented.
  - Closure of Mangalore Bengaluru (NH 75) due to monsoon or any other reasons severely affects trade activities.
  - Bypass is required for Channarayapatna town.
  - An elevated highway or flyover is needed between Kulur and Baikampady on NH 66 as the stretch connecting New Mangalore Port is always congested.
- ► Infrastructure at Mangalore port needs to be augmented.
- Due to restrictions on movement of heavy vehicles between Heggadde and Maranahalli on NH 75 during 6pm to 6am, heavy vehicles need to take a detour of 350 kms via Hubballi - Ankola route.
- ► The Baikampady Industrial Area lacks proper approach road from NH 66.

- ► ICD Whitefield is inaccessible due to traffic and inadequate road infrastructure in the region. Either alternate road connectivity or enhancement of existing connectivity needs to be undertaken.
- Connectivity to various existing industrial zones of Karnataka, especially in Bengaluru and Hubbali regions is inadequate.
- Bengaluru Satellite Town Ring Road project needs to be expedited.
- ► First and Last mile connections are sub optimal especially in Tier 3 cities.
- Multimodal/Logistics parks required in places other than Bengaluru and Mysuru.
- Lack of Truck terminals, especially at Hubbali, Raichur and other cities at city periphery.
- Additional Customs facilities/CFS/ICDs are required in the northern and eastern parts of Bengaluru as there is a high demand for cargo movement.
- ► District level cold storage facilities are required of agricultural cargo.

#### Services

- ► Shortage of truck drivers leading to nonavailability of trucks.
- ► High demand of skilled manpower in the logistics industry especially warehouse handling and crane operators.
- Non availability of unloading labourers during night-time at terminals (bulk movements -Mangaluru) causes delays and adds to cost.

#### Operating and Regulatory Environment

- Warehousing should be brought under White Category to allow exemption of environmental clearance.
- Implementation and functioning of Single window Clearance system for Warehousing and Logistics Parks should be improved, especially NOC from Fire Department and Licenses by Panchayat.
- ► There are delays in statutory clearances from state authorities.
- Single point for grievances redressal needs to be provided, especially for domestic trade.
- Multiple check points between Karnataka and Kerala.



- ► There is unwanted stoppage of cargo vehicles by RTO/Police authorities.
- Diesel pilferage happens consistently, especially in the regions of Peenya and Bommanahalli.
- Restricted movement of cargo vehicles in cities and district headquarters.

### State feedback

- While most of the observations related to road and port connectivity fall under the purview of central agencies like NHAI, the state has included these gaps and envisaged changes as per the "Karnataka State Logistics Plan-2022".
- ► The state will discuss issue of sub optimal road connectivity to Baikampady Industrial Area

- with Karnataka State Industrial Area Development Board and undertake necessary actions.
- ▶ Specific actions to address challenges to first / last mile connectivity, access to industrial zones, ICD Whitefield, establishing MMLP (and allied infrastructure), district level cold storage facility, truck parking terminals, skilling in logistics sector, streamlining clearances, etc. are envisaged in 'The Karnataka State Logistic Plan-2022'.
- ➤ 280.8 km Bangalore Satellite Town Ring Road construction by NHAI is underway.
- The issue of non-availability of unloading labourers during night-time at terminals (bulk movements at Mangalore) will be taken up with NMPA to make adequate arrangements.

# Initiatives undertaken by the State Government

### **Smart Enforcement**

The state has implemented ANPR (Automated Number Plate Record) and adoptive signals on major traffic routes along with CCTV surveillance.

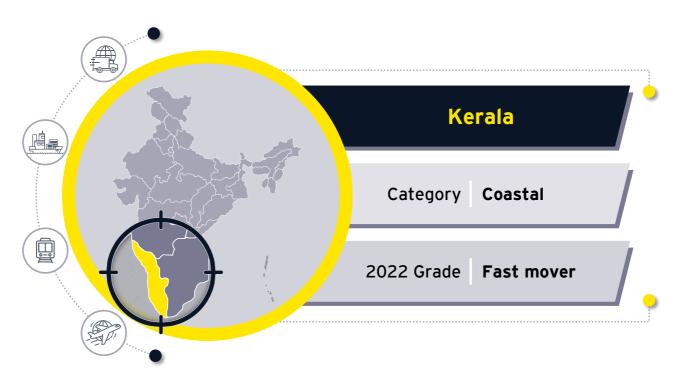
### Skill Development

- ► The state has developed 'Automated Driving Test Track' at RTO offices of Jnanabharathi, Electronic City, Mysore and Kalaburagi.
- Construction work has been completed for establishing Heavy Vehicle Driver Training Institutes at Kalaburagi and Mangaluru.

## Action taken by the State against LEADS 2021 recommendations

Karnataka has provided actions against recommendations as suggested in LEADS 2021 report by mapping improvement areas to stakeholders (NHAI, MOSPW, NCTF, Indian Railways). The state will work in close quarters with these stakeholders to implement reform actions.





# KERALA- a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 34 below.

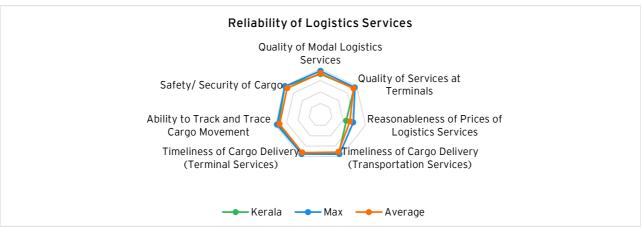
Exhibit 34: Brief logistics profile of Kerala

Parameter	Unit	Value	Year	Source
Road Length	km	NH=1,782 / SH= 4,128	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	2,087	2019-20	MoR
Inland Container Depot (ICD)	nos.	2	2021-22	State Govt.
Container Freight Station (CFS)	nos.	12	2020-21	State Govt.
Air Cargo Terminals	nos.	4	2020-21	State Govt.
Railway Goods Sheds	nos.	134	2020-21	MoR
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	1,59,449	2020-21	State Govt.
Cold Storage Capacity	MT	80,715	2020-21	State Govt.
Logistics Training Centres	nos.	16	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	919	2020-21	State Govt.

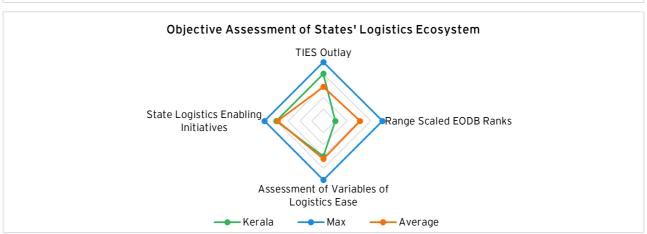


Exhibit 35: State's LEADS indicator wise performance











Kerala has been graded as Fast Mover within the Coastal cluster.

The State has scored below average across indicators related to Quality of Infrastructure except for Terminal Infrastructure. Primary interactions have highlighted about insufficient storage infrastructure at Cochin Port and regarding high congestion on the connecting roads. Besides, the strong clout of labour unions drives labour cost higher. This has also been reflected in the low scores on the indicators of Reasonableness of Road Freight Rates and Prices of Terminal Services.

The State has been rated above average on all other indicators related to Reliability of Logistics Services except for Modal Logistics Services.

The State has been rated average in all indicators in regard to Operating and Regulatory Environment. Extent of Facilitation and Ease of Obtaining Approvals have been identified as areas where the state could improve.

## Industry feedback

### Infrastructure

- First and Last mile connectivity to key Industrial clusters needs to be provided.
- Roads widening work from Thiruvananthapuram to Kasaragod to be expedited.

- Streetlights on Bolgatty to Kalamaseri to be provided, as it is an accident-prone route.
- Non availability of Warehouses, especially in Northern Kerala.
- MMLPs are required in Kochi and Kannur.
- Temperature controlled warehousing facility is not available in Cochin area.
- The draft in Azhikkal is only 2.4 and in Beypore 3.2m which limits the type of vessel that can be handled at port.

#### Services

 Availability of skilled labour is scarce for cargo handling services at warehouses.

# Operating and Regulatory Environment

- ► High road tax in the state causing high transportation cost.
- ► There are multiple stoppages during interstate cargo movement by RTO and police officials to collect informal charges.
- Parking yards for empty trailers are underutilised (infrastructure is available but trucks are being parked on roads).
- ► There is no grievance cell and official mechanism to have a direct dialogue with the transporters.

## Initiatives undertaken by the State Government

### **Smart Enforcement**

- ► The State has implemented e-challan and 'POS' system to prevent unwarranted stoppages accompanying informal payments.
- ► Suraksha Mitr It is a GPS based vehicle tracking and monitoring system for ensuring safety of Transport vehicles in Kerala.

## Skill Development

The State is formulating Intelligent transport policy which will cover various aspects on infrastructure creation for skill development of truck drivers and other logistics personnel.

Coastal Landlocked

NF

ITc

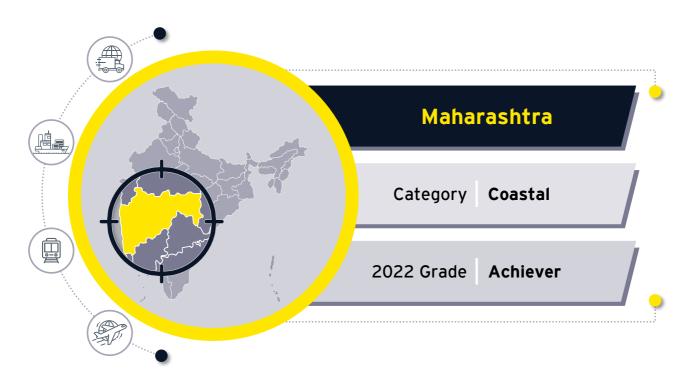


# Action taken by the State against LEADS 2021 recommendations

Kerala has taken adequate actions against the recommendations as suggested in LEADS 2021 report. Broadly, the measures taken by the State government are:

- ► The State has formulated logistics action plan which includes various aspects of logistics such as logistics infrastructure development, digitization of logistics operations, institutional development, policy measures.
- ► The State logistics action plan categorizes activities as per short (1-2 months), medium (3 months to 1 year) and long (5 years) timelines. Cargo infrastructure augmentation is envisaged as utilizing rail and water transport. The action plan also focuses on using green logistics for last mile delivery.
- ► Greater emphasis on developing logistics facilities cold storage facilities, warehouses, MMLPs etc. and digitization of state logistics and transport management systems.
- ► The State has also included institutional development as one of its focus areas which will augment skilling of logistics personnel and industry engagement coupled with formulation of logistics disaster management plan.
- ► The State has included policy measures, such as industry status to logistics and drone delivery, to strengthen its logistics environment.





# MAHARASHTRA - a brief logistics profile

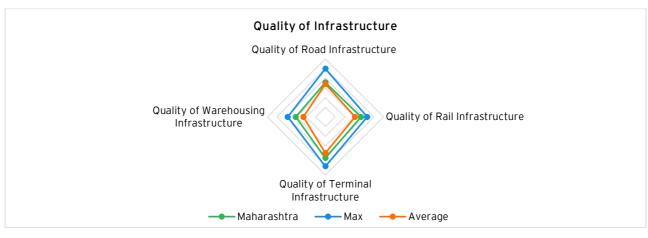
Brief overview of the logistics profile of the State is provided in the exhibit 36 below.

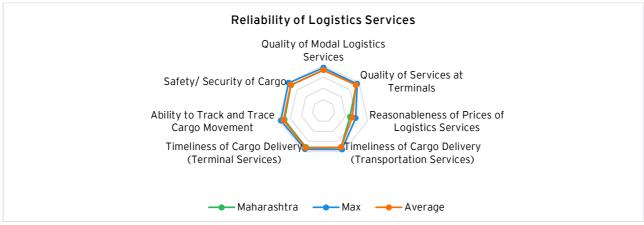
Exhibit 36: Brief logistics profile of Maharashtra

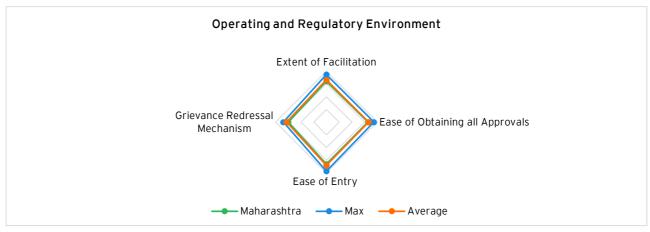
Parameter	Unit	Value	Year	Source
Road Length	km	NH= 17,757/ SH= 28,461	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	11,631	2019-20	MoR
Inland Container Depot (ICD)	nos.	18	2021-22	IMC List
Container Freight Station (CFS)	nos.	45	2018-19	CBIC
Private Freight Terminal (PFT)	nos.	8	2020-21	State Govt.
Air Cargo Terminals	nos.	11	2020-21	State Govt.
Railway Goods Sheds	nos.	548	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	22,33,000	2020-21	State Govt.
Cold Storage Capacity	MT	10,09,693	2020-21	State Govt.
Logistics Training Centres	nos.	116	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	2,126	2020-21	State Govt.

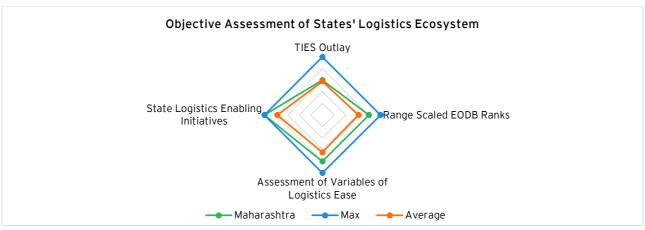


Exhibit 37: State's LEADS indicator wise performance









Note: It is important to check the confidence interval (CI) of a States' indicator scores before making any judgement on its performance.



Maharashtra has been graded as an Achiever within the Coastal cluster.

The State has scored above average across indicators related to Quality of Infrastructure. State has scored high with regards to Terminal Infrastructure indicator.

Reasonableness of Prices of Logistics Services, Track and Trace movement of cargo and Safety and Security of Cargo related to Reliability of Logistics Services has been identified as areas where the state could improve.

Maharashtra has been rated below average on all indicators related to Operating and Regulatory Environment. Labour unions, entry restrictions and lack of effective grievance redressal mechanism for the sector have been highlighted by the trade as key limiting factors.

State needs to take pro-active measures for addressing and improving the perception of trade friendliness.

## **Industry Feedback**

#### Infrastructure

- Approach roads to CFSs in Dronagiri and Rasayani clusters need to be widened to handle growing traffic.
- Internal MIDC roads and first / last mile roads connecting various industrial areas in Pune, Nagpur and Nashik need improvement.
- ► Road infrastructure between Pune to Chakan needs improvement.
- Parking facility for trucks plying in between JNPT and CFS is required.
- Truck terminal/Transport nagars are required at Ambad, Shirpur, Satpura, Ambik, Nayagaon, Pimplegaon and Ozar areas of Nashik.
- Hazardous cargo insinuation facility near JNPT needs to be setup.
- Cold warehousing infrastructure for agriculture and horticulture commodities

needs to be improved in Nashik, Nagpur and Konkan, region.

#### **Services**

- ► Labour is a major issue in State across industrial areas in Maharashtra.
- Regular delay in stamp-duty validation at Inspector General of Stamps, office based in Alibaug.
- ► Lack of Reconciliation / grievance redressal system in the state.
- ► The quality of water supply to industrial areas located outside MIDC needs improvement.
- Waste management facilities need to be developed in Chakan industrial region.
- Quality testing and other clearances required for European and American exports are often delayed and subject to speed money.

# Regulatory and Operating Environment

- Illegal encroachments in MIDCs at Pimpri Chinchwad cause hindrance in cargo handling and movement.
- Weigh bridges on the Maharashtra MP border need to be jointly calibrated.
- State Government collects Stamp Duty at 0.1% on delivery order value of imported goods as tax. This results in increasing the total logistic cost to the trade.
- ► Renewal permissions, related to Maharashtra Pollution Control Board (MPCB) are delayed.
- " Facilitation Fee" is collected from truck owners at inter states borders of Madhya Pradesh, Gujarat and Goa.
- Locals (project affected people) collect INR 1,000 - 1,500 / truck as "facilitation fee" (known as Varai charges) at JNPT associated CFSs, this directly adds to the cost of logistics to the customer.
- Unwarranted and frequent stoppages by RTO officials in the state lead to delays.



# Initiatives undertaken by the State Government

## State policy for logistics

▶ Maharashtra has formulated Maharashtra Logistics Park Policy - 2018.

#### Smart Enforcement

▶ 18 Border check post have been modernized, equipped with weighbridges, cameras, RFID etc. to minimize manual stoppages and checking at border locations.

## Skill Development

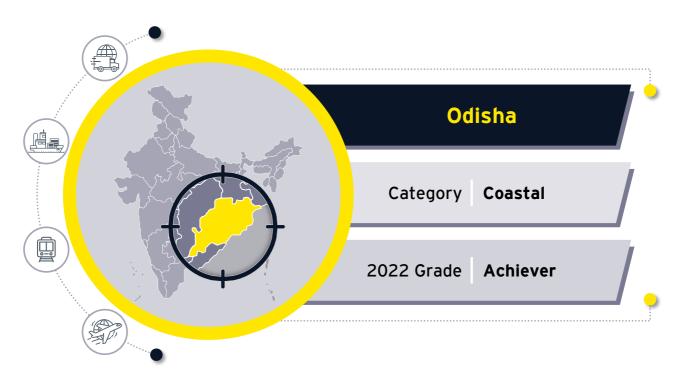
▶ Maharashtra Logistics Park Policy - 2018 covers various aspects of skill development for logistics personnel.

## Action taken by the State against LEADS 2021 recommendations

Maharashtra has taken following actions against the recommendations as suggested in LEADS 2021 report:

- ▶ Institutional mechanism (EGoS, NPG & TSU) has been setup to streamline logistics in the state.
- ► The state has built Command and Control Centers in seven smart cities to ensure efficient traffic management and easier passage of freight through these cities. Additionally, 24 Integrated Border Check Points have also been sanctioned by the state to ease freight movement.
- ▶ 18 Border check post have been modernized, equipped with weighbridges, cameras, RFID etc. to minimize manual stoppages and checking at border locations.
- ▶ The state has identified 4 MMLP Projects at Mumbai / Thane, Pune, Nashik, and Aurangabad.





# ODISHA - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 38 below.

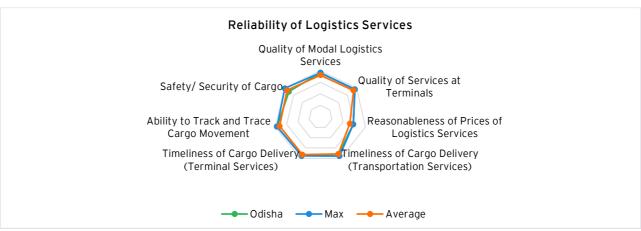
Exhibit 38: Brief logistics profile of Odisha

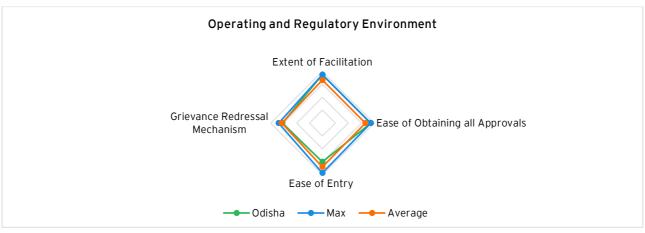
Parameter	Unit	Value	Year	Source
Road Length	km	NH= 5,897/ SH= 4,173	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	5,506	2019-20	MoR
Inland Container Depot (ICD)	nos.	3	2021-22	CBIC
Container Freight Station (CFS)	nos.	0	2020-21	IMC List
Private Freight Terminal (PFT)	nos.	6	2020-21	MoR
Air Cargo Terminals	nos.	1	2020-21	State Govt.
Railway Goods Sheds	nos.	88	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	6,89,671	2020-21	State Govt.
Cold Storage Capacity	MT	2,74,175	2020-21	State Govt.
Logistics Training Centres	nos.	29	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	4,018	2020-21	State Govt.

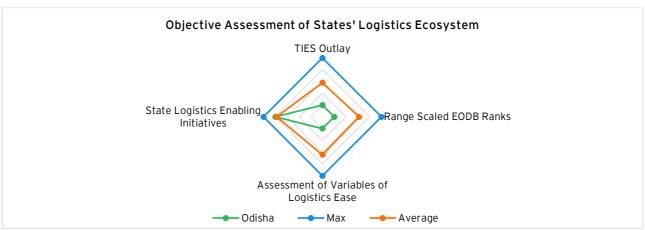


Exhibit 39: State's LEADS indicator wise performance











Odisha has been graded as an Achiever within the Coastal cluster.

The State has scored high across indicators related to Quality of Infrastructure (Road, Rail, Terminal and Warehouse Infrastructure).

The state has scored above average on all other indicators related to Reliability of Logistics Services except for Safety/ security of cargo, which has been identified as an area where the state could improve.

As per primary interactions, Reasonableness of prices of logistics services and Track and Trace of Cargo are rated high.

Within the Operating and Regulatory Environment indicators, Extent of facilitation and Ease of obtaining approvals have been rated high.

State has scored below average on all indicators related to Ease of Entry and Grievance Redressal Mechanism. This aspect has been perceived as a major concern by the logistics stakeholders and

State needs to take pro-active measures for addressing and improving the perception of trade.

## Industry feedback

#### Infrastructure

- NH 520 and SHs in Keonjhar and Sundargarh districts are in good condition, but do not have shoulders. In addition, first mile connectivity to NH/SH needs to be improved.
- Sub optimal condition of the roads serving Dhamra port need attention as it leads to low port utilization, which results in traffic diversion and congestion at Paradeep port.

#### **Services**

- Most of the road transportation is highly cartelized which increases the transportation rates.
- ► At Paradeep port, evacuation and turnaround of vehicles takes a lot of time which results in snarled-up traffic outside the port gate.

# Initiatives undertaken by the State Government

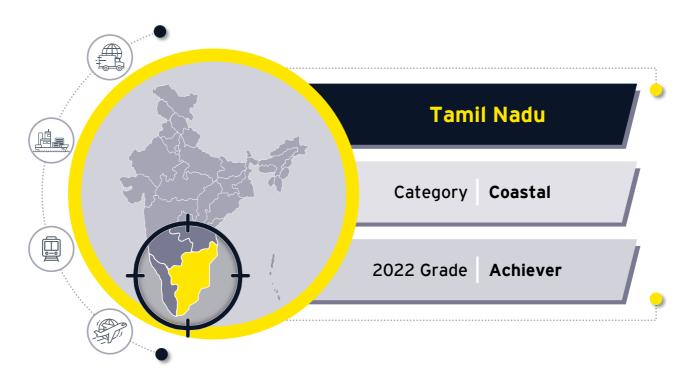
### State policy for logistics

▶ The State has formulated its Industrial Policy in 2015 and MSME Development Policy in 2016.

#### Key initiatives under the regulatory regime

- ▶ Under the Odisha Industries Facilitation Act of 2004 and Rules of 2005, State Level Single Window Clearance Authority (SLSWCA) has been set up to approve all projects, including logistics facilities. Similarly, District Level Single Window Clearance Authority (DLSWCA) has been set up to approve all projects at the individual district level. Application to these authorities can be submitted through the GO SWIFT online application system.
- ► The State also has setup a State Project Monitoring Group (SPMG) chaired by Chief Secretary for grievance redressal and dispute resolution for the logistics sector.





# TAMIL NADU - a brief logistics profile

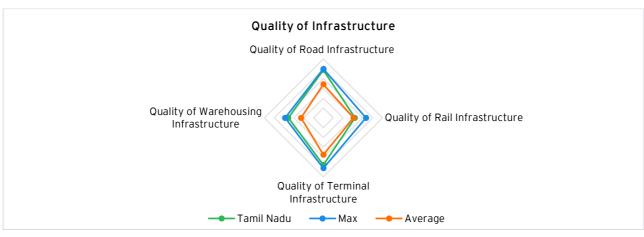
Brief overview of the logistics profile of the State is provided in the exhibit 40 below.

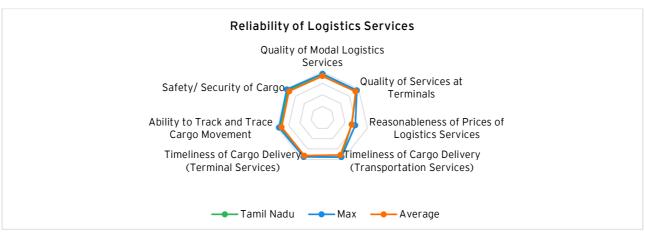
Exhibit 40: Brief logistics profile of Tamil Nadu

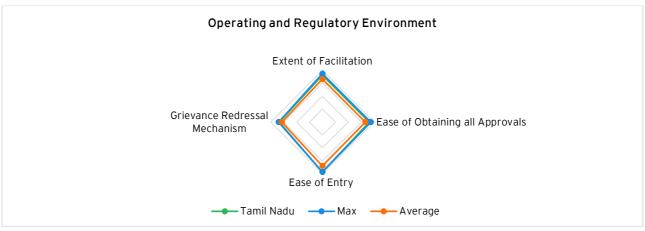
Parameter	Unit	Value	Year	Source
Road Length	km	NH= 6,858/ SH= 11,275	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	6,836	2019-20	MoR
Inland Container Depot (ICD)	nos.	11	2021-22	CBIC
Container Freight Station (CFS)	nos.	46	2020-21	State Govt.
Private Freight Terminal (PFT)	nos.	1	2020-21	State Govt.
Air Cargo Terminals	nos.	6	2020-21	AAI and State Govt.
Railway Goods Sheds	nos.	116	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	14,72,098	2020-21	State Govt.
Cold Storage Capacity	MT	4,00,210	2020-21	State Govt.
Logistics Training Centres	nos.	1	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	2,000	2020-21	State Govt.

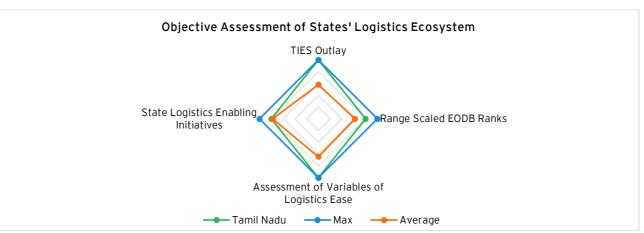


Exhibit 41: State's LEADS indicator wise performance











Tamil Nadu has been graded as an Achiever within the Coastal cluster.

The State has scored above average across indicators related to Quality of Infrastructure except for Rail infrastructure. The State has taken multiple measures to improve quality of infrastructure.

Like other Coastal states, Reasonableness of Prices of Logistics Services has been identified as an area where the state could improve. The state has been rated above average on all other indicators related to Reliability of Logistics Services.

State has scored high with regards to all indicators related to Operating and Regulatory Environment.

This is corroborative with various initiatives being taken by the State Government for improvement of the logistics ecosystem in the state.

# Industry feedback

#### Infrastructure

- Absence of dedicated road connectivity to ease movement from seaport/airport.
- Lane capacity of roads to be increased near key industrial clusters in Kanchipuram, Tiruvallur, Chengalpettu, Coimbatore, Tiruppur and Dindigul.
- Sub optimal condition of Vallanadu bridge connecting Tuticorin, and Tirunelveli is hindering traffic movements.
- Madurai to Tuticorin road needs to be widened.
- ► Tuticorin ring road needs to be developed.
- ► Tirunelveli to Tuticorin, Palayamkottai bypass work needs to be expedited.
- Absence of earmarked truck parking / laybys infra facilities inside Ports/ICDs, SIPCOT /TIDCO /SIDCO Industrial estates.
- Truck parking facilities along the state/national highways need to be developed at every 100 km distance.
- ► Land to be earmarked inside the industrial estates/parks/zones to carry out the logistics related activities. This land should be disbursed to logistics operators at the same cost of industrial land.
- Unavailability of advanced /modern freight handing equipment to facilitate vertical

- storage at government owned/operated warehouses.
- ► Inadequate storage infrastructure, lack of skilled manpower and higher freight tariffs at ICD Irugur.
- Infrastructure augmentation is required at non-major ports, to handle coastal and captive cargo (especially at Cuddalore and Rayapatnam ports).
- Logistics parks are required in Chennai, Coimbatore, Madurai and Tuticorin to serve as aggregation points for handling domestic cargo movement.
- Air Cargo complex at Tuticorin airport needs to be developed.
- State needs to create farm produce aggregation points with multi modal connectivity in peri-urban areas. Absence of infrastructure like ripening chambers, dehumidifier and reefer trucks in rural collection centres is leading to huge post harvesting losses.
- ► Cold Storage/Temp controlled storage needs to be developed at Chennai Airport.

#### Services

- Service providers do not work on weekends hence shipments reaching during weekend accrues additional terminal charges.
- ► Inadequate skilled manpower at the freight handling facilities.

## Operating and Regulatory Environment

- Toll charges are increasing every year. Many of toll plazas continue to charge tolls even after completion of their concession period. It needs to be regulated.
- State should have 24/7 control room service & single window system to assist exporters, importers, and all logistics stakeholders.
- Absence of regulatory and institutional framework to facilitate the on-time clearance of CRZ, land acquisition and others for the infrastructure projects. There are multiple local bodies for land acquisition and clearances in different zones of the state.
- Approval towards ODC movements on the highways needs to be digitalized and a single window approval system needs to be introduced. Currently multiple agencies are



- involved, and unnecessary halts are being made enroute.
- In TN, unlike AP and Kerala, yearly Warehouse license renewal is required.
- Integrated system of e-waybill, fast-tag, VAAHAN needs to implement in the state.
- Multiple physical checks of goods carrying vehicles by commercial tax officers despite the existence of E-waybill needs to be regulated.

### State feedback

- The state has awarded works (Package 1 for Chennai peripheral ring road) to ease movement. Moreover, NHAI is constructing a two-tier elevated corridor to Chennai Port.
- NHAI is constructing Chennai-Bangalore Industrial Corridor and NH connecting Tambaram to Chengalpattu. In addition, the state is also increasing first/last mile connectivity of industrial clusters under CRIDP & IEF.
- Vallandu bridge, Madurai-Tuticorin Road and Tuticorin ring road project are being developed by NHAI.
- The State initiated the development of road stretch (Palayamkottai) under the Chennai Kanyakumari Industrial Corridor Program (SH 40). Further, The State is discussing with relevant state departments to expedite the project.
- The State is already in process of developing truck parking facilities at Industrial clusters of SIPCOT/TIDCO. The truck parking facility at Nilakkottai and 13 other industrial locations is operational from 2021.
- The State is taking necessary measures towards development of truck lay-bys along major State Highways under various road sector programs like: TNRDC, TNRSP implemented by State Highways Department.
- The State has already addressed the initiative towards earmarking of land inside industrial parks to carry out logistics activities under the draft Logistics Plan & Policy.
- The State has already addressed the initiative of augmenting the existing state government warehousing assets by adopting modernization and mechanization through

- PPP model under the draft Logistics Plan and Policy.
- The State has already discussed the issue in the 1st NPG and EGOS meeting. The Central agency (CONCOR) responded that necessary action will be taken up towards improvement of the services.
- The State has already initiated the upgradation and expansion works for Cuddalore Minor Port which shall enhance the port capacity.
- The State jointly with central agencies (NHLML/NHAI) is taking multiple initiatives towards development of logistics park at strategic locations. Development of Chennai MMLP is under bid evaluation and DPR and site identification for Coimbatore MMLP is underway.
- The development of air cargo complex is under the purview of Airport Authority of India. The State shall facilitate necessary support towards the requirement for development of Air Cargo Complex.
- The State is taking necessary step towards development of primary processing centres at strategic location under the Tamil Nadu supply chain management project. additional 20 locations have been identified for establishment of PPC's under NABARD Rural Infrastructure Development Fund.
- The State is promoting development of Farm Produce Organization (FPO) under Tamil Nadu Irrigated Agriculture Modernization Project (TNIAMP) and jointly under Central Government schemes.
- The cargo terminals in Tamil Nadu are operating and offering services 24\*7. There are no restrictions on number of working days. The operation cycles are planned as per the shipment and end user requirement.
- The State has launched its flagship scheme Tamil Nadu Naan Mudhalvan Scheme on March 2022 which covers upskilling training courses related to Logistics sector.
- The State is already promoting various skill development programs for logistics sector through TN APEX Skill Development Centre (Logistics). In addition, CII Institute of Logistics and TVS Supply Chain Solutions are also conducting various certified logistics skill courses in the state.



## Initiatives undertaken by the State Government

### State policy for logistics

State logistics policy is under draft stage and shall be notified by 2022.

#### Skill Development

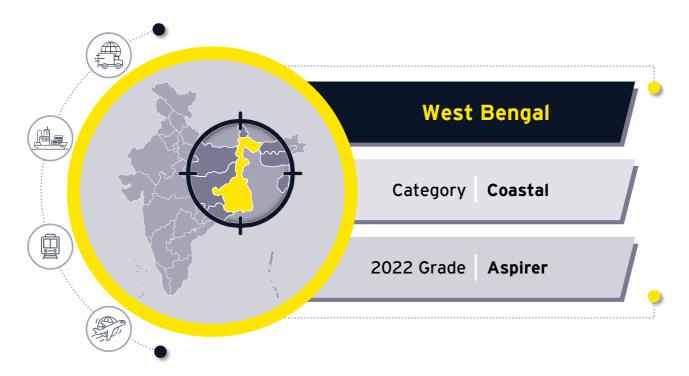
▶ Draft state logistics policy of the state covers various aspects of skill development for logistics personnel

## Action taken by the State against LEADS 2021 recommendations

The State has taken following actions against the recommendations in LEADS 2021 report:

- Parking bays at Chennai air cargo complex have been reshaped and increased to 4 nos.
- ► Elevated road corridor has been proposed from Meenambakkam to Tambaram to facilitate the cargo movements in/out from Chennai air cargo terminal, DPR study is in progress and the development will be carried out jointly by CMRL and State Highway.
- ► Ample Truck parking facility is available in Irungattukottai 10 Acres (additional 5 Acres of land is under proposal) and Vallam Vadagal 6 Acres
- ▶ In Sriperambudur and Oragadam truck parking spaces of 7 Acres & 6 Acres respectively have been proposed.
- The state is working on rail alignment and land acquisition for new railway line from Guduvancherry to Avadi connecting Sriperumbudur, Oragdam, Irukunagattukotai industrial areas.
- ▶ To decongest the traffic in Hosur goods shed, doubling of railway line is under process.
- To tackle congestion on Chennai port separate rakes are supplied from tiruvottiyur extended facility towards adhoc cargo evacuation support as and when required.
- Proposal for establishing ICD cum CFS at Thandalam railway siding near Kancheepuram is being evaluated, for which 200 acres of land acquisition is under progress.
- ▶ DPR is in completion stage for the two tier elevate highway from Chennai port to Maduravoyal to ease the congestion on Chennai port.
- Alternate land has been identified near Tsunami Colony for setting up of power station, TNEB officials inspected the site, their response is awaited.
- To improve road from Kamrajar port to Kattupalli port the state has suggested to transfer road ownership from Kamarajar port to state government, since it's used by other stakeholders as well.
- The state is considering development of a centralized yard in Hosur which may be connected to Tuticorin port through rail
- For both Madurai to Tuticorin and the bye-pass connectivity for Tirunelveli, -Tenkasi DPRs have been completed, land acquisition is in process.
- Adoption of GPS/vehicle tracking of commercial vehicles is under implementation. The proposal is submitted to the state government for further action.
- Necessary steps have been taken up to increase the height of the poles along the state and national highways.
- Expansion of air cargo facility will be taken up as per Airport Masterplan 2030 & 2050 as and when required
- ▶ ICD Irugur is sufficient in terms of skilled labour and infrastructure facilities for container cargo
- The state shall schedule a meeting between industry stake holders and CONCOR under the chairmanship of Coimbatore collector to discuss high Container transport charges charged by CONCOR for road movements
- ▶ 47 toll plazas in the state are already following the National highway fee rule and site conditions hence no further optimization is possible
- ► The state mentioned that Tuticorin Port has access to 3 railway sidings and is well connected with southern railway network in addition Tuticorin port is well equipped with testing facilities with international standard for all the imported cargos





# WEST BENGAL - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 42 below.

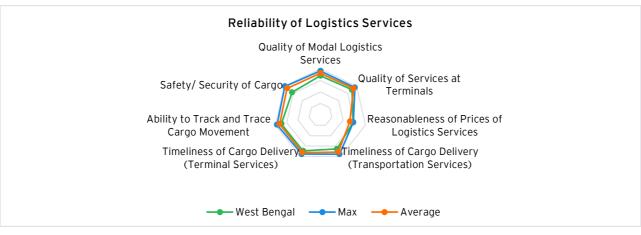
Exhibit 42: Brief logistics profile of West Bengal

Parameter	Unit	Value	Year	Source
Road Length	km	NH=3,665 / SH=4,505	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	10,309	2019-20	MoR
Inland Container Depot (ICD)	nos.	1	2021-22	CBIC
Container Freight Station (CFS)	nos.	10	2017-18	CBIC
Private Freight Terminal (PFT)	nos.	1	2020-21	MoR
Air Cargo Terminals	nos.	1	2020-21	AAI
Railway Goods Sheds	nos.	424	2019-20	MoR
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	4,04,356	2019-20	WDRA
Cold Storage Capacity	MT	59,47,311	2020-21	MoCAF&PD
Logistics Training Centres	nos.	2	2020-21	MoSDE
No. of Individuals trained in logistics	nos.	1,030	2020-21	MoSDE

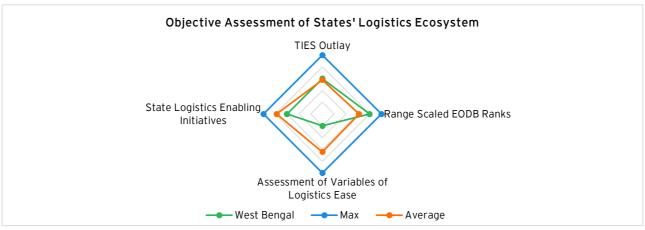


Exhibit 43: State's LEADS indicator wise performance











West Bengal has been graded as an Aspirer within the Coastal cluster.

The State has scored below average across all indicators related to Quality of Infrastructure except for Rail infrastructure. As per primary interactions Warehousing and Terminal Infrastructure needs improvement.

The State has scored below average across all indicators related to Reliability of Logistics Services.

Similarly, the State has scored below average across all indicators related to Operating and Regulatory Environment. State needs to take remedial actions for improvement of logistics ecosystem.

# Industry feedback

### Infrastructure

- Roads connecting CFS's in Kolkata to the port need improvement.
- Road between Kolkata-Siliguri is not motorable due to poor road quality.
- ► Heavy traffic congestion in Dalkhola.
- Services on Inland Waterways are impacted due to insufficient draft maintenance.
- ► There is a lot of habitation around the port which creates hinderance in free cargo movement. Additionally, drainage system also needs to be provided in the area around the port.

## Operating and Regulatory Environment

- ► There are limited interactions between State Governments and Logistics industry stakeholders.
- Unwarranted stoppages of trucks by Police and RTO officials.

# Initiatives undertaken by the State Government

### State policy for logistics

▶ West Bengal Logistics Park Development and Promotion Policy 2018 summarises the policy objectives.

## State's role in developing Logistics Park.

- ► A dedicated policy for logistics is under preparation.
- The State has formulated a Logistics Master Plan (World Bank Master Plan for Kolkata Metropolitan Area).

# Investment in logistic infrastructure - facilitation and Incentivisation

- The State has conducted a detailed study and identified prospective locations for setting up Logistics Parks at Dankuni, Durgapur, Tajpur, Malda City and Siliguri.
- ► Calcutta Goods Transport Association (CGTA) has initiated a transportation hub consisting of truck terminals, warehousing facilities, and other requisite amenities.

## Key Initiatives under regulatory Regime

- ► The State has Silpasathi Single Window Service, which pertains to approvals and grievance redressal for all industries, including logistics.
- ► The State has launched an enabling training scheme called 'Utkarsh Bangla' for the training of truck drivers and other logistics personnel.
- ► The State is currently evaluating logistics proposals on an objective evaluation framework that includes adopting green building concepts and environmentally sustainable best practices. e.g., Instakart project at Haringhata.



# 4.2 Landlocked



# BIHAR - a brief logistics profile

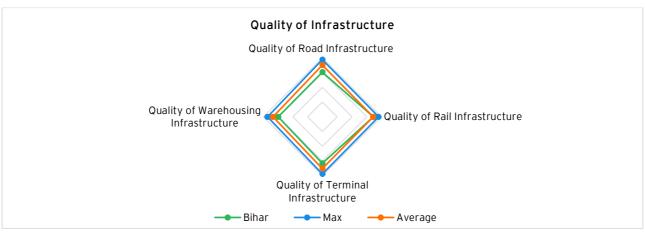
Brief overview of the logistics profile of the State is provided in the exhibit 44 below.

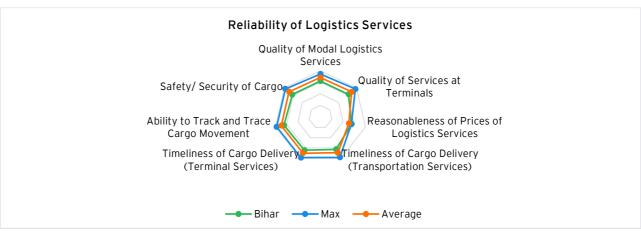
Exhibit 44: Brief logistics profile of Bihar

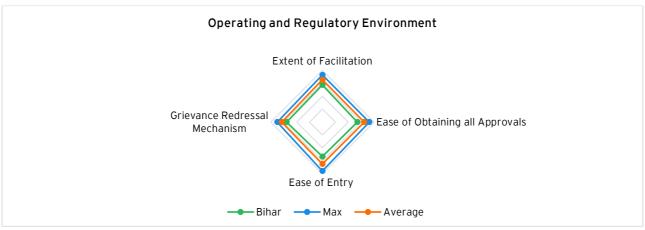
Parameter	Unit	Value	Year	Source
Road Length	km	NH=5,421 / SH=3,714	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	7,663	2019-20	MoR
Inland Container Depot (ICD)	nos.	2	2021-22	CBIC
Private Freight Terminal (PFT)	nos.	1	2020-21	MoR
Air Cargo Terminals	nos.	2	2020-21	State Govt.
Railway Goods Sheds	nos.	266	2020-21	MoR
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	7,92,004	2020-21	State Govt.
Cold Storage Capacity	MT	14,79,122	2020-21	MoCAF&PD
Logistics Training Centres	nos.	37	2020-21	MoSDE
No. of Individuals trained in logistics	nos.	2,774	2020-21	State Govt.

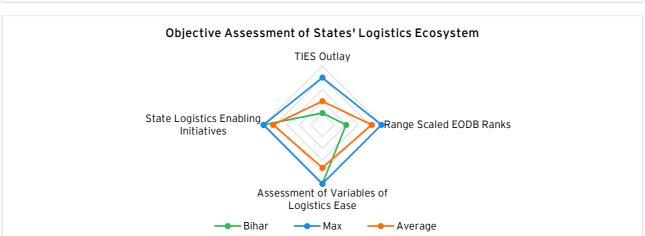


Exhibit 45: State's LEADS indicator wise performance











Bihar has been graded as an Aspirers within the Landlocked cluster.

Bihar has scored below average on all the indicators across Quality of Infrastructure (Road, Rail, Warehouse and Terminal).

Reasonableness of prices of logistics services has been rated high for the State, and all the other indicators under Reliability of Logistics service have been identified as areas of improvement.

Thefts/pilferage across key freight routes at interstate border/check posts have resulted in Ease of Entry indicator being rated below average for the State within the Landlocked Cluster.

State approvals, facilitation and grievance redressal indicators have been rated below average and need to be addressed proactively by the State.

# **Industry Feedback**

### Infrastructure

 Road infrastructure in the state faces issues such as potholes, congestion, or multiple chokepoints resulting in lower carrying capacity, etc.

- ► First / last mile connectivity to industrial hubs and warehousing zones needs improvement.
- Construction of Road connecting Jharkhand Via Bahktiyarpur is delayed and results in traffic congestion.
- Parking areas along with lay-bys facilities on highways need to be developed.

### Services

- Multiple incidents of theft on key freight routes across the state.
- Availability of skilled manpower in logistics sector is limited.

## Operating and Regulatory Environment

- Multiple stoppages by RTO/Police authorities at interstate border/check points is a problem that needs to be addressed.
- ► There is need for an efficient mechanism to track grievances raised by logistics service providers.

# Initiatives undertaken by the State Government

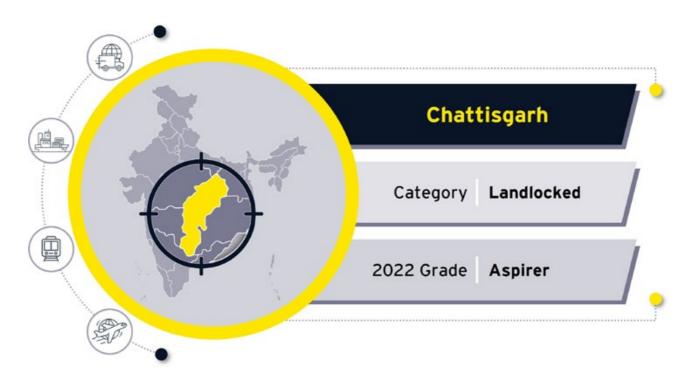
### State policy for logistics

▶ Draft Integrated Logistics and Logistics Park Policy for the State has been put in public domain and is under finalisation.

## Skill Development

- ▶ Mandatory driver refresher training course for traffic violators.
- ▶ The state has established IDTR Aurangabad district in collaboration with Maruti Suzuki.





# CHHATTISGARH - a brief logistics profile

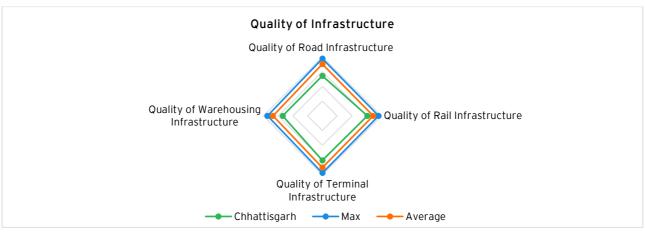
Brief overview of the logistics profile of the State is provided in the exhibit 46 below.

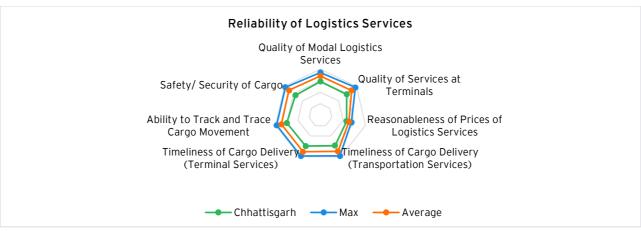
Exhibit 46: Brief logistics profile of Chhattisgarh

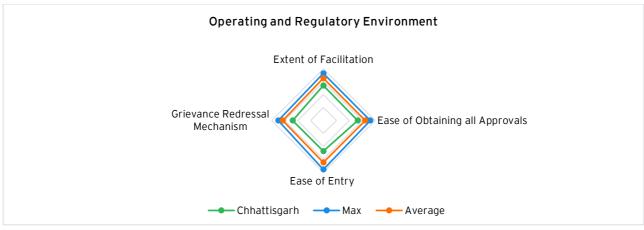
Parameter	Unit	Value	Year	Source
Road Length	km	NH=3,620 / SH= 4,098	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	2914	2019-20	MoR
Inland Container Depot (ICD)	nos.	1	2021-22	IMC List
Private Freight Terminal (PFT)	nos.	5	2020-21	State Govt.
Air Cargo Terminals	nos.	1	2020-21	State Govt.
Railway Goods Sheds	nos.	14	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	2,12,250	2020-21	State Govt.
Cold Storage Capacity	MT	4,87,292	2020-21	MoCAF&PD
Logistics Training Centres	nos.	18	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	16	2020-21	State Govt.

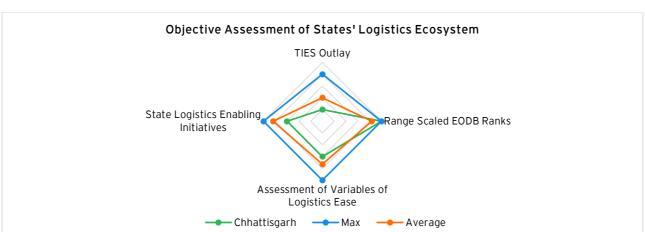


Exhibit 47: States' LEADS indicator scores and ranking











Chhattisgarh has been graded as an Aspirer within the Landlocked Cluster.

Chhattisgarh secured below average scores on all the indicators across Quality of Infrastructure, Reliability of Logistics Services and Operating and Regulatory Environment indicators.

Quality of Road and Terminal and Warehousing Infrastructure have been rated low and are key areas for improvement.

Timeliness of Cargo delivery in transportation and Safety and Security of Cargo have been rated low and identified as key challenge amongst Reliability of Logistics service indicators.

Thefts/pilferage across key freight routes, unwarranted vehicle stoppages at interstate border/check posts has resulted in Ease of Entry indicator being rated lowest amongst the Landlocked Cluster.

State has scored below average on all indicators related to Operating and Regulatory Environment. This aspect has been perceived as a major concern by the logistics stakeholders and State needs to take pro-active measures for addressing and improving the perception of trade.

# **Industry Feedback**

#### Infrastructure

- Road infrastructure in the state faces issues such as potholes, congestion, or multiple chokepoints etc.
- First/Last mile connectivity to industrial and agri clusters need improvements.
- State lacks storage/warehousing infrastructure.
- Parking areas along with lay-bys facilities on highways need to be developed.

### Services

- Surveillance on forest freight routes is needed
- ➤ Safety and security of cargo in transit is a concern. Key freight routes are prone to thefts and pilferage.
- Non-availability of skilled workers in logistics sector.

## Operating and Regulatory Environment

- Unwarranted stoppage by police and RTO officials at check points results in delays.
- There is no effective grievance redressal system in the state for logistics industry.
- ► Delay in securing approvals from the State government on transport and terminal logistics infrastructure.

### Initiatives undertaken by the State Government

### State policy for logistics

▶ The logistics sector in the state is facilitated by Chhattisgarh Park Policy 2018-2023.

## Skill Development

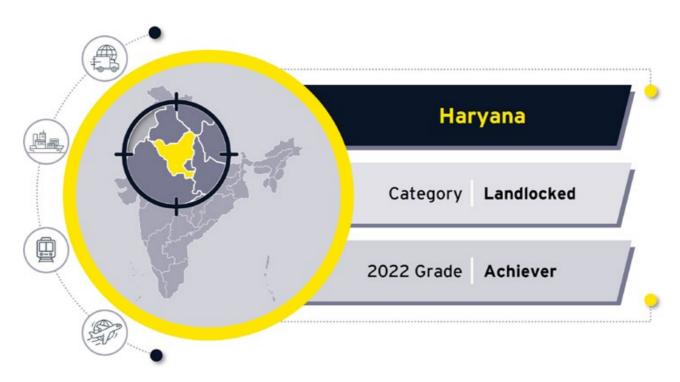
Commercial Drivers in the state are trained in Institute of Driver Training and Research (IDTR) through various simulators, workshops, and tracks.

## Action taken by the State against LEADS 2021 recommendations

Chhattisgarh has taken following measures against the recommendations as suggested in LEADS 2021 report:

- ▶ Robust institutional mechanism (EGoS, NPG & TSU) setup to streamline logistics in the state.
- ► To counter unauthorized stoppage of trucks on the road, the state is implementing AIS-140 GPS based tracking.
- The state has started to facilitate regular interactions between the industry, transporter's unions and terminal operators to jointly address areas of concern pertaining to logistics.





# HARYANA - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 48 below.

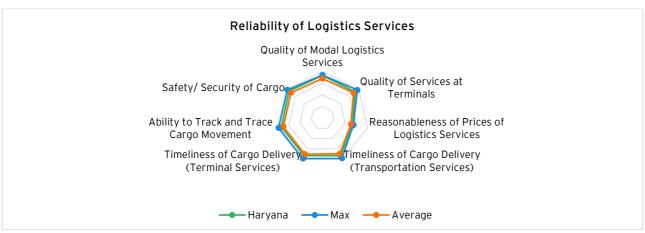
Exhibit 48: Brief logistics profile of Haryana

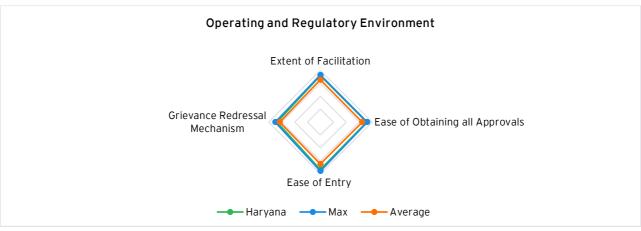
Parameter	Unit	Value	Year	Source
Road Length	km	NH= 3,237/ SH= 1,602	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	3,243	2019-20	MoR
Inland Container Depot (ICD)	nos.	11	2021-22	IMC List
Container Freight Station (CFS)	nos.	3	2021-22	CBIC
Private Freight Terminal (PFT)	nos.	9	2020-21	State Govt.
Air Cargo Terminals	nos.	1	2020-21	State Govt.
Railway Goods Sheds	nos.	203	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	22,05,000	2020-21	State Govt.
Cold Storage Capacity	MT	8,19,809	2020-21	MoCAF&PD
Logistics Training Centres	nos.	13	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	783	2020-21	State Govt.

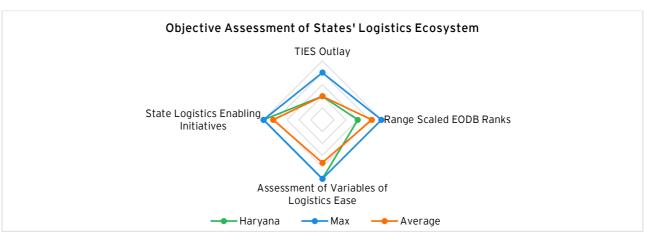


Exhibit 49: State's LEADS indicator wise performance











Haryana has been graded as an Achiever within the Landlocked cluster.

State has secured maximum score on Quality of Warehousing Infrastructure, and other indicators within Quality of Infrastructure have also been rated high.

State has been rated high on indicators related to Reliability of Logistics Services. Safety and security of cargo has been identified as an area of improvement.

Operating and Regulatory Environment is perceived to be good in Haryana and has been rated high.

# **Industry Feedback**

#### Infrastructure

- Development of expressway being constructed alongside the ICD Piyala (parallel to NH-8) needs to be expedited.
- ► Entry/exit road connectivity to ICD-Piyala is inadequate and needs improvement.

- First/last mile connectivity from National Highway to Yamuna Nagar industrial cluster needs development.
- Truck parking terminals and resting places (truck lay-bys) for drivers are required to be developed along key freight routes.
- First/last mile connectivity to Industrial zones and warehouses need improvements.
- There is no rail link at ICD-Rewari. Containers are sent to ICD-Pali after clearance from Rewari, resulting in increase in cost and turnaround time.
- Development of bypass near ICD Rewari needs to be expediated.

### **Services**

Untrained manpower is resulting in damage of cargo during transit and handling. Training of logistics professionals is needed.

# Regulatory and Operating Environment

► Thefts during transit within the state need to be curbed through surveillance.

### Initiatives undertaken by the State Government

## State policy for logistics

► Haryana has formulated Logistics, Warehousing & Retail Policy - 2019.

### **Smart Enforcement**

- The State has deployed 45 potable weighing bridges in order to curb the overloading of commercial vehicles, which are distributed among all Secretaries of Road Transport Authority (RTA) in the State.
- To enhance safety and security of life and property, Govt. of Haryana has planned to install facial recognition cameras across the State. As a pilot initiative, cameras are being installed in metro stations of Gurgaon.

# Skill Development

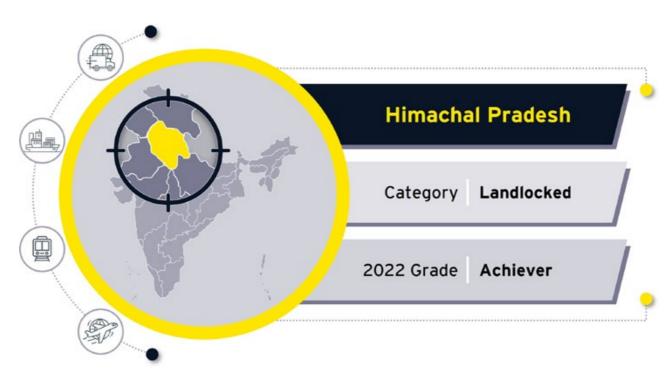
- Institute of driving training & research (IDTR) Bahadurgarh and Rohtak has been set up in collaboration with M/s Maruti Suzuki India Ltd.
- ▶ IDTR Kaithal is being set up in collaboration with M/s Ashok Leyland Ltd.
- ▶ IDTR Bhiwani is envisaged to be set up in collaboration with M/s Tata Motors Ltd.

## Action taken by the State against LEADS 2021 recommendations

Haryana has taken following actions against the recommendations as suggested in LEADS 2021 report:

- ▶ Robust institutional mechanism (EGoS, NPG & TSU) setup to streamline logistics in the state.
- ► CCTV cameras have been installed on 20 locations of NH-44 at Police Assistance Booths (PAB) from Ambala to Sonipat District. Out of these locations, Automatic Number Plate Reading (ANPR) & Speed detection cameras have been installed at 10 locations.
- ▶ The state has initiated work of recarpeting and repairing of all roads connecting to ICDs and Industrial areas.





# HIMACHAL PRADESH - a brief logistics profile

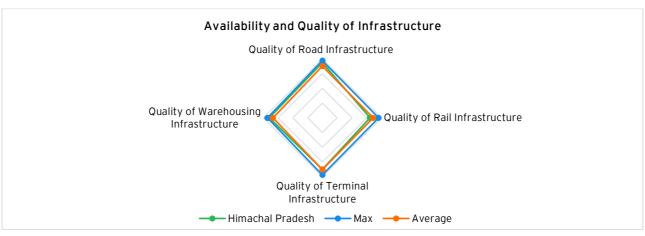
Brief overview of the logistics profile of the State is provided in the exhibit 50 below.

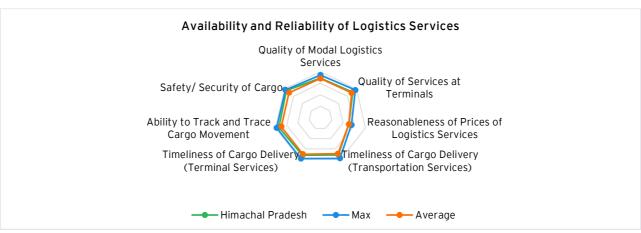
Exhibit 50: Brief logistics profile of Himachal Pradesh

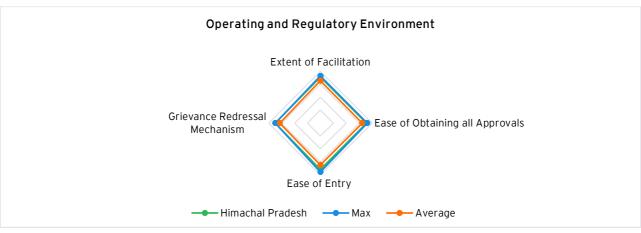
Parameter	Unit	Value	Year	Source
Road Length	km	NH= 2,607/ SH= 5.35	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	376	2019-20	MoR
Inland Container Depot (ICD)	nos.	1	2021-22	CBIC
Air Cargo Terminals	nos.	3	2020-21	AAI and State Govt.
Railway Goods Sheds	nos.	1	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	1,50,409	2020-21	State Govt.
Cold Storage Capacity	MT	1,46,769	2020-21	State Govt.
Logistics Training Centres	nos.	45	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	1,215	2020-21	MoSDE and State Govt.

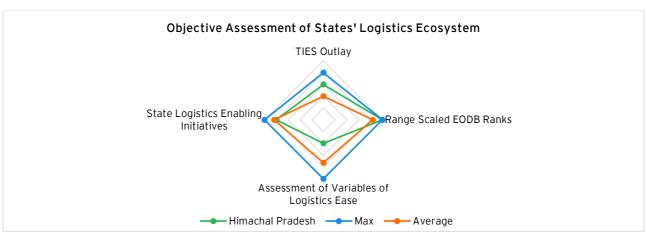


Exhibit 51: State's LEADS indicator wise performance











Himanchal Pradesh has been graded as an Achiever within the Landlocked cluster.

State has secured above average scores on all the indicators across Quality of Infrastructure, Reliability of Logistics Services and Operating and Regulatory Environment indicators.

Quality of Road and Warehousing Infrastructure have been rated high, Quality of Rail Infrastructure and Terminal Infrastructure are identified as areas of improvement.

Reasonableness of prices of logistics services and Timeliness of terminal services were identified as areas where the state could improve its performance. The State has been rated above average on all other indicators related to Reliability of Logistics Services.

Grievance redressal mechanism has been rated high while all other indicators under operating and regulatory environment have been rated as above average.

## Industry feedback

#### Infrastructure

- Baddi-Nalagarh highway is a major bottleneck due to sub optimal road conditions.
- ► Single lane Baddi-Siwasan road often leads to traffic congestion.
- Nalagarh-Ropar Road and Nalagarh-Bharatgarh roads need widening for efficient traffic movement.

- Road capacity enhancement is needed for Baddi-Baroti-Nalagarh (BBN) area.
- Truck Parking space is required near ICD Baddi.

## Operating and Regulatory Environment

- ► Logistics cost to reach Baddi is nominal but from Baddi transportation cost is very high due to union rates.
- Transport unions cause hindrances in day-today transport operations.
- ► Entry tax for non-Himachal goods vehicle makes the transport in State costly.

### State feedback

- Baddi-Nalagarh highway widening is under progress and tender for commencement of work on has already been floated.
- Stretches of Baddi-Siwasan and Nalagarh-Ropar roads which pass through territories of Haryana and Punjab, the State has already written to both states to consider widening in their regions.
- ► Funds under TIES Scheme for Export Infrastructure development would be used for the construction of parking lots in ICD Baddi.
- ➤ The state shall initiate the dissolving process of transport unions is under progress as per the directives of the Hon'ble Himachal Pradesh High Court.



# Initiatives undertaken by the State Government

## State policy for logistics

- ▶ Himachal Pradesh has formulated Himachal Pradesh Logistics Policy 2022.
- Distinguishing features of the state logistics policy are:
  - ▶ Land allotment for development of logistics facilities a certain percentage of area as per the state master plan is earmarked for development of industrial/ logistics units in industrial estates.
  - ▶ Development of centre of excellence a repository wherein innovative logistics solutions and emerging technologies/practices are identified for improving efficiency of logistics supply chain.
  - ► Granting "Industry Status" to logistics enables logistics activities to be considered as industrial activity in the context of land-use and helps in reducing the cost of setting up of units. The conversion of agricultural land to logistics infrastructure will be easier, thereby improving feasibility of project.
  - ► Green logistics Techniques that aim at minimizing ecological impact of logistics activities, including eco-friendly transportation, reducing carbon emissions, solid/liquid waste management, scientific disposal techniques, use of bio degradable items, adopting recycling techniques, using renewable energy, etc.

## Skill Development

State logistics policy covers various aspects of skill development for logistics personnel.

## Actions taken by the State against LEADS 2021 recommendations

Following actions have been undertaken by the State against recommendations suggested in LEADS 2021 report:

- ► Equipped interceptors/ flying squads with body cameras for video recording to ensure transparency in workings.
- Organized multiple consultations with truck union to address their concerns.
- Widening of Baddi-Nalagarh highway is underway.





# JHARKHAND - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 52 below.

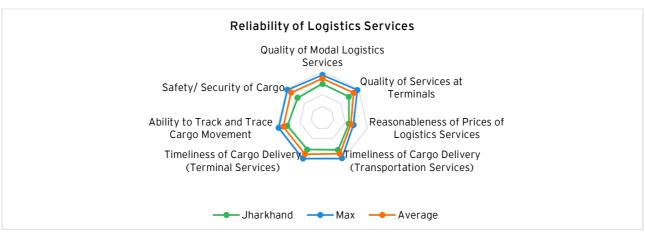
Exhibit 52: Brief logistics profile of Jharkhand

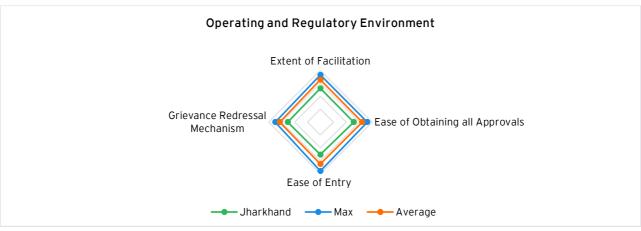
Parameter	Unit	Value	Year	Source
Road Length	km	NH=3,367 / SH= 1,232	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	6,296	2019-20	MoR
Inland Container Depot (ICD)	nos.	1	2021-22	State Govt.
Private Freight Terminal (PFT)	nos.	1	2020-21	State Govt.
Air Cargo Terminals	nos.	1	2020-21	State Govt.
Railway Goods Sheds	nos.	438	2020-21	MoR
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	7,22,316	2020-21	State Govt.
Cold Storage Capacity	MT	2,36,680	2020-21	State Govt.
Logistics Training Centres	nos.	2	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	119	2020-21	State Govt.

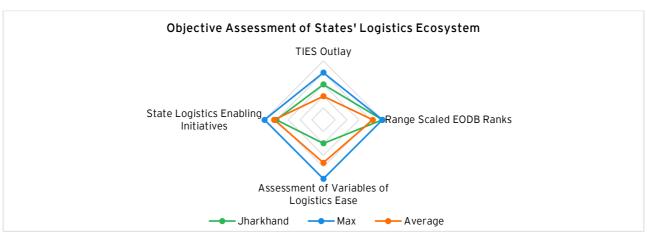


Exhibit 53: State's LEADS indicator wise performance











Jharkhand has been graded as an Aspirer within the Landlocked cluster.

Jharkhand secured below average scores on all the indicators across Quality of Infrastructure, Reliability of Logistics Services and Operating and Regulatory Environment indicators.

Quality of Road and Terminal and Warehousing Infrastructure have been rated low and are key areas for improvement.

Timeliness of Cargo delivery in transportation and Safety and Security of Cargo have been rated low and identified as key challenge amongst Reliability of Logistics service indicators.

Thefts/pilferage across key freight routes, unwarranted vehicle stoppages at interstate border/check posts has resulted in Ease of Entry indicator being rated lowest amongst the Landlocked Cluster.

State has scored below average on all indicators related to Operating and Regulatory Environment. This aspect has been perceived as a major concern by the logistics stakeholders and State needs to take pro-active measures for addressing and improving the perception of trade.

# **Industry Feedback**

### Infrastructure

- Cargo terminals need to be established at major trading / manufacturing hubs.
- ▶ In Ranchi and Jamshedpur region, there are no organized Transport Nagars or demarcated parking areas.
- Road Infrastructure across state needs to be provided.
- Road infrastructure in the state faces issues such as potholes, congestion, or multiple chokepoints due to lower carrying capacity, etc.
- Warehouses with modern amenities are not available in the state.

## Services

- Multiple incidents of theft on key freight routes across the state.
- Availability of skilled manpower in logistics sector is limited.

## Operating and Regulatory Environment

- ► Entry restrictions for freight movement in city limits.
- Unauthorised stoppage by police and RTO officials needs to be curbed.
- ► An efficient mechanism to track grievances raised by logistics service providers is needed.

## Initiatives undertaken by the State Government

# State Logistics Policy

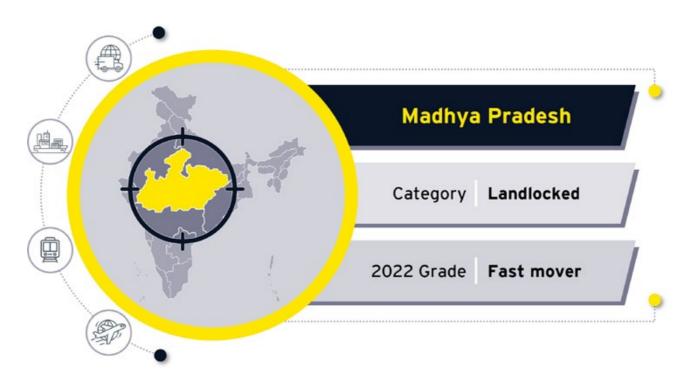
▶ Jharkhand is in process of formulating the state logistics policy and the same shall be notified by 2022.

# Action taken by the State against LEADS 2021 recommendations

Jharkhand has taken adequate actions against the recommendations as suggested in LEADS 2021 report. Broadly, the measures initiated by the State government are-

- ▶ Department of Industries, Government of Jharkhand will soon be rolling out its Industrial Parks and Logistics Policy 2022.
- The draft policy has provisions for overall development of logistics sector of the state with focus on the development of robust infrastructure, upgrading and improving the existing warehousing and cold chain infrastructure with enhanced capacity.
- The policy will encourage private players to setup more logistics parks and units in the state which will ultimately create a conducive logistics ecosystem to boost the industrial growth of the state.





# MADHYA PRADESH - a brief logistics profile

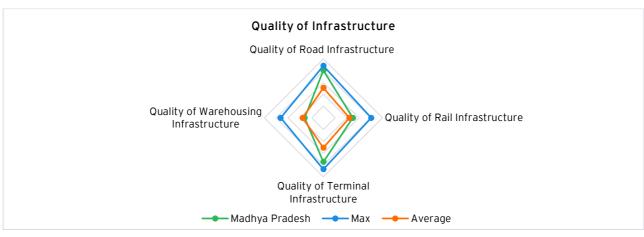
Brief overview of the logistics profile of the State is provided in the exhibit 54 below.

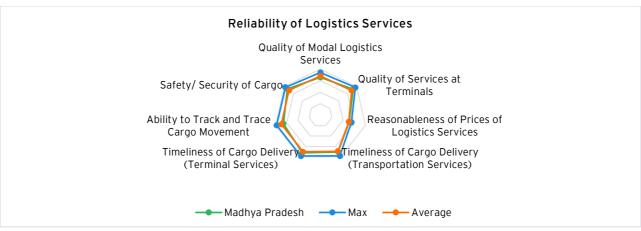
Exhibit 54: Brief logistics profile of Madhya Pradesh

Parameter	Unit	Value	Year	Source
Road Length	km	NH= 8,940/ SH= 11,389	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	9,702	2019-20	MoR
Inland Container Depot (ICD)	nos.	7	2021-22	CBIC
Container Freight Station (CFS)	nos.	6	2020-21	State Govt.
Private Freight Terminal (PFT)	nos.	2	2020-21	MoR and State Govt.
Air Cargo Terminals	nos.	2	2020-21	AAI and State Govt.
Railway Goods Sheds	nos.	45	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	1,49,80,000	2020-21	State Govt.
Cold Storage Capacity	MT	13,26,032	2020-21	State Govt.
Logistics Training Centres	nos.	188	2020-21	MoSDE and State Govt.
No. of Individuals trained in logistics	nos.	3,854	2020-21	State Govt.

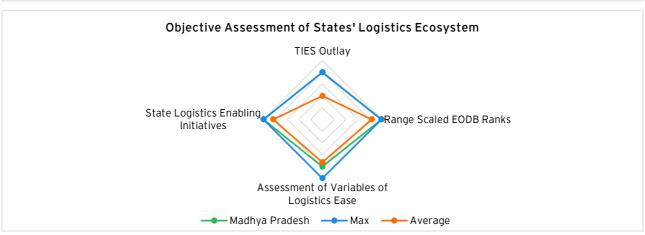


Exhibit 55: State's LEADS indicator wise performance











Madhya Pradesh has been graded as Fast Mover within the Landlocked cluster.

The State has been rated highest in Quality of Road and Terminal Infrastructure. The State scores above average across indicators related to Quality of Infrastructure except for Warehousing infrastructure.

The State has been rated above average on all indicators under Reliability of Logistics Services except for Modal Logistics Services and Track and Trace of Cargo movement. These are the areas where State could take remedial actions and improve its performance.

Promoting, Incentivising and State Facilitation and Ease of Obtaining Approvals has been rated below average and are perceived as areas of concern. State needs to take pro-active measures.

## Industry feedback

#### Infrastructure

- Approach road to ICD Mandideep needs widening.
- Parking facility for trucks and resting places for drivers are required in Indore, Pithampur and Bhopal Industrial Areas.
- Warehousing and product specific (Agri, Pharma) cold storage infrastructure needs to be developed in Indore, Pithampur and Bhopal.

### Services

► There is a shortage of skilled manpower for logistics related activities.

#### Operating and Regulatory Environment

- Grievance redressal system needs to be developed and implemented effectively
- Weighbridges on Maharashtra MP borders are not calibrated as per prescribed standards.
- ► Locals collect "facilitation fee" from trucks entering / leaving MP from / to Maharashtra, Gujarat.
- Frequent truck stoppages by RTO officials, often leads to informal payments.

#### State feedback

- ► The State government has already identified infrastructure gap at ICD Mandideep and has proposed widening of road.
- ▶ Product specific Cold storage facilities have already been developed in SEZ (Indore), and various industrial Parks such as Pithampur, Boregaon, Maneri, Malanpur etc. Department has allotted spaces for warehouses in multiple Industrial Parks across the state.
- MPLWC is also upgrading and modernizing warehousing infrastructure facility in the State at selected locations including Indore and Bhopal. Funds have been sanctioned through NABARD and work has been initiated.
- Warehousing and cold storage infrastructure is being proposed in the Multimodal logistic Park, Indore, Pithampur Economic Corridor, and various upcoming industrial parks.
- The state undertakes feedback and consultation with industrial body members of FICCI and CII through various roadshows and stake holder consultation meetings. A weekly meeting with industrial players is carried out by CM office which entails multiple one-on-one meetings between Chief Minister and Industries.
- ► The state is conducting regular meetings with local Authorities, Transport Association, Bus operator Associations and Auto Rickshaw unions to resolve issues of "facilitation fee". State districts have also been advised to coordinate with local unions to redress grievances.
- Audit of weighbridges along all borders of the State is being undertaken.
- ► The state is in process of implementing smart enforcement. As of now out of 40 check posts, 19 have been made functional with smart systems like E-way bill, Fast Tag, CCTV systems etc.
- ► Vahan 4.0 portal has been made functional in the State and its integration with relevant databases is under process.



## Initiatives undertaken by the State Government

#### State policy for logistics

► The state's Industrial Promotion Policy 2014 covers logistics as sector and has laid relevant policy guidelines

#### Smart Enforcement

- ► The State has initiated the implementation of Integrated Command and Control Centre for traffic coordination
  - As of now out of 40 check posts, 19 are functional with smart systems like E-way bill, Fast Tag, CCTV systems etc.

#### Skill Development

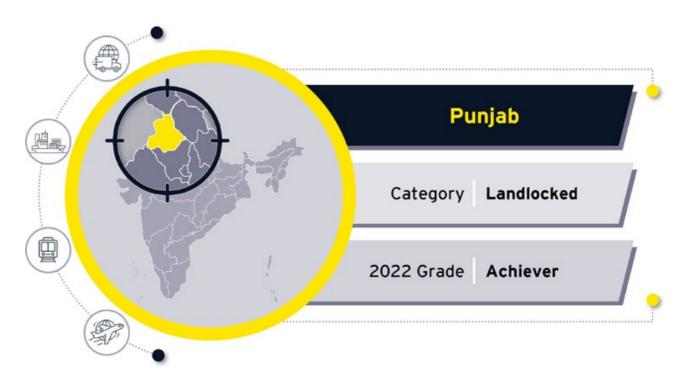
- ▶ The state has total 188 training centers for logistics sector professionals.
- 25 PMKVY state run skilling centers for logistics professionals.

## Action taken by the State against LEADS 2021 recommendations

The State has taken following actions against the recommendations in LEADS 2021 report:

- ▶ Robust institutional mechanism (EGoS, NPG, TSU) setup to streamline logistics.
- ► Established a Command-and-Control Centers in seven smart cities to ensure efficient traffic management and easier passage of freight through these cities. Additionally, 24 Integrated Border Check Points have also been sanctioned by the state to ease freight movement.
- ► The state undertakes feedback and consultation from industrial body members of FICCI and CII through various roadshows and stake holder consultation meetings. A weekly meeting with industrial players is carried out by CM office which entail multiple one to one meeting with Chief Minister and Industries.
- ► The State has developed an online single window system for providing all Logistics approvals including RTO approvals.
- ► To reduce the cost of cargo movement, State Government is increasing the cargo capacity of Bhopal and Indore airports.
- ► The state has ensured fast track allotment of land for expansion of Railway network for better railway connectivity.
- ▶ Land has been allotted for development of MMLP in Indore (MOU signed with NIDC).
- ▶ Land allotment for MMLPs in Bhopal and Ratlam is under process.





# PUNJAB - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 56 below.

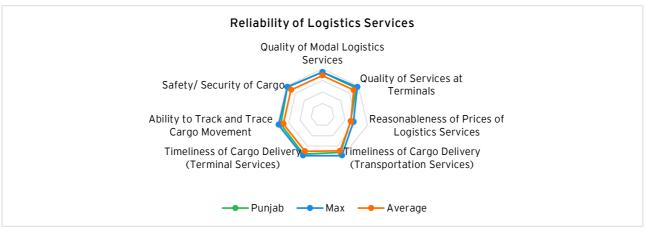
Exhibit 56: Brief logistics profile of Punjab

Parameter	Unit	Value	Year	Source
Road Length	km	NH= 4,099/ SH= 1,503	2020-21	MoRTH/NHAI
Railway Track	Track-km	3,622	2019-20	MoR
Inland Container Depot (ICD)	nos.	8	2021-22	State Govt.
Container Freight Station (CFS)	nos.	3	2020-21	State Govt.
Private Freight Terminal (PFT)	nos.	6	2020-21	MoR and State data
Air Cargo Terminals	nos.	1	2020-21	State Govt.
Railway Goods Sheds	nos.	78	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	58,55,000	2020-21	State Govt.
Cold Storage Capacity	MT	23,50,000	2020-21	State Govt.
Logistics Training Centres	nos.	32	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	2,280	2020-21	State Govt.

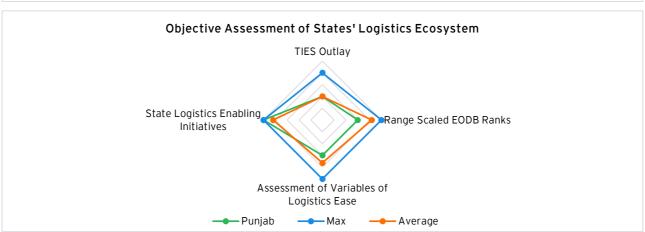


Exhibit 57: State's LEADS indicator wise performance











Punjab has been graded as an Achiever within the Landlocked cluster.

Punjab is rated high on indicators related to quality of infrastructure (Rail, Road, Warehouse and Terminal).

Reasonableness of prices of logistics services and timeliness of cargo delivery were identified as areas where state could improve its performance.

Modal logistics services and Safety and security of cargo have been rated high.

Truck stoppages by RTO/Police authorities has been indicated as a major regulatory concern.

Operating and Regulatory Environment is perceived to be good in Punjab and has been rated high.

## Industry feedback

#### Infrastructure

- Amritsar-Jamnagar Expressway work should be expedited to improve road connectivity.
- Roads in Transport Nagar in Ludhiana need major improvement as it is a focal point to industrial area.
- Truck parking terminals and driver rest facilities should be developed along major State roads.
- Warehousing and truck parking areas should be developed near Dehlon-Sahnewal road.
- Missing Amritsar-Ferozepur rail link should be constructed.
- ▶ ICD at Attari border needs to be developed.
- ► Development of Air Cargo Terminal at Mohali needs to be expedited.

## Services

- Animal and Plant Quarantine labs are available only at Amritsar whereas majority of ICDs are located in Ludhiana. AQ/PQ labs are needed in Ludhiana. Approximately two days are lost in transit and examination process for Ludhianabased exporters.
- High inland haulage charges by Shipping lines.

#### Operating and Regulatory Environment

➤ Setting up of driver training centres across the state. Currently they are available only at Hoshiyarpur and Mansa.

- Transport/Trucking has not been given an Industry status and hence loans for trucks etc. are very costly.
- The process of applying and fees payment for obtaining National Permit is online. However, the permits are not generated online, and transporters have to visit the Transport Department.
- ► Heavy goods vehicles are often overloaded.
- Online challans are being levied if speed money is not paid by truck drivers. Once the challan is issued it needs to be settled in the court. Hence the trucker has only two options, one is to give speed money right away or defend an online challan based on fictitious issues later in the court.
- Truckers are being challaned for not carrying physical documents.

#### State feedback

- Draft Integrated Logistics and Logistics Park Policy for the State has been put in public domain and is under finalisation. The policy caters to elements of developing connectivity to industrial, warehousing, agricultural and logistics clusters.
- Punjab has notified State Logistics Cell (SLC), State Logistics Coordination Committee (SLCC) and City Logistics Committee (CLC) to address bottlenecks, road widening, requirement of flyover or bypass, first/ last mile connectivity along with requirements of other civil infrastructure.
- Upgradation of Ludhiana Transport Nagar roads has been included in the Logistics Action Plan as approved by State Logistics Cell
- First/ Last mile connectivity issues are being taken up by the State Level Institutional Framework for PM GatiShakti. TSU and NPG meetings have already been conducted and EGoS meeting is scheduled for the approval of such projects.
- Provisions for Truck Parking/ Wayside Amenities along with fiscal incentives have been included in the Logistics Policy Clause 8.3.
- Provisions of reserving dedicated land area for logistics and warehousing has been covered in Clause 9 of the Sate Logistics Policy.



- ► Trade through ICP Attari has already declined from a total movement of cargo of 21,61,311 mt in 2012-23 to 1,22,919 mt in 2020-21 with the nos. being only 16,185 mt for 2021-22 (up to Sep '21). ICD at Attari may not be feasible at present.
- Mohali Air cargo Complex is stated to be operationalised within a month's time. The ACC is sufficient to cater to the current demands.
- State has a minimal role in setting up Animal & Plant Quarantine and AQ/PQ labs, as these issues are taken up by NCTF secretariat. They have taken corrective action against it and established labs wherever there are bill entries.
- Trade facilitation has already been taken up by State Logistics Committee (SLC) as issues brought up by private industry stakeholders

- are regularly taken up in consultative meetings.
- ► The state has included skill development as an initiative in the state logistics policy.
- ► The State has already envisaged Logistics Sector as a thrust sector and it has been identified as an eligible service enterprise (for MSME and Large categories) for Fiscal and Non-Fiscal Incentives under the Industrial and Business Development Policy (IBDP), 2017. The definition and scope of Transport/ Trucking has been covered under the logistics sector.
- The processes for "Smart Enforcement and Safety" under the Logistics Action Plan have already been covered under clause 7.2.1 of the logistics policy and under "Technology Interventions".
- ► The State already has a grievance redressal mechanism under PBGRAM.

## Initiatives undertaken by the State Government

### State policy for logistics

▶ Draft Integrated Logistics and Logistics Park Policy for the State has been put in public domain and is under finalisation.

#### **Smart Enforcement**

▶ Weighbridges at all working sites are integrated with centralized mining web portal such that the weight of vehicles from weighbridges is transmitted automatically. To capture number plate details CCTV surveillance is provided at all such locations.

#### Skill Development

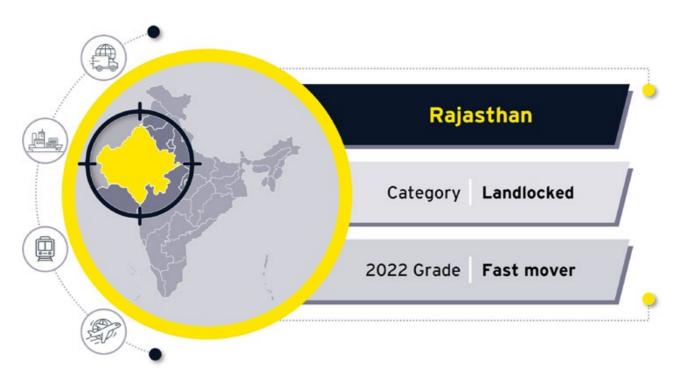
- State Institute of Automotive & Driving Skills, Mahuana is established to provide training to truck drivers
- ▶ Institute for Driver Training & Traffic Research (IDTR) is being developed at Kapurthala
- ▶ Regional training centers for truck drivers are being developed at Malerkotla & Batala.

#### Action taken by the State against LEADS 2021 recommendations

The State has taken following actions against the recommendations as suggested in LEADS 2021 report:

- ▶ State logistics policy is under draft stage and shall be notified by 2022.
- ► The state is formulating state logistics action plan.





# RAJASTHAN - a brief logistics profile

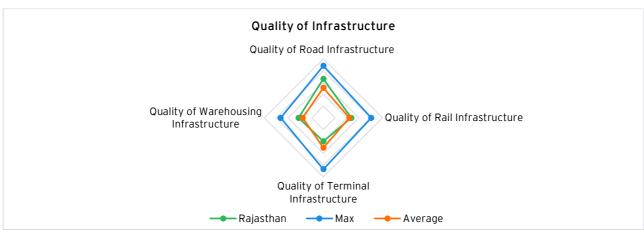
Brief overview of the logistics profile of the State is provided in the exhibit 58 below.

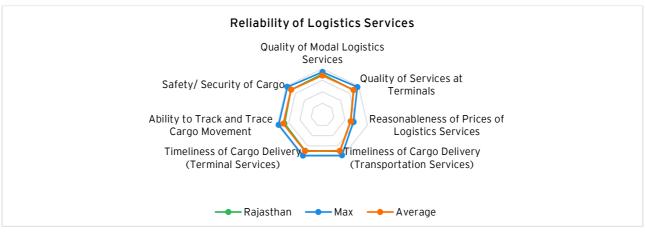
Exhibit 58: Brief logistics profile of Rajasthan

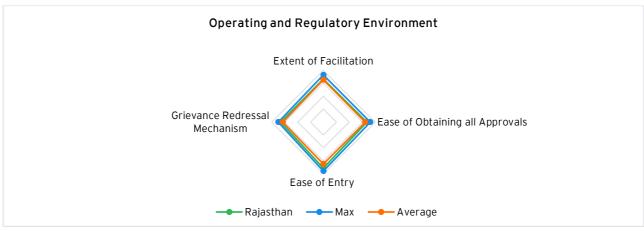
Parameter	Unit	Value	Year	Source
Road Length	km	NH=10,350 / SH= 15,545	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	9,190	2019-20	MoR
Inland Container Depot (ICD)	nos.	9	2021-22	CBIC
Private Freight Terminal (PFT)	nos.	3	2020-21	MoR
Air Cargo Terminals	nos.	1	2020-21	State Govt.
Railway Goods Sheds	nos.	346	2020-21	MoR
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	МТ	15,89,000	2020-21	State Govt.
Cold Storage Capacity	MT	6,31,969	2020-21	State Govt.
Logistics Training Centres	nos.	19	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	1,184	2020-21	State Govt.

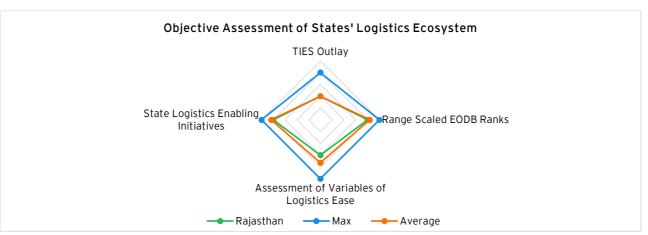


Exhibit 59: State's LEADS indicator wise performance











Rajasthan has been graded as Fast Mover within the Landlocked cluster.

Rajasthan has been rated above average in Quality of Road, Rail and Warehousing infrastructure. Quality of Terminal Infrastructure is identified as an area of improvement where the State has been rated below average.

Reliability of Logistics Services, Timeliness of cargo delivery-terminal and Track and Trace of cargo movement were identified as areas where state could improve its performance.

The State is rated above average on all indicators under Operating and Regulatory Environment.

These are the areas where State could take remedial actions and improve its performance.

Promoting, Incentivising and State Facilitation and Ease of Obtaining Approvals has been rated below average and are perceived as areas of concern. State needs to take pro-active measures.

## Industry feedback

#### Infrastructure

- Last mile connectivity to ICDs needs to be improved.
- ► During monsoon season, roads across the state witness congestions and potholes.
- Truck parking terminals and truck lay-bys are required at regular intervals along key freight routes.

#### **Services**

Only 4 ICDs (Kathuwas, Kota, Jodhpur and Kanakpura) are used for EXIM operations while other 5 ICDs are used for domestic transportation due to unavailability of customs clearance facility.

## Regulatory and Operating Environment

- Frequent checks and stoppages by RTO hinder cargo movement.
- Logistics is not assigned 'Industry status' in the state and therefore no incentives are provided to logistics activities.
- ► There are regular cases of theft and pilferage at all major ICDs.

## Initiatives undertaken by the State Government

## State policy for logistics

State Logistics, Warehousing and Logistics Park Policy 2022 is under formulation stage.

## Skill Development

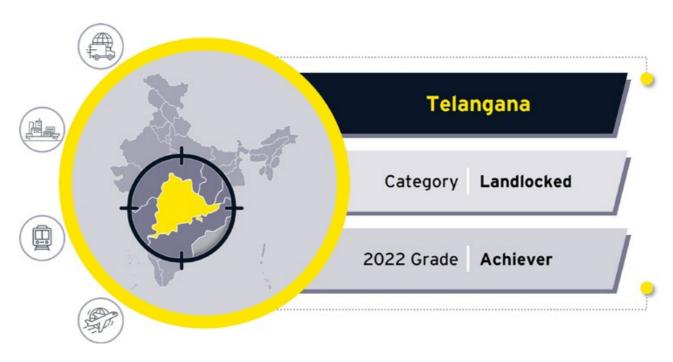
► State Logistics, Warehousing and Logistics Park Policy 2022 includes creation of center of excellence which will include skill development and training for logistics personnel.

## Action taken by the State against LEADS 2021 recommendations

Rajasthan has taken following actions against the recommendations as suggested in LEADS 2021 report:

- ▶ Logistics, Warehousing and Logistics Park Policy 2022 is under draft stage and shall be notified by 2022.
- ▶ The number of physical checks for commercial vehicles are being rationalized.
- ► The State shall be conducting stakeholder consultation for Logistics sectors to understand the key issues and provide solution for the same under the proposed policy.





# TELANGANA - a brief logistics profile

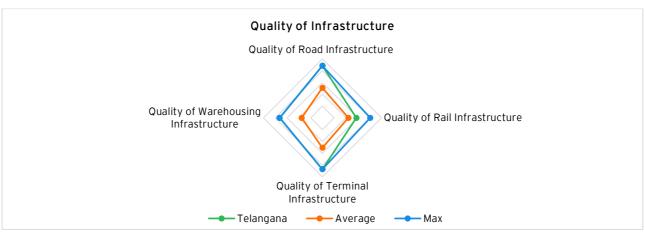
Brief overview of the logistics profile of the State is provided in the exhibit 60 below.

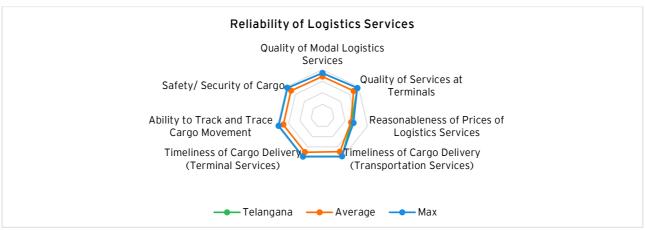
Exhibit 60: Brief logistics profile of Telangana

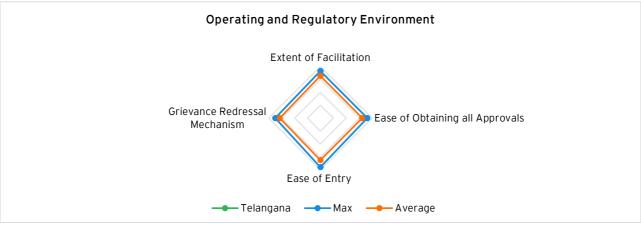
Parameter	Unit	Value	Year	Source
Road Length	Km	NH= 3.974/ SH= 1,727	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	3,223	2019-20	MoR
Inland Container Depot (ICD)	nos.	2	2021-22	CBIC
Container Freight Station (CFS)	nos.	2	2020-21	State Govt.
Private Freight Terminal (PFT)	nos.	6	2020-21	MoR
Air Cargo Terminals	nos.	1	2020-21	AAI and State Govt.
Railway Goods Sheds	nos.	56	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	МТ	4,45,369	2019-20	State Govt.
Cold Storage Capacity	MT	4,10,905	2020-21	MoCAF&PD
Logistics Training Centres	nos.	19	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	1,779	2020-21	State Govt.

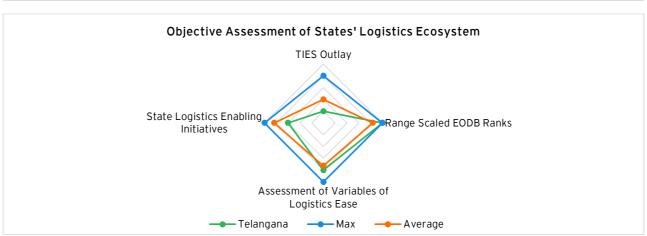


Exhibit 61: State's LEADS indicator wise performance











Telangana has been graded as an Achiever within the Landlocked cluster.

State leads in overall Quality of Infrastructure, particularly in Road, Terminal, and Warehouse Infrastructure.

Quality of Rail Infrastructure is identified as an area requiring improvement. State may work with Ministry of Railways to assess and improve the quality of rail infrastructure.

Quality of Modal Services, Quality of Services at Terminal and Timeliness are rated high, particularly Telangana is the only State to feature in Achiever segment with regards to Timeliness in transportation services.

Reasonableness of Prices of Logistics Services was identified as an area where the state could improve its performance.

The State has been rated high on all other parameters related to Reliability of Logistics Services and operating and regulatory environment.

## Industry feedback

#### Infrastructure

- Road infrastructure in the state faces issues such as potholes, congestion, or multiple chokepoints due to lower carrying capacity, etc
- First / last mile connectivity to industrial zones needs improvement.
- By-pass roads need to be developed for all towns on the Hyderabad - JNPT route to ensure 24 x 7 movement of heavy vehicles.
- ▶ The Nizamabad region needs MMLP/Dry Port.
- Lack of Packhouse/Processing facilities for perishables including irradiation facilities.

#### **Services**

There is a shortage of skilled manpower for logistics related activities.

## Operating and Regulatory Environment

- Process of 'change in land use' to be made easier.
- Trucks and Trailers are seized during accidents along with Cargo and are put on

- hold which leads to huge losses to transporters.
- ► Entry restrictions for movement of freight in city limits is a major hindrance.

#### State feedback

- ▶ Govt of Telangana has notified the 'Telangana State Logistics Guidelines' 2021-26. The State government endeavours to implement the policy in full and to monitor its effective implementation. A special committee chaired by Principal Secretary (Industries and Commerce) will be set up as per the provisions of the policy. With respect to improving connectivity infrastructure the policy provides for complimentary trunk infrastructure such as rail and road connectivity as an incentive for the development of ICDs/Dry Ports and integrated logistics parks.
- ► The feasibility of providing MMLPs/Dry ports in various regions will be studied in consultation with industry partners.
- The state logistics policy provides incentives for development of cold chain infrastructure including cold storages (both capital and interest subsidy) and reefer vehicles (100% reimbursement of vehicle registration and national permit fees).
- Improving the availability of skilled manpower for the logistics sector is one of the major objectives of the State Logistics Policy. As per its provisions, Government will initiate measures to establish a Centre of Excellence (CoE) for training and upskilling of people. It also provides for reimbursement of cost involved in skill upgradation.
- The State logistics policy already provides for financial incentives for the development of logistics on par with other industrial sectors as per the procedure laid out in the State Industrial Policy.
- The State logistics policy provides financial assistance for installing tracking devices in transport vehicles as well as for installation of logistics management software. Stakeholders will be encouraged to integrate track and trace mechanism.
- State Government will consider easing out cargo vehicle movement within city limit in consultation with concerned departments.



## Initiatives undertaken by the State Government

## State policy for logistics

▶ Telangana has formulated Telangana State Logistics Policy 2021-2026.

#### Skill Development

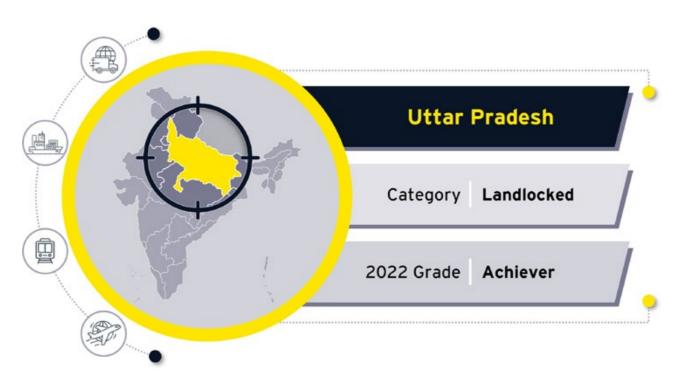
The state has setup Telangana Institute of Driving Education and Skills (TIDES) at Sircilla in collaboration with Ashok Leyland Ltd.

## Action taken by the State against LEADS 2021 recommendations

Telangana has taken adequate actions against the recommendations as suggested in LEADS 2021 report. Broadly, the measures taken by the State government are:

- Telangana has already issued an EV Policy encouraging green logistics.
- ▶ Telangana Government has provided for financial and other incentive in the Industrial and logistics policy for the State.
- The Govt. has improved road connectivity especially in the cities by connecting arterial roads to the highways within the city. It has also included Road Transport Corporation (TSRTC) to deliver the Cargo into nook and corner of the State.
- The Govt. has formed SHE Teams in police department by providing a common emergency number for women to call in case of any emergency.
- The Government advised the companies to make available the facility of pick and drop for women working during night shifts.





## UTTAR PRADESH - a brief logistics profile

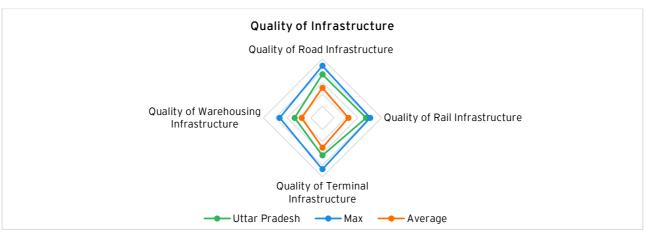
Brief overview of the logistics profile of the State is provided in the exhibit 62 below.

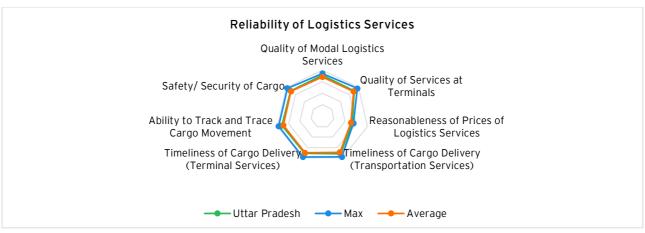
Exhibit 62: Brief logistics profile of Uttar Pradesh

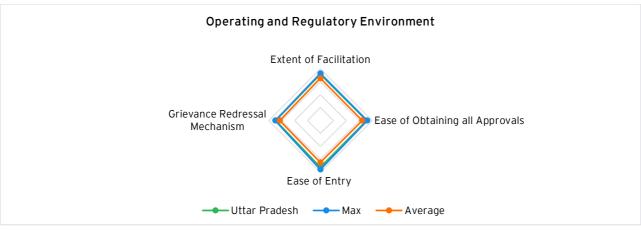
Parameter	Unit	Value	Year	Source
Road Length	km	NH= 11,737/ SH= 11,590	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	16,001	2019-20	MoR
Inland Container Depot (ICD)	nos.	11	2021-22	CBIC
Container Freight Station (CFS)	nos.	5	2020-21	State Govt.
Private Freight Terminal (PFT)	nos.	2	2020-21	MoR
Air Cargo Terminals	nos.	2	2020-21	AAI and State Govt.
Railway Goods Sheds	nos.	154	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	МТ	26,28,630	2019-20	State Govt.
Cold Storage Capacity	MT	1,61,00,055	2020-21	State Govt.
Logistics Training Centres	nos.	15	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	2,445	2020-21	State Govt.

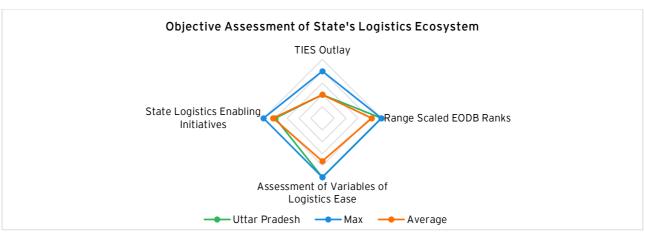


Exhibit 63: State's LEADS indicator wise performance











Uttar Pradesh has been graded as an Achiever within the Landlocked cluster.

The State has been rated high across Quality of Road and Rail Infrastructure indicators. Quality of Terminal and Warehousing infrastructure have been identified as an area of improvement for the State.

The State has been rated above average on all other indicators related to Reliability of Logistics Services. Timeliness of Cargo delivery in Services and Safety and Security of Cargo have been identified as key challenges amongst Reliability of Logistics service indicators.

Ease of Entry and Grievance Redressal Mechanism related indicators have been perceived as areas of concern. State needs to take pro-active measures for addressing and improving the perception of trade friendliness.

## **Industry Feedback**

#### Infrastructure

- Approach road to ICD-Dadri faces heavy traffic and needs widening.
- First mile connectivity to ICD Loni needs improvement. After the construction of the new flyover, the connectivity has further deteriorated near Banthala mod, Loni. Many times, containers get overturned due to incorrect slope of the road.
- Kanpur to Mirzapur presently takes around 48 hours. Condition of the single lane bridge connecting Mirzapur to Gopiganj is poor. The alternate route through Naini is congested owing to city entry / exit restrictions.
- First and last mile connectivity to ICD-Panki is an issue. The connectivity road Kalpi marg needs widening.
- Dedicated parking zones with driver amenities for trucks are needed in outer periphery of Agra.
- Truck lay-bys are also required on key freight routes in the State.

#### **Services**

- ► Frequent power failures at ICD-Loni, increases the cost of operations creates problems for service-users.
- Unavailability of skilled manpower in logistics sector is a concern.

- Development of PQ/FSSAI Labs at Kanpur is needed.
- ► Theft and pilferage during transit near Agra is a concern.

## Operating and Regulatory Environment

- Inspection of overloaded trucks and commercial vehicles is needed.
- An efficient mechanism to track grievances raised by logistics service providers is needed.
- Simplified online process for approval and disbursement of State freight subsidy is needed.

#### State Feedback

- ► The state government is planning various infrastructure projects in the region to ease traffic and reduce dependence on ICD-Dadri.
- PWD Department has identified 95 locations for developing parking and resting spaces. The state government has started to develop parking spaces and resting areas for truck drivers at the following locations: -
  - ▶ 2 Lane Agra to Aligarh section of NH-93 (81.4 Km).
  - ► 4 Lane Agra Bypass connecting of NH-2 to NH-3 (32.8 Km).
  - ▶ 6 Lane Agra Etawah Bypass.
- Construction of Delhi-Dehradun expressway passing in the vicinity of ICD-Loni is underway by NHAI. Power failures are happening due to underground wire cut incidents during the ongoing construction work.
- At present in 16 divisions, state-owned driver training institutes are being developed, out of which construction work in 12 divisions has been already started.
- Drivers Training and Multi Skill Institutes are under construction at 16 locations namely-Prayagraj, Moradabad, Mirzapur, Mathura, Meerut, Varanasi, Gorakhpur, Ayodhya, Aligarh, Bareilly, Basti, Jhansi, Azamgarh, Devipatan-Gonda, Muzzaffarnagar and Chitrakoot Dham Banda. Most of these Institutes are likely to be completed and made operational during current financial year.
- ► The Institute of Driver Training and Research (IDTR) is also under construction at Raebareli.



- ➤ At present, 688 Motor Driving Training Schools under private ownership are providing training to heavy vehicle (Bus/Truck) drivers.
- State Lab at Etawah will cater to the needs of exporting hubs nearby such as Kanpur, Meerut & Hapur. The State Government has sent a proposal to DPIIT for upgradation of this lab to AQCS/ PQ lab.
- Advanced Traffic Management Systems (ATMS), Way in Motion sensor systems with cameras has been implemented in all lanes of Toll Plazas, and Static Weigh Bridge at each Toll Plaza of main carriageway.
- ► The state government has undertaken installation of Fixed Cameras/PTZ, Automatic Number Plate Recognition system, CCTV, Red Light Violation Detection, Inceptor Vehicles, Barriers, Racer Mobile/ Signal Systems etc. However, theft and pilferage issues of Agra will be resolved through surveillance system & frequent patrolling.
- The State Government already provides an Online Single Window Clearance System. The State Govt is also working on the development of online incentive management system.

## Initiatives undertaken by the State Government

#### State policy for logistics

▶ The state has formulated Uttar Pradesh Logistics & Warehousing Policy - 2018.

#### **Smart Enforcement**

- ► The state has implemented Advanced Traffic Management Systems (ATMS), Way in Motion sensor systems with cameras in all lanes of Toll Plazas, and Static Weigh Bridge at each Toll Plaza of main carriageway.
- ► Integrated mining surveillance system through Mine Mitra (minemitra.up.gov.in) has been developed. It provides Online Mineral Management, Integrated mining surveillance system, Online e-commerce platform and Lease deed mapping.
- ▶ Weighbridges have been installed at mining areas which are integrated with Unified Revenue Command Center to track actual volume/weight of minerals loaded on vehicles from the mining area.

#### Skill Development

- ▶ 688 Motor Driving Training Schools under private ownership are established to provide training to heavy vehicle's (Bus/Truck) drivers.
- ▶ State owned Drivers Training and Multi Skill Institutes are being constructed in 12 divisions to provide training to the truck drivers as well as other logistics personnel such as loaders/unloaders, packers etc.
- ▶ Institute of Driver Training and Research (IDTR) is under construction at Raebareli.

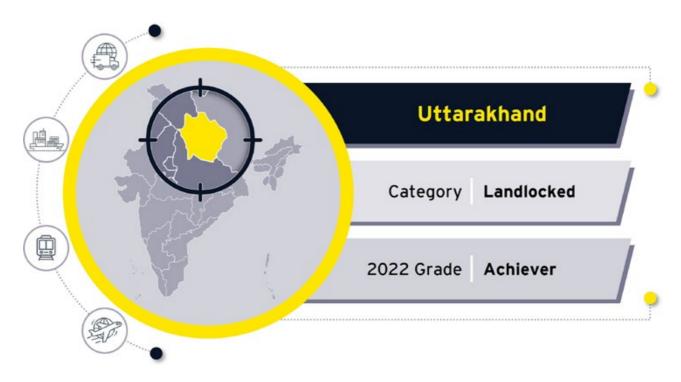


## Action taken by the State against LEADS 2021 recommendations

Uttar Pradesh has taken following actions against the recommendations as suggested in LEADS 2021 report:

- Industrial estate Talkatora is being setup under UPSIC at a total cost of INR 9.41 Cr.
- ▶ Kanpur to Kabrai Section of NH-86: Project for 2-laning with paved shoulders has been constructed.
- ▶ DPR for 4 laning of Sagar Kabrai greenfield economic corridor from MP/UP Border to Kabrai, NH-86 is under preparation.
- ► Lucknow to Gonda, Bharaich and Nepal bridge over river Ghaghra: DPR for four laning of Barabanki to Rupaidiha section of NH-927 is under preparation an additional bridge at Ghaghra river is being proposed in the DPR.
- Development of Naderganj Industrial area is underway along with widening and strengthening of road network in the area.
- ▶ UPSIDA has identified 9.48 acres of land at Industrial area Agro Park Phase-2 Kursi Road Distt-Barabanki for warehousing /logistics purpose.
- ▶ District administration of Varanasi (Rajatalab Tehsil) has identified and acquired 70% of the land for developing Transport Nagar near NH-2.
- The State Govt. is promoting existing incubators IIT Kanpur & collaborating with related agencies such as NICDC for the development of a Unified Logistics Interface Platform (ULIP) in the state.
- The State has a Start-ups Fund for promoting such incubators & Start-ups, with an aim to create a platform for transporter, CHA, and logistics service providers in the state.
- ► To control the cases of theft of cargo several Smart Enforcement measures have been taken. This includes installation of Fixed Cameras/PTZ, Automatic Number Plate Recognition system, Red Light Violation Detection, Inceptor Vehicles, Barriers, Racer Mobile/ Signal Systems etc.
- Most of the identified areas for developing dedicated parking space and facilities for truck drivers have been developed by NHAI. Presently, 18.60 Ha of land is proposed for parking of about 11,700 trucks on the Lucknow-Ayodhya-Gorakhpur section of NH-28. Similarly, PWD Dept. has identified 95 locations for developing parking & resting spaces.
- ▶ UPEIDA has provided for development of Truck Lay-by and rest area for truckers' amenities along Agra-Lucknow Expressway and Purvanchal Expressway.





## UTTARAKHAND - a brief logistics profile

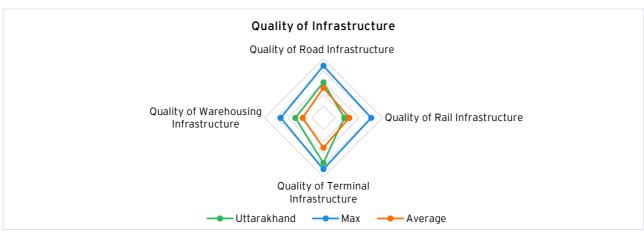
Brief overview of the logistics profile of the State is provided in the exhibit 64 below.

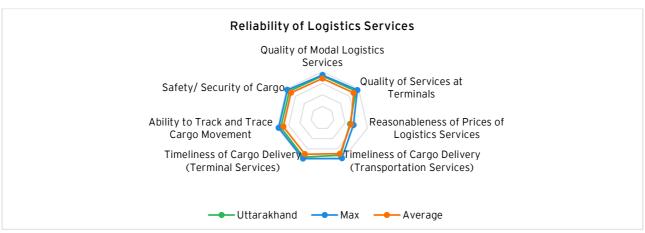
Exhibit 64: Brief logistics profile of Uttarakhand

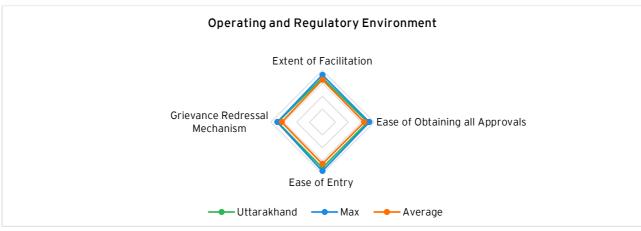
Parameter	Unit	Value	Year	Source
Road Length	Km	NH= 2,949/ SH= 5,850	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	528	2019-20	MoR
Inland Container Depot (ICD)	nos.	2	2021-22	State Govt.
Private Freight Terminal (PFT)	nos.	1	2020-21	MoR and State Govt.
Air Cargo Terminals	nos.	3	2020-21	AAI
Railway Goods Sheds	nos.	20	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	96,211	2019-20	State Govt.
Cold Storage Capacity	MT	1,91,314	2020-21	State Govt.
Logistics Training Centres	nos.	4	2020-21	MoSDE
No. of Individuals trained in logistics	nos.	166	2020-21	MoSDE

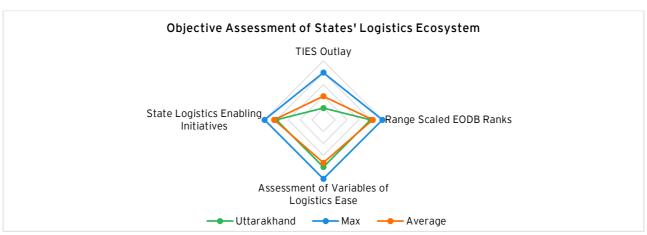


Exhibit 65: State's LEADS indicator wise performance











Uttarakhand has been graded as an Achiever within the Landlocked cluster.

The State has scored above average across indicators related to Quality of Infrastructure except for Rail and Warehousing Infrastructure.

The state has been rated above average on all other indicators related to Reliability of Logistics Services. Reasonableness of Prices of Logistics Services has been identified as an area where the State could improve.

State has scored above average on Operating and Regulatory Environment indicators.

## **Industry Feedback**

#### Infrastructure

- Condition of road connecting Moradabad to Kashipur has deteriorated owing to heavy movement of loaded trucks on the stretch.
- Road movement during Kavad Yatra affects the traffic movement, an alternative route for freight movement is required.
- ▶ Road infrastructure across state faces issues such as potholes, congestion, multiple chokepoints, etc.
- Cold storage/Warehouse infrastructure in both Roorke-Haridwar-Rishikesh region and Kashipur - Pantnagar region is required to be developed.

#### **Services**

► Shortage of skilled manpower in logistics sector is a concern.

### Regulatory and Operating Environment

Shift of traffic to from Kashipur and Pant-Nagar ICD to Moradabad ICD owing to incentives offered to shippers by Uttar Pradesh.

#### State Feedback

- ► The State's logistics policy is under cabinet approval and will be put in public domain for consultation and finalization. The logistics policy envisages a dedicated operation and management cell as well as incentives for developing logistics infrastructure (terminals, cold storages, warehouses, etc.).
- Skilling of workers is included in the state logistics policy which shall be notified soon.
- The transport department has empanelled various skilling development institutes to conduct capacity building programs for the truck drivers and other logistics personnel.
- Proposed logistics policy includes an incentive-based model for logistics stakeholders of Uttarakhand.

#### Initiatives undertaken by the State Government

## State policy for logistics

State logistics policy is under draft stage and will be put in public domain for consultation and finalization.

## Skill Development

► The Transport department has empaneled various skill development institutes to provide capacity building programs to the truck drivers / other personnel etc.

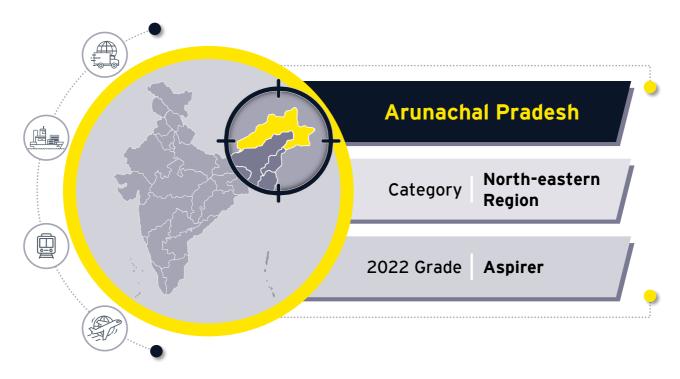
## Action taken by the State against LEADS 2021 recommendations

Uttarakhand has taken adequate actions against the recommendations as suggested in LEADS 2021 report. Broadly, the measures taken by the State government are-

- ► The state is in process of drafting its logistics policy which will cover aspects ranging from city/ state logistics master plan to development of logistics infrastructure.
- ▶ The state has constituted City Logistics Coordination Committee.



# 4.3 North-Eastern Region



## ARUNACHAL PRADESH - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the Exhibit 66 below.

Exhibit 66: Brief logistics profile of Arunachal Pradesh

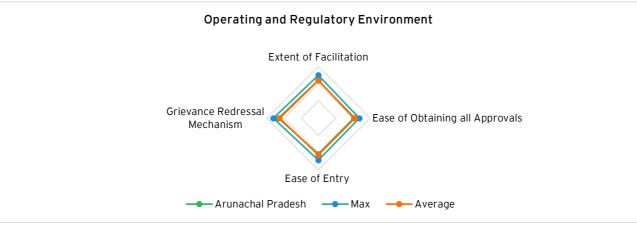
Parameter	Unit	Value	Year	Source
Road Length	km	NH= 2,537/ SH= 4,043	2020-21	NH - MoRTH/NHAI
Railway Track	Track-km	26	2019-20	MoR
Air Cargo Terminals	nos.	1	2020-21	AAI
Railway Goods Sheds	nos.	5	2019-20	State Govt.
Cold Storage Capacity	MT	6,000	2020-21	MoCAF&PD
Logistics Training Centres	nos.	10	2020-21	MoSDE
No. of Individuals trained in logistics	nos.	2,009	2020-21	MoSDE

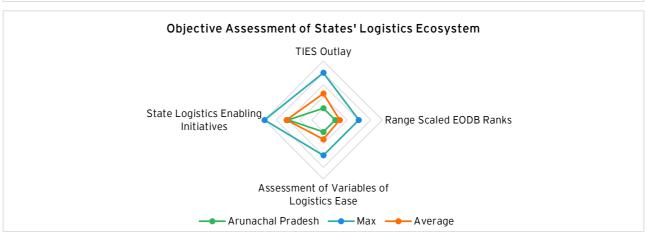


Exhibit 67: State's LEADS indicator wise performance











Arunachal Pradesh has been graded as an Aspirer in the North-Eastern Region (NER) cluster.

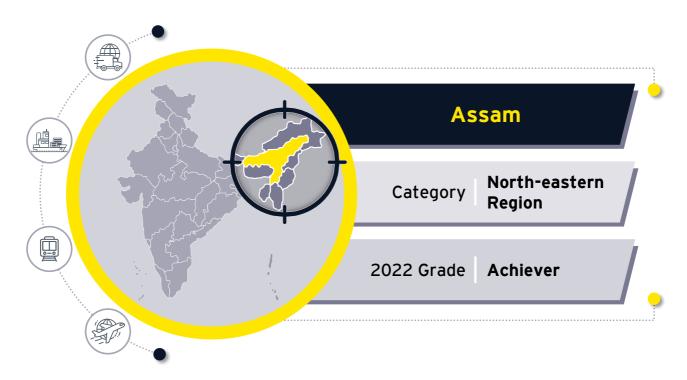
Within the NER Cluster, Arunachal Pradesh secured below average scores on all the indicators across Quality of Infrastructure, Reliability of Logistics Services and Operating and Regulatory Environment indicators.

Quality of Rail and Terminal and Warehousing Infrastructure have been rated low and are perceived to be key areas for improvement. Timeliness of Cargo delivery at Terminals, Track and trace cargo movement and Safety and Security of Cargo have been rated low and identified as key challenge amongst Reliability of Logistics service indicators.

State has been rated low on Extent of Facilitation, Ease of obtaining approvals, Grievance redressal mechanism indicators amongst the NER cluster and State needs to take pro-active measures for addressing and improving the perception of the trade.







# ASSAM - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 68 below.

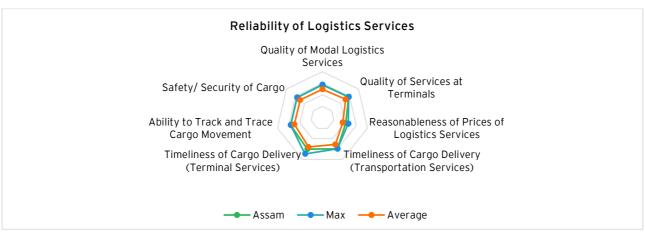
Exhibit 68: Brief logistics profile of Assam

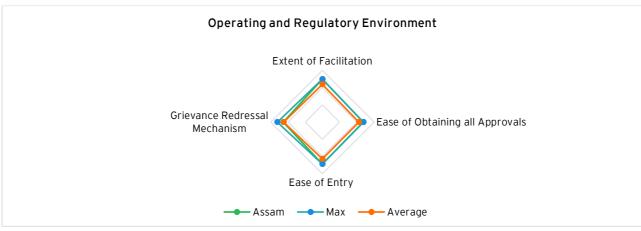
Parameter	Unit	Value	Year	Source
Road Length	km	NH=3,936 / SH= 2,322	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	3,662	2019-20	MoR
Inland Container Depot (ICP)	nos.	1	2021-22	State Govt.
Air Cargo Terminals	nos.	6	2020-21	State Govt.
Railway Goods Sheds	nos.	33	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	4,12,419	2020-21	State Govt.
Cold Storage Capacity	MT	2,33,000	2020-21	State Govt.
Logistics Training Centres	nos.	14	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	122	2020-21	State Govt.

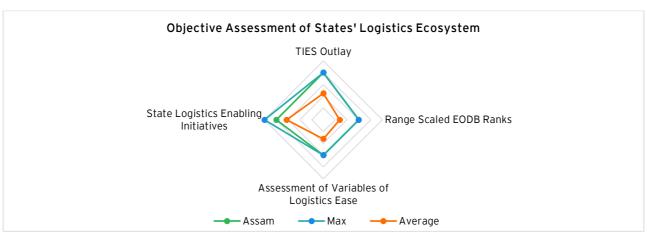


Exhibit 69: State's LEADS indicator wise performance











Assam has been graded as an Achiever within the NER cluster.

Within the NER cluster, Assam has been rated highest on all the indicators across Quality of Infrastructure, Reliability of Logistics Services and Operating and Regulatory Environment indicators.

The State has come up with a comprehensive logistics policy with an intention to make Assam a regional logistics hub and augment the State's economic development.

Infrastructure development initiatives such as MMLP at Jogighopa and development of Inland Waterway terminals in the State are further envisaged to give impetus to logistics in the State.

### Industry Feedback

#### Infrastructure

- Density of road and railway network across Assam is low and inadequate.
- Drafts at National waterways need to be augmented for enhancing trade and commerce across neighbouring states and countries.
- Cargo destined to a closer neighbouring country such as Myanmar/ Bangladesh goes first to a gateway port of Mundra and then to

- the destination. This is due to inadequate road connectivity with neighbouring countries.
- National highway-8 connecting Assam to Tripura and road stretch between Jiribam, Imphal and Assam - Manipur border requires repair and recarpeting.
- ► 110 km long highway between Silchar to Imphal is not motorable and needs augmentation.

#### **Services**

- Empty repositioning charges of containers for both export and import movement are expensive.
- Haulage rates along with other charges are high at ICD Guwahati.
- Limited availability of trucks and unfair RTO practices are hindrances for registering commercial vehicles.

## Operating and Regulatory Environment

- ► Cases of theft and pilferage of goods in transit on State highway connecting Assam with Kolkata.
- Unwarranted stoppages of commercial vehicles by the traffic police cause delays in cargo delivery.

## Initiatives undertaken by the State Government

### State policy for logistics

Assam has formulated Assam Logistics and Warehousing Policy 2022.

#### **Smart Enforcement**

- ► The State has deployed Automatic Number Plate Recognizing (ANPR) system on NH-37 which divides Kaziranga national park.
- ▶ The state has implemented a web-based E-chalan system.

### Skill Development

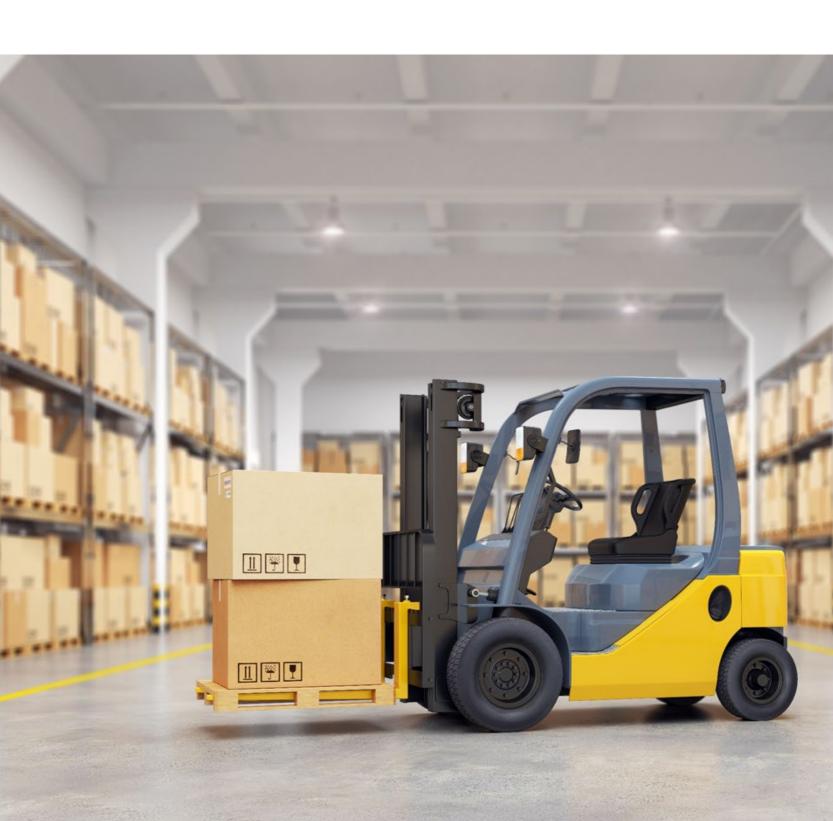
- ► Transport Department, Government of Assam has set up a Drivers and Conductors Training School, Betkuchi, Guwahati.
- NIAIMT, Silchar center consists of Mechanics Training Institute (MTI), Driving Training Institute (DTI) and Inspection Maintenance Station (IMS).



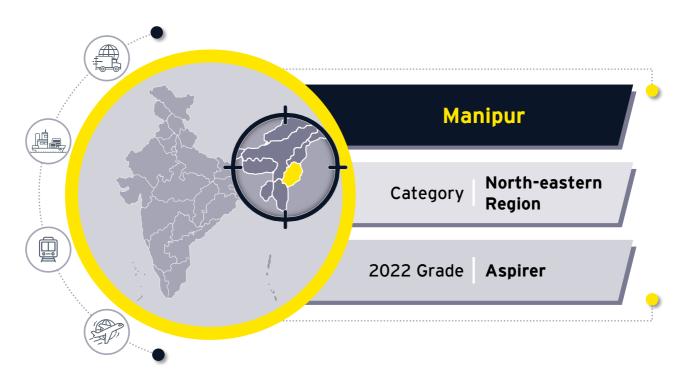
## Action taken by the State against LEADS 2021 recommendations

Assam has taken adequate actions against the recommendations as suggested in LEADS 2021 report. Major measures taken by the State government are listed as below:

- ▶ The State has put emphasis to develop additional parking spaces with basic amenities for drivers (resting areas, drinking water facilities etc.). Some of the already developed parking spaces with the above facilities are Nilachal Truck Parking (NH 37), Truck Parking Zone, Alta (NH 27) and Northeast Gateway Truck Parking, Srirampur Border (NH 127B).
- ▶ Dredging in NW-2 is complete to ensure sufficient draft for inland movement of cargo. Dredging operations at Brahmaputra River are underway.
- ▶ 2.9 Km long flyover from Maligaon towards Kamakhya is under construction with a diversion from Maligaon towards Pandu which will substantially reduce the traffic congestion in the city.







# MANIPUR- a brief logistics profile

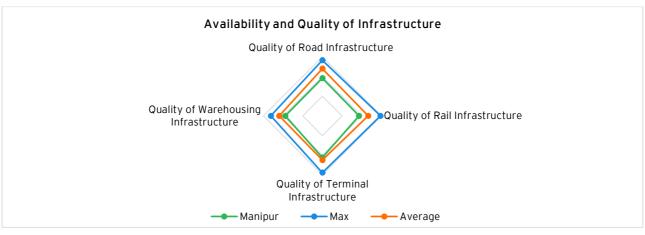
Brief overview of the logistics profile of the State is provided in the exhibit 70 below.

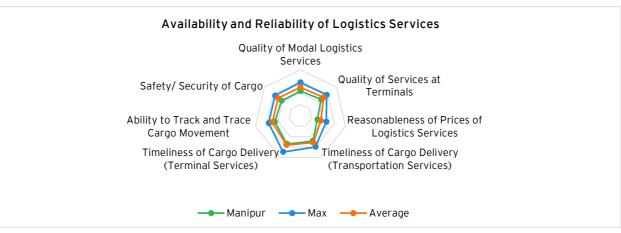
Exhibit 70: Brief logistics profile of Manipur

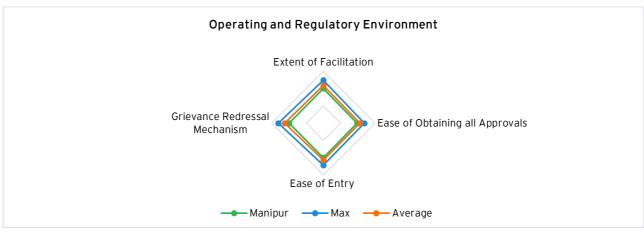
Parameter	Unit	Value	Year	Source
Road Length	km	NH=1,750	2020-21	NH - MoRTH/NHAI
Railway Track	Track-km	18	2019-20	MoR
Integrated Check Post (ICP)	nos.	1	2021-22	CBIC
Air Cargo Terminals	nos.	1	2020-21	AAI
Railway Goods Sheds	nos.	4	2019-20	State Govt.
Cold Storage Capacity	MT	4,500	2020-21	MoCAF&PD
Logistics Training Centres	nos.	3	2020-21	MoSDE
No. of Individuals trained in logistics	nos.	808	2020-21	MoSDE

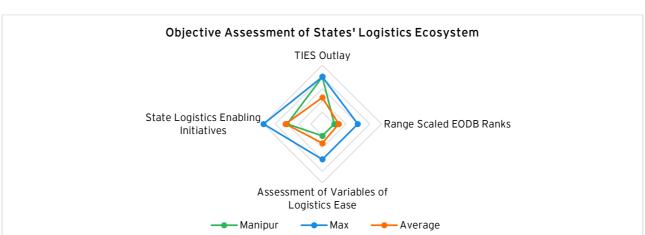


Exhibit 71: State's LEADS indicator wise performance











Manipur has been graded as an Aspirer within the NER cluster.

Similar to other North-eastern States, Quality of Infrastructure continues to be a challenge, specifically in case of Manipur, road infrastructure is perceived as a significant challenge.

Quality of Rail and Terminal and Warehousing Infrastructure have been rated low and are key areas for improvement. Reasonableness of Road Freight Rates and Terminal Prices are considered as limitations compared to other North-eastern States. Reasonableness of prices of logistics services and Timeliness of Cargo at terminal services have been identified as barriers to the growth of logistics ecosystem.

The Ease of Obtaining Approvals and Efficiency of Regulatory Services are perceived to be challenging as compared to other North-eastern States.

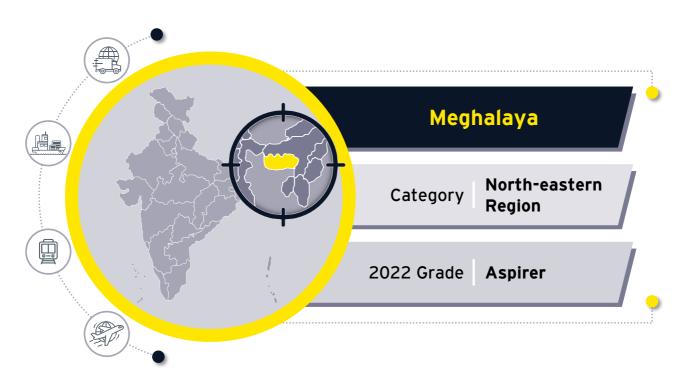
State has been rated low on Extent of Facilitation, Ease of obtaining approvals, Grievance redressal mechanism indicators and State needs to take proactive measures for addressing and improving the perception of the trade.

## Initiatives undertaken by the State Government

#### State policy for logistics

▶ Manipur has formulated Manipur Integrated Logistics Policy 2022.





# MEGHALAYA - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 72 below.

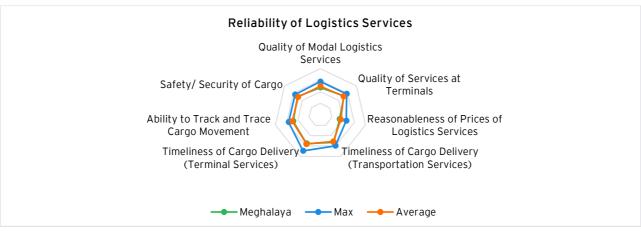
Exhibit 72: Brief logistics profile of Meghalaya

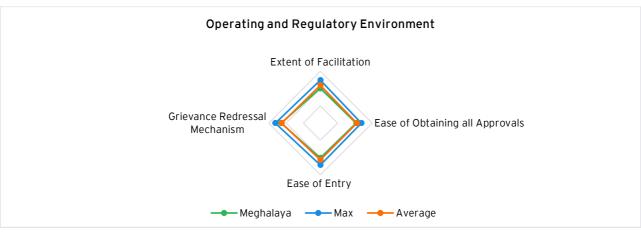
Parameter	Unit	Value	Year	Source
Road Length	km	NH=1,156 / SH= 752	2020-21	MoRTH/NHAI
Railway Track	Track-km	13	2019-20	MoR
Air Cargo Terminals	nos.	5	2020-21	AAI
Cold Storage Capacity	MT	5,055	2020-21	State Govt.
Logistics Training Centres	nos.	2	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	480	2020-21	State Govt.

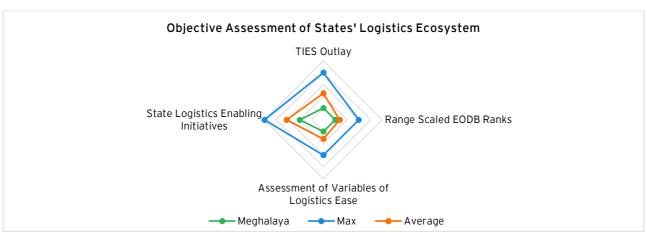


Exhibit 73: State's LEADS indicator wise performance











The State of Meghalaya has been graded as an Aspirer within the NER cluster.

Within the NER Cluster, the State has been rated low on all the indicators across Quality of Infrastructure, Reliability of Logistics Services and Operating and Regulatory Environment indicators.

Quality of Rail and Terminal and Warehousing Infrastructure have been rated low and are key areas for improvement.

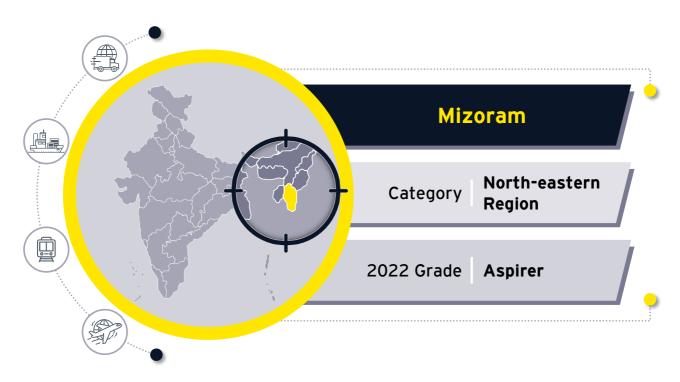
Reasonableness of prices of logistics services and Timeliness of Cargo at terminal services have been rated low and identified as key challenge amongst Reliability of Logistics service indicators.

State has been rated low on Extent of Facilitation, Ease of Entry, Grievance redressal mechanism indicators.

Perception regarding Operating and Regulatory Environment in Meghalaya continues to be the poorest amongst all other North-eastern States, and State needs to take pro-active measures for addressing and improving the perception of the trade.







# MIZORAM - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 74 below.

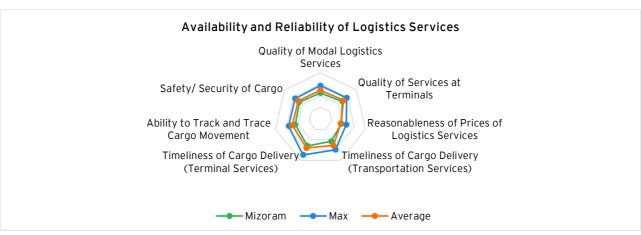
Exhibit 74: Brief logistics profile of Mizoram

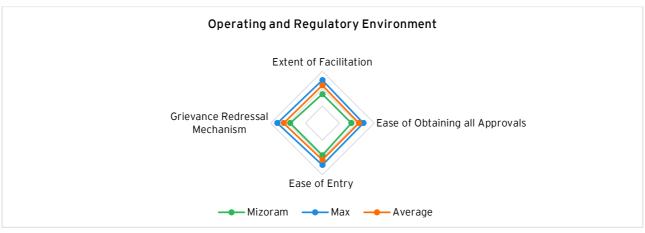
Parameter	Unit	Value	Year	Source
Road Length	km	NH=1,423 / SH= 170	2020-21	MoRTH/NHAI
Railway Track	Track-km	6	2019-20	MoR
Air Cargo Terminals	nos.	1	2020-21	AAI
Railway Goods Sheds	nos.	2	2020-21	MoR
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	128	2020-21	State Govt.
Cold Storage Capacity	MT	4,001	2020-21	MoCAF&PD
Logistics Training Centres	nos.	1	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	33	2020-21	State Govt.

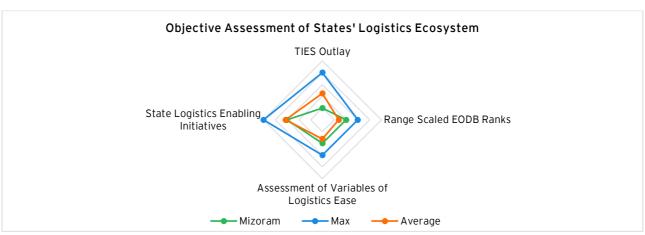


### Exhibit 75: State's LEADS indicator wise performance











Mizoram has been graded as an Aspirer within the NER cluster.

Within the NER Cluster, Mizoram secured below average scores on all the indicators across Quality of Infrastructure, Reliability of Logistics Services and Operating and Regulatory Environment indicators.

Indicators within Quality Infrastructure have been rated low and are identified as an area where state could improve its performance.

Modal Logistics Services, Timeliness of Cargo in Transportation and at Terminal, Track and Trace of Cargo have been rated low and identified as key challenge amongst Reliability of Logistics service indicators.

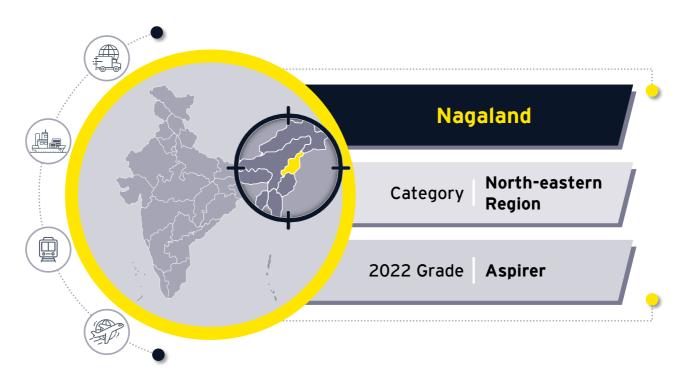
State has been rated low on Extent of Facilitation, Ease of obtaining approvals, Grievance redressal mechanism indicators and State needs to take proactive measures for addressing and improving the perception of the trade.

# Initiatives undertaken by the State Government

### State policy for logistics

▶ The State has formulated Mizoram State Logistics Policy 2022





# NAGALAND - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 76 below.

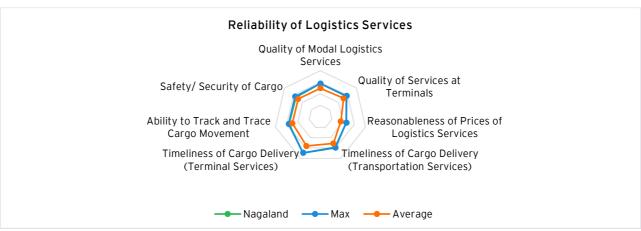
Exhibit 76: Brief logistics profile of Nagaland

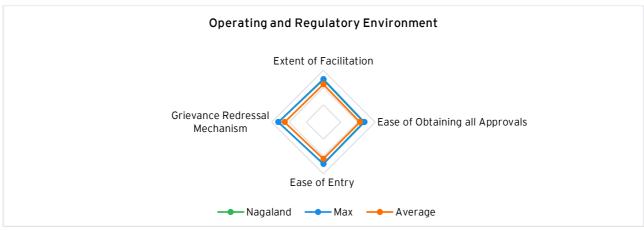
Parameter	Unit	Value	Year	Source
Road Length	km	NH=1,548 / SH= 650	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	23	2019-20	MoR
Air Cargo Terminals	nos.	1	2020-21	State Govt.
Railway Goods Sheds	nos.	1	2020-21	State Govt.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	46,480	2020-21	State Govt.
Cold Storage Capacity	MT	9,500	2020-21	State Govt.
Logistics Training Centres	nos.	1	2020-21	MoSDE
No. of Individuals trained in logistics	nos.	60	2020-21	MoSDE

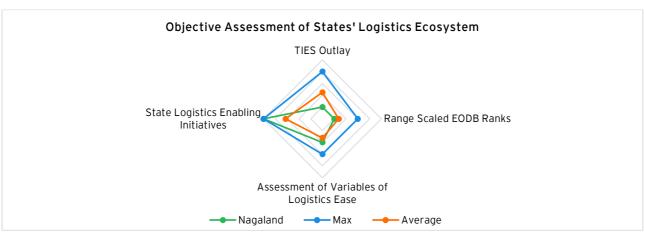


Exhibit 77: State's LEADS indicator wise performance









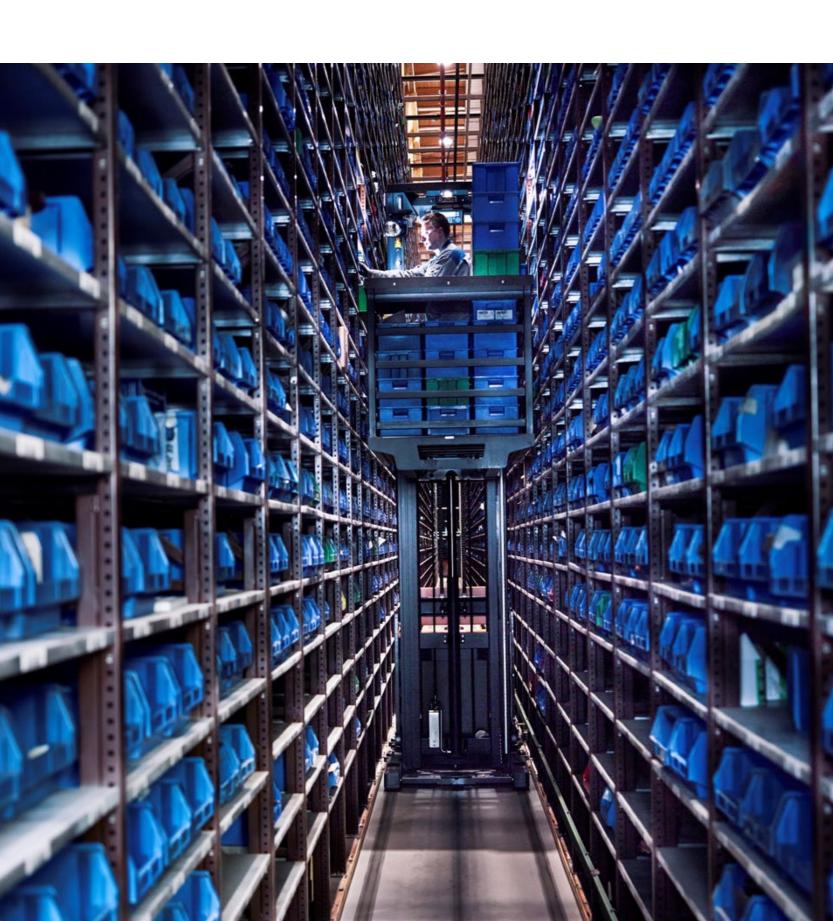


Nagaland has been graded as an Aspirer within the NER cluster.

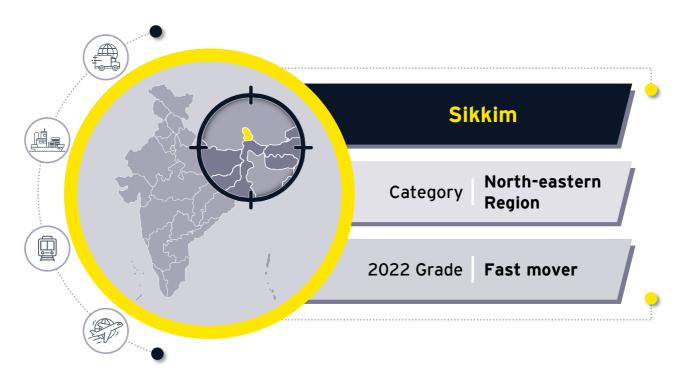
Quality and Availability of Logistics Infrastructure is perceived to be significantly inferior as compared to other North-eastern States. Quality of Infrastructure indicators have been rated low and are identified as areas requiring improvement.

Similarly, Quality of Logistics Services and Capability of Logistics Service Providers are perceived to be key challenges in the growth of this North-eastern States.

Reasonableness of Road freight Rates and Prices of Terminal Services continues to be a challenge in Nagaland like all other North-eastern States.







# SIKKIM - a brief logistics profile

Brief overview of the logistics profile of the State is provided in the exhibit 78 below.

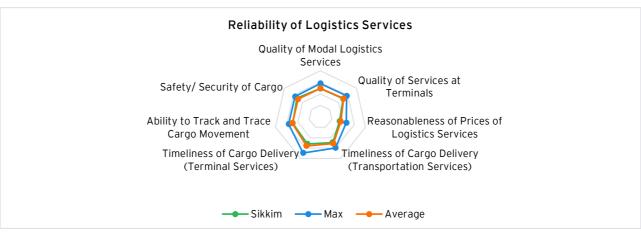
Exhibit 78: Brief logistics profile of Sikkim

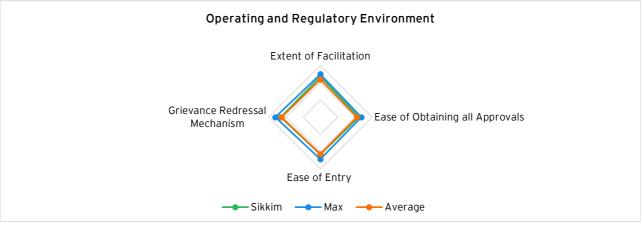
Parameter	Unit	Value	Year	Source
Road Length	km	NH=709 / SH= 701	2020-21	MoRTH/NHAI
Air Cargo Terminals	nos.	1	2020-21	AAI
Cold Storage Capacity	MT	2,100	2020-21	MoCAF&PD
Logistics Training Centres	nos.	4	2020-21	MoSDE
No. of Individuals trained in logistics	nos.	738	2020-21	MoSDE

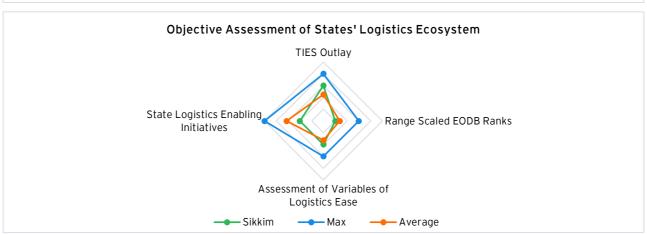


Exhibit 79: State's LEADS indicator wise performance











Sikkim has been graded as Fast Mover in the NER cluster.

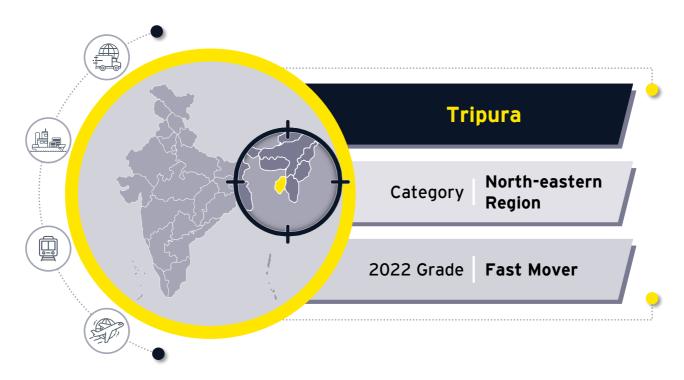
Within the NER Cluster, Sikkim has been rated low on all the indicators across quality of infrastructure (Road, Rail, Warehouse and Terminal). Quality of Infrastructure continues to be a challenge according to industry stakeholders.

Reasonableness of prices of logistics services and Timeliness of cargo at Transportation and Terminal Services has been rated low under Reliability of Logistics service. Rates and Prices of Terminal Services is perceived to be a challenge, as is seen across the country. State approvals, facilitation and grievance redressal indicators have been rated above average within the NER Cluster and are required to be addressed proactively by the State.

Availability and Reliability of Logistics Services is perceived to be better in Sikkim compared to other North-eastern States. Similarly, Operating and Regulatory Environment is perceived to be better in Sikkim compared to other Northern Eastern States.







# TRIPURA - a brief logistics profile

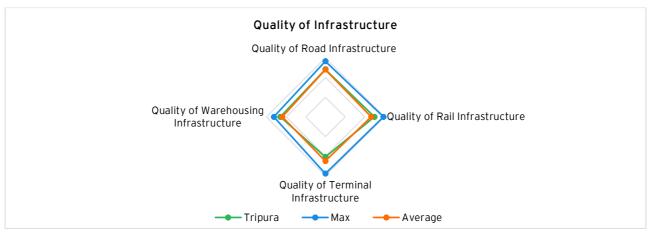
Brief overview of the logistics profile of the State is provided in the exhibit 80 below.

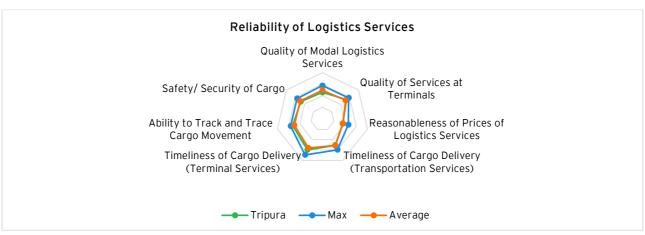
Exhibit 80: Brief logistics profile of Tripura

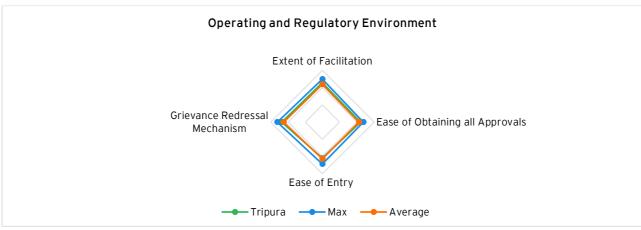
Parameter	Unit	Value	Year	Source
Road Length	km	NH=854 / SH= 1,057	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	337	2019-20	MoR
Integrated Check Post (ICP)	nos.	1	2017-18	CBIC
Air Cargo Terminals	nos.	1	2020-21	AAI
Railway Goods Sheds	nos.	9	2019-20	MoR
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	50	2019-20	WDRA
Cold Storage Capacity	MT	35,000	2020-21	MoCAF&PD
Logistics Training Centres	nos.	2	2020-21	MoSDE
No. of Individuals trained in logistics	nos.	540	2020-21	MoSDE

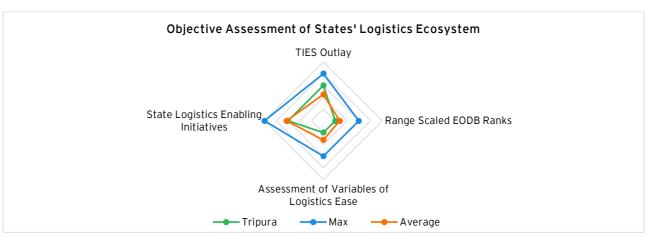


Exhibit 81: State's LEADS indicator wise performance











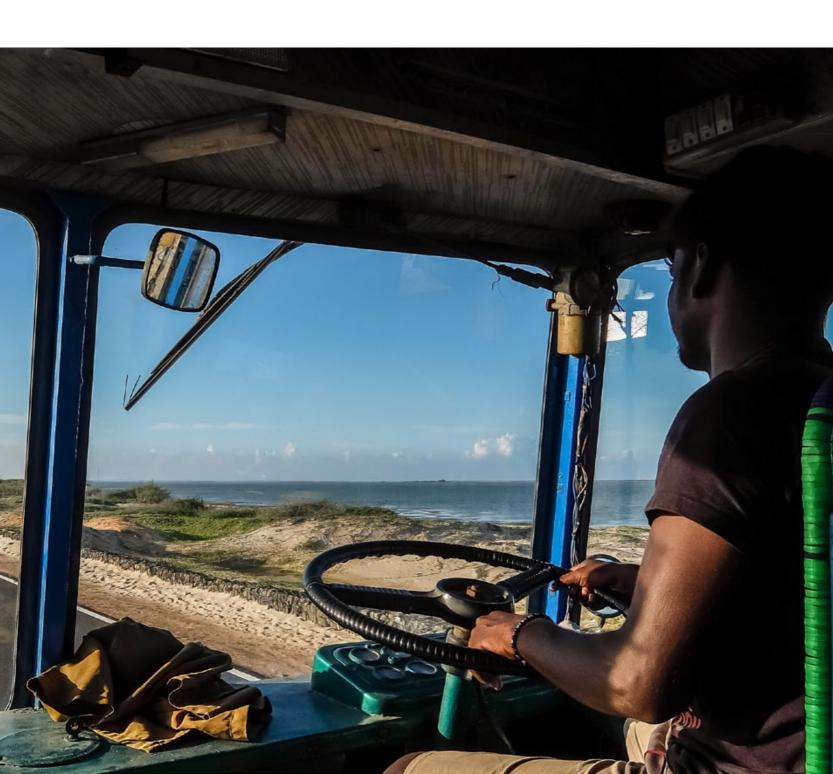
Tripura has been graded as a Fast Mover in the NER cluster.

Within the NER Cluster, Tripura has been rated low on all the indicators across Quality of Infrastructure, Reliability of Logistics Services and Operating and Regulatory Environment indicators.

Indicators within Quality Infrastructure have been rated low and are identified as areas where State could improve its performance.

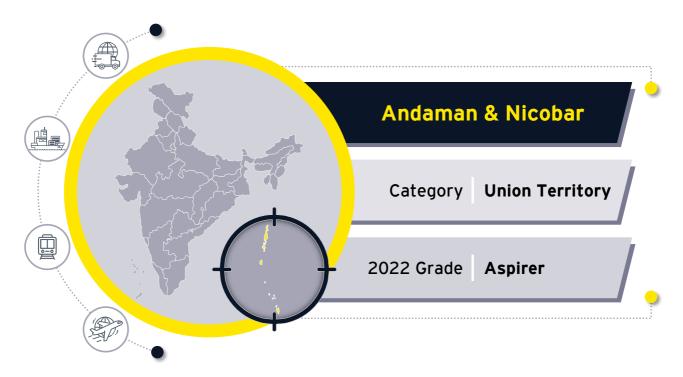
Modal logistics Services, Reasonableness of prices of logistics services, Timeliness of Cargo in Transportation and at Terminal, Track and Trace of Cargo and Safety/ security of cargo have been rated low and is perceived to be a challenge amongst Reliability of Logistics service indicators.

State has been rated low on Extent of Facilitation, Ease of obtaining approvals, Grievance redressal mechanism indicators and State needs to take proactive measures for addressing and improving the perception of the trade.





# 4.4 Union Territories



# ANDAMAN AND NICOBAR - a brief logistics profile

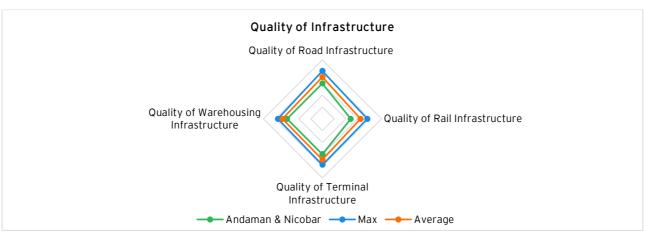
Brief overview of the logistics profile of the UT is provided in the exhibit 82 below.

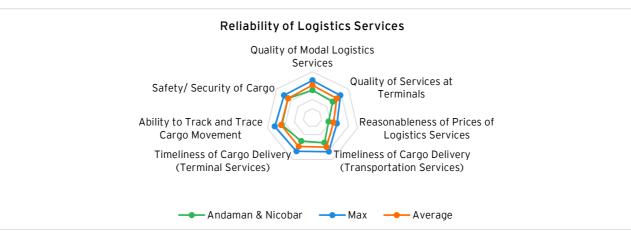
Exhibit 82: Brief logistics profile of Andaman and Nicboar

Parameter	Unit	Value	Year	Source
Road Length	Km	NH=422/ SH= 260	NH -2018-19 SH - 2020-21	NH - MoRTH/NHAI SH - State Govt.
Air Cargo Terminals	nos.	1	2020-21	UT Administration.
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	МТ	26,863	2020-21	UT Administration.
Cold Storage Capacity	MT	2,663	2020-21	UT Administration

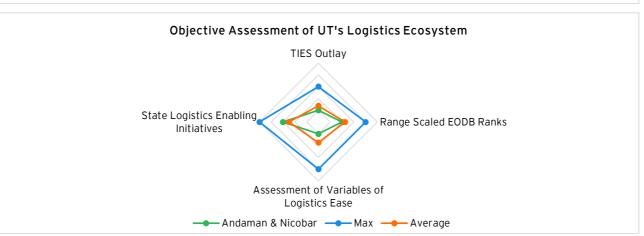


#### Exhibit 83: UT's LEADS indicator wise performance











Andaman & Nicobar (A&N) has been graded as Aspirer within the Union Territory (UT) cluster.

A&N is rated low across the indicators related to Quality of Infrastructure (Rail, Road, Warehouse and Terminal).

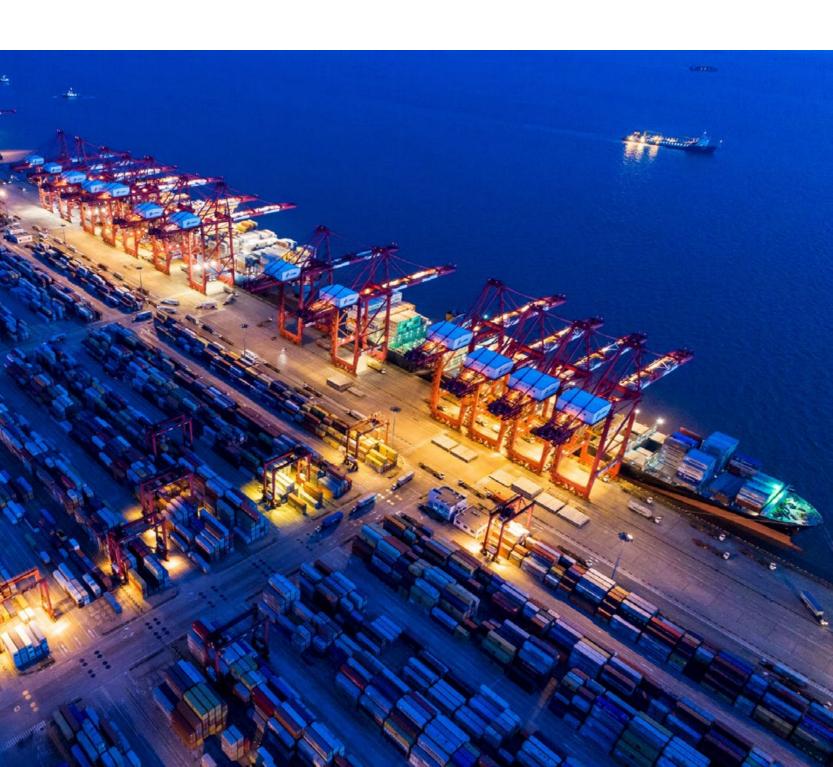
Reliability of Logistics Services indicators were identified as areas where UT could improve its performance.

State facilitation and Truck stoppages by RTO/Police authorities have been indicated as major regulatory concern.

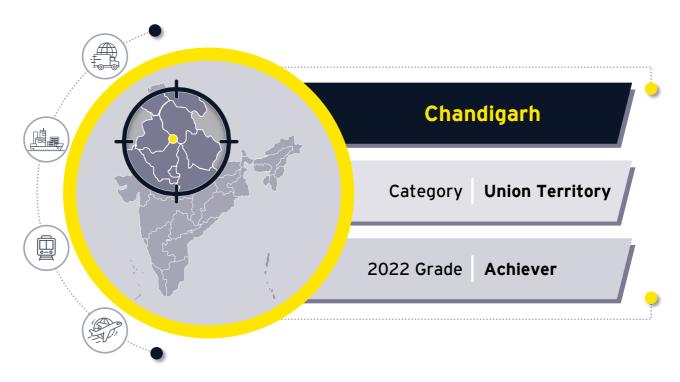
# Industry feedback

#### Infrastructure

- Infrastructure at Port Blair and Havelock ports needs to be improved.
- Single Pilot and Tug is available at the port of Port Blair is not sufficient to expeditiously handle the cargo.







# Chandigarh - a brief logistics profile

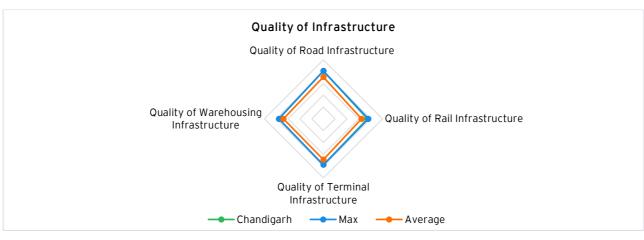
Brief overview of the logistics profile of the UT is provided in the exhibit 84 below.

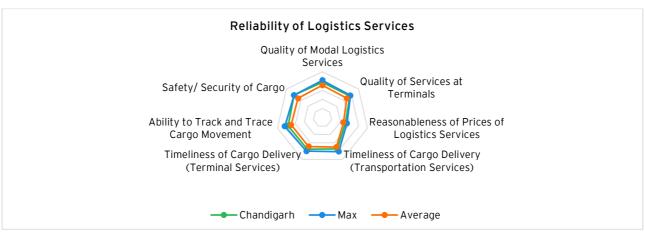
Exhibit 84: Brief logistics profile of Chandigarh

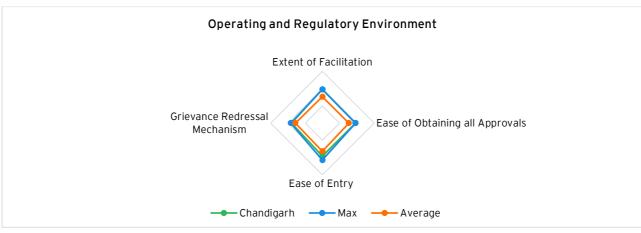
Parameter	Unit	Value	Year	Source
Road Length	km	NH=15 / SH=9	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	83	2019-20	MoR
Air Cargo Terminals	nos.	1	2020-21	AAI
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	10,550	2020-21	WDRA
Cold Storage Capacity	MT	12,462	2020-21	MoCAF&PD

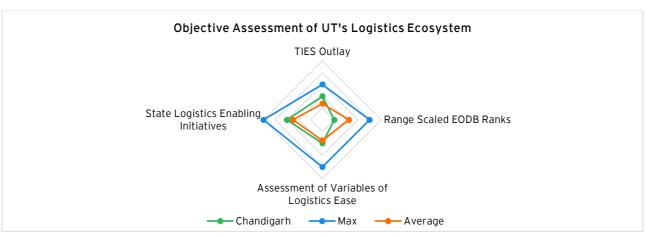


### Exhibit 85: UT's LEADS indicator wise performance











Chandigarh has been graded as Achiever within the UT cluster.

Chandigarh is rated high on all indicators related to Quality of Infrastructure (Rail, Road, Warehouse and Terminal) within the UT Cluster.

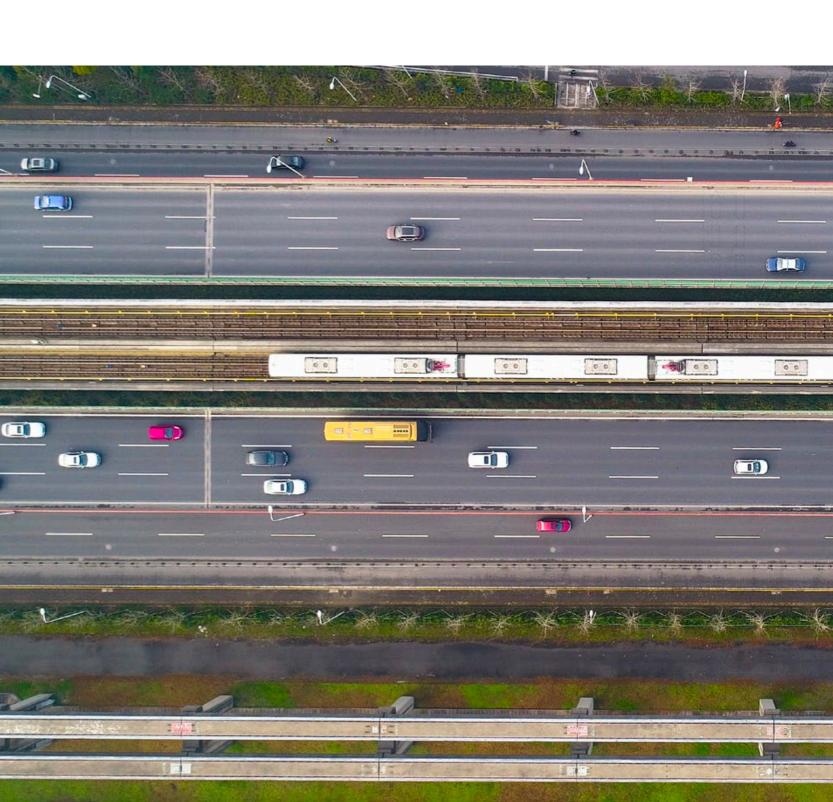
Ability to Track and Trace the cargo is identified as an area requiring improvement.

Truck stoppages by RTO/Police authorities has been indicated as a major regulatory concern. The UT is rated high on all other indicators pertaining to Operating and Regulatory Environment.

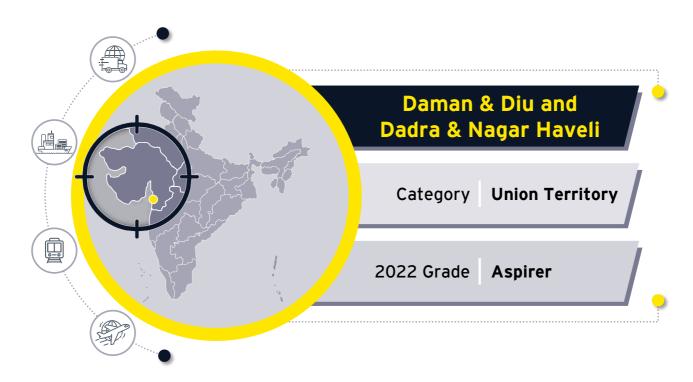
# Industry feedback

#### Infrastructure

- RoB/RUB is required for first and last mile connectivity to Dappar ICD.
- Dedicated parking areas need to be earmarked for commercial vehicles within city limit.
- Chandigarh has entry restrictions for freight movement in city limits which disturbs the cargo movement and results in delays.
- ► Lack of an effective reconciliation and grievance redressal system for logistics in the UT.



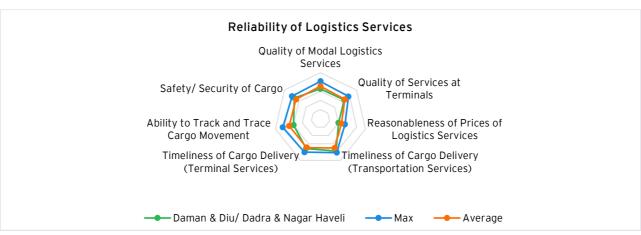




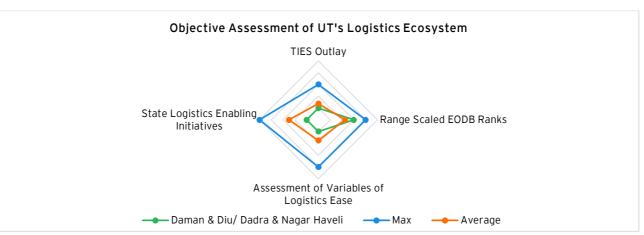


### Exhibit 86: UT's LEADS indicator wise performance









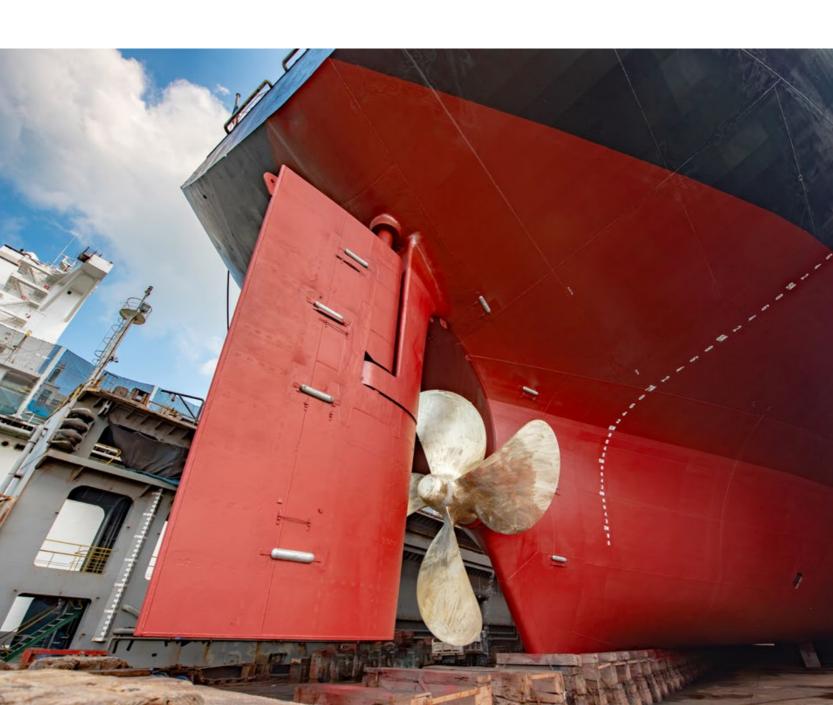


Daman & Diu and Dadra & Nagar Haveli has been graded as an Aspirer within the UT cluster.

Quality of Road Infrastructure is identified as a key challenge for efficient movement of freight within the UT.

Quality of Rail Infrastructure, Warehouse Infrastructure and Terminal Infrastructure have been perceived to be good. The UT need to improve its performance across all indicators under Reliability of Logistics Services, as it has been rated average by the logistics stakeholders.

While the UT has performed above average in its cluster in Ease of Entry and Issues related to Grievance Redressal indicators, a special focus is required to improve its performance in State Facilitation and Ease of Obtaining all Approvals.







# DELHI- a brief logistics profile

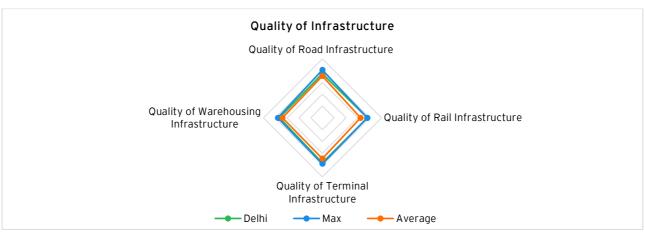
Brief overview of the logistics profile of the State is provided in the exhibit 87 below.

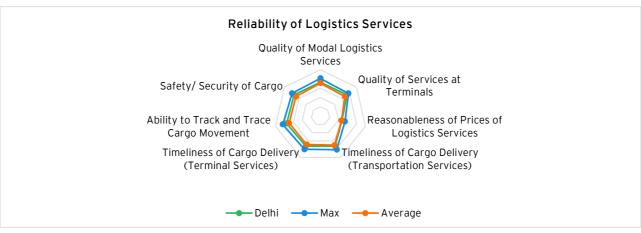
Exhibit 87: Brief logistics profile of Delhi

Parameter	Unit	Value	Year	Source
Road Length	km	NH=616/	2020-21	NH - MoRTH/NHAI
Railway Track	Track-km	706	2019-20	MoR
Inland Container Depot (ICD)	nos.	2	2021-22	IMC List
Air Cargo Terminals	nos.	1	2020-21	State Govt.
Railway Goods Sheds	nos.	73	2019-20	MoR
Warehouse Capacity (incl. State, Central, Private owned) (MTPA)	MT	19,646	2020-21	WDRA
Cold Storage Capacity	MT	1,29,857	2020-21	State Govt.
Logistics Training Centres	nos.	4	2020-21	State Govt.
No. of Individuals trained in logistics	nos.	1,306	2020-21	MoSDE

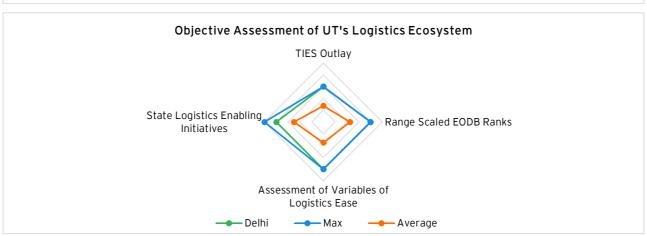


#### Exhibit 88: UT's LEADS indicator wise performance











Delhi has been graded as an Achiever within the UT cluster.

The UT has scored high across indicators related to Quality of Infrastructure (Road, Rail, Terminal and Warehouse).

Reasonableness of Prices of Logistics Services, related to Reliability of Logistics Services has been identified as areas where the state could improve.

Delhi has been rated high on all indicators related to Operating and Regulatory Environment, except for Ease of Entry indicator owing to Green Tax for entry of Commercials vehicles in the premises of Delhi.

Owing to unfavourable entry timings for commercial vehicles and high turnaround time at Tughlakabad ICD, stakeholders perceive Operating and Regulatory Environment to be a key challenge.

## Industry feedback

#### Infrastructure

Parking space is a major issue in Delhi. There are no earmarked parking spaces for commercial vehicles and hence they are parked on the curbs of the roads. (For e.g., Unregulated parking in Ghazipur area).

#### Operating and Regulatory Environment

- Due to restricted entry timings for heavy commercial vehicles and lack of truck parking zones, smaller commercial vehicles are used to transport cargo within the city, thereby increasing the cost of logistics manifold.
- Green tax and Entry tax levied on trucks makes the trucking cost very high. (INR 2500 on loaded container and INR 1300 on empty container).

### Initiatives undertaken by the State Government

#### **Smart Enforcement**

► The state has Installation of Smart Weighbridges at critical entry points for stringent tracking of overloading.

#### Skill Development

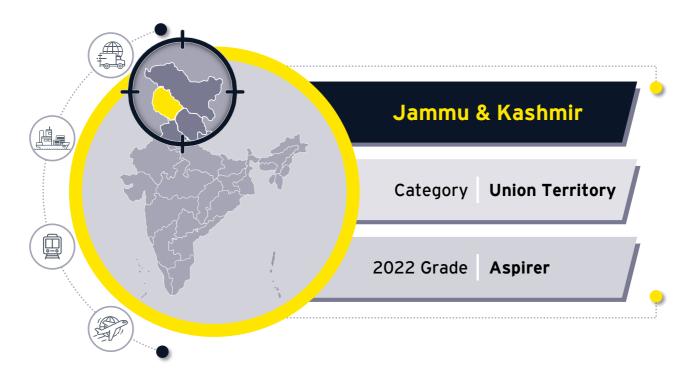
▶ Delhi Skill and Entrepreneurship University offers a 3-year course in Bachelor of Management Studies (land transportation). The course comprises of classroom training interspersed with industry visits, guest lectures and paid apprenticeships covering topics such as road and rail logistics, vehicle telematics, terminal management, and transportation marketing.

## Action taken by the State against LEADS 2021 recommendations

Delhi has taken various actions against the recommendations as suggested in LEADS 2021 report. Majorly, the measures taken by the State government are as below:

- ► The UT has a dedicated section related to formulation of Logistics and integrated development of logistics corridor in the Master Plan of Delhi.
- ▶ Installation of Smart Weighbridges at three impounding pits of Transport Department. at Burari, Dwaraka and Sarai Kale Khan which helps in keeping a check on overloading activities thereby ensuring timely completion of prosecution process.
- ► The UT is in the process of developing/ establishing an integrated Single Window System for facilitating expedited clearances and approvals.





# JAMMU AND KASHMIR - a brief logistics profile

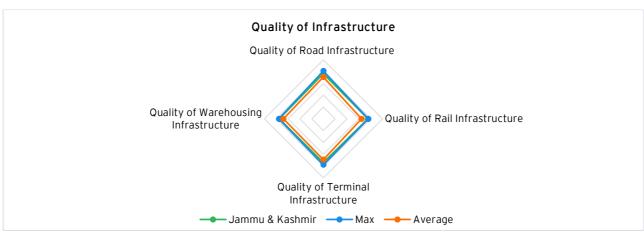
Brief overview of the logistics profile of the State is provided in the exhibit 89 below.

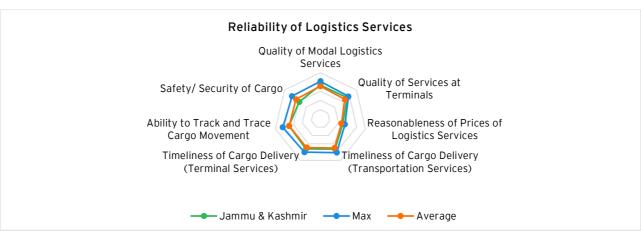
Exhibit 89: Brief logistics profile of Jammu and Kashmir

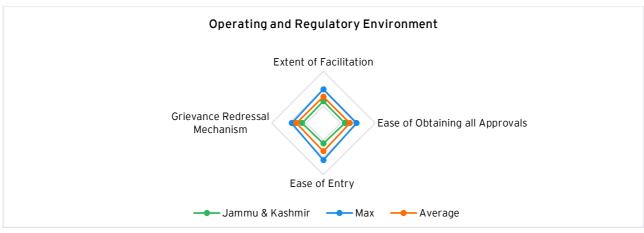
Parameter	Unit	Value	Year	Source
Road Length	km	NH=2,423 / SH= 23,999	2020-21	NH - MoRTH/NHAI SH - State Govt.
Railway Track	Track-km	493	2019-20	MoR
Air Cargo Terminals	nos.	1	2020-21	AAI
Railway Goods Sheds	nos.	22	2019-20	MoR
Cold Storage Capacity	MT	2,50,169	2020-21	MoCAF&PD
Logistics Training Centres	nos.	15	2020-21	MoSDE
No. of Individuals trained in logistics	nos.	1,158	2020-21	MoSDE

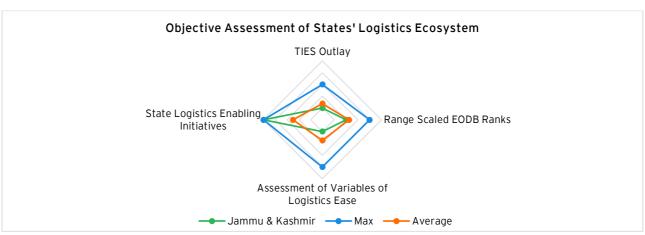


#### Exhibit 90: UT's LEADS indicator wise performance











J&K has been graded as an Aspirers within the UT cluster.

The UT has scored above average across indicators related to Quality of Infrastructure. (Road, Rail, Terminal and Warehouse).

The UT has scored above average across all indicators related to Reliability of Logistics Services. Reasonableness of Road freight rates and Prices of terminal services is perceived to be a challenge as is seen across the cluster.

J&K has been rated below average on all indicators related to Operating and Regulatory Environment.

### Industry feedback

#### Infrastructure

Cold storage and ripening chamber facilities are not established in J&K, the agri-produce straight goes to Punjab which results in damages during transportation.

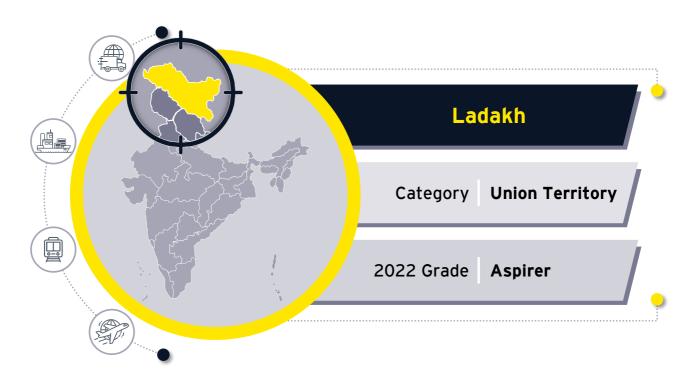
#### **Services**

- Shortage of skilled labour As per Industrial policy, to avail industries benefits 75% staff should be local, however local people are not skilled which hampers the trade.
- ► Currently there are no driver training schools to train the drivers for hilly terrains.
- ▶ Walnut kernels and Saffron strands are sent to Delhi from Srinagar by air for Exports, thereby increasing the cost of logistics.
- ► Theft/ pilferage of commodities (eg. Walnut kernels) is a matter of concern.

## Operating and Regulatory Environment

- ▶ Due to truck unions at Kathua, transportation rates at are high.
- ► Entry tax is levied on non-J&K goods vehicle, which increases the transportation cost.

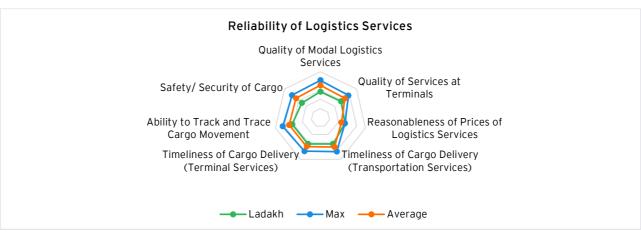


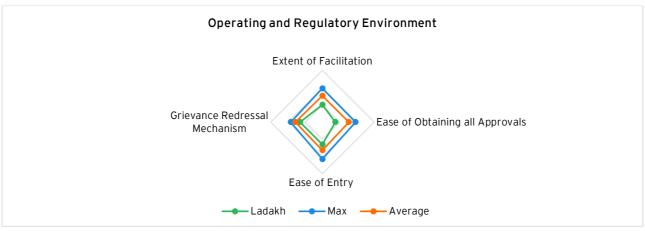


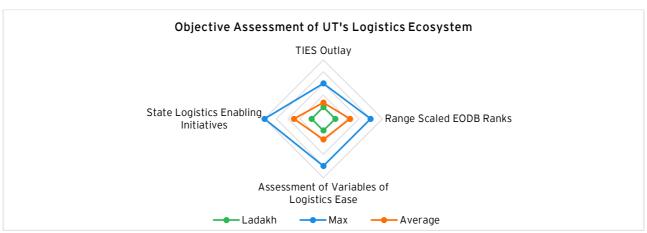


#### Exhibit 91: UT's LEADS indicator wise performance











Ladakh has been graded as an Aspirer within the Union Territory (UT) cluster.

The UT has scored below average across all indicators related to Quality of Infrastructure.

The state has been rated below average on all other indicators related to Reliability of Logistics Services.

State has scored low with regards to Ease of Entry and Grievance Redressal Mechanism related indicators. Extent of facilitation and Ease of obtaining approvals have been identified as areas where the state could improve.

## Industry feedback

#### Infrastructure

- Srinagar is the main hub for exports in the vicinity, but currently there is no direct connection to Srinagar for freight except road.
- ▶ In order to export horticulture and agricultural products from Leh, cold supply chain is required (reefer vehicles, controlled atmosphere centres etc.).

#### **Services**

 Customs facility at upcoming truck terminal at Kargil is needed to the custom related activities when exporting from Srinagar. Skilled local labour is required for handmade pashmina products as outside labour is not available due to extreme weather conditions.

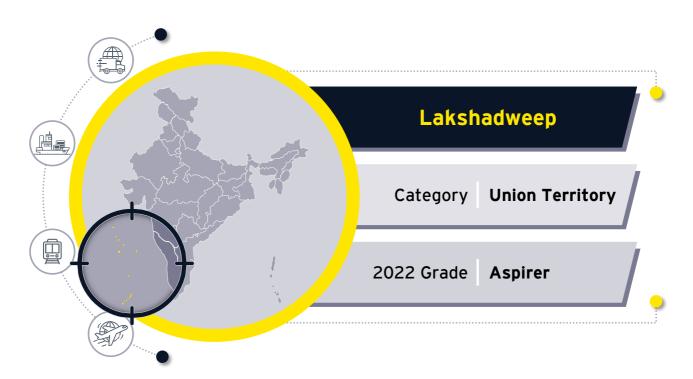
### Operating and Regulatory Environment

- Subsidy to transport raw material should be provided.
- ► Ladakh Industrial policy and Logistics policy should be formulated to incentivize local industries.

#### State feedback

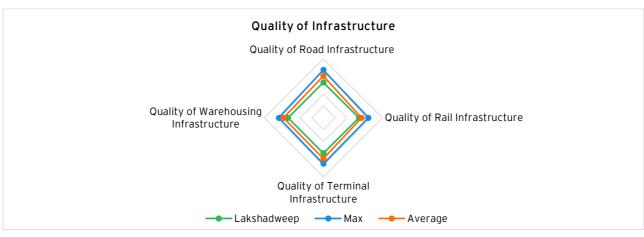
- ► Sub Foreign Post Office (SFPO) for custom clearance has been set up at Leh Airport.
- UT is framing a Policy to provide incentive on Controlled atmosphere centres in the Central Development Scheme and State Industrial Policy.
- ► There are two Cold Storages establish by the Government.
- Currently Handicraft & Handloom training centres are established in the UT.
- ► The UT is formulating an Industrial policy which will provide incentives based on:
  - Project and production level.
  - Transportation of goods and exportoriented units.

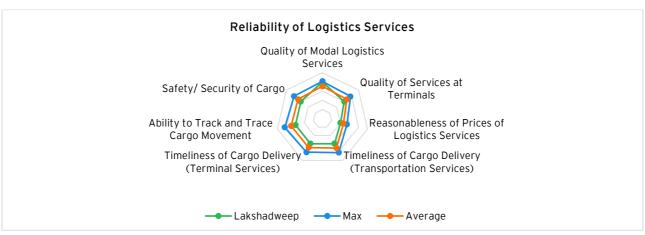


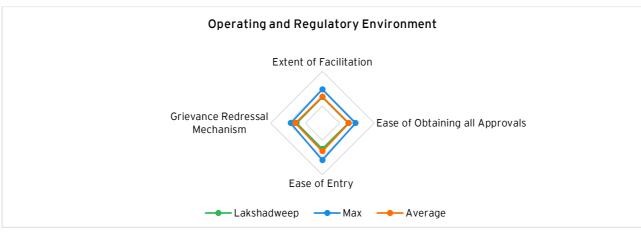


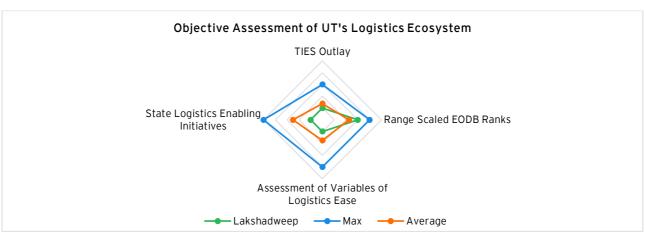


### Exhibit 92: UT's LEADS indicator wise performance











Lakshadweep has been graded as an Aspirer within the UT cluster.

The UT needs to focus on improving the Infrastructure Quality as the UT has been rated below average across the indicators under Quality of Infrastructure.

The UT is rated below average for all indicators related to Reliability of Logistics Services except

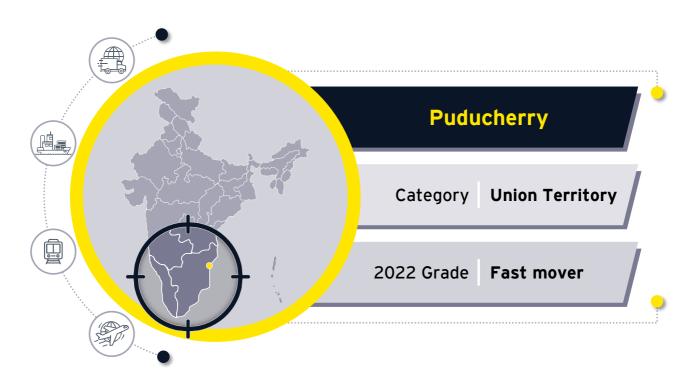
quality of modal logistics services, which is the only indicator being rated high.

Lakshadweep has scored below average with regards to all indicators under Operating and Regulatory Environment.

The UT needs to focus on improving the overall logistics ecosystem in the UT in proactive manner.

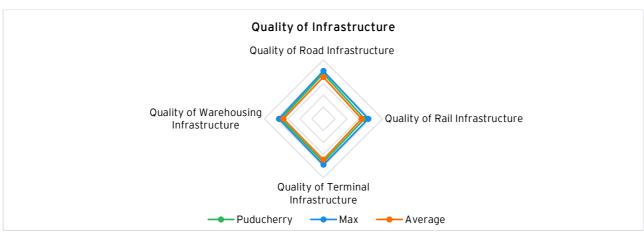


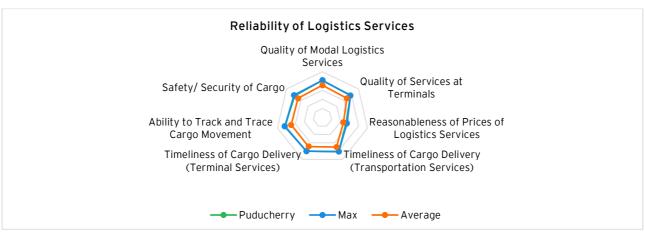


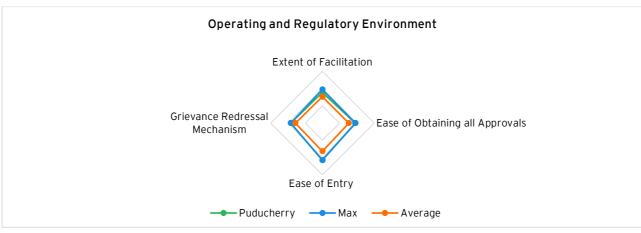


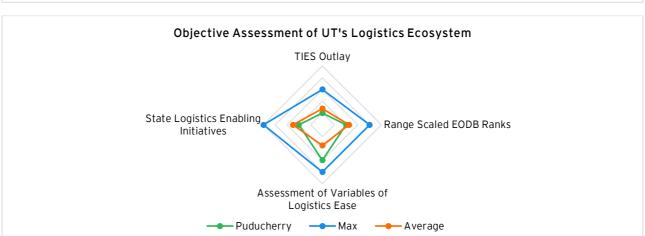


### Exhibit 93: UT's LEADS indicator wise performance









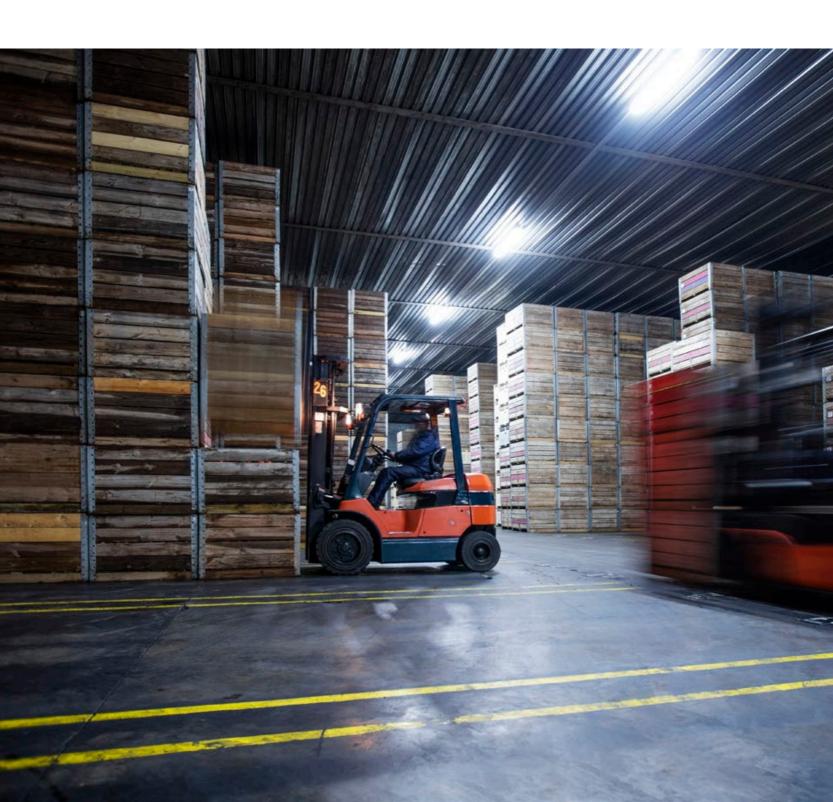


Puducherry has been graded as Fast Mover within the UT cluster.

The UT has scored above average across indicators related to Quality of Infrastructure except for Rail infrastructure, which has been identified as area where UT could improve its performance.

The UT has scored high with regards to all indicators related to Reliability of Logistics Services.

UT has scored high with regards to all indicators related to Operating and Regulatory Environment except for State facilitation, which is an area requiring improvement at UT's level.









### 5. Way forward and Conclusion

India has achieved a major milestone of becoming the fifth largest economy in the world and efforts to propel growth across sectors are being undertaken continuously. To become globally competitive and reduce logistics cost in the country, Government's focus has been on integrated infrastructure development for multimodal connectivity and improving efficiency of logistics services. In the spirit of cooperative and competitive federalism, States/UTs have an integral role to play in devising ways and means for improving logistics infrastructure in the country, which in turn shall result in increased logistics efficiency and reduced logistics costs in domestic as well as EXIM trade. This Chapter encapsulates the key initiatives undertaken by the Government of India (GOI), which will provide guidance to the States and UTs for developing a resilient and sustainable logistics system.

A broad overview of suggestions proposed by the GOI which should be undertaken by States/UTs are briefly discussed below:

#### A. PM GatiShakti State Master Plan (SMP)

All 36 States/UTs have been onboarded to use PM GatiShakti National Master Plan. Individual portals for all the States/UTs have been developed with the integration of over 700 data layers, till date. Each State Government has been given ownership of their respective portals along with the responsibility of regular updation of necessary data layers critical for infrastructure and logistics planning and development. Capacities are being built in these States & UTs through workshops/training of more than 1000 officers in physical mode at Bhasksracharya National Institute for Space Applications and Geo-Informatics, Gandhinagar (BISAG-N) till date, besides online trainings. States/UTs which are yet to update the data layers in NMP, are required to complete the data layer updation exercise at the earliest. Dovetailing state level action with national level planning, co-ordination and monitoring in mission mode is expected to bring about the desired infrastructure improvements in a planned manner.

#### B. Framing of State Logistics Policy

State Logistics Policies have been formulated by 13 States and the completion of policy formulation in the remaining States/UTs has been targeted for December 2022. The progressive step, since the launch of the National Logistics Policy, for the States/UTs is to choose a course of action that would create specific strategies for logistics planning and implementation at state level, in a holistic manner. The States/UTs are advised to use the framework under National Logistics Policy (NLP)-2022 for drafting their respective logistics policy, for a uniform and cohesive policy structure across the country for creation of a robust and integrated logistics ecosystem. The state policy will serve to proactively creating robust logistics ecosystem, while addressing issues being faced by stakeholders in establishing, managing, and operating logistics services and allied activities in the States/UTs.

# C. Logistics Performance Monitoring Framework

Policy implementation is a critical phase in the policy management process as it involves assessing the actions taken by public and private sectors directed at the achievement of the set objectives. This involves the conversion of policy objectives into specific KPIs for assessing performance. Hence, as a part of the formulation of the State Logistics Policy, States/UTs have been advised to develop a monitoring framework including KPIs and timelines to facilitate regular assessment and time bound implementation of various initiatives. development.

#### D. Grievance Redressal System

There is need of fast-track resolution of grievances faced by stakeholders in logistics ecosystem. A digital system Ease of Logistics (E-LogS) for registering, coordinating, and monitoring resolution of user issues has been developed on which authorized user associations will register and upload their issues/suggestions. This portal has been developed by the Logistics Division, DPIIT to facilitate time-bound resolution of issues. Such mechanism will provide a common platform for logistics stakeholders to voice their grievances and facilitate faster solution



of issues. It would aid in developing a common and seamless portal for logistics related approvals/clearances and grievances redressal. Several states such as Assam, Andhra Pradesh, Gujarat, Madhya Pradesh Maharashtra and Uttar Pradesh etc. have considered to establish a Grievance Redressal System under their Logistics Policy.

#### E. Preparation of City Logistics Plan

Restricted movement of commercial vehicles in the city during the daytime severely affects the efficacy of the logistics system. Change in consumption patterns due to growing use of ecommerce services is also leading to the need to improve freight movement within the city. A comprehensive City logistics plan is required to be prepared which helps in coordinated cargo movement through efficient interconnection of long distance and last mile transportation while minimising the negative impacts of freight movement in the city. States/UTs need to prepare a city logistics plan for key urban areas and to develop transhipment terminals in peri-urban areas to interchange goods between large and small vehicles for last mile delivery. States/UTs may also look at devising a policy for zoning of freight movement in major cities and district headquarters.

# F. Improvement of First and Last Mile connectivity

In addition to last mile connectivity in urban area, States/UTs need to identify and improve condition of intersection points and connecting roads between National Highways (NH), State Highways (SH) and Major District Roads (MDR) connecting industrial, agricultural and logistics clusters by way of improvement measures such as providing flyover, ROB, Traffic signals, widening of roads etc. to improve the first and last mile connectivity.

# G. Dedicated land bank for logistics infrastructure

States/UTs may consider earmarking of land parcels for development of logistics infrastructure such as warehousing clusters, logistics parks, MMLPs, truck terminals and (empty) container yards etc. Prior earmarking will ensure that adequate land is available when required for this often neglected yet critical infrastructure.

# H. Development of Transport Nagars/Truck Terminals

Lack of availability of Truck terminals is a major issue across the country. Due to absence of dedicated parking space, trucks are parked alongside roads which poses risk of accidents and results in reduced road capacity utilization. States/UTs may identify critical logistics and industrial clusters along major freight corridors and earmark parking space to be utilized as Truck Terminal/Transport Nagar. In addition to truck parking, provision of ancillary facilities such as toilet block, dormitory, restaurant, chemist cum first-aid facility, repair & maintenance facility, etc. is also recommended. Wherever feasible, these projects can be developed on PPP mode.

# I. Development of Controlled Atmosphere Infrastructure

There is an immense demand of multicommodity controlled atmosphere warehouses and allied services in key agriculture production centres. States/UTs may consider provision of appropriate incentives in their Logistics Policy for development of Cold Supply Chain Infrastructure - reefer vehicles, controlled atmosphere storage, ripening chambers, sorting-grading units and packhouse etc. Development of such specialised facilities through private sector investment should be incentivised as well.

#### J. Development of Air Cargo Complex

States/UTs may explore feasibility for development or expansion of existing air cargo complexes specially in the zones which have limited connectivity through other means such as rail, road, and waterway due to geographical challenges or other reasons. Such initiatives should be specifically examined in areas producing high value (perishable) commodities requiring least time transportation to consumption centers.

# K. Development of Animal Quarantine (AQ) /Plant Quarantine (PQ) Centres and Labs

States/UTs are advised to ensure the availability of Export Certification labs, AQ Certification Service / PQ labs in agriculture export zones to avoid wastages and additional storage cost.

### L. Human Resources Development and Capacity Building for Logistics Sector



To develop an overarching logistics human resource strategy, Line Ministries/States/UTs have to develop action plans to address challenges in skill development and internal capacity building in the respective sector. A course on PM GatiShakti initiative is also being developed for the overall capacity building of the Civil servants, dealing in infrastructure-related projects, both at the Centre and State levels. To carry through, mandatory certificate courses with evaluation are being designed using "Integrated Government Online Training (IGoT)" platform of Department of Personnel Training (DoPT). It is an e-learning platform for civil servants posted across the country.

States/UTs are advised to give special attention to re-skilling & up-skilling of local workers through various schemes of Ministry of Skill Development & Entrepreneurship (MSDE) and State Skill Development Corporations. States/UTs are also advised to focus on creating and capacity enhancement of Skill Development Centres. Training schools should be established at key logistics hubs, to train workers, for instance, in using heavy vehicles and in handling equipment such as Reach stackers, Forklifts, Cranes etc. Development of such establishments may also be explored on a PPP format and private organizations may be incentivised and partnered with for upgrading skills of employees in logistics services

#### M. Single-Window online clearance system

Setting up of Logistics Infrastructure like PFTs, Rail Terminals, ICDs, Warehouses etc. involves several statutory approvals and NOCs such as CLU, Fire, Labour, Factory Licence, Forest NOC etc. from concerned State Govt. agencies. The procedural complexity and consequent delays in obtaining regulatory approvals generally creates an adverse perception against ease of doing business in the state among investors and infrastructure developers. States/UTs may consider implementing or refining of 'Single Window online clearance system' for logistics industry enabling paperless approval systems, reducing/eliminating physical visits, and instituting a time bound approval mechanism under the Logistics Nodal agency. In case of overlapping responsibilities within State and local Administration offices, onus should be on the Nodal agency to get approvals, with inputs being provided by the approval seeking stakeholder. Approval towards regular freight movement and Over Dimensional Cargo (ODC) movements on the highways also need to be digitalized and a single window approval system needs to be introduced; Andhra Pradesh has already initiated the approval of ODC movement through online single window system.

### N. Digitization and Use of Technology in Logistics Systems

With the introduction of PM GatiShakti-NMP. digitization and centralization of Logistics infrastructure data has been initiated. States/UTs are advised to expedite updation of data in NMP portal for comprehensive planning of projects. States/UTs are also advised to encourage private players towards automation of warehouses and adherence to Global Standards which will help in both optimizing turn-around time and attaining risk minimization in warehouse operations. States/UTs are also advised to explore use of "Artificial Intelligence in Logistics Systems" to improve service standards and reduce operational errors. States/UTs can refer to the 'e-Handbook on Warehousing Standards-2022' for detailed insights on usage of technology in Logistics Industry. States/UTs may also consider implementing 'Smart Enforcement System' through integration of VAHAN, GST, e-way bill, fast-tag and other digital systems; and enable track and trace mechanism (RFID, Scanner, In-motion weigh bridge etc.) on key freight corridors.

# O. Clarity on logistics infrastructure categorization

States/UTs may consider providing more clarity on Logistics Infrastructure
Categorization under Environment Clearance. It is suggested that non-hazardous handling ambient warehouses and terminals be categorised in white category with condition of providing prescribed green area.
States/UTs may discuss the issue with Central Pollution Control Board for issuing appropriate guidelines for categorization. Additionally, State Pollution Boards also need to expedite the approval process through online submission and minimising physical visits for follow-ups.



### Conclusion:

LEADS is an indigenous data driven index which practically measures the performance of States/UTs on Logistics parameters. Logistics Division, DPIIT is committed to handholding States/UTs in the development of their logistics ecosystem and provide a roadmap for improving logistics efficiency. LEADS is a key tool to drive logistics sector efficiency across the country which in turn will help India achieve the target of bringing down logistics cost compared to global benchmark.

It is anticipated that reference to this edition of the LEADS report will not only help the states in assessing where they stand vis a vis other states in their logistics performance but also enthuse them into taking proactive measures on and beyond the ones illustrated to achieve improvements in their performance during the course.







### 6. Annexures

### 6.1 Annexure 1: Perception Questionnaire

For each question, please select the option that best describes your current work. All the questions are mandatory for beginning the survey.

(Disclaimer- Identity of all respondents will not be published anywhere, and all responses will be kept anonymous)

1.	Name of Respondent:	7.	Cargo type you primarily dealwith:
			Bulk/Break Bulk
			Containerized Cargo
2	Name of the Company		Perishable Cargo
2.	Name of the Company:		Parcel (Express/Non-Express) Cargo
			Special Cargo (Project Cargo, Hazardous, High Value Commodities, etc.)
			Controlled atmosphere/ Refrigerated cargo
3.	Location: Town/ Village:		Liquid cargo
٥.	City		Others: Please specify
	City: State:		, ,
	Pin code:		
	- III GGGC.	8.	Please indicate the predominant nature of
4.	Nature of market you primarily deal with:		your involvement in the logistics chain:
	EXIM		Trader/Shipper
	Domestic		Transport Service Provider (including Road
	Both		Haulier, Rail Operator, Shipping Line, Airline, Inland Waterways)
5.	Your position in your company / firm:		Terminal Infrastructure Service Provider (including ICD, CFS, PFT, AFS, Air Cargo
	Senior Management		Terminal, Port Terminal, Warehouse, Cold
	Middle Management (Manager and above)		Store, etc.)
	Supervisor		Logistics Service Provider (including Freight forwarder, Customs broker, Carriage and
	Operations Executive		Freight Agents, Air Cargo Agents, 3rd Party
	Other		Logistics Service Provider, NVOCC,
			Aggregators/Consolidators)
6.	Transport mode you typically deal with:		
	Road		
	Rail		
	Airways		
	Waterway (Sea, Inland)		
	ase select top three (3) States/UTs where you pound realities of logistics	perform	logistics operations and/or are familiar with
Sta	ite/UT 1		
Sta	nte/UT 2		
Sta	ite/UT 3		



#### (PART A)

Survey comprises three main sections and all questions are mandatory. Please provide responses based on your perception of the entire logistics chain across your chosen States/UTs.

#### Section 1: Logistics Infrastructure

2. Rate the quality of road infrastructure available in your chosen States/UTs

(Road Infrastructure here refers to the road network and associated physical infrastructure such as road condition, signage, lighting, vehicle refuelling services, toll, state border points, etc.)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

3. Rate the quality of rail infrastructure available in your chosen States/UTs

(Rail Infrastructure here refers to the sufficiency of rail tracks, congestion on rail networks, etc.)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

4. Rate the quality of terminal infrastructure in your chosen States/UTs

(Terminal Infrastructure refers to ICDs, CFSs, Dry Ports, Land Customs Stations, AFSs, PFTs, MMLPs, Port terminals, Airport terminals, Inland Waterway Terminals, Good Sheds and Truck Terminals.)

	Very				Very	Please tick the terminal infrastructure in state where you face major issues			
	Poor	Poor	Average	Good	Good	EXIM In	frastructure		Domestic Infra.
State/ UT 1						ICD / CFS / Dry Ports / MMLPs / Land Customs Stations etc.	Air freight Terminal	Ports	PFT/Railway Good Sheds/ Truck Terminals / Inland Waterway Terminals
State/ UT 2						ICD / CFS / Dry Ports / MMLPs / Land Customs Stations etc.	Air freight Terminal	Ports	PFT/Railway Good Sheds/ Truck Terminals / Inland Waterway Terminals
State/ UT 3						ICD / CFS / Dry Ports / MMLPs / Land Customs Stations etc.	Air freight Terminal	Ports	PFT/Railway Good Sheds/ Truck Terminals / Inland Waterway Terminals



5. Rate the quality of warehousing infrastructure in your chosen States/UTs

(Warehousing Infrastructure refers to warehouses including silos/bulk storage, consolidation centres, cold storages, packhouses, etc.)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

A. Rate the **overall quality of logistics infrastructure** in your chosen States/UTs

(This is a summary question and refers to overall modal, terminal, connectivity and warehousing infrastructure)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

Section 2: Comprises two aspects: a.) Quality of Logistics Services provided in respect of cost, timeliness, cargo tracking and safety/security of cargo and b.) Quality (availability and efficiency/ competence) of Logistics Service Providers.

6. Rate the quality of modal logistics services in your chosen States/UTs

(Modal logistics services here refers to- haulage/transportation by different modes of transport)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

7. Rate the quality of services at terminals in your chosen States/UTs

(Terminal Services refers to handling and storage of cargo, customs examination, freight forwarding and value-added services like consolidation, repackaging, labelling, last-mile connectivity, etc. at Terminals as defined in Q.No.3 above)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

8. Rate the reasonableness of prices of logistics services in your chosen States/UTs

(Logistics services here refer to haulage/transportation by different modes, and all terminal services defined in Question 6 above)

	Very cheap	Cheap	Reasonable	Expensive	Very expensive
State/ UT 1					
State/ UT 2					
State/ UT 3					



**9.** Rate the **timeliness of cargo delivery in relation to transportation services** in your chosen States/UTs

(**Timeliness** here refers to delivery within schedule/ or within reasonably expected time within a State/UT)

	Very cheap	Cheap	Reasonable	Expensive	Very expensive
State/ UT 1					
State/ UT 2					
State/ UT 3					

5. Rate the **timeliness of cargo delivery in relation to terminal services** provided in your chosen States/UTs

(**Timeliness** here refers to reasonableness of time taken for terminal operations viz., time taken in stuffing/ destuffing of cargo, loading/ unloading of cargo and container, customs-examination, etc.)

	Very cheap	Cheap	Reasonable	Expensive	Very expensive
State/UT 1					
State/ UT 2					
State/ UT 3					

6. Rate the ability to track and trace cargo movement on the freight routes in your chosen States/UTs

(This refers to mobile/internet connectivity along with an institutional mechanism to track and trace cargo movement, as also the condition of cargo and/or container)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

7. Rate the safety/ security of cargo within your chosen States/UTs

(Safety/ Security refers to consistency in delivery without damage/ deterioration/ pilferage/ loss of cargo due to logistics inefficiencies or accidents or thefts during transportation of goods)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

B. Rate the overall efficiency and reliability of logistics services in your chosen States/UTs

(This is a summary question and refers to overall logistics services and logistics service providers in the selected State/UT)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

- 1.
- 2.
- 3.



# Section 3: Operating and Regulatory Environment impacting logistics infrastructure and service provision

12. Rate the **State government/UT administration's role in promoting, incentivising, facilitating** and even directly investing in creation, management and operation of logistics infrastructure and encouraging efficient logistics services in your chosen States/UTs

(State Government/UT's role here refers to ease of obtaining regulatory approvals and efficiency/effectiveness of policies related to single window clearances, labour laws, ease of land use and related ancillary facilities, maintenance of law and order, and provision of tax breaks/subsidies/access to credit, grievance redressal and dispute resolution, etc.)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

Please State the top 3 issues faced
-------------------------------------

- 1.
- 2.
- 3.
- 13. Rate the ease of obtaining all approvals from the States/UTs for setting up warehouse infrastructure in your chosen States/UTs

(Warehousing Infrastructure includes silos/bulk storage, consolidation centres, cold storages, packhouses, etc. ease of obtaining relevant approvals from competent authority in terms of time and cost)

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

14. Rate the State/UT based on the ease of entry in the selected State/UT from a neighbouring State/UT.

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

15. Rate the State/UT based on your satisfaction with the logistics issues related grievance redressal mechanism of the selected State/UT.

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					



C. Rate the **overall operating and regulatory environment** impacting logistics in your chosen States/UTs

	Very Poor	Poor	Average	Good	Very Good
State/ UT 1					
State/ UT 2					
State/ UT 3					

16. Select the **top five (5) issues/challenges** being faced in the logistics sector in each chosen States/UTs separately

Key Issues	State/UT-1	State/UT-2	State/UT-3
Lack of first/last mile connectivity to economic zones/Industrial areas			
Long haulage choke points/multiple checking points in transit			
Lack of right size/capacity of Rolling stock			
Non-Availability of Terminals (Terminals include Ports/ CFS/ ICD/ AFS/Intermodal stations/Good sheds/Warehouses etc.)			
Congestion at terminals (Terminals include Ports/ CFS/ ICD/ AFS/Intermodal stations/Good sheds/Warehouses etc.)			
Shortage of warehouses/cold storages/packhouses			
Non-Availability of suitable Parking spaces/Public utilities along key freight routes			
(Public utilities include driver restrooms, medical facilities, truck repair facilities, 24X7 emergency helpline)			
Lack of Mobile & Internet connectivity along key freight routes leading to low cargo visibility during transit			
Congestion at toll points.			
Delays in obtaining/renewing commercial permits for vehicles/drivers			
Lack of digital integration between Vahaan, Sarathi, RTO, and GSTN causing multiple documentations & hassles			
Lack of Policy to provide Capital subsidy & Fiscal incentives to Logistics Infrastructure			
Lack of transparency and outdated laws leading to multiple enforcement checks and discretionary challans/fines			
Lack of Single Window (including unified grievance redressal, notified landbanks) Mechanism for logistics at State/UT level			
Lack of Unified grievance redressal and dispute resolution mechanism for logistics at State/UT level.			
Unauthorized checks and unwarranted stoppages by RTOs, police.			
Theft/pilferage of goods in transit or storage			
Transport and labour Unions monopolizing, levying illegal charges			
Shortage of trained professionals and operators such as truck drivers			
Lack of scheduled rail services for cargo/containers			
High freight rates			



In case an issue/challenge is not listed in the options above please add the same in the box below and mention the State/UT concerned.

Issue/Challenge:	
1.	
2.	
3.	
4.	
5.	

17. Name the top three (03) States States/UTs based on your experience with the logistics sector of the State/UT (Rank-01 indicates best and rank -03 indicates worst)?

	Name of State/UT
Rank 1	
Rank 2	
Rank 3	



### 6.2 Annexure 2: Comparison and revisions undertaken to the survey instrument

Q. No	LEADS 2021	Q. No	LEADS 2022	Justification
	Section	on-1: Qu	ality of Logistics Infrastructure	
1	Rate the quality of road infrastructure available in your chosen States/UTs	1	Rate the quality of road infrastructure available in your chosen States/UT's	No Change
2	Rate the quality of rail infrastructure available in your chosen States/UTs	2	Rate the quality of rail infrastructure available in your chosen States/UT's	No Change
3	Rate the quality of multimodal terminal infrastructure in your chosen States/UTs			Respondents were unable to distinguish between unimodal and multimodal terminals,
4	Rate the quality of unimodal terminal infrastructure in your chosen States/UTs	3	Rate the quality of terminal infrastructure in your chosen States/UTs	leading to similar responses. Hence the two have been combined to get appropriate response. Further to identify bottleneck it has been divided between EXIM and Domestic
5	Rate the quality of warehousing infrastructure in your chosen States/UTs	4	Rate the quality of warehousing infrastructure in your chosen States/UTs	No Change
А	Rate the overall availability and quality of logistics infrastructure in your chosen States/UTs	Α	Rate the overall quality of logistics infrastructure in your chosen States/UT's	Modification made to ensure alignment with Part A questions which are focused on "Quality" of logistics infrastructure.
	Se	ction 2:	Quality of Logistics Services	
	Rate the quality of logistics		Rate the quality of modal logistics	Respondents were unable to distinguish between "quality of logistics services" and "capability of service providers", leading to similar response.
6	services in your chosen States/UTs	rvices in your chosen 5 States / IT's	States/UT's	Therefore, we have subsumed the "logistics service provider" aspect into 'logistics services' and divided "logistics services" between 'modal" and 'terminal'.
7	Rate the capability of logistics service providers to serve as one-stop shop for inter-modal and/or multimodal shipments in your chosen States/UTs	6	Rate the quality of services at terminals in your chosen States/UTs	
8	Rate the reasonableness of road freight rates in your chosen States/UT's	7	Rate the reasonableness of prices of logistics services in your chosen States/UT's	Combined to remove multicollinearity issue which was faced in LEADS 2021



Q. No	LEADS 2021	Q. No	LEADS 2022	Justification
9	Rate the reasonableness of prices of terminal services in your chosen States/UT's			
10	Rate the timeliness of cargo delivery in relation to transportation in your chosen States/UT's	8	Rate the timeliness of cargo delivery in relation to transportation in your chosen States/UTs	No Change
11	Rate the timeliness of cargo delivery in relation to terminal services provided in your chosen	9	Rate the timeliness of cargo delivery in relation to terminal services provided in your chosen	NO Change
12	Rate the availability of mobile/internet connectivity on the freight routes in your chosen States/UTs	10	Rate the ability to track and trace cargo movement on the freight routes in your chosen States/UTs	Nomenclature has been revised to reflect respondents understanding
13	Rate the safety/security of cargo during transportation to/from your chosen States/UTs	11	Rate the safety/security of cargo	Combined to remove multicollinearity issue which
14	Rate the safety/security of cargo at terminals to/from your chosen States/UTs	11	within your chosen States/UT's	was faced in LEADS 2021
В	Rate the overall availability, efficiency and reliability of logistics services and logistics service providers in your chosen States/UTs	В	Rate the overall efficiency and reliability of logistics services in your chosen States/UTs	Modification made to ensure alignment with Part B questions which are focused on "efficiency and reliability" of logistics services.
Se	ction 3: Operating and Regulatory	Enviro	nment impacting logistics infrastruc	ture and service provision
15	Rate the extent of facilitation provided by the State government/UT administration for encouraging logistics in your chosen States/UT's	12	Rate the State government/UT administration's role in promoting, incentivising, and facilitating creation, management and operation of logistics	Combined Q.15 & Q.16 to remove multicollinearity issue which was faced in LEADS 2021.
15(a)	Rate the ease of obtaining all approvals from the States/UTs for setting up warehouse		infrastructure and encouraging efficient logistics services in your chosen States/UTs	Q.15(a) has been retained.
13(u)	infrastructure in your chosen States/UTs		Rate the ease of obtaining all approvals from the States/UTs for setting up warehouse	
16	Rate the efficiency of regulatory processes in your chosen States/UTs which are in purview of the State Government	13	infrastructure in your chosen States/UTs	
		14	Rank the State/UT based on the ease of entry in the selected State/UT from a neighbouring State/UT.	New question, to understand difficulties faced by stakeholders in interstate movement of goods.
		15	Rank the State/UT based on your satisfaction with the logistics issues related grievance redressal	New question, to understand if there is a system to reach out to correct department in



Q. No	LEADS 2021	Q. No	LEADS 2022	Justification
			mechanism of the selected State/UT.	the state for grievances faced by stakeholders.
17	Rank the top five (5) issues/ challenges being faced in the logistics sector in your chosen States/UTs. (Indicate the ranks in the box as per your preference from 1 to 5).	16	Rank the top five (5) issues/challenges being faced in the logistics sector in your chosen States/UTs. (Indicate the ranks in the box as per your preference from 1 to 5).	No Change
С	Rate the overall Operating and Regulatory Environment impacting logistics in your chosen States/UTs	С	Rate the overall Operating and Regulatory Environment impacting logistics in your chosen States/UTs	No Change
		17	Name the top three (03) States States/UTs based on your experience with the logistics sector of the State/UT	New Question to assess States/UT's on an overall basis in logistics from stakeholder's viewpoint



### 6.3 Annexure 3: Objective Questionnaire

Please provide the details of the respondent:

Name of State:	
Name of Nodal Office/ Designated State Representative:	
Designation of Nodal Office/ Designated State Representative:	
Mobile Number:	
Email Address:	

This survey comprises 2 sections related to the logistics sector in States/UTs. All the questions are mandatory.

Section 1: Regulatory & Institutional Support for Enabling Logistics

			(Yes/ No)
Q1	Does any State policy cover the following	aspects of logistics facilitation/incentives?	
	(a) 'Industry or Priority Status' to logistic	S	
	(b) Development of logistics infrastructur warehouses, Inter-modal terminals, In (port terminals and land customs stat		
	(c) Provide taxes (holiday / rebate) and/c incentives/interest subsidies	or other fiscal incentives such as capital	
	(d) Encouragement of research and innov	vation in logistics	
	(e) Earmarking of land in various State Ir development of logistics infrastructur		
	(f) Skilling for logistics (financial incentiv	es and setting up Centres of Excellence)	
	(g) Environment friendly and green logist	ics	
	(h) Single Window Clearances for faster a infrastructure	and easier approvals of logistics	
	(i) Urban mobility plan covering urban fr	eight movement	
Q2	Has the State/UT set up the coordination PM- GatiShakti and/or Logistics sector in t		
Q3	Has the state mapped land revenue record prepared by Bisag-N?	ds on Gati Shakti State Master Plan Portal	
Q4	Has the State mapped the below onground layers on GatiShakti State Master Plan Pol (Please tick the number of layers mapped)	rtal of Biasg-N?	
	Land records	Seismicity	
	Forest	Flood maps	
	Wildlife	Power transmission and distribution	
	Eco sensitive zones	Mining areas	
	CRZ	ASI sites	
	Reserve forest	Tourism sites	
	Water resources	Roads	
	Rivers	Water supply pipelines	
	Embankments	Sewer lines	
	Canals	Drainage	
	Reservoirs dams	Economic zones	



				(Yes/ No)		
		Soil type	Industrial parks			
Q5	adequ (Pleas	Do majority of economic zones/industrial parks/terminals in your State/UT have adequate first/last mile connectivity? (Please list the top 05 economic zones/industrial parks/terminals with adequate last and first mile connectivity)				
	S.No	Name of economic zones/ industrial parks/terminals	Adequate last and first mile connectivity (Yes/No)			
	1					
	2					
	3					
	4					
	5					
Q6	freigh	t movement?	nere effective action has been taken)			
	S.No	Location of Chokepoint	Measures undertaken			
	1					
	2					
	3					
	4					
	5					
Q7	Does t logisti	n mechanism for processing approvals for				
		stics facilities include logistics ter ousing infrastructure).	minals, and any other transport and			
Q8		he State/UT have grievance redre cs sector?	essal and dispute resolution mechanism for			
Q9	(e.g.,		logy interventions for Smart Enforcement c.) for minimal inspection and stoppages of			
Q10		e State/UT undertaken initiatives e Rule, 2014 to restrict protrudin	for enforcement of the Central Motor g/ obstructing cargo?			
Q11	years		for identifying peri-urban areas in last two cated parking space for trucks/trailers? ban areas)			
	Name	of Identified per-urban areas in la	st two years:			
	1.					
	2.					
	3.					
	4.					
	5.					
Q12			icy/scheme for creation of infrastructure for tics personnel (loaders/unloaders, packers)?			
Q13	reforn		s of communicating its initiatives and policy ria workshops, notifications to trade bodies, etc.?			

If the answer to any of the above question is 'Yes', please provide the Government notification(s)/ Supporting documentary evidence(s)/Minutes of the Meeting(s), wherever applicable for the same.



### Section 2: Information on Enablers of Logistics

Please provide the data on the following parameters for the financial years mentioned

			F	Financial Year	
#	Parameters	Unit	2018-19	2019-20	2020-21
	Taballa make of Chatalliah	Surfaced (Km)			
1	Total length of State Highways	Unsurfaced (Km)			
2	Taballa with of Diabrick Dands	Surfaced (Km)			
2	Total length of District Roads	Unsurfaced (Km)			
	Total langth of Linhan Danda	Surfaced (Km)			
3	Total length of Urban Roads	Unsurfaced (Km)			
4	Total langth of Dural Doads	Surfaced (Km)			
4	Total length of Rural Roads	Unsurfaced (Km)			
E	Total langth of Village Deads	Surfaced (Km)			
5	Total length of Village Roads	Unsurfaced (Km)			
6	Total number of registered Goods Commercial Vehicles (GCVs)	(in number)			
7	Number of road accidents during the year of Goods Commercial Vehicles	(in number)			
8	Total number of registered drivers for Goods Commercial Vehicles (GCVs)	(in number)			
9	Container Freight Stations	(in number)			
10	Inland Container Depots	(in number)			
11	Private Freight Terminal	(in number)			
12	Railway goods shed	(in number)			
13	Port Terminals	(in number)			
14	Air Cargo Terminals/Air Freight Stations	(in number)			
15	Cold Storages (including state owned, central owned, private owned)	Capacity (MT)			
16	Warehouses (including state owned, central owned, private owned)	Capacity (MT)			
17	Number of training centres for skilling of logistics sector professionals	(in number)			
18	Number of individuals, trained in logistics training centres during the year	(in number)			
19	Investment (as percentage of total budgetary in:	allocation) made by the	State/UT (Pu	blic+Private in	nvestment)
	a. Road connectivity	(in %)			
	b. Rail Connectivity	(in %)			
	c. Transport and logistics infrastructure	(in %)			
	d. Transport and logistics sector skilling	(in %)			
20	Please State the actions taken by the State of 2021 Recommendations for the Specific State			2021 Index?	(LEADS



### 6.4 Annexure 4: 21 Secondary Parameters - LEADS 2022

### Guiding principles:

- ▶ All the data points that were sough since the Start of LEADS 2021 exercise were exploratory in nature. An attempt to understand the periodicity, frequency and consistency of data across States
- ▶ Data has been collated from central / state/ secondary sources available

S No.	o. Variables		Year	Source	Normalizing factor	Year	Source
		Us	ed for statistica	l analysis			
1	Total Length of State Highways						
2	Total Length of District Roads	Replaced with proxy variable - State wise Capital	004040	States/ UTs			
3	Total Length of Urban Roads	Outlay on Roads and Bridges	2018-19, 2019-20, 2020-21	budget data & LEADS 2022 Objective	Geographical Area	2020-21	FRI Dehradun website
4	Total Length of Rural Roads	Average of (2018- 19, 2019-20, 2020-21)		Questionnaire			
5	Total Length of Village Roads						
6	Total no. of registe Commercial Vehicle		2020-21	MoRTH (VAAHAN data)	GSVA goods	2019-20	MoSPI
7	No. of CFSs		2020-21	FOIS & LEADS 2022 Objective Questionnaire	GSVA goods	2019-20	MOSPI
8	No. of ICDs		2021-2022	IMC List	GSVA goods	2019-20	MOSPI
9	No. of PFTs		2020-2021	FOIS	GSVA goods	2019-20	MOSPI
10	No. of Railway Goo	d sheds	2020-2021	FOIS	GSVA goods	2019-20	MOSPI
11	Capacity of Air care (MT)	go terminals / AFSs	2019-20	MoCA	GSVA goods	2019-20	MOSPI
12	Capacity of cold sto	orages (MT)	2019-20	MoCAF&PD	GSVA goods	2019-20	MOSPI
13	Capacity of warehouses (MT)		2019-20 (WDRA) and 2020-21 (Objective Questionnaire)	WDRA & LEADS 2022 Objective Questionnaire	GSVA goods	2019-20	MOSPI
14	Total number of tra logistics	aining centres for	2020-21	MoSDE	GSVA goods	2019-20	MOSPI
15	Number of individu logistics training	als, trained in	2020-21	MoSDE	GSVA goods	2019-20	MOSPI
16	Amount of subsidy disbursed during the year	Replaced with proxy variable - Subsidy data from TIES, State wise average of Average of (2017- 18, 2018-19, 2019-20, 2020- 21)	2017-18, 2018-19, 2019-20, 2020-21	MoCI	GSVA goods	2019-20	MOSPI

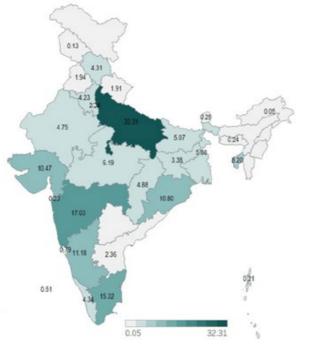


S No.	Variables	Year	Source	Normalizing factor	Year	Source		
17	Ease of Doing Business (EoDB)	2019-20	DPIIT - Business Reform Action Plan	NA	NA	NA		
	Used as normalizing parameter							
1	Gross State Value Added (GSVA)	2019-20	MOSPI	NA	NA	NA		
2	Total geographical area of the State/UT	2020-21	FRI Dehradun website	NA	NA	NA		
	Used	for States analy	sis / insights					
1	Number of road accidents during the year of Goods Commercial Vehicles	2019-20	MoRTH	NA	NA	NA		
2	Total no. of registered drivers of GCVs	2020-21	MoRTH (SARATHI data)	GCV	2020-21	MoRTH		



# 6.5 Annexure 5: Heat Maps for Objective Assessment of States' Logistics Eco-system

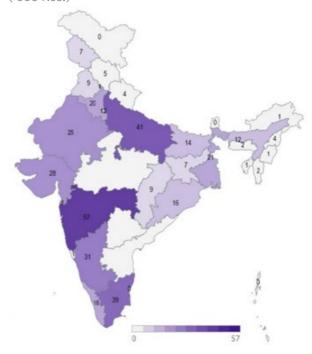
**Exhibit 94:** Capital outlay on roads and bridges ('000 INR Crores)



Note: Data is not available for Assam, Manipur, Mizoram, Nagaland, Telangana, Chandigarh, Ladakh and Puducherry

Source: States' Budget, 2021

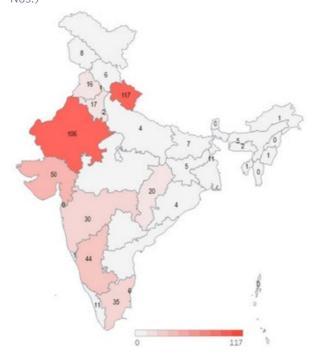
**Exhibit 95:** Registered commercial vehicles ('000 Nos.)



Note: Data is not available for Andhra Pradesh, Madhya Pradesh, Telangana, and Lakshadweep

Source: Ministry of Road Transport and Highways, 2021

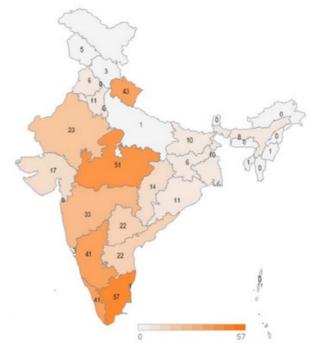
**Exhibit 96:** Registered commercial vehicles' drivers ('000 Nos.)



Note: Data is not available for Andhra Pradesh, Madhya Pradesh, Telangana, and Lakshadweep

Source: Ministry of Road Transport and Highways, 2019

**Exhibit 97:** Road accidents due to commercial vehicles ('000 Nos.)

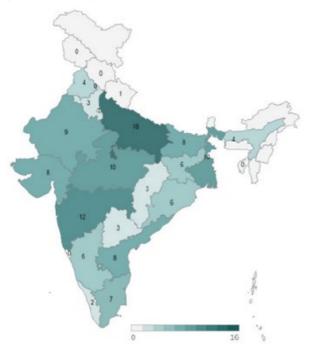


Note: The nos. of road accidents occurred in Ladakh are available together with the nos. of  ${\sf J\&K}$ 

Source: Ministry of Road Transport and Highways, 2019

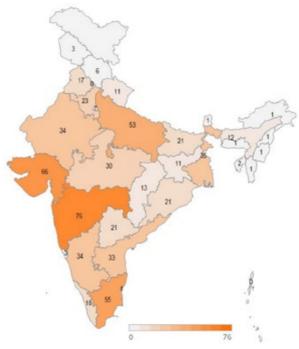


Exhibit 98: Total rail routes ('000 Track-km)



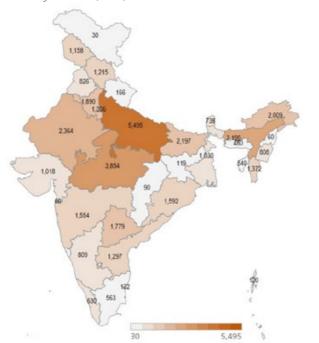
Source: Ministry of Railways, 2020

Exhibit 99: GSVA Goods ('000 INR Crores)



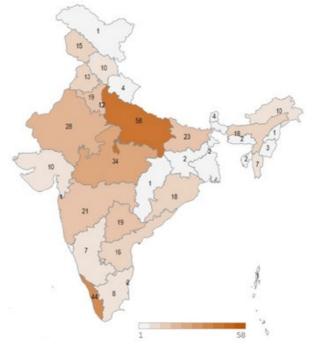
Source: Ministry of Statistics and Programme Implementation, 2020

**Exhibit 100:** Total no. of individuals trained in logistics training centres (Nos.)



Note: Data is not available for Chandigarh, Goa, and Lakshadweep Source: Ministry of Skill Development and Entrepreneurship, 2021

**Exhibit 101:** Total training centres for logistics (Nos.)

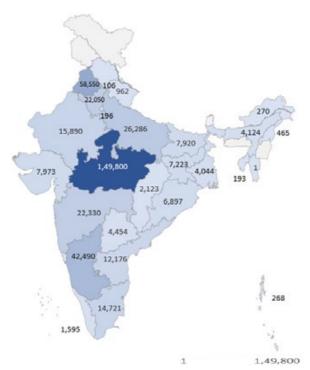


Note: Data is not available for DNH and DD, Ladakh and Lakshadweep  $\,$ 

Source: Ministry of Skill Development and Entrepreneurship, 2021



**Exhibit 102:** Total warehouse storages capacity ('00 MT)



Source: WRDA (2019-20) and LEADS 2022 Objective Questionnaire

Exhibit 103: Total cold storages capacity ('000 MT)



Source: Ministry of Consumer Affairs, Food and Public Distribution, 2020



### 6.6 Annexure 6: LEADS 2021 vs 2022 Comparison

Q. No.	LEADS 2021	Q. No.	LEADS 2022	Justification	
1	Does the State/UT have a Logistics Policy? If the answer to the above is "No", Does the State/UT have any plans to launch the Logistics Policy within next one year?		Does any State policy cover the following aspects of logistics facilitation/ incentives?  a) Industry or Priority Status' to logistics		
2	Does the State/UT have a Logistics Park Policy? If the answer to the above is "No", Does the State/UT have any plans to launch the Logistics Park Policy within next one year?			b) Development of infrastructure such as Multi-Modal Logistics Parks, warehouses, Inter-modal terminals, Integrated logistics parks and ICD/CFS/AFS (port	
3	If the answers to Q1 and Q2 are "No", is there any other State policy which covers logistics?		terminals and land customs stations (wherever applicable)) c) Provide taxes (holiday / rebate)	Q1 through Q5	
	If the answer to Q3 is 'Yes', does the Policy:(a) Grants "Industry or Priority" status to logistics?		and/or other fiscal incentives such as capital incentives/interest subsidies	from LEADS 2021 have been combined under a single	
4	(b) Provide taxes (holiday / rebate) and/or other fiscal incentives to the	1	d) (d)Encouraging research and innovation in logistics	question in LEADS 2022	
	logistics sector? (c) Earmark a dedicated fund for investment in the logistics sector?			e) Earmark land area in various State Industrial Development Area for development of logistics infrastructure	under various dimensions of a logistics policy
5	Does the State/UT have a State Logistics Master Plan? If the answer to the above is "No", Does the State/UT have any plans to launch the State Logistics Master Plan within next one year?				<ul> <li>f) Skilling for logistics (financial incentives and setting up Centres of Excellence)</li> <li>g) Environment friendly and green logistics</li> <li>h) Single Window Clearances for faster and easier approvals of logistics infrastructure</li> <li>i) Urban mobility plan covering urban freight movement</li> </ul>
6	Has the State/UT appointed the Nodal officer for the integrated development of logistics sector in the State/UT?	2	Treight movement		
7	Has the State Logistics Cell been constituted? If the answer to the above is "Yes", How many meetings of the Logistics Cell were held from its inception?			Has the State/UT set up the institutional Mechanism (equivalents of):  Nomination of Nodal officer for coordination with Bisag - N	Q6 through Q9 all dealt with the setting up of an institutional arrangement in
8	Has the State Logistics Co-ordination Committee been constituted? If the answer to the above is "Yes", How many meetings of the State Logistics Co-ordination Committee were held from its inception? (Please tick below).		<ul> <li>Empowered Group of Secretaries (EGoS),</li> <li>Network Planning Group (NPG),</li> <li>Technical Support Unit (TSU)</li> <li>(Mark Yes only if all the three are established)</li> </ul>	a State/UT and hence the same has been combined in a single question in 2022.	
9	Has the City Logistics Coordination Committee been set up for the implementation of City Logistics plans				



Q. No.	LEADS 2021	Q. No.	LEADS 2022	Justification
	for all the identified cities of your State/UT? How many meetings of the State Logistics Co-ordination Committee were held from its inception? (Please tick below).			
10	To enable the development of Logistics Parks and Terminals does the State/UT facilitate for provision of: b) Earmark at least 30% land area in various State Industrial Development Area for development of logistics infrastructure c) Deemed conversion of Change of Land Use within 30 days of application d) Standard layout and design specifications for logistics parks and warehousing of different areas/sizes and fast track approvals.			Incorporated under Q1
		Q3	Has the state mapped land revenue records on Gati Shakti State Master Plan Portal prepared by Bisag-N	
		Q4	Has the State mapped the below onground and underground infrastructure related layers on GatiShakti State Master Plan Portal of Biasg-N?  (Please tick the number of layers	New Question added considering the overarching theme on PMGS
			mapped)	
11	Do the majority of terminals in your State/UT have adequate first/last mile connectivity to the National/State Highways?	Q5	Do majority of economic zones/industrial parks/ terminals in your State/UT have adequate first/last mile connectivity? (Please list the top 05 economic zones/industrial parks/ terminals with adequate last and first mile connectivity)	Retained with additional information required from the States/UTs
12	Has the State/UT mapped the choke points/bottlenecks in road freight movement and undertaken measures to alleviate the bottlenecks?	Q6	Has the State/UT measures to alleviate the choke points/bottlenecks in road freight movement? (Please furnish list of 05 chokepoints where measures have been taken)	Retained with additional information required from the States/UTs
13	Does the State/UT have a single window mechanism for processing approvals for logistics facilities*? (*Logistics facilities include logistics terminal, transport and warehousing infrastructure).	Q7	Does the State/UT have a single window mechanism for processing approvals for logistics facilities*? (*Logistics facilities include logistics terminal, transport and warehousing infrastructure).	No Change
14	Does the State/UT have grievance redressal and dispute resolution mechanism for logistics sector?	Q8	Does the State/UT have grievance redressal and dispute resolution mechanism for logistics sector?	No Change
15	Have the State/UT implemented technology interventions for Smart	Q9	Have the State/UT implemented technology interventions for Smart	No Change



Q. No.	LEADS 2021	Q. No.	LEADS 2022	Justification
	Enforcement (e.g., weighbridges, sensors, camera etc.) for minimal inspection and stoppages of truck on road?		Enforcement (e.g., weighbridges, sensors, camera etc.) for minimal inspection and stoppages of truck on road?	
16	Has the State/UT undertaken initiatives for enforcement of the Central Motor Vehicle Rule, 2014 to restrict protruding cargo?	Q10	Has the State/UT undertaken initiatives for enforcement of the Central Motor Vehicle Rule, 2014 to restrict protruding cargo?	No Change
17	Has the State/UT undertaken initiatives for identifying peri-urban areas for logistics facilities?	Q11	Has the State/UT undertaken initiatives for identifying peri-urban areas in last two years for logistics facilities such as dedicated parking space for trucks/trailers? (Please list the top 05 identified peri-urban areas)	Retained with additional information required from the States/UTs
18	Does the State/UT have an enabling policy/scheme for creation of infrastructure for training of truck drivers, other logistics personnel (loaders/unloaders, packers)?	Q12	Does the State/UT have an enabling policy/scheme for creation of infrastructure for training of truck drivers, other logistics personnel (loaders/unloaders, packers)?	No Change
19	Does the State/UT have a policy/scheme for creation of dedicated parking spaces along major highways and key freight routes?			Subsumed in O.No.1
20	Has the State/UT taken measures to create sustainable and environment friendly logistics?			Q.NO.1
		Q13	Has the State/UTs taken efforts in terms of communicating its initiatives and policy reforms to trade in general via workshops, notifications to trade bodies, amendments updated on state portals, etc.?	New Question to assess efforts undertaken by State/UTs on awareness on logistics sector enabling initiatives



### 6.7 Annexure 7: GatiShakti Finance Scheme

F. No. 44 (1)/PF-S/2022-23 (CAPEX)
Government of India
Ministry of Finance
Department of Expenditure
(Public Finance - States Division)

North Block, New Delhi. Dated: the 6<sup>th</sup> April, 2022.

To,

The Chief Secretary, All State Governments, (As per list attached)

Subject:

Guidelines on the Scheme for Special Assistance to States for Capital Investment for 2022-23.

Sir/ Madam,

Capital expenditure has a high multiplier effect, enhances the future productive capacity of the economy, and results in a higher rate of economic growth. Therefore, despite the adverse financial position of the Central Government, it was decided to launch a "Scheme for Special Assistance to States for Capital Expenditure" in the financial year 2020-21. Under the scheme, financial assistance was provided to the State Governments in the form of 50-year interest free loan. An amount not exceeding Rs.12,000 crore was earmarked for the Scheme for the financial year 2020-21, and a sum of Rs.11,830.29 crore was released to the States. The Scheme was continued in the year 2021-22 with an allocation of Rs.15,000 crore.

- 2. In view of the positive response to the Scheme and considering the requests of the State Governments, the Government of India has decided to launch a redesigned and expanded Scheme for the year 2022-23. The Scheme has been named as "Special Assistance to States for Capital Investment 2022-23". An amount of Rs.1 lakh crore has been allocated for the Scheme. Under the Scheme, financial assistance will be provided to the State Governments in the form of 50-year interest free loan for capital investment projects. The loan provided under the Scheme will be over and above the normal borrowing ceiling allowed to the States for the financial year 2022-23. The loan amount is to be spent in financial year 2022-23.
- 3. The Scheme for Special Assistance to States for Capital Investment 2022-23 has Seven Parts:
- (i) Part-I: An amount of Rs.80,000 crore is earmarked for this Part of the Scheme. This amount has been allocated amongst States in proportion to their share of central taxes & duties as per the award of the 15<sup>th</sup> Finance Commission. State-wise allocation is given in Annexure-1. Under this Part of the Scheme, States are required to submit capital works proposed to be taken up by them in 2022-23 in the format given in Annexure-2 to the Department of Expenditure

(DoE) for approval and release of funds. Projects which are in the PM Gati Shakti Master Plan shall receive priority, wherever appropriate.

- (ii) Part-II (PM Gati Shakti related Expenditure): Part-II of the Scheme is aimed at facilitating PM Gati Shakti related investment in the States. An amount of Rs.5,000 crore is earmarked for Part-II of the Scheme. Additional amount from savings under other Parts of the Scheme may also be reallocated to this Part of the Scheme based on response of the States and utilization of funds. Guidelines for this Part of the Scheme including institutional arrangements to be put in place, guiding principles for selection of projects and suggestive list of eligible categories of projects are given in Annexure-3. States will submit projects proposed to be taken up under this Part of the Scheme to the Department for Promotion of Industry & Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India. DPIIT will scrutinize the proposals received from the State Governments and will recommend State-wise list of projects to the DoE for approval and release of funds under this Part of the Scheme.
- (iii) Part-III (PMGSY): An amount of Rs.4,000 crore is earmarked for this Part of the Scheme. This amount is meant for supplemental funding for priority segments of PM Gram Sadak Yojana (PMGSY) including support for the States' share. Ministry of Rural Development (MoRD) will identify the priority segments in not more than one fifth of the total number of blocks in the country for providing funds under this Part of the Scheme. The funds may also be given to States under this Part for providing State's share of PMGSY projects in priority blocks. Details of priority segments and guidelines for formulation and submission of project proposals under this Part of the scheme will be issued by the MoRD. States will submit proposals to MoRD which will examine the proposals received from the States and after scrutiny of the same, will recommend the State-wise details of projects identified for funding under the Scheme to DoE. MoRD will also recommend to DoE the release of funds to States for providing State's share for PMGSY projects in the priority blocks.
- (iv) Part-IV (Incentives for Digitization): An amount of Rs.2,000 crore is earmarked for this Part of the Scheme. Under this Part, States will be provided incentive, if they meet the following conditions/reforms:
  - Mandatory adoption of Digilocker for all citizen centric services for delivery of certificates and documents.
  - b. Publishing APIs of all online service on API Setu.
  - c. Publish all non personal data on **data.gov.in** as per the provisions of National Data Sharing and Accessibility Policy, 2012.
  - d. Promotion of Digital Payments and Direct Benefit Transfer (DBT) for all welfare schemes.
  - e. Integrating all online service with UMANG platform.
  - f. Use of Aadhaar for subsidy related schemes.

Eligibility of States to receive incentive will be determined by the Ministry of Electronics and Information Technology (MeitY) and communicated to DoE.

Maximum amount available to a State under this Part of the Scheme will be Rs 200 Crore on "First Come First Served Basis". States will be free to decide the projects of capital investment to be taken up from the incentive amount admissible to them under this Part. The list of projects proposed to be undertaken from incentive fund under this Part of the Scheme, in prescribed format (Annexure-2) may be sent by the State along with their proposal under Part-I of the Scheme. Simultaneously, States will approach MeitY with supporting documents for determination of their eligibility for incentives. On receipt of recommendation from MeitY, DoE will process the projects under this Part for granting approval and release of funds.

- (v) Part-V (Optical Fibre Cable): An amount of Rs.3,000 crore is earmarked for this Part of the Scheme. This amount will be available to States for capital projects on Optical Fibre Cable (OFC) network. Maximum amount of incentive available to a State under this Part of the Scheme is Rs.300 crore on "First Come First Served Basis". Funds will be provided to States under this Part of the Scheme subject to fulfillment of the following conditions:
  - a. Right of Way (RoW) policy/Rules of the State are aligned with the Central Government RoW Policy/Rules
  - b. On boarding of the State on the National RoW portal
  - c. State has no RoW applications pending from TSPs and ISPs beyond 60 days on the date of submission of request for providing funds under this Part of the Scheme.

Eligibility for capital projects on OFC network under this Part the Scheme is as under:

- a. Concerned State Special Purpose Vehicle (SPV) (which should be a State Public Sector Unit) should have an appropriate Telecom License/Registration (ISP or IP-1) from the Central Government or the State SPV has a valid Memorandum of Understanding (MoU) with Universal Service Obligation Fund (USOF) under the Bharatnet State- led Model.
- b. There is no duplication of the existing Bharatnet project in setting up OFC network. Existing OFC network of Telecom Licensees/Infrastructure Providers/BBNL should be utilized by the State/UT Government, wherever available/feasible.
- c. Funds can be used to extend <u>Bharatnet</u> to Villages from the GPs covered as at present for Last Mile Connectivity (LMC) on the OFC to Government Institutions (like School, Health Centre, Anganwadi, Police Station, Krishi Vikash Kendra, Post Office, ration Shop etc.) from Bharat Net network.

States will submit projects proposed to be taken up under this Part of the Scheme to the Department of Telecommunications (DoT), Ministry of Communications, Government of India. DoT will examine the eligibility of the State and scrutinize the proposals received from the State Governments and will recommend Statewise list of projects to DoE for approval and release of funds under this Part of the Scheme.

(vi) Part-VI (Urban Reforms): An amount of Rs.6,000 crore is earmarked for this Part of the Scheme. This amount will be available to States as incentive for undertaking reforms related to Building Byelaws, Town Planning Schemes, Transit Oriented Development, and Transferable Development Rights. Guidelines for this Part of the Scheme are given in Annexure-4.

Eligibility of States to receive incentive under this Part of the Scheme will be determined by the Ministry of Housing and Urban Affairs (MoHUA) and communicated to DoE. Incentive will be provided on "First Come First Served Basis". States will be free to decide the projects of capital investment to be taken up from the incentive amount admissible to them under this Part. The list of projects proposed to be undertaken from incentive fund under this Part of the Scheme, in prescribed format (Annexure-2) may be sent by the State along with their proposal under Part-I of the Scheme. Simultaneously, States will approach MoHUA with supporting documents for determination of their eligibility for incentive amount. On receipt of recommendation from MoHUA, DoE will process the projects under this Part for granting approval and release of funds.

- (vii) Part-VII (Disinvestment and Monetization): This Part of the Scheme aims at providing incentives to State Governments for privatization/disinvestment of the State Public Sector Enterprises (SPSEs) and monetization/recycling of assets. Under this Part, States will be provided additional funds as 50-year interest free loan over and above their allocation/incentives under other Parts of the Scheme. An amount of Rs.5,000 crore is allocated for this Part of the Scheme. Guidelines for this Part of the Scheme are in Annexure-5.
- 4. **Mandatory conditions:** In order to avail benefits of any Part of the Scheme, in addition to the conditions prescribed under various Parts of the Scheme, a State is required to meet the following mandatory conditions:
- (i) Full compliance with the official name of all Centrally Sponsored Schemes (CSSs) [correct translation to local language is permissible] and any guidelines/instructions issued by the Government of India regarding branding of CSSs, in all Schemes of all Ministries.
- (ii) Full compliance of DoE's instructions F.No.1 (13) PFMS/FCD/2020 dated 23.03.2021 regarding the new procedure for release of funds under CSSs.
- 5. Funds provided to the States under the Scheme by the Government of India shall be used for new and ongoing capital projects, for long term benefit to the State. The funds may also be used for settling pending bills in ongoing capital projects.
- 6. Project with capital outlay of less than <u>Rs.5 crore</u> (Rs.2 crore for North Eastern States) and repair and maintenance projects irrespective of capital outlay will not be considered under the Scheme.
- 7. It is not mandatory for the States to submit proposals under all seven Parts of the Scheme together. States may submit proposals separately for each Part of the Scheme.

- 8. States (if they wish) may submit projects of a higher value than the funds allocated, indicating their preference/priority.
- 9. States may also use not more than 5% of the funds allocated under Part-I of the Scheme for contributing State's share for Jal Jeevan Mission (JJM) projects. Such proposals may be included in the State's request under Part-I of the Scheme.
- 10. The Government of India reserves the right to reject any project which, in its opinion, does not have sufficient economic merit in terms of short-term stimulus combined with long-term benefits to the economy.
- 11. Funds not used by a State within a reasonable time may be reallocated to other States by the Government of India. In case of unavoidable changes in specific projects for which expenditure is sanctioned, State Government shall seek the approval of the Government of India for the change. Funds will not be released against un-approved changes and may be deducted from subsequent instalments / tax devolution, if already released.
- 12. Expenditure by the States of the funds provided under the Scheme for purposes other than for which the funds were sanctioned, will result in the deduction of the amounts by the Government of India from the devolution of taxes/duties due to the State in subsequent periods. Application of the State for funds under the Scheme will constitute its consent for such deduction in respect of ineligible expenditure.
- 13. The projects posed by the State Governments may either be executed by Departments of the State or by PSUs or other agencies of the State Governments which are fully under the administrative control of the State Government.
- 14. The amount released by the Government of India shall be released by the State Government to the Implementing Agencies/Single Nodal Agencies of the State within 10 working days. Delay beyond this period will make the State liable to pay interest to the Government of India on the amount released as per the weighted rate of interest on Open Market Borrowings (i.e. 10 year G-Sec.) for the previous year. State will submit a fund transfer certificate in the proforma given in **Annexure-6** showing dates of receipt and transfer of funds.
- 15. The State Government shall ensure that there is no duplication in funding of the projects approved under the Scheme either with the funds provided by the Government of India or the State Government.
- 16. Under Part-I of the Scheme, funds for approved projects will be released by the Department of Expenditure in two installments. The 1<sup>st</sup> installment of 50% of the amount approved will be released on approval of the list of projects submitted by the State. Remaining 50% will be released as the 2<sup>nd</sup> installment on submission of Utilization Certificate in Form 12-B of the GFR, 2017, duly signed by the State Finance Secretary, of at least 75% of the amount released in the 1<sup>st</sup> installment. In case of remaining Parts, funds will be released in one instalment.

- 17. The Utilization Certificate for the amount utilized upto 31.03.2022, in the Form 12-B of the GFRs, 2017 for the amount initially released as the 1<sup>st</sup> installment in 2021 \_2, and the 2<sup>nd</sup> installment in 2021-22 under Part-I to Part-III and Additional Allocations under the Scheme, as the case may be, duly signed by the Finance Secretary of State Government will be provided by the State Government failing which equivalent amount will be deducted from the 1<sup>st</sup> installment of funds released to the State under the Scheme for "Special Assistance to States for Capital Investment, 2022-23".
- 18. It is a condition of the Scheme that all amounts allocated under Part-I to Part-VII of the Scheme shall be spent on eligible expenditure before 31.03.2023. For this purpose, release of funds to intermediate agencies without actual payments to the final recipient (parking of funds) will not be treated as expenditure.
- 19. Decision of the DoE regarding eligibility for any component shall be final.
- 20. States shall extend necessary support to the NITI Aayog or any other agency entrusted by the Government of India with monitoring and evaluation of projects funded under the Scheme as needed.

This issues with the approval of Finance Minister.

Encl: As above.

Yours faithfully

(Deependra Kumar)

Director (PF-S) Tel: 011-23094904

### State wise allocation under Part-I of the Scheme for Special Assistance to States for Capital Investment, 2022-23

S. No.	State	Devolution (%)	Amount Allocated (Rs. in crore)
1	Andhra Pradesh	4.047	3,238
2	Arunachal Pradesh	1.757	1,406
3	Assam	3.128	2,502
4	Bihar	10.058	8,046
5	Chhattisgarh	3.407	2,726
6	Goa	0.386	309
7	Gujarat	3.478	2,782
8	Haryana	1.093	874
9	Himachal Pradesh	0.83	664
10	Jharkhand	3.307	2,646
11	Karnataka	3.647	2,918
12	Kerala	1.925	1,540
13	Madhya Pradesh	7.85	6,280
14	Maharashtra	6.317	5,054
15	Manipur	0.716	573
16	Meghalaya	0.767	614
17	Mizoram	0.5	400
18	Nagaland	0.569	455
19	Odisha	4.528	3,622
20	Punjab	1.807	1,446
21	Rajasthan	6.026	4,821
22	Sikkim	0.388	310
23	Tamil Nadu	4.079	3,263
24	Telangana	2.102	1,682
25	Tripura	0.708	566
26	Uttar Pradesh	17.939	14,351
27	Uttarakhand	1.118	894
28	West Bengal	7.523	6,018
Total .		100.00	80,000

# Application format for providing requisite details of the Projects (Summarized)

Date:..../..../

Letter No:.....

5

The Secretary, Expenditure,

Ministry of Finance,

Government of India.

Subject: Approval of projects under the Scheme for Special Assistance to States for Capital Investment, 2022-23.

With reference to your letter F. No. 44(1)/PF-S/2022-23 (CAPEX) dated ......, we would like to submit the following projects under the

aforesaid scheme.

		 1			$\overline{}$	 	_
	Details (if any)						
Economic	Justification (in brief)						
	Completion Implementing Period Agency						
	Completion Period						
Capital	Outlay (Rs. in Crore)						
ngoing	Unpaid bill (if any)						-
In case of or	Percentage bill (Rs. in completion (if any) Crore)						
	Whether New or Ongoing						
	Sector Location						Total
	Sector						_
	Type of Project						
	Name of the Project						-
	SI. No.	<u>.</u>	0	i	က်		

Note: Detailed Project Report (DPR) in respect of each project should be obtained by the State Government and kept in its record.

Yours sincerely

Additional Chief Secretary/Principal Secretary/Secretary, Finance Department, Government of

# Guidelines on Part-II of the Scheme for Special Assistance to States for Capital Investment, 2022-23 (PM Gati Shakti related investment):

## 1. Institutional Arrangement/Policy Formulation:

For alignment with PM Gati Shakti framework, States are advised to ensure following institutional arrangement/policy environment

- Updation of required data layers on PM Gati Shakti National Master Plan (NMP) including land revenue maps
- Formulation of State Logistics Policy
- Creation of administrative structures i.e. Empowered Group of Secretaries (EGoS), Network Planning Group and Technical Support Unit.

# 2. Guiding Principles for Selection of Projects:

States are advised to adopt the following guiding principles for selection of projects:

- i. Impact on logistics efficiency, resilience, sustainability and reliability
- ii. Integrated approach to planning
- iii. Unity for economic clusters
- iv. Critical connectivity projects useful for faster movement of goods

### 3. Eligible Categories of Projects

Suggestive list of eligible categories of capital investment projects which can be funded from this Part of the scheme is as under:

- Development of nodes like ICDs, CFS, warehousing, multimodal or uni modal logistics parks, modern aggregation centres, etc.
- Critical connectivity infrastructure for providing last and first mile connectivity to industrial parks, economic zones.
- iii. Inter-connected infrastructure for attaining multimodal connectivity.
- Development of city logistics plan.
- Digital support including data monitoring centres at State level for monitoring freight flows.

- vi. Setting up of PM Gati Shakti data centres.
- vii. Development of new industrial parks including land acquisition.
- viii. Connectivity projects for cargo terminals being developed by M/o Railways.
- ix. Connectivity projects to ensure 24x7 freight flow in the State.

# 4. Procedure:

States are required to prepare annual action plan which will be appraised by the State Empowered Group of Secretaries (EGoS). State EGoS will have a nominee from Logistic Division of the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India to ensure that projects in annual action plan are in line with the spirit of PM Gati Shakti NMP.

# Guidelines on Part-VI of the Scheme for Special Assistance to States for Capital Investment, 2022-23 (Urban Reforms)

Six reforms have been identified for implementation by the States/UTs in the urban areas. While these reforms are individually effective, implementing them in combination creates a synergy. For example, building byelaws can be amended to promote affordable housing in the TOD zones, by using the extra FSI available through the TDR mechanism. Therefore, the States/UTs are highly encouraged to fully implement all the reforms to derive maximum benefit out of it. These reforms are:

- i. Modernizing of Building Bye-Laws
- ii. Adoption of Transferrable Development Rights (TDR)
- iii. Implementation of Town Planning Scheme (TPS) and Local Area Plans (LAP)
- iv. Implementation of Transit Oriented Development
- v. Creation of Sponge Cities
- vi. Removing Taxation for running the buses for public transport
- 2. The maximum amount of incentive available under the Scheme to different group of States will be as under:-

Group-I	Group-II	Group-III	Group-IV
(Rs.1000 crore)	(Rs.700 crore)	(Rs.500 crore)	(Rs.100 crore)
i) Maharashtra ii) Uttar Pradesh iii) Tamil Nadu iv) Gujarat v) Karnataka vi) West Bengal	i) Madhya Pradesh ii) Rajasthan iii) Andhra Pradesh iv) Bihar v) Telangana vi) Punjab	i) Haryana ii) Odisha iii) Chhattisgarh iv) Kerala v) Jharkhand vi) Assam vii) Uttarakhand	i) Tripura ii) Himachal Pradesh iii) Manipur iv) Mizoram v) Nagaland vi) Goa vii) Meghalaya viii) Arunachal Pradesh
			ix) Sikkim

3. Of the reforms identified above, successful implementation of the first reform, 'Modernising of Building Bye-Laws shall make a State/UT eligible for availing 20% of the maximum amount of incentive. Achievement of each of the remaining five reforms will make State/ UT eligible for availing 15% of the maximum amount of incentive. Implementation of any three out of the five remaining reforms shall make the State eligible to avail 80% of the maximum amount of incentive. Since grants will be released

during 2022-23, reforms have to be implemented by 15<sup>th</sup> October, 2022 so that the Ministry of Housing and Urban Affairs can examine the claims and send its recommendations to the Department of Expenditure by 30.11.2022 for approval of the capital projects to be taken up by the State from the incentive amount.

4. Details of the reforms to be undertaken by State to become eligible for incentive are as under:-

# i) Modernisation of Building Bye-Laws:

The States / UTs to review and amend their respective Bye-laws to eliminate provisions that restrict development or that are internally inconsistent. The provisions related to FSI, setback, permissible height, ground coverage etc. need to be scrutinized and provisions that irrationally restrict the development of land shall be ironed out. As a result of this, it is expected that the land parcels in the cities shall be more developable and at the city level the overall land use efficiency will improve.

The process of building plan approval shall also be reformed by doing away with unnecessary clearances and NOCs while availing construction permit. The process of building plan approval shall be converted online and all the NOC agencies shall be seamlessly integrated. This will result in a transparent and efficient process of building plan approval.

Provisions related to construction of affordable housing shall also be amended as a Part of the reform. Under this, additional FSI shall be permitted for promotion of affordable housing upto the built-up area of 60 sq m (EWS + LIG). The additional FSI available for construction of affordable housing may be provided with minimum premium/ no premium as against other uses. Byelaws may be amended to particularly densify the transit corridor by granting of additional FSI for construction of affordable housing for example 350 houses per hectare.

Amending the Building Bye- Laws to create additional built-up areas which shall facilitate resource generation to ULBs and UDAs.

## Steps to be taken

States/UTs need to amend their Building Bye Laws through notifications to ensure:

- Removing contradictions with respect to margin and ground coverage
- Differential building bye laws for promotion of affordable housing, especially upto 60 sq mts.
- Revenue generation through enhanced FSI
- Implement OBPS by eliminating physical submissions of building plans.
- Reducing NOCs and procedures through BPR defining service level benchmarks
   Clear amendments
- Innovative Provisions for e.g. for in-situ slum redevelopment, heritage conservation, public space making – mandatory for 0.1 million cities.
- Any other step deemed progressive by MoHUA.

# ii). Adoption of Transferrable Development Rights (TDR):

The State /UT to adopt a well formulated TDR policy at the State Level in order to provide incentives to areas where development for a particular reason or to provide compensation for contribution of land for public realm of the city. The TDR policy of identifying sending zones and receiving zones, with a clear mechanism at the receiving zone about how to take the additional volume of built up space.

The TDR policy can be applied for Heritage Conservation zones, contribution of private land for public realm, water body conservation and rejuvenation, In-situ slum redevelopment projects, plan for Affordable Housing (RAH) zones or any other innovative outcome. The TDR trading shall be facilitated through an online platform for assigning and trade of TDR.

The State/UT shall mainstream the use of the TDR policy in Urban Planning, and Undertake Capacity Building programmes to use this policy in planning, with assistance. This will lead to conservation of areas with heritage, ecological value etc. and help in redevelopment of slum areas by partnering with private sector. All the million plus cities shall be eligible for framing of TDR policy and receiving of the concomitant share of funds.

# Steps to be taken

- State/City to notify the TDR policy
- Metro system cities and cities with population above 5,00,000 to designate transit corridors – for e.g. 200 mts on either side of transit or area around stations/bus stops.
- Enabling byelaws to be adopted for densification of transit corridors
- Enhanced FAR to be leveraged for resource generation to ULBs which can be ploughed back for infrastructure augmentation as urban infra fund.

# iii) <u>Implementation of Town Planning Scheme (TPS) and Local Area Plans (LAP):</u>

The State/UTs shall take up development in greenfield areas for planned urban expansion through TPS and promote urban improvement in brownfield areas by increase in public realm and improvement in infrastructure through the mechanism of Local Area Plan. Both these mechanisms of micro planning require legal amendments in the respective State Town and Country Planning Act and training and capacity building of the officials in planning and implementation of LAP and TPS. Under the reform, not less than 5% land shall be reserved for EWS and social housing.

TPS promotes orderly urban expansion, creates supply of serviced land, improves land markets and generates finance for ULB/DA by creation of land banks. LAP facilitates rejuvenation of the city centres, making areas more liveable, boost economic opportunities and makes urban areas disaster resilient. Preparation of LAP can also be combined with TDR.

 States/UTs to amend their Town and Country Planning Acts to enable the preparation of Town Planning Scheme (TPS) and Local Area Plans (LAP)  States /UTs to demonstrate the LAP-TPS readiness within 8-9 months, start implementation of one Scheme of TPS/LAP in 25 percent of cities with populat. 1 above 1 lakh by 15<sup>th</sup> October, 2022.

# iv) Implementation of Transit Oriented Development (ToD):

Under this reform States/UTs shall come up with their respective ToD Policy on the lines of National ToD Policy. The reform will encourage the cities to incorporate provision of ToD in the Master/Development Plans so as to make it legally implementable. Actions under ToD shall include prescribing of enhanced FSI, promotion of mixed land use, rationalising private parking requirements, planning of parks and gardens, integrated planning of NMT infrastructure especially the bicycle track. ToD integrates land use and transport planning to develop compact growth centres within the influence corridor/zone. The planning shall ensure mixed land use along the transit corridor with provision for affordable housing and integrate livelihood with transit through vending zones.

ToD will lead to increased land use efficiency, densification, reduced carbon footprint, promote mixed land use and creation of additional built up space without the need for urban expansion. All the million plus cities shall be eligible for framing of ToD policy.

# Steps to be taken

- State/City need to delineate the Transit Corridor/zone.
- State/City to specify the width of the transit corridor
- Transit corridor to be notified and enabling Building Regulations.
- ToD to facilitate densification and affordable housing with improved accessibility and connectivity

# v) <u>Creation of Sponge Cities</u>:

There has been increased frequency of extreme flooding events in many areas and a shortage of clean, drinkable water, often in those same places. A Sponge City is one that has the capacity to mainstream urban water management into urban planning policies and designs. The general objectives of the concept entail restoring the city's capacity to absorb, infiltrate, store, purify, drain, and manage rainwater and regulate the water cycle as much as possible to mimic the natural hydrological cycle.

Under this reform, the State/UT is expected to employ appropriate planning, legal, technological frameworks and tools to implement, maintain, and adapt the infrastructure systems to collect, store, and treat and save rainwater. Broadly, the objective of the sub-Scheme is to enable the State Governments to formulate the City Master Plan, Integrated Water Management Plan, along with all other relevant sectoral plans including innovative methods/systems, towards achieving the Sponge City goal of retaining and reusing storm water.

The concept of Sponge City is based on water retention and conservation by using water retention methods such as Green Streets, Bio-swale, Water channelizing to

Wetlands and groundwater recharge. The Master Plan for Sponge City is expected to be complemented with a Water Sensitive Urban Design (WSUD) document.

# Steps to be taken

- All cities of the State with population above 1,00,000 prepare a holistic water bodies rejuvenation plan.
- Cities to prepare DPR and tender and start work in atleast 20 % of total of water bodies by 15<sup>th</sup> October, 2022.
- City to prepare, Integrated Water Management Plan to ascertain the status of ground water recharge vis-à-vis ground water extraction.
- Cities to ensure water policy enabling judicious use of ground water and surface water.

# vi) Removing Taxation for Running Bus for Public Transport:

The States/UTs are expected to undertake amendments in the respective State acts to exempt the city buses of cities from the payment of Road Tax. These taxes are paid to the State Transport Department and collected by the Road Transport Office (RTO) of the respective district. The exemption of these taxes shall reduce the per annum running cost of these buses and hence make the system more financially viable. The benefits of lower operational cost may also result in lower fares.

# Steps to be taken

- Framing of fiscal policies to reduce tax burden on public transport.
- Abolishing/substantial\_reduction in Stage Carriage Tax for State Public Transport Undertaking.
- Reducing the difference in Motor Vehicle Tax rates across States.

\*\*\*

# Guidelines on Part-VII of the Scheme for Special Assistance to States for Capital Investment, 2022-23

(Disinvestment of SPSEs and Monetization of Assets)

- Incentives to States will be provided under this Part of the Scheme for disinvestment of State Public Sector Enterprises (SPSEs) as well as for monetization/recycling of assets of States and of SPSEs
- For this purpose, SPSE means an organisation where majority ownership and management control are exercised by the State Government or State and Central Governments together and the organisation is subject to audit jurisdiction of the Comptroller and Auditor General.
- Asset monetization/recycling is the sale of an asset, or transfer of an asset with operation and maintenance responsibility for a long term duration, against an upfront payment, to return the capital to invest in new assets or revitalize existing assets.
- Disinvestment of State PSEs: Incentives to States under the Scheme will be available both for disinvestment of minority stakes in SPSEs as well as privatization (strategic sale) of SPSEs.
- (a) Disinvestment through minority stake sale in SPSEs: In case of disinvestment of SPSEs through sale of minority stake, the States will be given additional allocation equivalent to 50% of the amount realized from such sale after 31.03.2022 and by 31.03.2023 and deposited in the Consolidated Fund of the State.
- (b) Listing of SPSEs and disinvestment of minority stake through stock exchanges:

In case the State lists the SPSEs after 31.03.2022 and by 31.03.2023 in any of the stock exchanges by offering its shares for sale as per the Regulations issued by Securities and Exchange Board of India in this regard or offers for sale the shares of SPSEs already listed in any of the stock exchanges, the State will be given additional allocation under the Scheme equivalent to 66% of the amount realized from such sale and deposited in the Consolidated Fund of the State.

- (c) Privatization (strategic disinvestment) of State PSEs:
  - Privatization (strategic disinvestment) means sale of more than 50% of the equity in SPSEs along with transfer of management control after 31.03.2022 and by 31.03.2023. The incentive for strategic disinvestment will be higher. In such cases, the State will be given additional allocation under the Scheme equivalent to 100% of the amount realized from privatization and deposited in the Consolidated Fund of the State.
- (d) Asset monetization/ recycling: Monetization of assets unlocks their value, eliminates their holding cost and enables scarce public funds to be deployed to new projects. As an incentive for

State Governments to monetize assets, additional allocation equivalent to 50% of the realized value of assets deposited after 31.03.2022 and by 31.03.2023 either in the State Consolidated Fund or in the account of State Public Sector Enterprise(SPSE) owning the assets, will be provided under the scheme. Illustrative list of assets that may be monetized is as under:

- Roads,
- Ports,
- Airports,
- Bus terminals,
- Metro rail assets,
- Desalination plants,
- Other infrastructure assets etc. subject to approval by the Department of Expenditure, Ministry of Finance.

The amount realized by the State/SPSEs from monetization/recycling of assets under Part 4 (d) should be used by the State/SPSE concerned on capital expenditure only. The expenditure plan and list of projects should also be submitted to the Department of Expenditure along with list of projects to be taken up from incentive fund.

- Other conditions for approval of projects and releases of funds under Part-VII of the Scheme as under:
  - (i) The funds will be provided on "First-come First-served" basis subject to availability of funds.
  - (ii) Incentive to a State will ordinarily be limited to Rs.1,000 crore.

# Format for Details of Funds Transfer to the Implementing Agencies of the State

Name of the State:

Sanction Order No. and Date: Date of Receipt of the Funds:

დ. <del>4</del>.

Transfer of Funds to the Implementing Agencies of the State:

SI. No.	Name of Im	olementing Agency Amount Approved Amount Released Date of Release	Amount Released	Date of Release
-				
:				
,				
6				

5. Nature of Documentary Proof in respect of Transfer of Funds to the Implementing Agencies of the State:

State Government of...... (For Principal Secretary, Finance), Designation: Signature: Seal:





### Ernst & Young LLP

EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

This report has been prepared by Ernst & Young LLP, a limited liability partnership registered under the Limited Liability Partnership Act, 2008 in India, having its registered office at 22 Camac Street, 3rd Floor, Block C, Kolkata - 700016, in accordance with an engagement agreement for professional services with Ministry of Commerce and Industry (MoCI). Ernst & Young LLP's obligations to MoCI are governed by that engagement agreement. This report has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, or other professional advice. Refer to your advisors for specific advice.

The findings submitted in this report are based on information sourced from publicly available information or other third-party sources. Ernst & Young LLP have taken due care to validate the authenticity and correctness of sources used to obtain the information; however, neither we nor any of our respective partners, officers, employees, consultants, or agents, provide any representations or warranties, expressed or implied, as to the authenticity, accuracy or completeness of the information, data, or opinions that third parties or secondary sources provided to us. Before making any decision or taking any action that might affect your personal finances or business, you should consult a qualified professional adviser.

Ernst & Young LLP including its affiliates, partners, employees, agents and subcontractors do not accept or assume any responsibility or liability in respect of this report, or decisions based on it, to any reader of the report. Should such readers choose to rely on this report, then they do so at their own risk.

Ernst & Young LLP is one of the Indian client serving member firms of EYGM Limited. For more information about our organization, please visit www.ey.com/en\_in.

Ernst & Young LLP is a Limited Liability Partnership, registered under the Limited Liability Partnership Act, 2008 in India, having its registered office al 22 Camac Street, 3rd Floor, Block C, Kolkata - 700016

© 2022 Ernst & Young LLP. Published in India. All Rights Reserved.

This publication contains information in summary form and is therefore intended for general guidance only. It is not intended to be a substitute for detailed research or the exercise of professional judgment. Neither EYGM Limited nor any other member of the global Ernst & Young organization can accept any responsibility for loss occasioned to any person acting or refraining from action as a result of any material in this publication. On any specific matter, reference should be made to the appropriate advisor.

