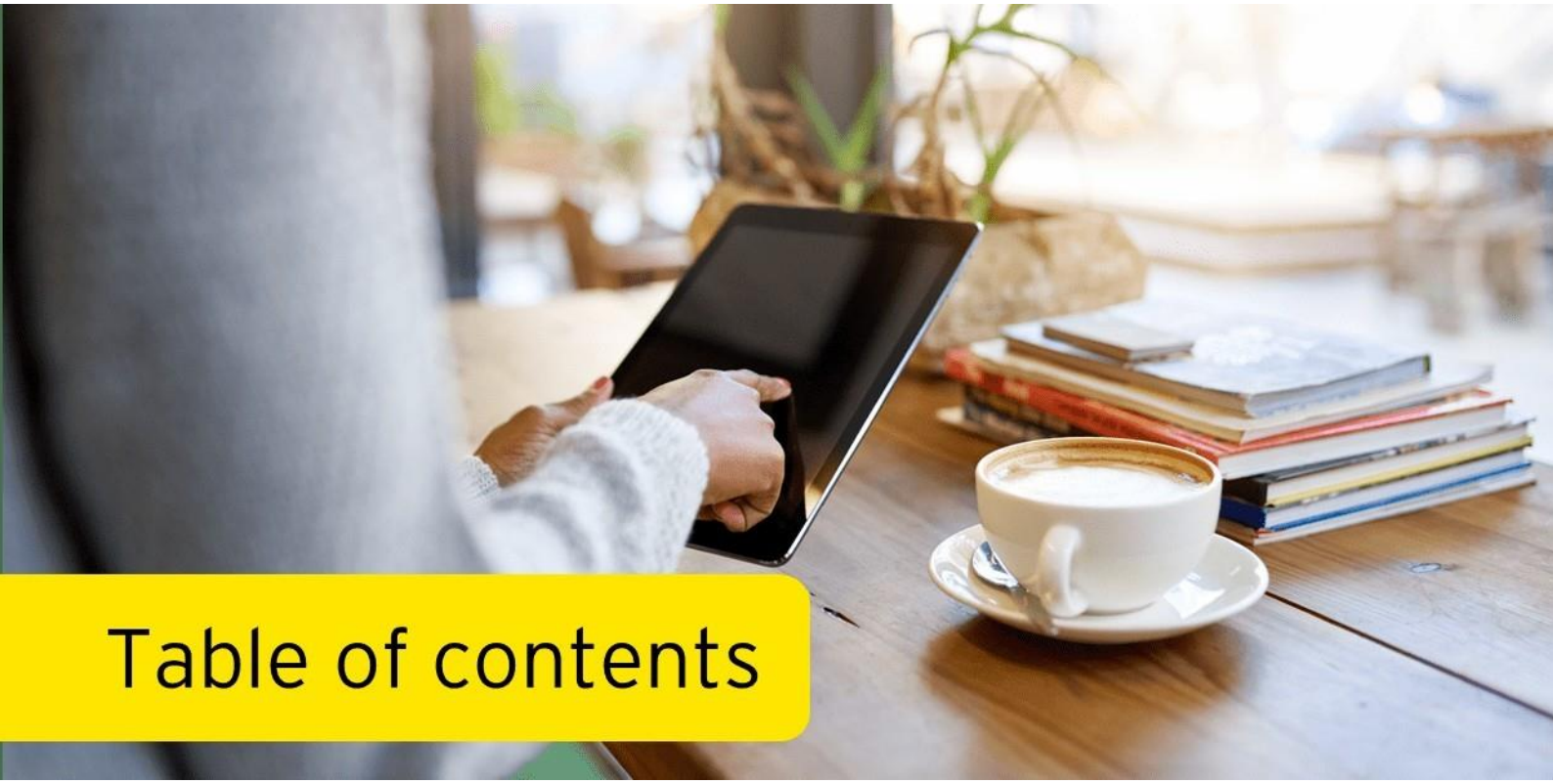
Government of
Tamil Nadu

TAMIL NADU
LOGISTICS POLICY
&
INTEGRATED LOGISTICS PLAN

2023



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SECTION 1: INTRODUCTION

TAMIL NADU LOGISTICS POLICY & INTEGRATED LOGISTICS PLAN

2023

1 Introduction

Tamil Nadu is India's second largest state economy, accounting for 9.47%[1] of the country's Gross Domestic Product (GDP) as of 2020-21. The Gross State Domestic Product (GSDP) of Tamil Nadu expanded at a healthy Compounded Annual Growth Rate (CAGR) of 10.02% between 2014-15 and 2020-21 viz-a-vis 9.46% for the country, to reach Rs. 19.03 trillion.

The distribution of Gross (State) Value Added (GVA/GSVA) by sector indicates contribution of primary, secondary, and tertiary sectors in the ratio of 13%: 33%: 54% respectively vis-a-vis 20%: 26%: 54% for the country outlining a vibrant manufacturing sector in the State.

The Government of Tamil Nadu has set a target for its GSDP to reach USD 1 trillion (~Rs. 82.41 trillion[2]) by 2030. To meet this target, the State has planned to grow the manufacturing sector from USD 48.1 billion in financial year 2020-21 (~18% of GSDP) to USD 250 billion in financial year 2030-31[3] (~25% of GSDP)[4]. Further, the State has also planned to grow the exports from ~USD 26 billion to USD 100 billion by 2030[5]. To realise the envisioned economic targets, enhancing competitiveness of the State's economic sectors, especially agriculture and industry is imperative.

Logistics efficiency, characterised by logistics cost reduction, is one of the well-recognised levers for trade competitiveness, export growth and diversification. As per a study conducted by the National Council of Applied Economic Research (NCAER), logistics costs as a percentage of GVA for some of the prominent sectors in the State are - Agriculture: 21.6%, Textile & Apparel: 7.91%, Electronics: 4.19%, Cement:12,97% and Machinery at 17.9%[6]. Empirical studies suggest that reduction

[1] Industries Department, Policy Note 2022-23

[2] Considering 1USD = 82.41 INR as per prevailing exchange rate

[3] Industries Department, Policy Note 2022-2023

[4] Industries Department, Policy Note 2022-2023

[5] Tamil Nadu Export Promotion Strategy 2021

[6] Country level estimates as per NCAER's study titled Analysis of India's Logistics Costs, 2019

of logistics costs can result in enhanced demand for goods, employment opportunities and growth[7].

Evidently, the vision of economic growth can be realized, if the supporting and required logistics eco-system is developed at the same pace.

The logistics eco-system in any State or any other geographical context operates in terms of interaction between 3 elements – (1) Infrastructure (trunk and terminal), (2) Services, and (3) Operating and Regulatory environment, and requires the inter-connected working of a number of agencies, stakeholders and operators. The state's logistics ecosystem has considerably evolved over time but continues to face some challenges across these aspects.

Therefore, being cognizant of the importance of development of an efficient logistics sector for the economic development of the State and the country, the Government of Tamil Nadu GoTN has formulated the Tamil Nadu Logistics Policy and Integrated Logistics Plan 2023 with a multi-sector, interdisciplinary and integrated approach for creating an efficient logistics eco-system in the State.

The Tamil Nadu Logistics Policy and Integrated Logistics Plan 2023 document comprises:

- **A Logistics Policy for the next 5 years** that provides an overarching policy framework for integrated development of the logistics sector in the State to support economic growth.
- **An Integrated Logistics Plan for the next 10 years** outlining various interventions identified as per the initial baseline study, their envisaged outcomes, timeliness as well as key stakeholders responsible for their implementation. To align with the emerging requirements as well as developments in the industry, the plan is envisaged to be updated on a rolling basis while also considering outcomes of identified interventions and inputs from stakeholders.

[7] Policy Research Working Paper by The World Bank - Improving Logistics Costs for Transportation and Trade Facilitation

- **Institutional framework and mechanism** for implementation of the Logistics Policy and Integrated Logistics Plan leveraging the 2-tier institutional framework, comprising an Empowered Group of Secretaries (EGoS) and a Network Planning Group (NPG), created for coordinating and facilitating integrated development of the logistics sector in the State under the PM Gati Shakti initiative.

SECTION 2: TAMIL NADU LOGISTICS POLICY

TAMIL NADU LOGISTICS POLICY & INTEGRATED LOGISTICS PLAN

2023

2 Tamil Nadu Logistics Policy

2.1 Focus of the Tamil Nadu Logistics Policy (TNLP)

A robust and cost-efficient logistics system is considered a key enabler for the development and growth of an economy. The logistics system comprises services relating to transportation, storage and handling of cargo, as well as facets of value-addition. Though the sector has evolved significantly over the years, it continues to be impacted by various interconnected issues such as:

- Lack of integrated infrastructure planning
- Sub-optimal transportation modal mix
- In-sufficient infrastructure or inter-linkages
- Cumbersome processes and limited technology adoption or its integration across the eco-system
- Limited standardization
- Shortage of skilled professionals

The Government of India (GoI) has launched initiatives to address/ resolve these issues. Some of them being the recently launched PM Gati Shakti National Masterplan, Logistics Efficiency Enhancement Programme (LEEP), development of Dedicated Freight Corridors (DFCs), Bharatmala Pariyojana, Sagarmala Programme, formulation of the National Rail Plan (NRP), National Infrastructure Pipeline and Jal Marg Vikas Project.

Further, to leverage the benefits of competitive federalism, the Ministry of Commerce and Industry developed the Logistics Ease Across Different States (LEADS) Index that ranks states on performance of the logistics eco-system in their boundaries.

The Government of Tamil Nadu (GoTN) has been taking up a number of policy and strategic initiatives for development of transport and logistics infrastructure in the

State and has envisaged various projects pertaining to development and upgradation of airport complexes, seaports, roads and highways, multi-modal logistics parks and dedicated rail freight corridors. The GoTN has also prepared the Tamil Nadu Export Promotion Strategy 2021 with the goal of increasing exports from Tamil Nadu to USD 100 billion by 2030 from USD 26 billion in 2021. In this context, the State has identified champion sectors to promote exports including Textile & Apparel, Food Processing, Auto & Auto Components, Leather & Footwear, Electronics, and Machinery.

The GoTN is also implementing multiple large scale transport and connectivity infrastructure projects across the State – including the Tamil Nadu Road Sector Project, Tamil Nadu Industrial Connectivity Project and Comprehensive Road Infrastructure Development Programme, among others.

Until recently, policy and strategic initiatives by the central and state governments concerning logistics sector focussed on investment in infrastructure – with the infrastructure development agenda largely being driven by separate agencies integration.

With participation of the private sector across various parts of the transport & logistics value chain and development of technology, the industry has witnessed several instances (across ports, container train operations, development of logistics terminals, etc.) where service provision and adoption of technology have positively impacted logistics service delivery to end users. Accordingly, the role of other elements like service provision, improvement in the regulatory environment, adoption of technology, focus on sustainability and skill development has now come into sharper focus. Therefore, the Government of Tamil Nadu has formulated the Tamil Nadu Logistics Policy with a multi-sector, interdisciplinary and integrated approach for creating an efficient logistics eco-system in the State

2.2 Vision and Strategic Objectives

The vision of Tamil Nadu Logistics Policy 2023 is "**To promote an integrated, reliable, cost-efficient and sustainable logistics system in the State of Tamil Nadu**

for enhanced competitiveness and fast-tracked economic development of the State."

To realise the vision, the Logistics Policy enunciates measures that the Government of Tamil Nadu will accordingly take and/ or facilitate across six strategic objectives – with a clear focus on the "need" as well as intended "outcomes" in each case.

The strategic objectives were identified by assessing key aspects impacting logistics performance (based on frameworks for preparation of the International Logistics Performance Index – LPI by the World Bank as well as the Logistics Ease Across Different States – LEADS in India by the Ministry of Commerce and Industry, Government of India) and global best practices, that could bring about a long-term improvement in the transport & logistics ecosystem.

The Tamil Nadu Logistics Policy 2023 strives to realise its vision by achieving the following strategic objectives:

(I) Enabling Integrated and robust logistics infrastructure development
(II) Promoting availability of cost-effective & high-quality services
(III) Creating enabling environment for logistics activities
(IV) Inculcating resilience and sustainability in Logistics Eco-system
(V) Adopting new age technologies in Logistics sector
(VI) Enabling skill development in logistics sector

The Tamil Nadu Logistics Policy will target the following key outcomes for achieving the vision:

- ☞ Reduction of cost of logistics (for export-import as well as domestic freight) in the State
- ☞ Leveraging private participation for development of logistics infrastructure; and
- ☞ Formulating an effective coordination mechanism between State and Central agencies towards facilitation and execution of initiatives concerning the logistics sector

- ☞ Consistent high ranking of the State of Tamil Nadu in the LEADS index of the Government of India
- ☞ Enhanced economic growth and employment generation

2.3 Interventions to achieve strategic objectives

A Enabling integrated and robust logistics infrastructure development

An efficient logistics system is characterised by robust connectivity of logistics infrastructure with cargo clusters that include industrial, agricultural, fisheries and animal husbandry clusters. This necessitates synchronised planning and targeted interventions through enhanced coordination between agencies responsible for logistics, agricultural and industrial infrastructure development.

Further, manufacturing and other export industries of the State need to grow at a significant pace to support realisation of the economic vision of the State to be a USD 1 trillion economy by 2030. The GoTN has been taking up various initiatives in this direction including development of new industries, industrial parks/estates, food parks, etc. at various locations in the State. The enhanced industrial and agricultural activity associated with these developments shall require augmentation of the transport and logistics infrastructure in the State through both brownfield and greenfield projects. In this backdrop, the TNLP 2023 identifies logistics infrastructure capacity creation as one of its key focus areas.

Enhancing and preserving liveability of cities is also a major focus area of the GoTN for the welfare of the State's populace. The liveability of cities is often hampered by in-efficient urban freight logistics. In this regard, the TNLP 2023 identifies efficient urban freight logistics as a key lever and provides for interventions for better planning and creation of urban freight logistics infrastructure.

A(I) Enabling synchronized planning for logistics infrastructure through a defined coordinated mechanism

- The GoTN will leverage the GIS layers of the State Master Plan being prepared under the PM Gati Shakti National Master Plan for enabling integrated planning and connectivity enhancement.

- The GoTN will leverage the two-tier institutional framework comprising of Empowered Group of Secretaries (EGoS) and a Network Planning Group (NPG) for coordinating and facilitating integrated development of the logistics sector in the State.

A(II) Identifying and resolving existing connectivity bottlenecks and development of new infrastructure

- The GoTN in consultation with the relevant stakeholders will assess the connectivity gaps vis-à-vis the existing industrial clusters, agricultural aggregation/ processing centres, fisheries/marine clusters, animal husbandry clusters and logistics terminals/infrastructure (goods sheds, Multi-modal Logistics Parks (MMLPs), truck terminals, ports etc.), and will prioritise the development of road connectivity. For rail connectivity, GoTN will support identification of connectivity gaps, and coordinate with the Ministry of Railways for implementation.

- In order to improve the efficiency of logistics terminals and curtail the dwell time and turnaround time, the GoTN will plan, coordinate/ facilitate projects related to development/ augmentation/ improvement of evacuation infrastructure for the existing and planned airports and seaports in the State.

- The GoTN will facilitate first/ last mile road connectivity (from nearest railways station and/ or State Highway/ National Highway/ Major District Road) to upcoming logistics infrastructure projects qualifying the definition and threshold outlined under the extant Harmonised Master List of Infrastructure Sub-sectors

of the Department of Economic Affairs8, under extant policies and funding and investment programs of the State Government. Upon request of the developer of such logistics infrastructure projects to the Nodal Agency for logistics in the State, these connectivity projects will be taken up for monitoring and implementation coordination as part of the Logistics Plan (using the institutional mechanism for implementation of the Logistics Plan).

- The GoTN will encourage capacity expansion of existing ICDs/ CFSs/ AFSs/ FTWZs and development of new ICDs/ CFSs/ AFSs/ FTWZs, through provision of Government land in accordance with extant land allocation policy and increase in demand at strategic locations in the State, as per the provisions of Policy and Guidelines for setting up of Inland Container Depots (ICDs), Container Freight Stations (CFSs) and Air Freight Station (AFSs) – by Government of India.

- The GoTN will encourage expansion of existing minor ports and development of greenfield minor ports considering the regional development requirements and demand. The GoTN will also encourage the expansion and development of fishing harbours and marine processing zones in the State.

- An appropriate land parcel will be earmarked in the upcoming industrial parks/estates/clusters in the State accommodating manufacturing and processing units for the development of truck terminal/yard and for carrying out common logistics activities. Development of such facilities will preferably be undertaken through private participation.

- The GoTN will identify unutilised factory sheds within the existing industrial parks/estates/clusters in the state and make them available for logistics activities, wherever feasible.

[8] Logistics Infrastructure" means and includes Multimodal Logistics Park comprising Inland Container Depot (ICD) with minimum investment of Rs. 50 crore and minimum area of 10-acre, Cold Chain Facility with minimum investment of Rs. 15 crore and minimum area of 20,000 sq.ft., and/or Warehousing Facility with investment of minimum Rs. 25 crore and minimum area of 1 lakh sq ft." as per Notification dated 11th Oct 2022

- The GoTN will identify strategic locations for development of truck terminals for driver resting areas, parking spaces and repair and maintenance along National/State highways, near industrial clusters and peripheries of high cargo density areas. Development of such facilities will preferably be undertaken through private participation.

- In line with the demand and requirement at specific locations, the GoTN in coordination with the Airports Authority of India (AAI) or any other airport operator will promote capacity and infrastructure augmentation/optimization in terms of facilities in existing air cargo complexes and development of new air cargo complexes in the State.

- The GoTN will identify and earmark land parcels, minimum 50 acres, at strategic locations in the State for development of Multimodal Logistics Parks/Logistics Park /Warehousing Clusters[9]/Private Freight Terminal (PFT). Such projects will preferably be developed through private participation.

- The GoTN will coordinate with and make adequate representation to the Ministry of Railways and/or its agencies for improvement and expansion of infrastructure and facilities at the existing goods sheds in accordance with the requirements of users.

- The GoTN, will undertake development of primary processing centres in the State to cater to the requirements of primary processing of horticulture produce. Further, it will identify locations/clusters for development and strengthening of cold chain infrastructure in the State.

- The GoTN will assess and identify pilot routes for development of dedicated/ high-capacity rail freight corridors in the State in coordination with the Ministry of Railways.

[9] Including commodity specific storage infrastructure such as controlled atmosphere and cold storage, tank farms and silos among others

- The GoTN will facilitate mega projects in logistics sector – entailing investments of more than Rs. 500 crores, by considering them for customised incentives.

- To attract and enable financing for large scale logistics infrastructure development, the GoTN will co-ordinate with financial institution such as National Investment & Infrastructure Fund (NIIF), Tamil Nadu Infrastructure Fund (TNIF) or any other suitable sources for leveraging funds.

A(III)Development of logistics plan for major cities and metropolitan regions

- The GoTN will encourage phase wise preparation of logistics master plan for major cities/metropolitan regions in the State to promote city logistics.

B Promoting availability of cost-effective and high- quality services

Availability of high-quality logistics services at competitive prices is one of the key levers for enhancing competitiveness of businesses. It enables access to various markets at competitive prices and contributes to vibrancy of the manufacturing and other export industries.

The freight transportation services sector in Tamil Nadu is heavily dominated by road transport. For instance, export-import cargo movement via rail to/from ports in the State on a large number of corridors has a share of only ~10%. Further, the rail traffic movements in the State are largely confined to within State or nearby states, with long lead inter-state rail movements dominated by road transport. Also, coastal shipping services and domestic container rail services are limited and confined to only a few routes. This scenario is due to a number of reasons including shortage of return cargo for domestic container rail services and coastal shipping services and limited availability of modern rail linked/inter-modal terminals.

Further, the quality of logistics services in some of the specific segments in Tamil Nadu have a significant scope for improvement. For instance, the dwell time for air

cargo is significantly high and a number of government warehousing facilities practice conventional storage and handling methods that require modernisation.

B(I) Enabling availability of cost- effective logistics services by supporting market development

- The GoTN will, in coordination with the Ministry of Railways and/or its agencies and through private participation, on pilot basis – encourage commencement of container rail services and kisan rail services on strategic routes under market development approach.

- The GoTN will assess and identify strategic coastal shipping routes to encourage and promote inter-modal transport that will result in cost effective services.

- The GoTN will coordinate with the relevant agencies/airport operator to improve quality of air cargo related services at air cargo complexes in Tamil Nadu. Further, the GoTN will engage with Central Bureau of Indirect taxes & Customs (CBIC)/airport operators/port authorities and operators on a continuous basis to take appropriate steps for reducing the dwell time at air cargo complexes and seaports in the state.

B(II) Provision of high-quality contemporary services to users

- In order to strengthen cold chain infrastructure and expand the market for perishable commodities produced in the state, the GoTN will encourage availability of reefer vehicle fleet by providing fiscal support to logistics/trucking companies on registration charges for the purchase/retrofit of reefer trucks.

- The GoTN will promote mechanisation and automation of warehousing sector in the State to improve the handling capacity, efficiency and quality of services.

- The GoTN will encourage logistics companies and service providers towards adoption of quality management system (Integrated Management System (IMS)/ International Organization for Standardization (ISO) 9001/ISO 14001/ Occupational Health and Safety Assessment Series (OHSAS) 18001/SA 8000) in their facilities.

- The GoTN will encourage development of Multi-Modal Logistics Park (MMLP) at strategic locations in coordination with central agencies and relevant stakeholders to promote intermodal transport and high-quality logistics services.

C Creating an enabling environment for logistics activities

Fast tracking approval/ clearance processes, handholding logistics sector investors and operators, strengthening enforcement and regulatory compliance framework and extending industry status and applicable incentives to logistics sector have been identified among the key levers for enhancement of ease of doing business in logistics sector in Tamil Nadu. The creation of an enabling environment for logistics activities through these specific interventions is expected to enhance attractiveness of Tamil Nadu as an investment destination for logistics players.

C(I) Developing single window clearance systems

- The GoTN will extend the existing single window clearance setup under the aegis of Guidance Tamil Nadu and FaMe TN department to logistics activities in the State for enhancement of ease of doing business.

- The GoTN will extend the existing grievance re-addressable system under the aegis of Guidance Tamil Nadu to logistics activities in the State.

- The GoTN will create a single window clearance system for movement of project cargo and over dimensional cargo in the State.

C(II) Providing industry status and extending incentives applicable for industry in logistics sector

- In order to promote development of logistics terminals and warehousing, the GoTN will extend the provision of special incentives for logistics infrastructure as mentioned under Para-17 of the Tamil Nadu Industrial Policy, 2021 to the following categories that qualify as per the extant Harmonized Master List of infrastructure sub-sectors of the Department of Economic Affairs, Government of India.
    - Multimodal Logistics Park comprising Inland Container Depot (ICD) with a minimum investment of Rs. 50 cr. and minimum area of 10-acre and/or,
    - Cold Chain Facility with a minimum investment of Rs. 15 cr. and minimum area of 20,000 sq. ft, and/or
    - Warehousing Facility with a minimum investment of Rs. 25 cr. and minimum area of 1 lakh sq. ft.

- The GoTN has already permitted 24X7 operations of facilities. This will also be applicable to operations of logistics and warehousing facilities in the State.

- The GoTN will re-classify the warehouse segment to industries category to facilitate ease of doing business in the State.

- The GoTN will take necessary steps to increase the maximum permissible height for warehouse development up to 24m.

- The GoTN will create a separate sub-category for warehouse development under the industries category for streamlining the registration process.

- During the master planning phase, the GoTN will earmark specific strategic regions/ locations for development of logistics facilities that will act as an aggregation centre and provide intermodal services.

- To promote logistics activities within government industrial parks/estates/clusters in the State for development of warehouses or built to suit practices, the GoTN will waive off the sub-leasing charges, charged by the government industrial estates.

C(III) Institutionalizing "Logistics Council" for data driven decision making

- The GoTN will establish a "Logistics Council" that will act as an advisory group to the Nodal Agency and facilitate co-ordination with logistics operators, logistics service providers and trade associations to understand the issues, gaps and future requirements in the logistics sector. The logistics council will also support in data driven decision making and recommending initiatives for the progression of logistics sector in the State.

D Inculcating resilience and Sustainability in the logistics eco-system

Sustainability and resilience are a key focus area for the GoTN across various facets of economic activity. Promotion of environment friendly modes of transport, reducing emissions through adoption of green fuels/ technology and incorporating energy efficient design standards in creation of logistics infrastructure have been identified as the key levers to enhance sustainability in the logistics ecosystem. In this context, pipeline infrastructure for transportation of gas is also being developed in the State.

D(I) Promoting modal shift to environment friendly modes of transport and adoption of environment friendly fuels/technology

- In order to reduce environmental footprint of the logistics sector, the GoTN will encourage modal shift from road to environment friendly rail and coastal shipping through development of terminal infrastructure including captive jetties and Gati Shakti multi-modal cargo terminals.

- The GoTN will support coastal shipping for transportation of freight on viable trade routes under market development approach in coordination with Tamil Nadu Maritime Board.

- The GoTN will explore the possibility of developing e-Highway Corridors on the existing/proposed major freight corridors in the State to promote environment friendly freight movement.

D(II) Promoting use of sustainable design through incentivisation

- The GoTN will promote use of electric vehicles and green fuel technologies – including 'Green Hydrogen', for freight movement in the State. GoTN will encourage e-commerce and delivery companies to transition to fleet of electric/ green fuel commercial vehicles. Fleet of electric vehicles would be eligible for incentives listed under Tamil Nadu e-Vehicle Policy, 2019 or any superseding policy, as applicable.

- The GoTN will encourage adoption of sustainable design standards and greening solutions that obtain rating under LEED certification or GRIHA systems for the development of logistics infrastructure.

E Adopting new age technologies in logistics

Adoption of technology has been identified as one of the key enablers for enhancing efficiency, reducing costs, building resilience, and improving service standards in logistics globally. Therefore, to enable development of a logistics ecosystem that is at par with global standards, the TN Logistics Policy 2023 promotes adoption of new age technologies by businesses engaged in logistics through interventions and incentivisation.

In this respect, the Tamil Nadu logistics policy, 2023 envisages the following interventions:

E(I) Promoting technology adoption and innovation

- The GoTN in coordination with relevant agencies will promote adoption of technology at Central/State government logistics terminals/facilities to improve efficiency and/or enhance service quality.

- The GoTN will promote innovation and technology enabled solutions for efficiency improvement in logistics sector by providing fiscal incentives to technology providers, start-ups and other business units.

- The GoTN will encourage start-ups in the logistics sector to avail funds & benefits within the Tamil Nadu Emerging Sector Seed Fund and/or TANSEED Grant Fund under the Tamil Nadu Start-up and Innovation Policy.

E(II) Creating tracking and monitoring infrastructure

- The GoTN will encourage and incentivise logistics service providers having registered offices in Tamil Nadu for technology adoption through provision of fiscal support towards technology adoption cost that will improve/ enable:

    - Tracking and tracing of cargo;
    - Exchange of information and documentation essential for logistics processes;
    - Efficiency improvement and process automation; or
    - Quality of service

- The GoTN will encourage and promote tracking and tracing of cargo movement across the major Export-Import (EXIM) corridors in the State to bring visibility & transparency in logistics eco-system, streamline the value chain and improve the management of logistics network.

E(III) Technology based interventions for monitoring compliances

- To reduce dependence on physical enforcement and avoid multiple stoppages of enroute vehicles, accelerate adoption of IT based system, enforcement mechanism, traffic cameras, RFID readers on freight vehicles along with integration of government data repository/portals.

F Enabling skill development in the logistics sector

Availability of skilled workforce can act as a key enabler for attracting investments, and setting up of, new businesses in the logistics sector. The TNLP 2023 envisages skill development of logistics sector workforce in the State as one of the key focus areas. This is expected to create a 'win-win' situation wherein logistics businesses will be able to enhance their service levels and performance, and the local populace will be able to avail employment and livelihood opportunities.

In this context, the Tamil Nadu logistics policy, 2023 envisages for the following key initiatives:

F(I) Initiate courses to skill the workforce across logistics sub-sectors

- The GoTN through Tamil Nadu Skill Development Corporation (TNSDC) will identify skill gaps and logistics job roles expected to have high demand in the future in coordination with the Logistics Sector Skill Council and prepare a Logistics Sector Skill Plan for the State.

- The GoTN will encourage introduction of logistics sector specific courses and skilling programs in the State in coordination with the Logistics Sector Skill Council and national and state level educational institutions and government bodies.

F(II) Upskill and recognize existing logistics workforce

- The GoTN will explore providing medical and health insurance to heavy vehicle drivers registered in the State at a nominal price.

- The GoTN, through TNSDC, will formalize the logistics workforce by initiating Recognition of Prior Learning Programs in coordination with industry players.

F(III) Involve private sector to skill and create employment opportunities

- The GoTN will encourage development of driver training institutes under the Institute of Driving Training & Research (IDTR) scheme of the Ministry of Road Transport and Highway, Government of India. Further, establishment of driver training institutes through private sector participation will also be encouraged.

  The GoTN will develop a Logistics Labour Market Information System that will be a repository of details of logistics sector workforce in the State, accredited by relevant agencies for their skills.

2.4 Fiscal Incentives

The fiscal incentives proposed under the initiatives envisaged in the Tamil Nadu Logistics Policy are as mentioned below. These fiscal incentives will be applicable for a period of 5 years from the date of promulgation of the policy and further extension will be considered based on the effectiveness and emerging requirements.

The GoTN intends to offer various fiscal incentives to market participants, operators and developers towards improvement in efficiency and visibility of trade and encourage business opportunities through private participation in the logistics sector.

A unit that has availed any incentive for the similar nature of work under any other scheme of the State Government or Central Government will not be eligible to avail incentive benefits under the logistics policy.

Eligibility criteria and coverage

- The incentives defined under the policy will be applicable to units registered and operating in the State of Tamil Nadu
- The incentives will be applicable to new units/projects which will commence operations during the effective period of the policy
- The incentives will also be applicable for existing units/projects that have commenced commercial operations prior to the date of promulgation of this policy but are undertaking initiatives eligible for incentives during the policy period

The provision of fiscal incentives will be extended to the following logistics facilities and activities as defined below:

Categories	**Logistics activity**	**Eligibility/ Target audience**
Logistics service providers	Transportation	Trucking companies and enterprises
	Cargo handling	Container freight station, inland container depots, cold chain facility, private freight terminals, Air freight station, warehouse operator
	Services	Freight forwarders & Third-party logistics players
Logistics technology providers	Innovation and business units	Start-ups & technology service provider
Developers of Integrated Logistics Park	Developers will be eligible to avail special incentives for development of Integrated Logistics Park in District "B" and "C" as defined under Tamil Nadu Industrial Policy,2021.	

	"B" Category Districts (12 districts) - Coimbatore, Erode, Karur, Krishnagiri, Namakkal, The Nilgiris, Ranipet, Salem, Tiruchirappalli, Tirupattur, Tiruppur, and Vellore. "C" Category Districts (22 districts) – Ariyalur, Cuddalore, Dharmapuri, Dindigul, Kallakurichi, Kanniyakumari, Madurai, Mayiladuthurai, Nagapattinam, Perambulur, Pudukkottai, Ramanathapuram, Sivagangai, Tenkasi, Thanjavur, Theni, Thiruvarur, Thoothukudi, Tirunelveli, Tiruvannamalai, Villupuram and Virudhunagar

Proposed Incentives under TN Logistics Policy

(I) Fiscal support for promoting innovation in logistics sector

Providing one time reimbursement of 100% of the patent registration fees in India to technology providers, start-ups and other business units developing technology enabled solutions for logistics efficiency improvement- subject to a cap of Rs. 25,000 per patent. The incentive will be available to enterprises having registered offices in Tamil Nadu and to individual entrepreneurs who are residents of the State.

(II) Cash award for technology adoption by logistics service providers in logistics facilities and operations

One-time cash award of 50% of the technology adoption cost, capped at Rs. 1 crore, to 3 applicants annually for adopting modern technologies such as RFID, Global Positioning System (GPS), IoT, robotics & automation, blockchain, artificial intelligence and data analytics among others. The incentive will be made available to logistics service providers having registered offices in Tamil Nadu.

Nodal Agency, TIDCO will call out for applications annually and shortlist the applications to encourage entities towards technology adoption.

(III) Fiscal support for enhancing cold chain logistics

One-time reimbursement of 100% of (1) vehicle registration charges in the State, and (2) road tax for 1 year for reefer trucks including retrofitting of capacity > 15 MT by logistics trucking companies & enterprises registered in Tamil Nadu. The fiscal incentive will be provided to registration of first 500 reefer trucks in the State during the policy period.

(IV) Special incentives for logistics infrastructure as defined under Tamil Nadu Industrial Policy (TNIP), 2021

Any facility that qualifies as Logistics Infrastructure as per the extant Harmonized Master List of Infrastructure sub-sectors of the Department of Economic Affairs, GOI will be eligible to avail fiscal incentives as defined under Para-17 of the TNIP,2021 policy. Following incentives will be applicable:

1. Training subsidy: Reimbursement of 50% of the training cost will be provided to logistics and warehousing projects (set up in "C" Districts) for technical training of the employee (mainly in the operational, frontline, supervisory roles) subject to a maximum of Rs. 10,000 per employee. The training cost can be claimed by the Project within one year from the date of commencement of commercial operations. Training can be arranged from any Government recognized/approved institution. The incentive will only be applicable to residents of Tamil Nadu.

2. Incentives for Integrated Logistics Parks: The developer of an Integrated Logistics Parks in "B" & "C" Category Districts will be eligible for Special Incentives for Warehousing & Logistics as defined in Para 15 of TNIP,2021: "*Special Incentives for Industrial Parks*", subject to meeting the criteria for an Approved Logistics Park as specified in Annexure VI that will be amended in TNIP, 2021 with 100% relaxation in the non-processing area of the park area. The specific incentives that shall be available are as given below:

(A) Capital subsidy: Integrated Logistics Park developers will be eligible for a Capital Subsidy of 12% or 15% of investment in internal infrastructure (such as internal roads, water distribution infrastructure, street lighting, drainage facilities, landscaping, and green areas, but excluding the cost of land and landfilling/levelling) in "B" or "C" Category Districts, respectively. This will be provided based on the following milestones:

i. 50% of the amount determined as Capital Subsidy upon paid-up allotment of 50% park area along with 10% operational units, i.e. either 10% of units achieving commercial production or units occupying 10% of park area achieving commercial production. This will be distributed in equal annual instalments over 5 years.

ii. 50% of the amount determined as Capital Subsidy upon paid-up allotment of 75% park area with 25% operational units, i.e. either 25% of units achieving commercial production or units occupying 25% of park area achieving commercial production. This will be distributed in equal annual instalments over 5 years.

(B) Logistics Park housing incentive: In addition to Capital Subsidy, Logistics Park developers will be eligible for Housing Incentive of 10% on the cost of developing the residential facilities developed within the Logistics Park over 10 years from the date of completion of the investment in the housing facility, subject to a ceiling of Rs. 10 cr.

(C) Green Logistics Park incentive: Integrated Logistics Park developers undertaking green and sustainable initiatives as listed in the Tamil Nadu Industrial Policy, 2021, Para 13.5.3, will be eligible for a 25% subsidy on cost of capital for setting up undertaking such initiatives, subject to a cap of Rs.5 Cr.

2.5 Institutional Mechanism

The State has created a 2-tier institutional framework, comprising an Empowered Group of Secretaries (EGoS) and a Network Planning Group (NPG), for coordinating and facilitating integrated development of the logistics sector in the State under the PM Gati Shakti initiative.

Given the context of involvement of multiple agencies, stakeholders and operators in the logistics sector, implementation of the Tamil Nadu Integrated Logistics Policy 2023 requires an institutional framework and mechanism for required multi-agency coordination, discussion and decision making. The 2-tier institutional framework, comprising EGoS and NPG, mentioned above will be leveraged for the same.

As the designated Nodal Agency for Logistics for the State, Tamil Nadu Industrial Development Corporation Limited (TIDCO) along with the program management unit will support the NPG and EGoS and undertake required coordination and tracking of progress of various initiatives and incentives – working in close coordination with relevant Ministries, Departments and Agencies (MDAs).

For the fiscal incentives provided under the Logistics Policy, TIDCO will be responsible for formulation of operational guidelines. For all investment above Rs.50 Cr, Tamil Nadu Guidance will be responsible for proposal/application evaluation and forward its recommendations to the Industries Department for sanction of incentives. For all investments up to Rs. 50 Cr, the evaluation of proposal and applications will be carried out by FaMe TN and sanctioned by the Commissionerate of Industries and Commerce.

State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) will be responsible to act as the disbursal agency of various incentives listed out in this policy for investment category above Rs. 50 Cr. For all investment up to Rs.50 Cr, Industries Commissioner and Director of Industries and Commerce (ICDIC) will be the responsible agency for disbursement of incentives.

Tamil Nadu Guidance as the designated nodal agency for facilitating single window clearances, will be responsible for extending the same to logistics enterprises in the

State for all investment above Rs. 50 Cr whereas the single window facilitation for MSME segment will be undertaken by the FaMe TN department, Commissionerate of Industries and Commerce and District Industries Centre.

2.6 Policy Duration

The Logistics Policy will be effective from the date of its promulgation by the Government of Tamil Nadu and applicable till 5 (five) years or the notification of a revised policy or amendment, whichever is earlier. The institutional mechanism for review and updating of the Policy is outlined in a under section 4.5 of the document.

Annexure VI- Components of an approved Integrated Logistics Park *(to be added in the Tamil Nadu Industrial Policy,2021 as an amendment)*

1. **Criteria for approval**

a) Any facility that qualifies as Logistics Infrastructure as per the extant Harmonised Master List of Infrastructure Sub-sectors of the DEA, GoI. The list currently include:

- Multimodal Logistics Park comprising Inland Container Depot (ICD) with a minimum area of 10-acre and/or,
- Cold Chain Facility with a minimum area of 20,000 sq. ft, and/or
- Warehousing Facility with a minimum area of 1 lakh sq. ft.

b) Should not have more than 10% wet land or double crop land

c) Should not include (for contiguity) more than 5% of Government land

2. **Non-Processing Area:** *100% relaxation*

The Integrated Logistics Park will have one or more of the following facilities over and above the Logistics Infrastructure as per the extant Harmonised Master List of Infrastructure Sub-sectors of the DEA, GoI.

Applicable for one or more of the below given facilities:

a) Custom bonded area

b) Warehouse space

c) Container stacking yard

d) Open storage space

e) Rail handling area

f) Temperature-controlled storage

g) Truck Terminal and equipment parking yard

h) Office space for business support

i) Space for common amenities

j) Open space, green area and internal roads

SECTION 3: TAMIL NADU INTEGRATED LOGISTICS PLAN

TAMIL NADU LOGISTICS POLICY & INTEGRATED LOGISTICS PLAN

2023

3 Tamil Nadu Integrated Logistics Plan

Tamil Nadu Integrated Logistics Plan (TNILP), 2023 includes a strategic plan for the next 10 years – outlining identified interventions, their envisaged outcomes, timelines as well as key stakeholders' responsible for their implementation.

A methodical and consultative approach was adopted for undertaking a gap and need analysis to identify the interventions for the Integrated Logistics Plan. The exercise is summarised at Annexure 3 of this document.

The timelines for implementation of identified interventions have been categorized as follows with respect to the date of notification of the plan:

- Short Term : Up to 2 years from notification
- Medium Term : 2 to 5 years
- Long Term : 5 to 10 years

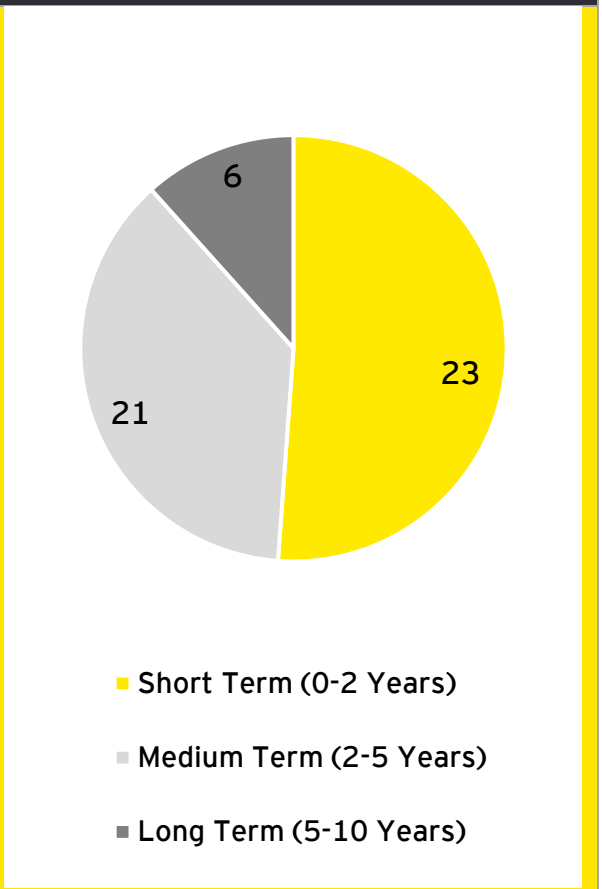
To align with the emerging requirements as well as developments in the industry, the plan is envisaged to be updated on a rolling basis while also considering outcomes of identified interventions and inputs from stakeholders.

3.1 Plan Overview

The Integrated Logistics Plan outlines interventions in the short-medium (2-5 years) term as well as the long term (5-10 years). It includes 50 interventions across the 6 policy levers/ strategic themes to address issues and development requirements in the logistics sector in the State.

The exhibit below provides a break-up of the interventions by policy levers/ strategic themes as well as timeframes.

Exhibit 1: Plan interventions across policy levers/ strategic themes and timeframes

Policy Levers/ Strategic Themes	No. of interventions	Interventions by timeframes
(A) Enabling integrated and robust logistics infrastructure development	23	
(B) Promoting availability of cost effective and high-quality logistics services	6	
(C) Creating enabling environment for logistics activities	9	
(D) Inculcating resilience & sustainability in logistics ecosystem	3	
(E) Adopting new age technologies in logistics	6	
(F) Enabling skill development in the logistics sector	3	
Total	50	

The Plan initiatives and interventions include ones that require investments for infrastructure creation (trunk infrastructure, terminal infrastructure as well as required inter-modal connectivity) as well as ones that are focused on enabling processes, regulations and due coordination.

An initial phase investment outlay of ~Rs. 62,541 Crores[10] has presently been estimated based on the assessment carried out for the identified three (2 EXIM, 1 Domestic) freight corridors and select locations in the State identified through need

[10] The envisaged investment quantum is estimated considering industry benchmarks at 2022 prices excluding the cost of land as applicable

and gap analysis through stakeholder consultation and secondary data analysis. The investment outlay will change on addition of interventions as the plan is envisaged to be updated on rolling basis considering emergence of new trends and requirements. Further it is also proposed to conduct detailed study of other freight corridors in the State to identify additional interventions and associated investments.

With its focus on creation of infrastructure as well as growth of the logistics sector in the State, the Plan is expected to contribute to creation of1.40-1.60 lakh direct and indirect jobs opportunities in the State.

Notably, the investment envisaged for implementation of the Plan is expected to be mobilised with involvement of the private sector as well as involvement and support of the Central Government.

Accordingly, effective implementation of the Plan initiatives would necessarily require coordinated working across State and Central Government Department(s) and agencies. In this context, a subsequent section outlines the proposed institutional mechanism for implementation of the Plan, including with respect to required coordination and follow-up for implementation of such initiatives and interventions.

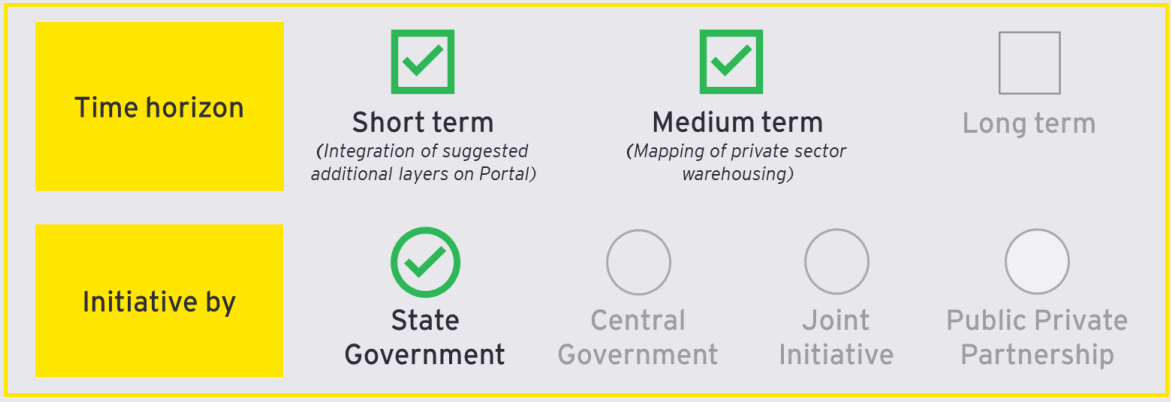
To operationalize the first set of initiatives identified in the plan, the mechanism for evaluation and disbursement of fiscal incentives along with obtaining project approvals through single window clearance will be applicable as outlined in the Tamil Nadu Logistics Policy.

3.2 Logistics Plan/List of Interventions

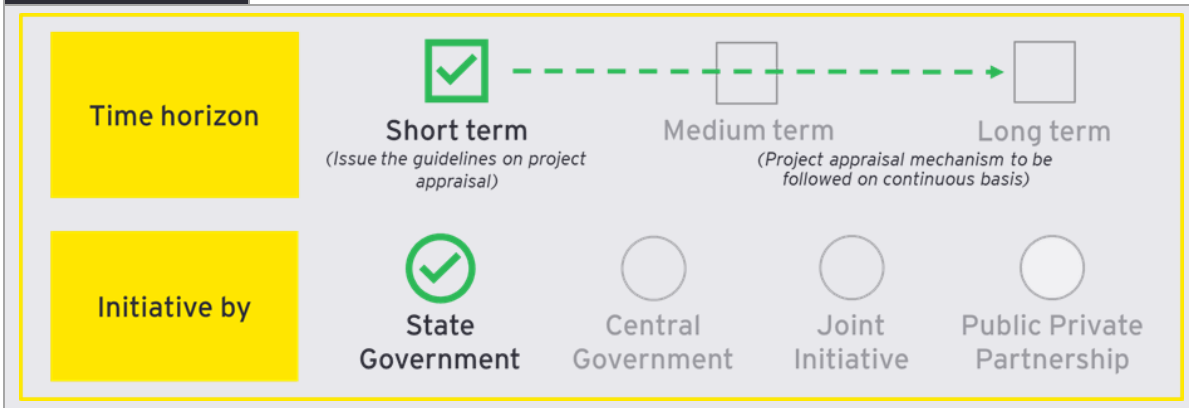
(A) Enabling integrated and robust logistics infrastructure development

A(I) Enabling synchronized planning for logistics infrastructure through a defined coordinated mechanism

S. No.	1.
Measures to be taken	The following additional layers will also be mapped on the GIS portal (State Master Plan) being formulated under PM Gati Shakti National Master Plan: ▶ Minor Ports ▶ Under agriculture - regulated markets and primary processing centers ▶ State warehousing and storage facilities ▶ Truck terminals ▶ Skill Development Centers and Driver Training Institutes In the medium term, the endeavour would be to also map private sector warehousing facilities (Refer intervention 3.3)
Outcome/KPI	No. of additional layers mapped on the Geographic Information System (GIS) Portal developed by Bhaskaracharya National Institute for Space Applications and Geo-informatics (BISAG – N)
Investment quantum	Not applicable
Stakeholder	**Primary:** Highways and Minor Ports Department (Tamil Nadu Maritime Board), Agriculture and Farmers Welfare Department, Cooperation, Food and Consumer Protection Department (Tamil Nadu Warehousing Corporation), Municipal Administration and Water Supply Department, Housing and Urban Development Department, State Transport Department, Labour Welfare and Skill Development Department **Secondary:** Industries, Investment Promotion and Commerce Department (TIDCO)



S. No.	2.
Measures to be taken	Inter-ministerial/ departmental coordination mechanism will be institutionalised to enable integrated planning for all transport and logistics projects of value equal to or greater than 50 crores. The Network Planning Group (NPG) would be responsible for operationalizing the proposed mechanism for inter-ministerial/ departmental coordination. TIDCO will prepare the detailed guidelines/ processes on project appraisal mechanism.
Outcome/KPI	Establishment of institutional structure and process
Investment quantum	Not applicable
Stakeholder	**Primary:** Network Planning Group, Industries, Investment Promotion and Commerce Department (TIDCO)

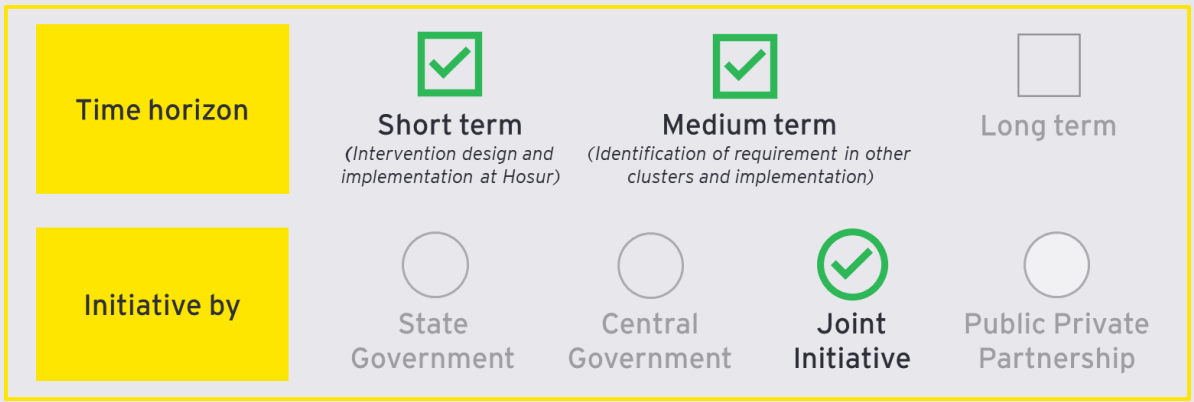


A(II) Identifying and resolving existing connectivity bottlenecks and development of new infrastructure

S. No.	3.

Measures to be taken	Improve/ develop/ fast-track road connectivity for industrial agriculture fisheries and animal husbandry clusters:
	• Improve intersections between major highways and roads connecting industrial clusters using measures such as slip lanes, traffic signals, rotary, flyover etc.
	  ○ Improvement for the Hosur (SIPCOT) industrial cluster to be prioritized
	• Improvements on following industrial clusters to be prioritized:
	  ○ Oragadam (SIPCOT)
	  ○ Sriperumbudur (SIPCOT)
	  ○ Irungattukottai (SIPCOT)
	On a periodic basis, SIPCOT/ TANSIDCO/ TIDCO/ Agriculture and Farmers Welfare Department to identify the road connectivity improvement/ development requirement for industrial and agricultural clusters to recommend to the NPG.
	For implementation of identified projects, funding and financial assistance under ongoing programmes such as the Comprehensive Road Infrastructure Development Programme, Tamil Nadu Investment Promotion Programme, and Industrial Ecosystem Fund (IEF) can be leveraged, as applicable.

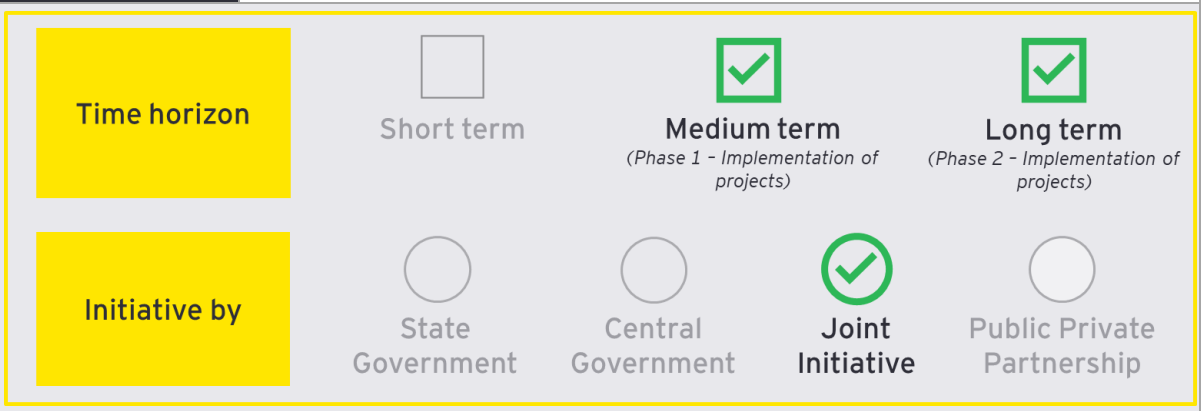
Outcome/KPI	No. of projects implemented from the identified pipeline of projects
Investment quantum	Rs. 5 – 10 Crore: Improvement of intersection at Hosur Industrial zone Rs. 70-100 Crore: Improvement of first mile/last mile connectivity at Oragadam, Sriperumbudur & Irungattukottai
Stakeholder	**Primary:** Highways and Minor Ports Department, Municipal Administration and Water Supply Department, Housing and Urban Development Department, Rural Development and Panchayat Raj Department, Indian Railways, Animal Husbandry, Dairying and Fisheries Department **Secondary:** Industries, Investment Promotion and Commerce Department (SIPCOT, TIDCO), MSME Department, Agriculture and Farmers Welfare Department



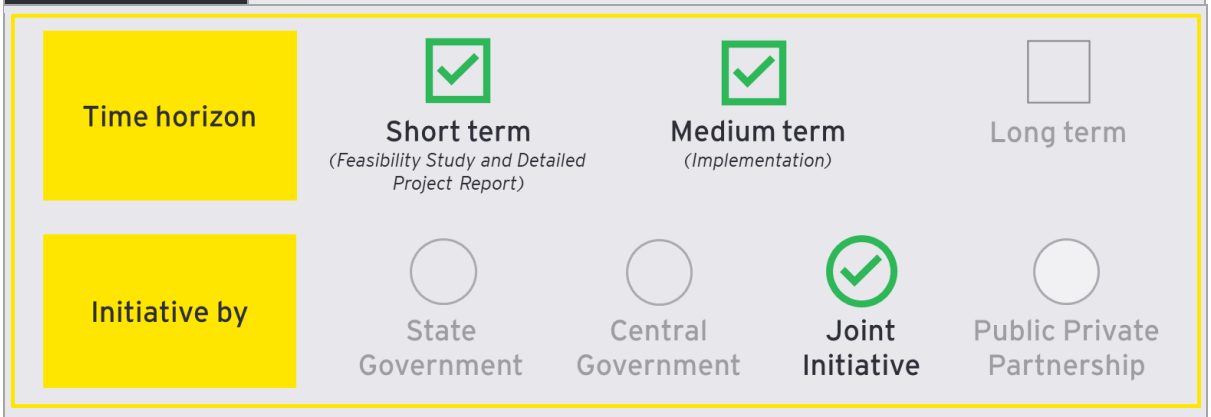
S. No.	4.
Measures to be taken	Improve/ develop/ fast-track rail connectivity for industrial and agriculture clusters: ○ Implement Guduvancheri- Oragadam- Sriperumbudur- Avadi rail connectivity project through fast tracking of land acquisition On a periodic basis, SIPCOT/ TANSIDCO/ TIDCO/ Agriculture and Farmers Welfare Department to identify the rail connectivity improvement/ development requirement for industrial and agriculture clusters to recommend to the NPG. For implementation of identified projects, funding and financial assistance under ongoing programmes such as the Tamil Nadu Investment Promotion Programme can be leveraged, as applicable.
Outcome/KPI	No. of projects implemented from the identified pipeline of projects
Investment quantum	Rs. 550 – 700 Crore
Stakeholder	**Primary:** Indian Railways **Secondary:** Industries, Investment Promotion and Commerce Department (SIPCOT, TIDCO), MSME Department, Agriculture and Farmers Welfare Department

Time horizon	☑ **Short term** *(Fastrack land acquisition)*	☑ **Medium term** *(Implementation)*	☐ Long term	
Initiative by	○ State Government	○ Central Government	✓ **Joint Initiative**	○ Public Private Partnership

S. No.	5.
Measures to be taken	Improve/ develop/ fast-track road connectivity (including first and last mile) for logistics terminals/infrastructure (Seaport) and key economic zones Phase 1 ○ Southern port access road project (4 laning of road from Vallur Junction (TPP road) to Kamarajar Port ○ NH45-A connecting Cuddalore port ○ Ennore-Manali road project ○ Chennai Port – Maduravoyal Expressway ○ Chennai Peripheral Ring Road (Package 1: Ennore Port to Thatchur) Phase-2 ○ Chennai peripheral ring road to connect Kanchipuram and Chengalpattu industrial clusters to Ennore and Katupalli Ports (Complete package), Chennai-Trichy-Tuticorin expressway* & Coimbatore Karur expressway* Additionally, undertake prefeasibility for extension of elevated corridor from Maduravoyal to Sriperumbudur. On a periodic basis, Major Port Authorities, Tamil Nadu Maritime Board/Minor Port Operators will consider user inputs and identify the connectivity improvement/ development requirement for seaports and associated logistics infrastructure to recommend to the NPG. For implementation of identified projects, funding and financial assistance under ongoing programmes such as the Comprehensive Road Infrastructure Development Programme and Industrial Ecosystem Fund (IEF) can be leveraged, as applicable.
Outcome/KPI	No of projects implemented from the identified pipeline of projects
Investment quantum	Rs. 22,000 Crore (Phase 1: 12,000 Crore and Phase 2: 10,000 Crore) ** Investment quantum has not been accounted due to project being in nascent stage*
Stakeholder	**Primary:** Highways and Minor Ports Department; National Highways Authority of India (NHAI), Municipal Administration and Water Supply Department, Housing and Urban Development Department, Rural Development and Panchayat Raj Department **Secondary:** Major Port Authorities, Highways and Minor Ports Department (Tamil Nadu Maritime Board)/Minor Port Operators



S. No.	6.
Measures to be taken	Improve/ develop/ fast-track road connectivity (including first and last mile) for logistics terminals/infrastructure (Airport) Fast track road connectivity improvement for air cargo complex o Chengalpattu to Tambaram elevated corridor o Feasibility for Meenambakkam to Tambaram elevated corridor o Extension of Chennai Bangalore Expressway project (CBIC) to Meenambakkam * On a periodic basis, Airports Authority of India/ Airport Operators, Highways and Minor Ports Department, NHAI will consider user inputs and identify the connectivity improvement/ development requirement for air cargo terminals/ infrastructure to recommend to the NPG. For implementation of identified projects, funding and financial assistance under ongoing programmes such as the Comprehensive Road Infrastructure Development Programme and Industrial Ecosystem Fund (IEF) can be leveraged, as applicable.
Outcome/KPI	No of projects implemented from the identified pipeline of projects
Investment quantum	Rs. 4,000 – 6,000 Crore **Investment quantum has not been accounted due to project being in nascent stage*
Stakeholder	**Primary:** Highways and Minor Ports Department; National Highways Authority of India (NHAI), Municipal Administration and Water Supply Department, Housing and Urban Development Department, Rural Development and Panchayat Raj Department **Secondary:** Airports Authority of India/Airport Operators



S. No.	7.
Measures to be taken	Fast track rail connectivity for seaports ○ Katupalli port ○ Cuddalore Port The rail connectivity requirements for seaports in the state should be assessed by port authorities and operators periodically for recommendation to NPG
Outcome/KPI	No of projects implemented from the identified pipeline of projects
Investment quantum	Rs. 1,000 Crore
Stakeholder	**Primary:** Indian Railways **Secondary:** Major Port Authorities, Department of Highways and Minor Ports (Tamil Nadu Maritime Board)/Minor Port Operators,

Time horizon	☑ Short term *(Finalization of studies)*	☑ Medium term *(Implementation)*	☐ Long term	
Initiative by	○ State Government	○ Central Government	◉ Joint Initiative	○ Public Private Partnership

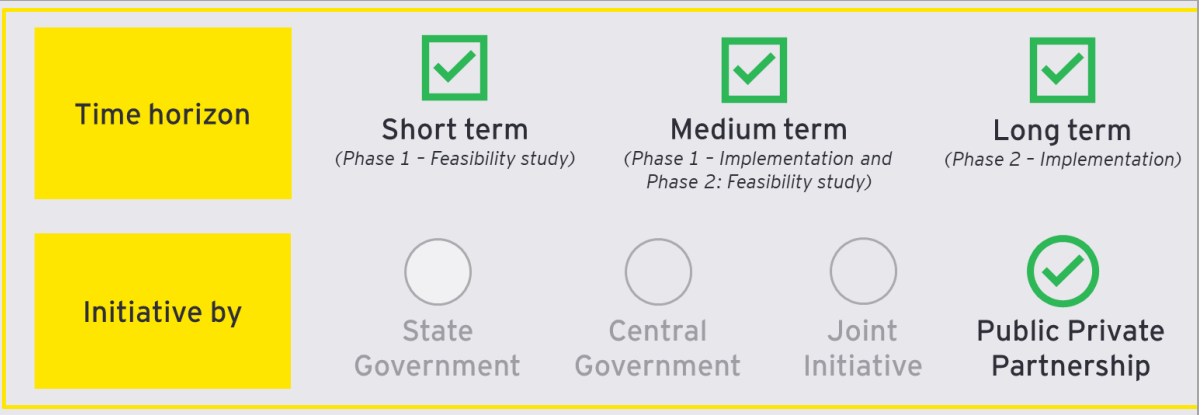
S. No.	8.

Measures to be taken	Improve/ develop/ fast-track road connectivity (including first and last mile) for rail logistics terminals/infrastructure (Good sheds)
	• Prioritise improvement of first and last mile road connectivity to the following railway goods sheds:
	  ○ Thanjavur
	  ○ Walajabad
	  ○ Melpakkam
	  ○ Ariyalur
	  ○ Dindigul
	On a periodic basis, Indian Railways, Highways and Minor Ports Department and NHAI will consider user inputs and identify the connectivity improvement/ development requirement for rail logistics terminals/goods sheds to recommend to the NPG.
	For implementation of identified projects, funding and financial assistance under ongoing programmes such as the Comprehensive Road Infrastructure Development Programme and Industrial Ecosystem Fund (IEF) can be leveraged, as applicable.

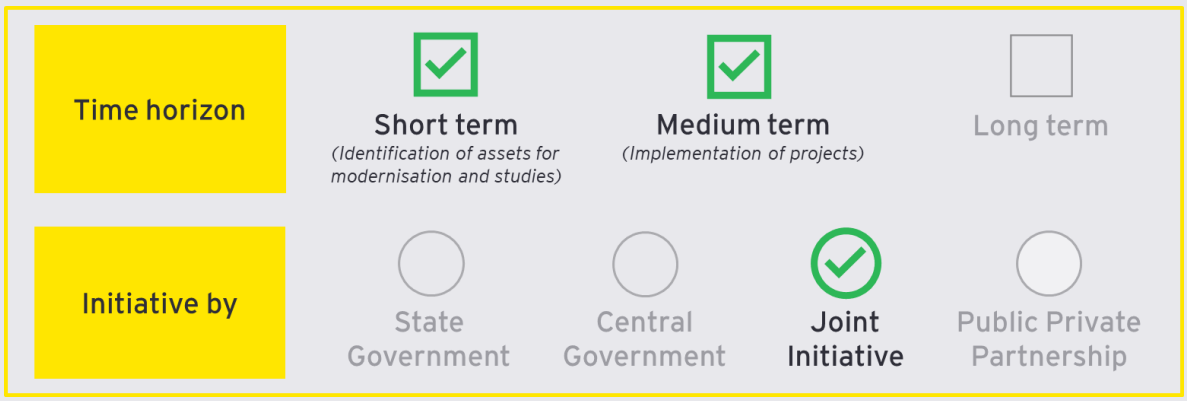
Outcome/KPI	No of projects implemented from the identified pipeline of projects
Investment quantum	Rs. 70 - 90 Crore
Stakeholder	**Primary:** Highways and Minor Ports Department; National Highways Authority of India (NHAI), Municipal Administration and Water Supply Department, Housing and Urban Development Department, Rural Development and Panchayat Raj Department, Indian Railways (for development on railway land) **Secondary:** Indian Railways (for identification of requirements)

Time horizon	☐ Short term	☑ Medium term *(Implementation)*	☐ Long term	
Initiative by	○ State Government	○ Central Government	✓ Joint Initiative	○ Public Private Partnership

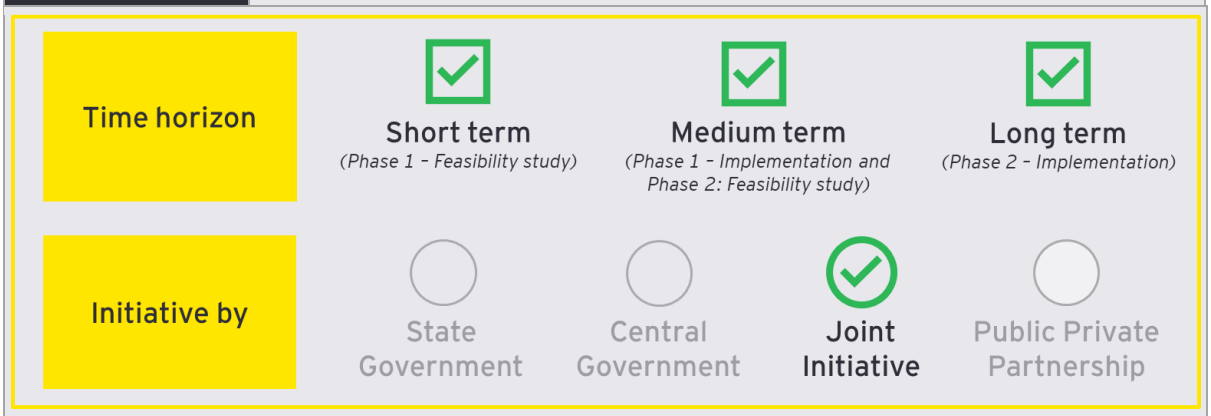
S. No.	9.
Measures to be taken	Earmark government land/ parcels, minimum 50 acres, for development of logistics facilities including logistics parks, warehousing clusters and truck terminals among others at strategic locations i.e. near existing industrial clusters and across the alignment of CKIC and CBIC Phase 2 in the State. Potential regions for the development of logistics parks and/ or warehousing clusters, requiring feasibility assessment are: Phase 1: Coimbatore, Tuticorin Phase 2: Hosur, Salem, Trichy, Madurai, Perambalur/Ariyalur Feasibility studies for development of logistics facilities at the afore-mentioned regions will be undertaken by Tamil Nadu Industrial Development Corporation (TIDCO)
Outcome/KPI	• Area of land earmarked for development of logistics facilities • No. of regions where land parcels have been identified
Investment quantum	Rs. 2,700 Crore (Phase 1:1,200 Crore and Phase 2: 1,500 Crore)
Stakeholder	**Primary:** Revenue and Disaster Management Department, Industries, Investment Promotion and Commerce Department (TIDCO), Municipal Administration and Water Supply Department, Housing and Urban Development Department, Rural Development and Panchayat Raj Department



S. No.	10.
Measures to be taken	In order to modernise existing warehousing assets, enhance utilisation and efficiency, Cooperation, Food and Consumer Protection Department (CF&CPD) will leverage private sector capability. CF&CPD will undertake: • Identification of warehousing assets requiring modernisation, upgradation and/ or management and operations by private sector players • Assessment of suitability of various structures/ models for modernisation/ upgradation/ operations and management considering factors that will inter alia include: o Private sector efficiencies to be brought in O&M of assets o Land resource optimisation through redevelopment/ modernisation/ plug & play model o Revenue and utilisation enhancement potential o Value creation from CF&CPD perspective
Outcome/KPI	• % Increase in the capacity/utilisation of warehousing assets • No. of warehousing assets modernised/ upgraded/operated and maintained through private participation
Investment quantum	Rs. 40 – 70 Crore
Stakeholder	**Primary:** Co-operation, Food and Consumer Protection Department (Tamil Nadu Warehousing Corporation) **Secondary:** Central Warehousing Corporation (shareholder in Tamil Nadu Warehousing Corporation (TNWC))



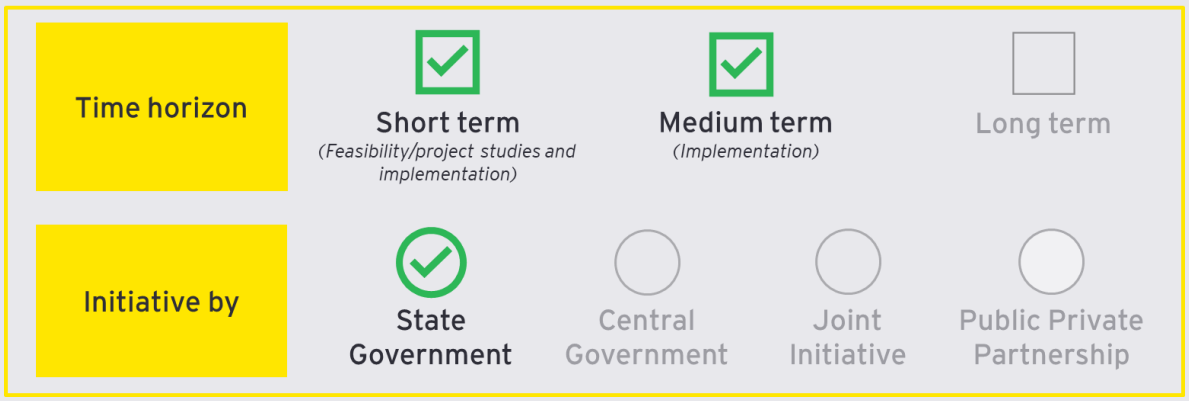
S. No.	11.
Measures to be taken	The Industries, Investment Promotion and Commerce Department (TIDCO) in coordination with the Indian Railways will assess potential locations for development of multimodal cargo terminals through modernisation of existing Goods Sheds and/ or greenfield development, by private participation. The models prescribed under Master Circular for Gati Shakti Multimodal Cargo Terminals dated 15th December 2021 issued by the Ministry of Railways, or any superseding policies, will be leveraged to undertake these developments. The GoTN may provide support through provision of right of way, government land (as per extant policy/regulations) for development of common user terminal logistics facilities such as warehousing, handling and material management area etc. Potential locations for undertaking feasibility study for development of multimodal cargo terminals: Phase 1: Milavittan, Ariyalur, Hosur, Melpakkam, Walajabad Phase 2: Madurai, Salem, Tiruvallur, Sriperumbudur Further in order to encourage rail cargo and promote multimodal terminals in the state, Indian Railways and GoTN will fast track the development of private freight terminal (PFT) at Ingur.
Outcome/KPI	• No of Goods Sheds modernised to multimodal cargo terminals • No of Greenfield multimodal cargo terminals developed
Investment quantum	Rs. 100 – 120 Crore (Phase 1: 60-70 Crore and Phase 2: 40-50 Crore)
Stakeholder	**Primary:** Indian Railways, Industries, Investment Promotion and Commerce Department (TIDCO)



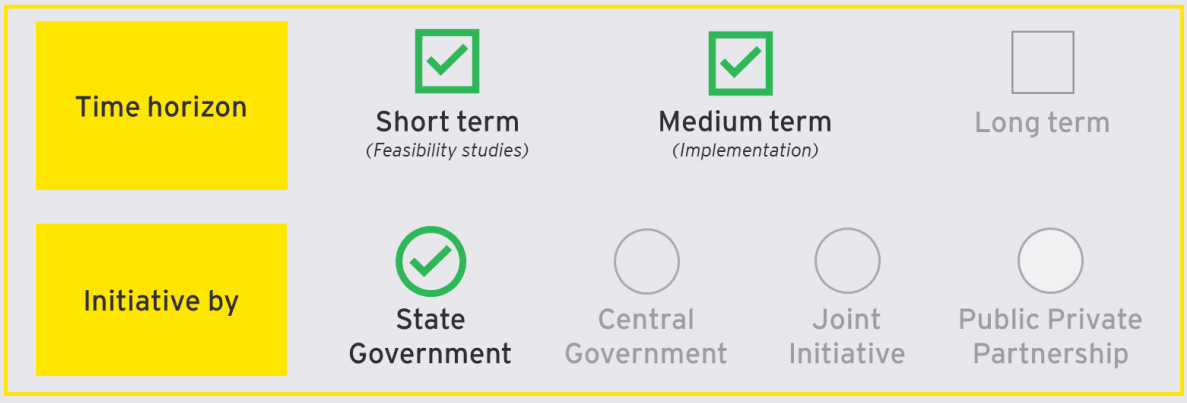
S. No.	12.
Measures to be taken	Truck lay byes including basic amenities will be developed by the Highways and Minor Ports Department and National Highway Authority of India (NHAI) at designated locations on the major highways/ road corridors. Key corridors that will be prioritised for development of truck lay byes are: Phase 1 • Hosur to Chennai • Coimbatore to Tuticorin via Madurai • Hosur to Coimbatore Phase 2 • Coimbatore to Chennai • Chennai to Kanyakumari
Outcome/KPI	• No. of truck lay byes developed along the highways
Investment quantum	Rs. 70 – 100 Crore (Phase 1: 40-50 Crore and Phase 2: 30-40 Crore)
Stakeholder	**Primary:** NHAI, Highways and Minor Ports Department **Secondary:** Municipal Administration and Water Supply Department, Housing and Urban Development Department, Rural Development and Panchayat Raj Department, Industries, Investment Promotion and Commerce Department

Time horizon	☑ **Short term** *(Phase 1 – Implementation)*	☑ **Medium term** *(Phase 2: Implementation)*	☐ Long term	
Initiative by	○ State Government	○ Central Government	◉ **Joint Initiative**	○ Public Private Partnership

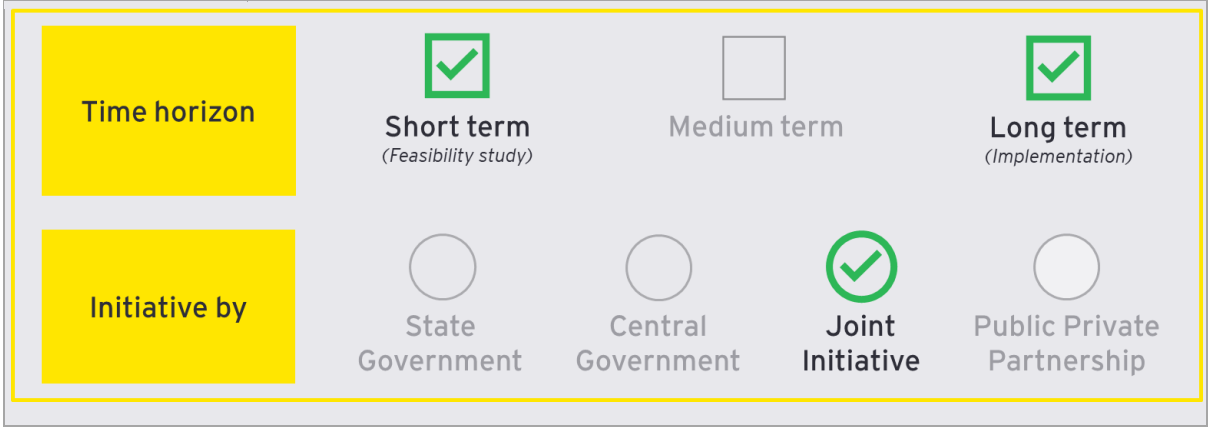
S. No.	13.
Measures to be taken	Agriculture and Farmers Welfare Department will fast track the development of primary processing centres (PPCs) in the clusters/ districts with high horticulture produce. Following districts to be prioritized for development of Primary Processing Centers (PPCs): • Salem • Erode • Cuddalore • Tiruvallur • Tiruvannamalai • Namakkal The Agriculture and Farmers Welfare Department considering the inputs of the stakeholders/ users including the Farmer Producer Organisations and Agriculture Cooperatives will identify the locations for development of PPCs
Outcome/KPI	No. of PPCs developed
Investment quantum	Rs. 150 - 200 Crore
Stakeholder	**Primary:** Agriculture and Farmers Welfare Department



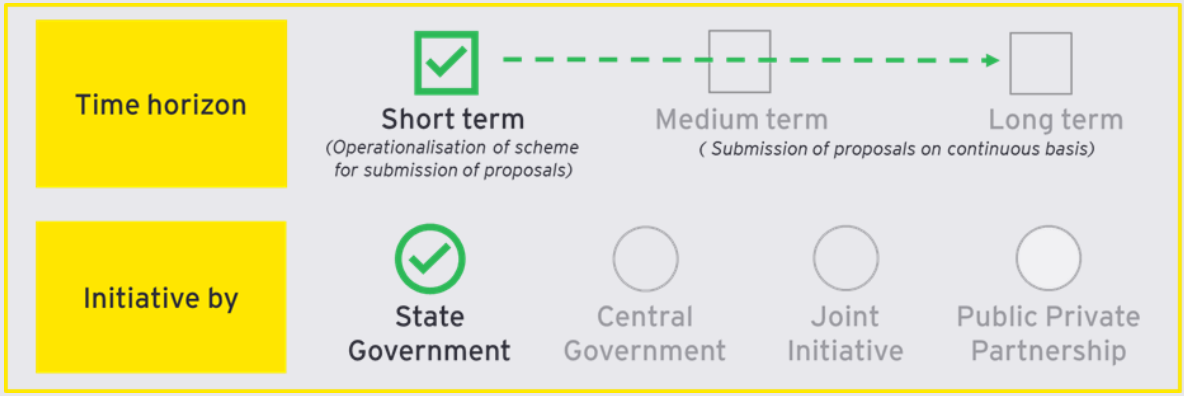
S. No.	14.
Measures to be taken	Agriculture and Farmers Welfare Department in coordination with Tamil Nadu Cooperative Marketing Federation, will on pilot basis assess the feasibility of developing solar based multi-commodity cold storage facilities at strategic locations. Following districts may be considered for assessing feasibility of setting up such facilities in the first instance: • Namakkal • Krishnagiri • Dharmapuri • Salem • Dindigul The locations for undertaking feasibility study will be identified by the Agriculture and Farmers Welfare Department in consultation with the FPOs, Agriculture Cooperatives and Tamil Nadu Cooperative Marketing Federation.
Outcome/KPI	• No. of feasibility studies undertaken • Pilot projects implemented
Investment quantum	Rs. 130 to 150 Crore
Stakeholder	**Primary:** Agriculture and Farmer's Welfare Department



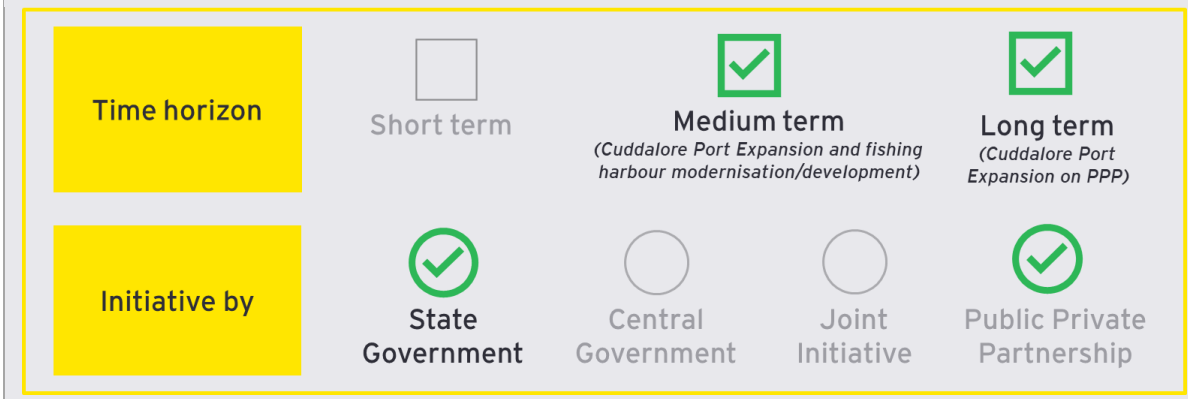
S. No.	15.
Measures to be taken	Industries, Investment Promotion and Commerce Department will undertake studies for identification and feasibility assessment for development of dedicated/ high utilisation rail freight corridors. Potential routes for development of such corridors will inter alia include: • Chennai-Tuticorin • Chennai-Bengaluru
Outcome/KPI	• Identification of routes and feasibility assessment for dedicated rail freight corridors
Investment quantum	Rs. 21,000 - 25,000 Crore
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department (TIDCO) **Secondary:** Indian Railways



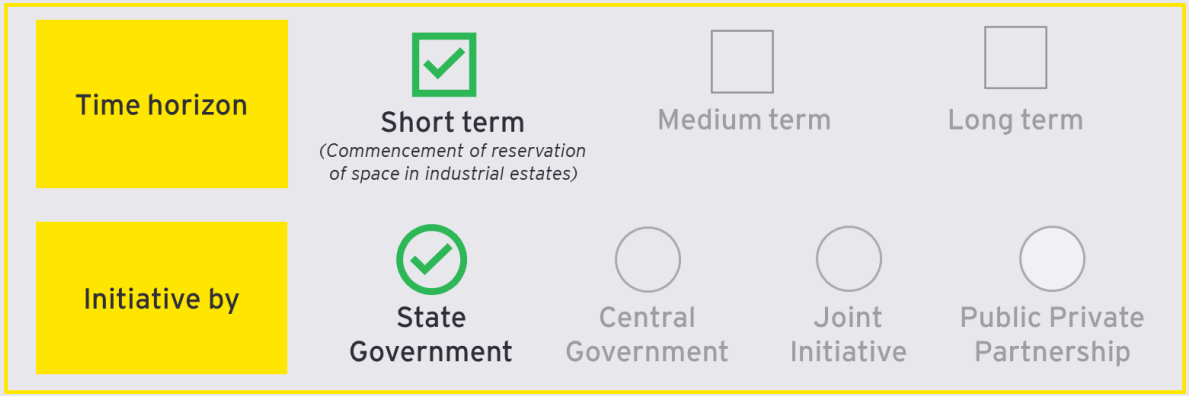
S. No.	16.
Measures to be taken	ICD/ CFS/ AFS/ FTWZ operators may submit proposals to Industries, Investment Promotion and Commerce Department for capacity expansion or development of new ICDs/ CFSs/ AFSs/ FTWZs along with techno-economic feasibility studies. On a case-to-case basis, Industries, Investment Promotion and Commerce Department will facilitate expansion/ development of logistics facilities based on the proposal received from the logistics operators.
Outcome/KPI	• New ICD/ CFS/ AFS/ FTWZ capacity created in the state
Investment quantum	Rs. 250 to 300 Cr (Private Investment)
Stakeholder	**Primary:** ICD/CFS/AFS/FTWZ operators, Industries, Investment Promotion and Commerce Department (TIDCO) **Secondary:** Central Board of Indirect Taxes and Customs



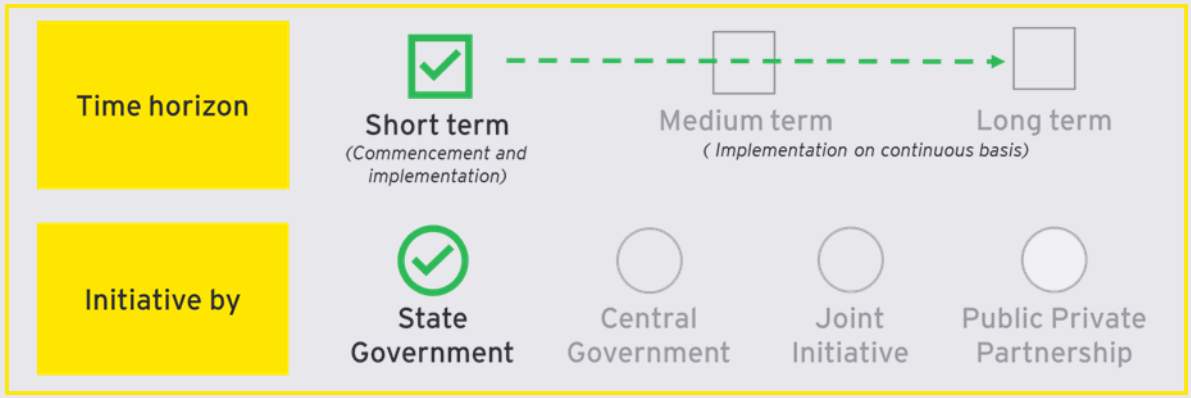
S. No.	17.
Measures to be taken	The Tamil Nadu Maritime Board (TNMB) should undertake the capacity expansion project for Cuddalore Port to increase the cargo handling capacity from 0.37 MTPA to 5.68 MTPA. Further, considering the regional development requirements and industry demand over the long term, TNMB will evaluate and pursue further expansion through private participation. To encourage the fisheries sector in the state, the TNMB should evaluate the need for expansion/ modernisation of existing fishing harbours and development of new fishing harbours in the State. Financial assistance available under Government of India's schemes such as the Pradhan Manttri Matsya Sampada Yojna (PMMSY) can be leveraged for implementation of such projects as applicable.
Outcome/KPI	• Completion of Cuddalore Port expansion project • Expansion of Cuddalore Port on PPP • No. of expansion/ modernisation projects for fishing harbours undertaken • No. of greenfield fishing harbours developed
Investment quantum	Rs. 500 to 800 Crore (Government Investment) Rs. 3,000 to 3,500 Crore (Cuddalore Expansion through PPP)
Stakeholder	**Primary:** Tamil Nadu Maritime Board **Secondary:** Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India



S. No.	18.
Measures to be taken	Industries, Investment Promotion and Commerce Department will earmark area for development of truck terminal/ parking yard within the allocated open space reservation in upcoming industrial parks/ estates/ clusters in the State accommodating manufacturing & processing units. A minimum of 5% of the Open Space Reservation (OSR) would be earmarked for development of truck terminal/ parking. The development in OSR will be limited to truck parking without construction of a structure. Necessary clauses will be amended in the Tamil Nadu Combined Building Rules
Outcome/KPI	• No. of new industrial parks/estates/clusters having dedicated area reserved for logistics activities
Investment quantum	Not applicable
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department (TIDCO /SIPCOT), Housing and Urban Development Department, Municipal Administration and Water Supply Department, MSME Department



S. No.	19.
Measures to be taken	The Industries, Investment Promotion and Commerce Department will identify the unutilised factory sheds within existing industrial parks/ estates/ clusters in the State and make them available for logistics activities, wherever feasible.
Outcome/KPI	• No of unutilised factory sheds converted to logistics facilities
Investment quantum	Not applicable
Stakeholder	Primary: Industries, Investment Promotion and Commerce Department (TIDCO / TANSIDCO / SIPCOT)



S. No.	20.
Measures to be taken	AAI/ Airport Operator will assess the feasibility for expansion of existing air cargo complexes/ development of air-cargo complexes at existing airports. Further, Industries, Investment Promotion and Commerce Department will assess feasibility for development of greenfield airports with cargo complexes. Potential locations for the development of greenfield air cargo complex and augmentation of air cargo complexes are: • Chennai – feasibility for second airport cargo complex • Tuticorin – feasibility for cargo complex
Outcome/KPI	• Increase in air cargo capacity available within the State
Investment quantum	Rs. 150 to 180 Crore
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department – TIDCO (For Green field airports), Airport Authority of India/Airport Operator (for brown field projects)

Time horizon	☐ Short term	☑ **Medium term** *(Feasibility study)*	☑ **Long term** *(Implementation)*	
Initiative by	○ State Government	○ Central Government	☑ **Joint Initiative**	○ Public Private Partnership

S. No.	21.

Measures to be taken	Housing and Urban Development Department in coordination with relevant Urban/ Rural Local Bodies, will undertake the following key initiatives, preferably through private participation:
	• Assess the requirement and undertake upgradation of existing truck terminals in urban and peri-urban areas. Potential locations to be prioritised in this respect are:
	  ○ Manjambakkam, Chennai
	  ○ Madhavaram, Chennai
	The Housing and Urban Development Department will continuously monitor and identify the need of upgrading of truck terminals and parking facilities in the state considering user inputs.

Outcome/KPI	• No of truck terminals upgraded
Investment quantum	Rs. 30 - 50 Cr
Stakeholder	**Primary:** Municipal Administration and Water Supply Department, Housing and Urban Development Department, Rural Development and Panchayat Raj Department

Time horizon	☑ **Short term** *(Implementation)*	☐ Medium term	☐ Long term	
Initiative by	☑ **State Government**	○ Central Government	○ Joint Initiative	○ Public Private Partnership

S. No.	22.

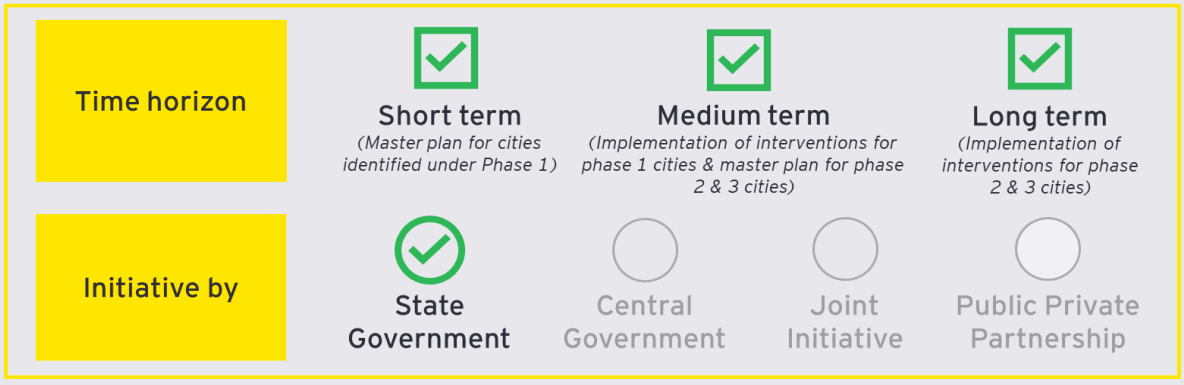
Measures to be taken	Housing and Urban Development Department in coordination with relevant Urban/ Rural Local Bodies, will undertake the following key initiatives, preferably through private participation:
	• Assess the requirement and undertake development of new truck terminals in peri-urban areas of cities with significant cargo movement.
	• Potential location to be prioritized for green field development of truck terminals are:
	  ○ Madurai
	  ○ Coimbatore
	  ○ Tiruchirappalli
	  ○ Hosur

Outcome/KPI	• No. of greenfield truck terminals developed
Investment quantum	Rs. 70 - 100 Crore
Stakeholder	**Primary:** Municipal Administration and Water Supply Department, Housing and Urban Development Department, Rural Development and Panchayat Raj Department

Time horizon	☐ Short term	☑ **Medium term** *(Feasibility and implementation at priority locations)*	☐ Long term	
Initiative by	☑ **State Government**	○ Central Government	○ Joint Initiative	○ Public Private Partnership

A(III) Development of logistics plan for major cities and metropolitan areas

S. No.	23.
Measures to be taken	Greater Chennai Corporation and Coimbatore District Collector will formulate City/ Metropolitan Region Logistics Master Plans for Chennai and Coimbatore respectively to plan the development of following city/ metropolitan region logistics infrastructure, among others as required: • Storage/ consolidation/ distribution centres • Fulfilment centres for e-commerce • Bypasses/ ring roads • Common user parcel delivery terminals • Parking and unloading zones • Charging infrastructure along priority corridors Subsequently, city logistics master plan will be prepared for Hosur, Madurai and Tiruchirappalli city under Phase-2 and Salem, Tirunelvelli, Erode, Vellore and Tuticorin in Phase -3 Further, the Municipal Administration and Water Supply Department may identify other cities/ urban areas that need to form a city/ metropolitan region logistics master plan. The GoTN will promote use of electric vehicles and green fuel technologies – including 'Green Hydrogen', for freight movement in the State. GoTN will encourage e-commerce and delivery companies to transition to fleet of electric/ green fuel commercial vehicles. Fleet of electric vehicles would receive incentives listed under Tamil Nadu E-Vehicle Policy, 2019 or any superseding policy, as applicable. To this end, the City/ Metropolitan Regional Logistics Master Plans would account for development of charging infrastructure for electric freight vehicles on priority corridors/ strategic locations.
Outcome/KPI	• No. of city/ metropolitan region logistics master plan prepared • No. of interventions implemented from the master plan
Investment quantum	Not applicable
Stakeholder	**Primary:** Municipal Administration and Water Supply Department, Housing and Urban Development Department



(B) Promoting availability of cost-effective and high-quality services

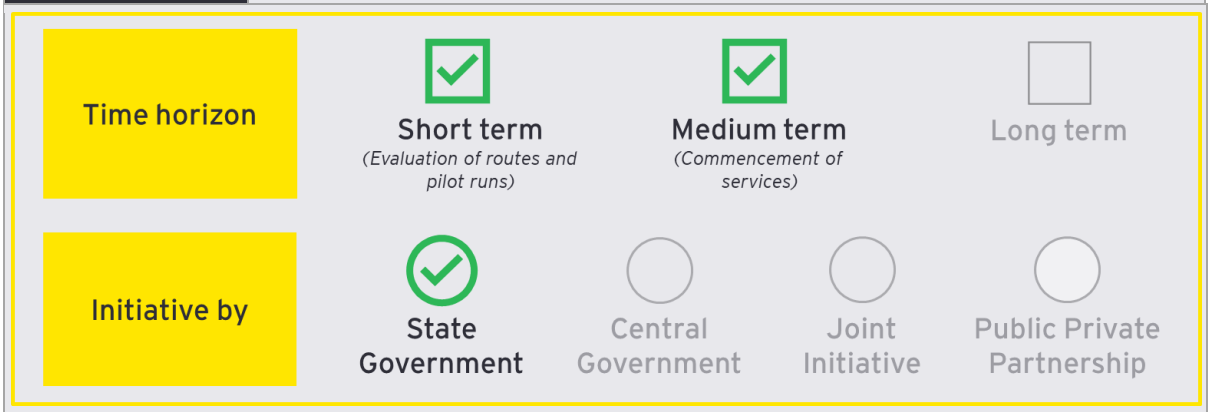
B(I) Enabling availability of cost-effective logistics services by supporting market development

S. No.	24.
Measures to be taken	TIDCO to evaluate potential new routes for container rail services considering the inputs and proposals from Container Train Operators and encourage the initial pilot runs for a pre-defined period from a market development perspective. The potential routes that will be considered for container rail services inter alia include: • Madurai to Vapi-Surat and extension to Tuticorin • Ahmedabad to Chennai • Coimbatore to Tuticorin
Outcome/KPI	No. of new routes commenced for container rail service
Investment quantum	Rs. 50 – 90 Crore
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department (TIDCO), Indian Railways **Secondary:** Container Train Operators
Time horizon	☑ **Short term** *(Evaluation of routes and pilot runs)* ☑ **Medium term** *(Commencement of scheduled services)* ☐ Long term
Initiative by	☑ **State Government** ○ Central Government ○ Joint Initiative ○ Public Private Partnership

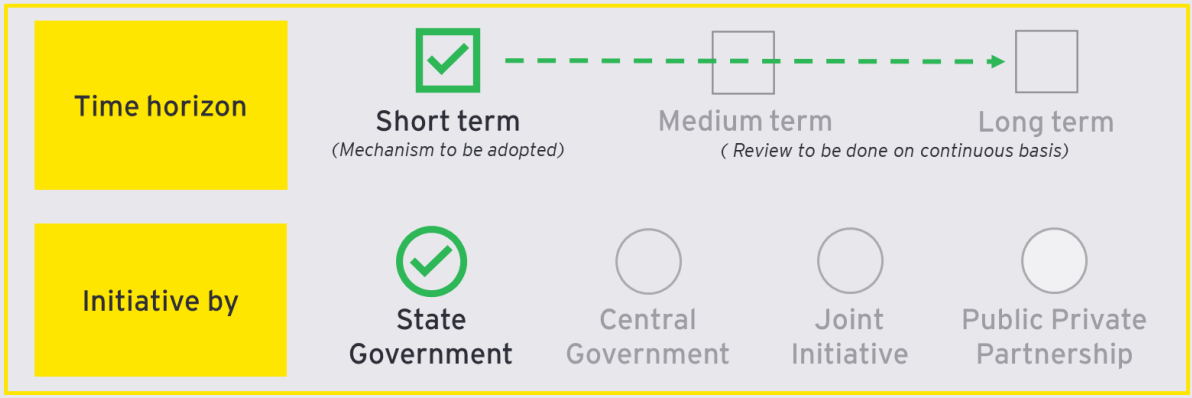
S. No.	25.
Measures to be taken	TIDCO/ Agriculture and Farmers Welfare Department to evaluate potential routes for kisan rail services respectively and encourage the initial pilot runs from a market development perspective. The potential routes that will be considered for kisan rail services inter alia include routes to major consumption markets such as Delhi, Mumbai and Kolkata from the following locations: • Krishnagiri • Theni • Namakkal • Dharmapuri • Salem • Thanjavur • Trichy • Madurai
Outcome/KPI	• No. of new routes commenced for kisan rail service
Investment quantum	Rs. 30 – 50 Crore
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department (TIDCO), Agriculture and Farmers Welfare Department, Indian Railways **Secondary:** Indian Railways

Time horizon	☑ **Short term** *(Evaluation of routes and pilot runs)*	☑ **Medium term** *(Commencement of scheduled services)*	☐ Long term	
Initiative by	○ State Government	○ Central Government	◉ **Joint Initiative**	○ Public Private Partnership

S. No.	26.
Measures to be taken	The Highways and Minor Port Department will assess the feasibility for development of coastal shipping routes and encourage the initial pilot runs from a market development perspective. Further, logistics service providers may also undertake market/ feasibility studies and submit to Tamil Nadu Maritime Board (TNMB) for consideration. The key routes that will be considered in this respect will include: • Movement between Maharashtra/ Gujarat and Tamil Nadu (Coimbatore/ Tirupur/ Dindigul) • RO-RO Automobile movements between Chennai and Mumbai
Outcome/KPI	• No. of coastal shipping routes commenced
Investment quantum	Rs. 100 – 130 Crore
Stakeholder	**Primary:** Highways and Minor Port Department (Tamil Nadu Maritime Board) Major Port Authorities **Secondary:** Shipping companies and Freight forwarders



S. No.	27.
Measures to be taken	Port Authorities and Airports Authority of India/ Airport Operators in the state will periodically submit dwell time reports to the NPG with underlying concerns and issues. The NPG in consultation with the relevant stakeholders will engage with CBIC/ Port Authorities/ Airport Authority/ Operator to take appropriate steps for optimizing the dwell time at airports and seaports in the State.
Outcome/KPI	• Reduction of dwell time
Investment quantum	Not applicable
Stakeholder	**Primary:** NPG **Secondary:** Port Authorities/ Operator, Airport Authority of India/Airport Operator, Central Board of Indirect Taxes and Customs

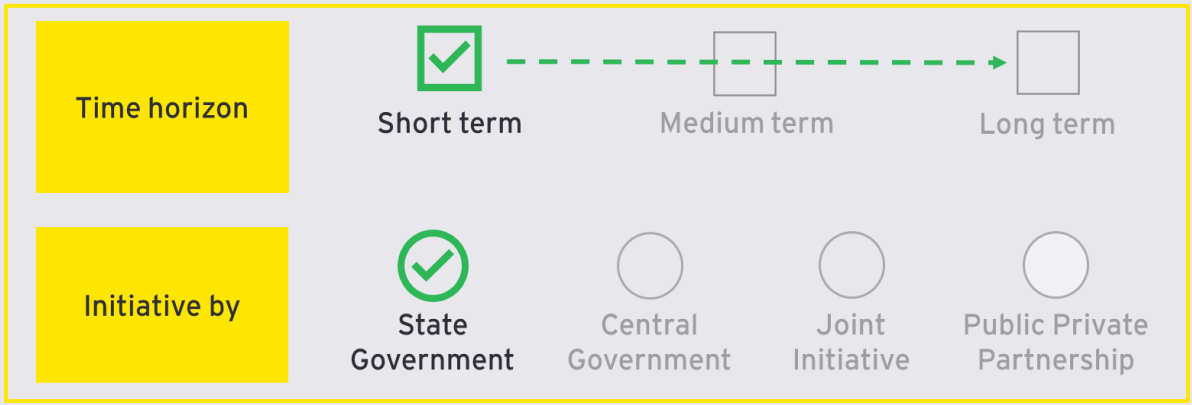


B(II) Provision of high-quality contemporary services to users

S. No.	28
Measures to be taken	The Transport Department will make a one-time reimbursement of 100% of (1) vehicle registration charges in the State, and (2) road tax for 1 year for the reefer trucks including retrofitting of capacity > 15 MT by logistics/ trucking companies & enterprises registered in Tamil Nadu. The first 500 reefer trucks registered in the State during the policy period will be applicable to avail incentive. A separate category will be created by the transport department for registration of reefer vehicle to have a data base on the reefer trucks operating in Tamil Nadu.
Outcome/KPI	• New capacity of reefer vehicles registered in the state
Stakeholder	Primary: Transport Department Secondary: Industries, Investment Promotion and Commerce Department, MSME Department • TIDCO – Preparation of guidelines, • If investment is > 50 Crore, Guidance Tamil Nadu for evaluation of applications and SIPCOT for incentive disbursement • If investment is < 50 Crore, FaMe TN for evaluation of applications and ICDIC for incentive disbursement

Time horizon	☑ Short term *(Issuance of guidelines and operationalisation)*	☐ Medium term	☐ Long term	
Initiative by	☑ State Government	○ Central Government	○ Joint Initiative	○ Public Private Partnership

S. No.	29.
Measures to be taken	The GoTN will encourage logistics companies and service providers towards adoption of quality management system (Integrated management system IMS/ISO 9001/ISO 14001/OHSAS 18001/SA 8000/any other logistics related quality certification) in their logistics facilities.
Outcome/KPI	• No. of logistics service providers attaining quality certifications
Investment quantum	Not Applicable
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department, MSME Department



(C) Creating an enabling environment for logistics activities

C(I) Developing single window clearance systems

S. No.	30.
Measures to be taken	A grievance redressal mechanism for resolution of grievances of logistics sector operators will be institutionalised. The extension of Biz Buddy Portal of Tamil Nadu's Guidance Bureau for Industries will be explored for this purpose. A cell will be formed in Guidance Department with additional manpower for this purpose.
Outcome/KPI	• Operationalisation of the grievance redressal mechanism
Investment quantum	Not applicable
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department (Guidance Tamil Nadu) **Secondary:** NPG, Empowered Group of Secretaries (EGoS)

Time horizon	☑ **Short term** *(Inclusion of concerned stakeholders in Biz Buddy portal)*	☑ **Medium term** *(Extension of Biz Buddy portal for logistics sector)*	☐ Long term	
Initiative by	◉ **State Government**	○ Central Government	○ Joint Initiative	○ Public Private Partnership

S. No.	31.
Measures to be taken	The Department of Transport will set-up a single window clearance system for movement of project cargo and over dimensional cargo in the State. It will endeavour to establish maximum moving dimensions of key routes for this purpose.
Outcome/KPI	• Operationalisation of single window system
Investment quantum	Not applicable
Stakeholder	**Primary:** Highways and Minor ports Department **Secondary:** Tamil Nadu State Police, Transport Department, Tamil Nadu Generation and Distribution Corporation Ltd. (TANGEDCO), Indian Railways, NHAI

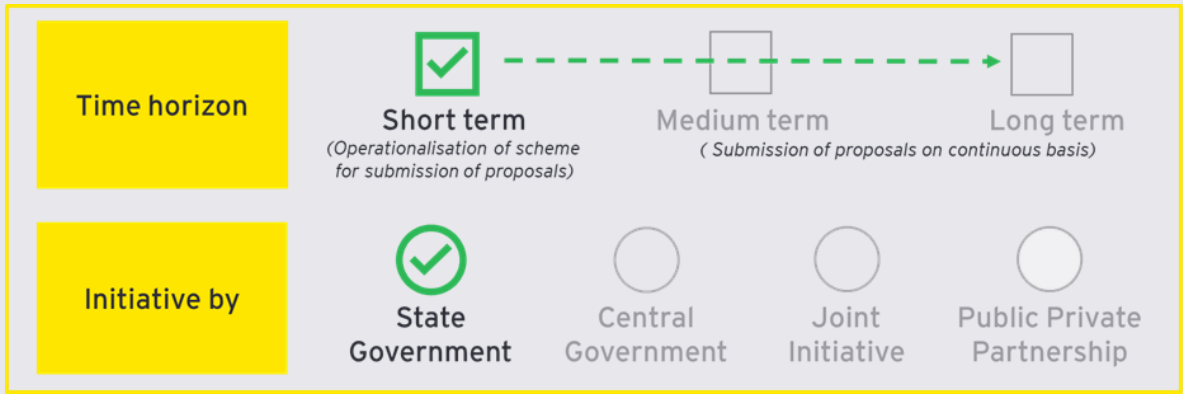
Time horizon	☐ Short term	☑ Medium term	☐ Long term	
Initiative by	☑ State Government	○ Central Government	○ Joint Initiative	○ Public Private Partnership

S. No.	32.
Measures to be taken	The existing single window portal operated under the aegis of Guidance TN and FaMe TN will be extended to logistics activities to secure all business-related approvals/clearances/NOCs etc in the State to enhance ease of doing business.
Outcome/KPI	• Integration of logistics activities/clearance requirement to existing single window portal
Investment quantum	Not applicable
Stakeholder	**Primary:** • If investment is > 50 Crore, Guidance Tamil Nadu will provide single window clearance • If investment is < 50 Crore, FaMe TN will provide single window clearance **Secondary:** Industries Investment Promotion & Commerce Department, MSME Department

Time horizon	☑ Short term	☐ Medium term	☐ Long term	
Initiative by	◉ State Government	○ Central Government	○ Joint Initiative	○ Public Private Partnership

C(II) Providing industry status and extending incentives applicable for industry in logistics sector

S. No.	33.
Measures to be taken	Based on the location of existing/ proposed clusters, Industries, Investment Promotion and Commerce Department and Agriculture and Farmers Welfare Department will identify and submit to NPG, the regions/ locations for development of logistics facilities such as warehouses, logistics parks, truck terminals etc. The NPG will coordinate with the relevant urban/ rural local bodies/ planning authorities for earmarking of land for setting up of logistics facilities at such locations during the master planning phase. The Industries, Investment Promotion and Commerce Department will integrate change in land use related approvals/ clearances process for development of logistics infrastructure in the existing single window clearance system.
Outcome/KPI	• Area earmarked in land use plans for development of logistics facilities
Investment quantum	Not Applicable
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department (TIDCO), Agriculture and Farmers Welfare Department **Secondary:** Department of Municipal Administration and Water Supply, Housing and Urban development Department (DTCP and CMDA), Rural development and Panchayat Raj Department



S. No.	34.
Measures to be taken	The GoTN, through Housing and Urban Development Department, will re-classify the warehouse segment to industries category to facilitate ease of doing business in the State. GoTN will also mandate existing warehouse developers to update their developments for streamlining registration process under the new sub-category under Industries category within a defined period of time. Necessary steps will be taken to increase the warehousing establishment height from 18.3 m to 24m. The Housing and Urban Development Department will provide the information related to warehouses registered under the new category to Industries, Investment Promotion and Commerce Department for development of a database of warehouses.
Outcome/KPI	• Issue of relevant notification • No. of warehouses registered under the new category • Development of warehouse database
Investment quantum	Not applicable
Stakeholder	**Primary:** Housing and Urban Development Department (Directorate of Town and Country Planning and Chennai Metropolitan Development Authority), Department of Municipal Administration and Water Supply **Secondary:** Industries, Investment Promotion and Commerce Department (TIDCO)

Time horizon	☑ Short term	☐ Medium term	☐ Long term	
Initiative by	◉ State Government	○ Central Government	○ Joint Initiative	○ Public Private Partnership

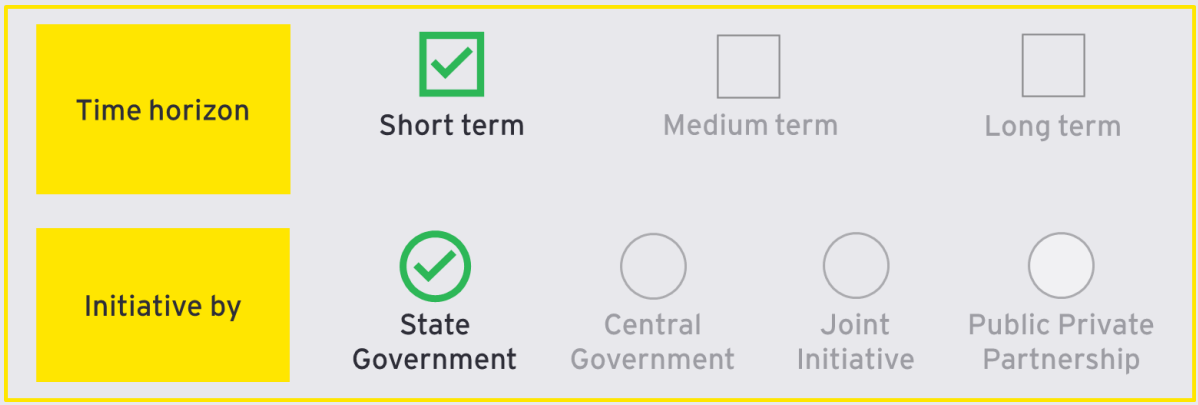
S. No.	35.
Measures to be taken	To encourage development of warehousing and cold chain developers, Department of Industries will extend the incentives and benefits applicable under section 17 of Tamil Nadu Industrial Policy, 2021 to the categories defined as per extant Harmonized master list of DOE: • Multi-modal Logistics Park comprising Inland Container Depots (ICD) with a minimum investment of Rs.50 Cr and minimum area of 10 acre and/or, • Cold Chain Facility with a minimum investment of Rs. 10 crore and minimum area of 15,000 sq. ft, • Warehousing Facility with a minimum investment of Rs. 15 crore and minimum area of 75,000 sq. ft. The details of the applicable incentives have been mentioned separately in the TN Logistics Policy. The procedure of sanctioning of incentives and sanctioning authorities as laid out in the Industrial Policy,2021 will be applicable for Special incentives to Logistics and Warehousing categories defined above,
Outcome/KPI	• No. of Logistics Developers attaining incentives for development of facilities as per minimum threshold defined by DOE
Investment quantum	Not applicable
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department

Time horizon	☑ Short term	☐ Medium term	☐ Long term	
Initiative by	◉ State Government	○ Central Government	○ Joint Initiative	○ Public Private Partnership

S. No.	36.
Measures to be taken	The GoTN has already permitted 24x7 operations of facilities as per the latest Government Order on Shop and Establishments Act,1947. This provision will also be applicable to operations of logistics and warehousing facilities in the State.
Outcome/KPI	• 24*7 operations of logistics and warehousing facilities
Investment quantum	Not applicable
Stakeholder	**Primary:** Tamil Nadu State Police, Labour Welfare and Skill Development Department

Time horizon	☑ Short term	☐ Medium term	☐ Long term	
Initiative by	◉ State Government	○ Central Government	○ Joint Initiative	○ Public Private Partnership

S. No.	37.
Measures to be taken	Industries, Investment Promotion and Commerce Department will waive off the sub-leasing charges charged by the government industrial estates for warehouses development or built to suit practices within industrial parks/ estates/ clusters in the state.
Outcome/KPI	• Issue of notification on waiving off sub-leasing charges
Investment quantum	Not applicable
Stakeholder	Primary: Industries, Investment Promotion and Commerce Department (SIPCOT, TIDCO, TANSIDCO)



C(III) Institutionalizing "Logistics Council" for data driven decision making

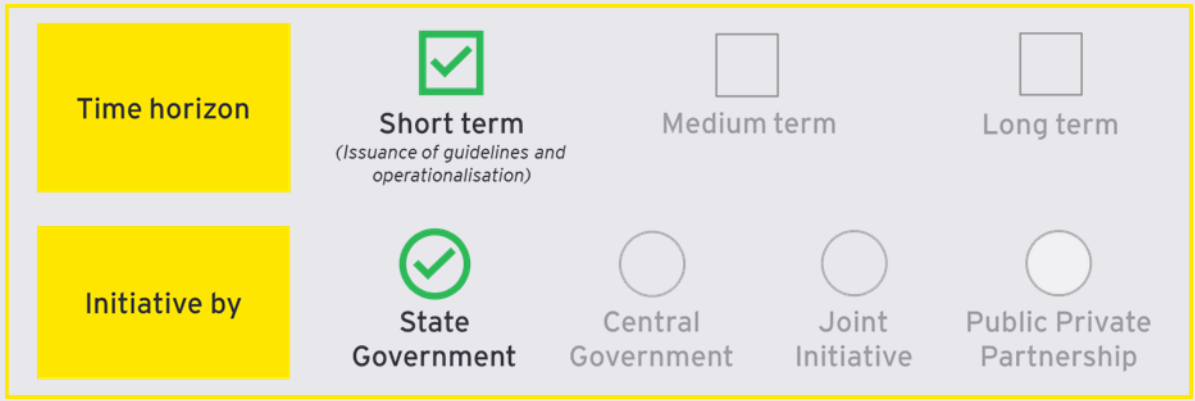
S. No.	38.
Measures to be taken	Industries, Investment Promotion and Commerce Department will establish a 'Logistics Council' for logistics sector in the State that will act as an advisory group to TIDCO/Nodal Agency and facilitate coordination with following trade & industry experts to understand issues, gaps and future requirements. • Industry & Trade Associations • Logistics Service Providers, Operators & Developers • Government Agencies- Logistics Oriented The Logistics Council will periodically (quarterly) undertake interactions with relevant stakeholders and suggest the Nodal Agency with findings, challenges and requirements.
Outcome/KPI	• Establishment of the 'Logistics Council'
Investment quantum	Not applicable
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department (TIDCO)

Time horizon	☑ Short term	☐ Medium term	☐ Long term	
Initiative by	◉ State Government	○ Central Government	○ Joint Initiative	○ Public Private Partnership

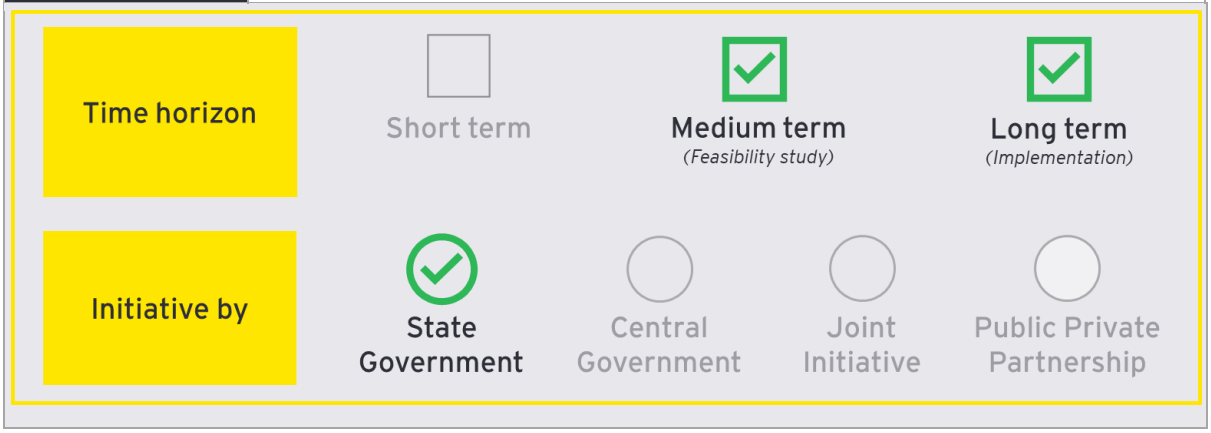
(D) Inculcating resilience and sustainability in the logistics system

D(I) Promoting modal shift to environment friendly modes of transport and adoption of environment friendly fuels/technology

S. No.	39.
Measures to be taken	Industries, Investment Promotion and Commerce Department in co-ordination with Tamil Nadu Maritime Board will prepare guidelines for scrutinizing of proposals received from operators for commencing coastal shipping services under market development approach.
Outcome/KPI	• Increase in volume of coastal cargo in the State
Investment quantum	Not applicable
Stakeholder	Primary: Industries, Investment Promotion and Commerce Department (TIDCO), Tamil Nadu Maritime Board



S. No.	40.
Measures to be taken	Department of Highways and Minor Ports will undertake feasibility study for identifying and developing e-Highway corridors on major freight routes in the state having significantly high-volume movements on defined origins and destinations.
Outcome/KPI	• Feasibility assessment of e-Highway Corridors
Investment quantum	Rs. 1,000 – 2,000 Crore
Stakeholder	**Primary:** Highways and Minor Ports Department **Secondary:** National Highways Authority of India



D(II) Promoting use of sustainable design through incentivisation

S. No.	41.
Measures to be taken	GoTN will encourage adoption of sustainable design standards such as Green infrastructure & solutions for the development of logistics infrastructure by obtaining certification under LEED and/or GRIHA systems.
Outcome/KPI	• Number of applications processed towards adoption of sustainable design standards
Investment quantum	Not applicable
Stakeholder	**Primary:** Housing and Urban Development Department (Directorate of Town and Country Planning and Chennai Metropolitan Development Authority)

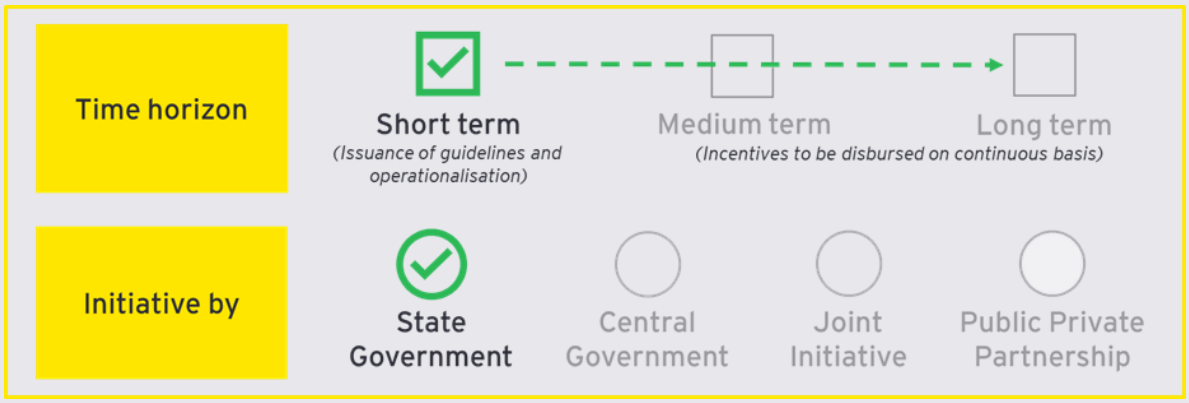
Time horizon	☑ Short term	☐ Medium term	☐ Long term	
Initiative by	◉ State Government	○ Central Government	○ Joint Initiative	○ Public Private Partnership

(E) Adopting new age technologies in logistics

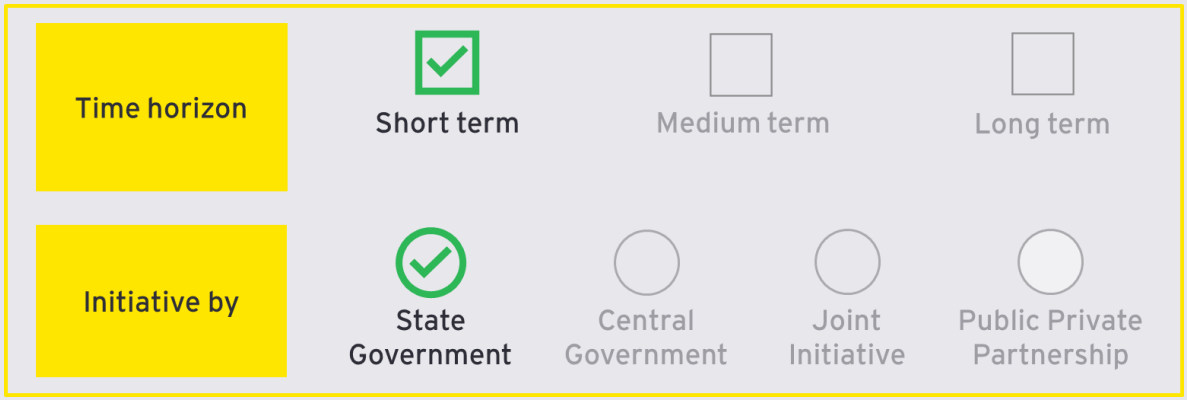
E(I) Promoting technology adoption and innovations

S. No.	42.
Measures to be taken	The GoTN will encourage and incentivise logistics service providers having registered offices in Tamil Nadu for technology adoption through provision of fiscal support towards technology adoption cost. The GoTN will provide one-time cash award of 50% of the technology adoption cost, capped to Rs. 1 crore, to 3 applicants annually for adopting modern technologies such as RFID, GPS, IoT, robotics & automation, blockchain, artificial intelligence and data analytics among others that will improve/ enable: • Tracking and tracing of cargo: • Exchange of information and documentation essential for logistics processes: • Efficiency improvement and process automation: or • Quality of service Industries, Investment Promotion and Commerce Department will prepare the guidelines /processes for disbursement of the incentives.
Outcome/KPI	• No. of logistics service providers adopting new age technology
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department, MSME Department • TIDCO – Preparation of guidelines, • If investment is > 50 Crore, Guidance Tamil Nadu for evaluation of applications and SIPCOT for incentive disbursement • If investment is < 50 Crore, FaMe TN for evaluation of applications and ICDIC for incentive disbursement **Secondary:** Tamil Nadu Information Technology Department
Time horizon	☑ Short term (Issuance of guidelines and operationalisation) — ☐ Medium term — ☐ Long term (Incentives to be disbursed on continuous basis)
Initiative by	☑ State Government — ☐ Central Government — ☐ Joint Initiative — ☐ Public Private Partnership

S. No.	43.
Measures to be taken	GoTN will promote innovation in logistics sector by providing one time reimbursement of the patent registration fees in India to technology providers, start-ups and other business units developing technology enabled solutions for logistics efficiency improvement. This reimbursement will be subject to a cap of RS. 25,000 per patent. The incentive will be available to enterprises having registered offices in Tamil Nadu and to the residents of the State. Industries, Investment Promotion and Commerce Department will prepare the guidelines /processes for disbursement of the incentive.
Outcome/KPI	• Operationalisation of the incentive scheme
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department, MSME Department • TIDCO – Preparation of guidelines, • If investment is > 50 Crore, Guidance Tamil Nadu for evaluation of applications and SIPCOT for incentive disbursement • If investment is < 50 Crore, FaMe TN for evaluation of applications and ICDIC for incentive disbursement **Secondary:** Tamil Nadu Start-up and Innovation Mission



S. No.	44.
Measures to be taken	The GoTN has formed Tamil Nadu Emerging Sector Seed Fund and TANSEED grant fund under Tamil Nadu Start-Up and Innovation Policy for supporting start-ups in the state with a corpus of Rs.500 Crore. Start-ups in logistics sector will also be eligible to avail this benefit
Outcome/KPI	• Fund utilised by logistics sector start-ups
Investment quantum	Not Applicable
Stakeholder	Primary: TIDCO, Tamil Nadu Infrastructure Fund Management Corporation, Micro, Small and Medium Enterprises Department



E(II) **Creating tracking and monitoring infrastructure**

S. No.	45.
Measures to be taken	Chennai and Kamarajar Port Authority will undertake feasibility assessment for technology enabled platform for development of truck ticketing system to optimize port gate operations. The GoTN will facilitate the implementation of the same through provision of land parcel for parking/holding area for trucks.
Outcome/KPI	• Feasibility of truck ticketing system
Investment quantum	Not applicable
Stakeholder	**Primary:** Chennai and Kamarajar Port Authorities, **Secondary:** Container Terminal Operators, Chennai Metropolitan Development Authority
Time horizon	☑ **Short term** *(Feasibility study)* ☑ **Medium term** *(Implementation)* ☐ Long term
Initiative by	○ State Government ◉ **Central Government** ○ Joint Initiative ○ Public Private Partnership

S. No.	46.
Measures to be taken	TIDCO will coordinate with the National Logistics Databank System (NLDS) to promote extension of the tracking infrastructure system to key Exim corridors in the state. The Exim corridors to be prioritised in this respect will include: • Hosur to Chennai Port • Coimbatore to Tuticorin Port
Outcome/KPI	• Extension of Logistics Data Bank to Exim corridors in the State
Investment quantum	Not applicable
Stakeholder	**Primary:** Industries, Investment Promotion and Commerce Department (TIDCO) **Secondary:** NLDS

Time horizon	☐ Short term	☑ **Medium term**	☐ Long term	
Initiative by	○ State Government	○ Central Government	◉ **Joint Initiative**	○ Public Private Partnership

E(III) Technology based interventions for monitoring compliances

S. No.	47.

Measures to be taken	The Department of Transport will undertake a study and implement IT based smart enforcement systems and mechanisms through following steps.
	• Installation of digital equipment including traffic cameras, weigh-in-motion cameras, RFID readers etc. on major highways/ corridors in a phased manner.
	• Key corridors to be prioritized for the installation of the equipment are:
	  ○ Hosur to Chennai
	  ○ Coimbatore to Tuticorin
	  ○ Coimbatore to Hosur
	• Acceleration and facilitation of integration of E-way bill data with VAHAN, Fast tag, and E-challan system
	Make available the digital devices/ tools through which the required information (E-way bill data, VAHAN and Fast tag) can be fetched and made available to the enforcement agencies

Outcome/KPI	• Possible options/solutions for implementation of smart enforcement • Implementation of smart enforcement in the state • Integration of E-way bill data with VAHAN, Fast tag and E-challan system
Investment quantum	Rs. 60 – 70 Crore
Stakeholder	**Primary:** Transport Department, Tamil Nadu State Police **Secondary:** Highways and Minor Ports Department, Ministry of Road Transport & Highways, Commercial Taxes and Registration Department
Time horizon	☐ Short term ☑ **Medium term** ☐ Long term
Initiative by	☑ **State Government** ○ Central Government ○ Joint Initiative ○ Public Private Partnership

(F) Enabling skill development in the logistics sector

F I) Initiate courses to skill the workforce across logistics sub-sectors

S. No.	48.

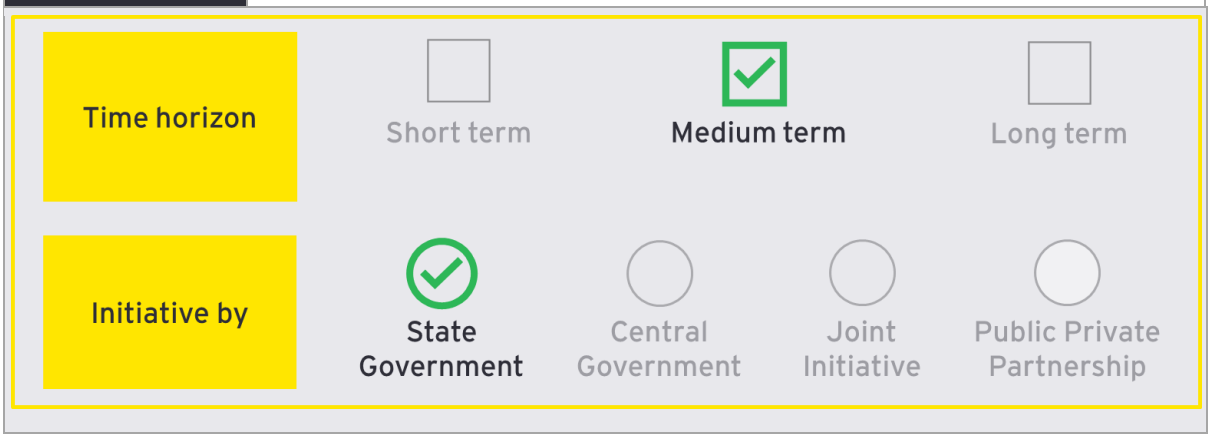
Measures to be taken	The Tamil Nadu Skill Development Corporation (TNSDC) and Labour Welfare and Skill Development Department will identify skill gaps and undertake the following key initiatives in order to accelerate skill development in the logistics sector of the state:
	• Develop course curriculum for high demand job roles with limited availability of formal training in association with Logistics Sector Skill Council and national and state level educational institutions. Amongst other, these will include:
	  ○ Courses on warehousing operations
	  ○ Courses on air cargo terminal operations
	• Develop apprenticeship program in association with private sector player to enable practical training and creating employment opportunities.

Outcome/KPI	• No of new courses initiated to upskill the logistics workforce
Investment quantum	Not applicable
Stakeholder	**Primary:** Tamil Nadu Skill Development Corporation, Logistics Sector Skill Council; Labour Welfare and Skill Development Department

Time horizon	☐ Short term	☑ Medium term	☐ Long term	
Initiative by	◉ State Government	○ Central Government	○ Joint Initiative	○ Public Private Partnership

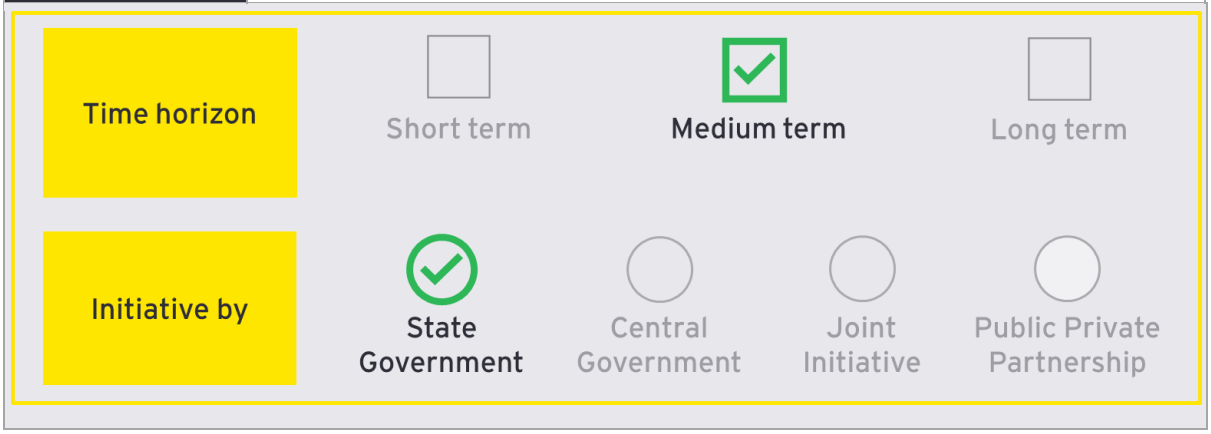
F II) Upskill and recognize existing logistics workforce

S. No.	49.
Measures to be taken	The Tamil Nadu Skill Development Corporation (TNSDC) and Labour Welfare and Skill Development Department will undertake the following key initiatives in order to accelerate skill development in the logistics sector of the state: • Introduce "Recognition of Prior Learning Programme" in partnership with the private sector of workforce engaged in the logistics sector across various job roles. • Explore providing medical and health insurance to heavy vehicle drivers registered in the State at a nominal price
Outcome/KPI	• Operationalisation of "Recognition of Prior Learning Programme" • No. of medical and health insurance registered for heavy vehicle drivers
Investment quantum	Not applicable
Stakeholder	**Primary:** Tamil Nadu Skill Development Corporation, Logistics Sector Skill Council; Labour Welfare and Skill Development Department



F (III) Involve private sector to skill and create employment opportunities

S. No.	50.
Measures to be taken	The Department of Transport will undertake assessment of existing training infrastructure for heavy freight vehicle drivers in the State and identify gaps/ requirement for development of driver training institutes. The Department will leverage Institute of Driving Training & Research (IDTR) scheme of the Ministry of Road Transport and Highway Further, Labour Welfare and Skill Development Department will develop a logistics labour market information system as a repository of details of accredited logistics sector workforce in the State.
Outcome/KPI	• No. of heavy vehicle driver training institutes in the State • Operationalization of logistics labour market information system
Investment quantum	Rs. 100 – 150 Crore
Stakeholder	**Primary:** Transport Department, Labour Welfare and Skill Development Department



SECTION 4: INSTITUTIONAL FRAMEWORK FOR TN LOGISTICS POLICY & INTEGRATED LOGISTICS PLAN

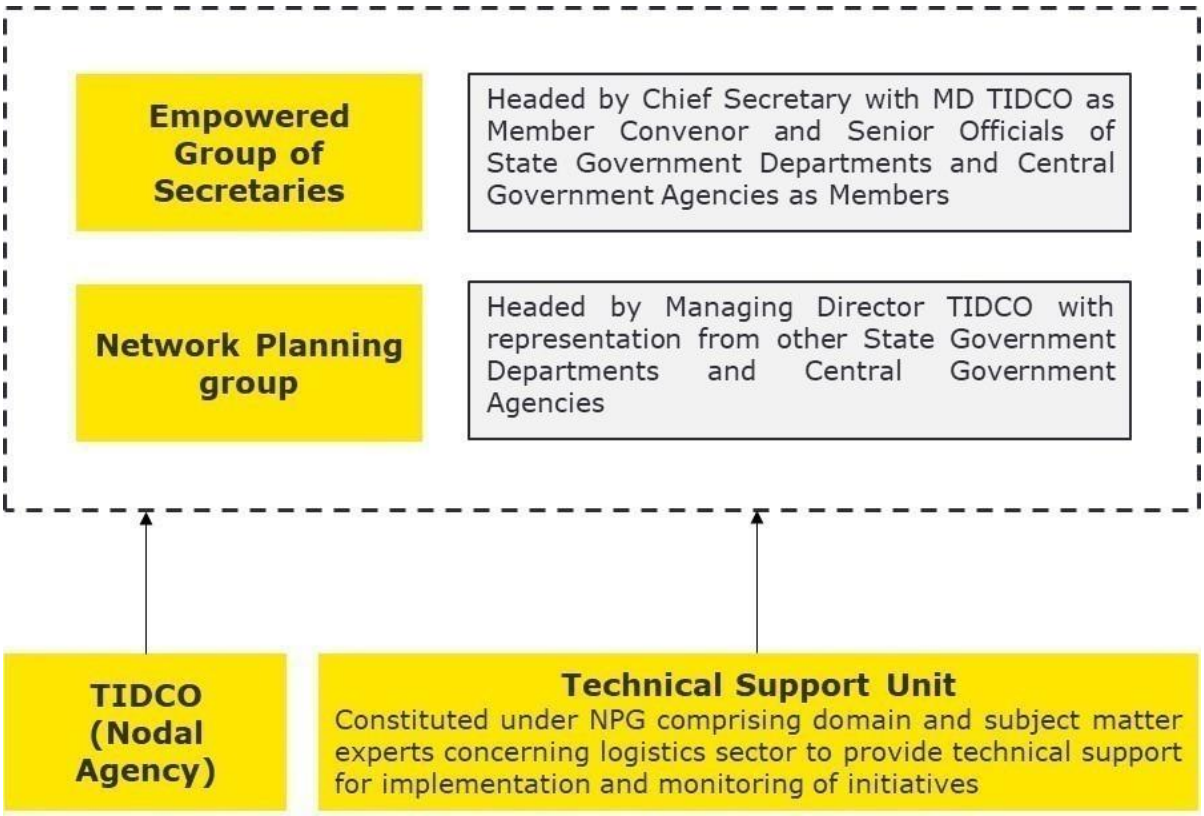
TAMIL NADU LOGISTICS POLICY & INTEGRATED LOGISTICS PLAN

2023

4 Institutional Framework and Mechanism

Implementation of the Tamil Nadu Integrated Logistics Plan, 2023 will be undertaken by leveraging the existing 2-tier institutional framework, comprising an Empowered Group of Secretaries (EGoS) and a Network Planning Group (NPG), created for coordinating and facilitating integrated development of the logistics sector in the State under the PM Gati Shakti initiative.

Exhibit 2: Institutional framework for implementation of TNLP & TNILP, 2023



4.1 Empowered Group of Secretaries (EGoS)

A group under the chairmanship of the Chief Secretary, GoTN was established vide G.O. (Ms). No.78, Industries (MIE1) Department, dated 05.04.2022 with Chairman and Managing Director, TIDCO as the member convener and other members comprising senior State Government officials and designated Central Government officials as provided in the following exhibit.

Exhibit 3: Constitution of the Empowered Group of Secretaries (EGoS)

S.N.	Department/Official	Role
1.	Chief Secretary to Government	Chairman
2.	Additional Chief Secretary to Government, Home, Prohibition & Excise Department	Member
3.	Additional Chief Secretary to Government, Industries Department	Member
4.	Additional Chief Secretary to Government, Water Resources Department	Member
5.	Additional Chief Secretary to Government, Environment, Climate Change and Forests Department	Member
6.	Additional Chief Secretary to Government, Municipal Administration and Water Supply Department	Member
7.	Additional Chief Secretary to Government, Energy Department	Member
8.	Principal Secretary to Government, Revenue and Disaster Management Department	Member
9.	Principal Secretary to Government, Highways and Minor Ports Department	Member
10.	Principal Secretary to Government, Housing and Urban Development Department	Member
11.	Principal Secretary to Government, Tourism, Culture and Religious Endowment Department	Member
12.	Secretary to Government, Micro, Small and Medium Enterprises Department	Member
13.	Secretary to Government, Agriculture and Farmers Welfare Department	Member
14.	Secretary to Government, Commercial Taxes and Registration Department	Member
15.	Transport Commissioner, Commissionerate of Transport	Member
16.	Managing Director & Chief Executive Officer, Tamil Nadu Guidance	Member
17.	Chairman, Chennai Port Trust	Member
18.	Chairman and Managing Director, Kamarajar Port Limited	Member
19.	Chairman, V. O. Chidambaranar (VOC) Port Trust	Member
20.	Regional Director, National Highways Authority of India	Member
21.	Regional Director, Airports Authority of India	Member
22.	General Manager, Southern Railways	Member

S.N.	Department/Official	Role
23.	Development Commissioner, Madras Export Processing Zone (MEPZ)	Member
24.	Chief Commissioner, Tamil Nadu & Puducherry Goods & Services Tax (GST) & Central Excise Department	Member
25.	Chief Commissioner, Chennai Customs Zone	Member
26.	Chief Commissioner, Tiruchirappalli Customs Zone	Member
27.	Chief General Manager, Container Corporation of India Limited	Member
28.	Chairman and Managing Director, Tamil Nadu Industrial Development Corporation Limited	Member - Convener

Secretaries of other relevant departments in the State can be co-opted as special invitees in case subjects related to their departments are to be taken up for consideration by the EGoS. Further, industry associations can also be invited to meetings as Special Invitees for EGoS meetings on need basis.

4.2 Network Planning Group (NPG)

A group under the chairmanship of the Chairman & Managing Director, TIDCO was established as the Network Planning Group with other members comprising State Government officials and designated Central Government officials as provided in the following Exhibit.

Exhibit 4: Constitution of the Network Planning Group (NPG)

S.N.	Department/Official	Role
1.	Chairman & Managing Director, TIDCO	Chairperson
2.	Representative from State Industries Promotion Corporation of Tamilnadu	Member
3.	Representative from Tamilnadu Small Industries Corporation Ltd.	Member
4.	Representative from Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO)	Member
5.	Representative from Highways Department	Member
6.	Representative from Agriculture Directorate	Member
7.	Representative from MEPZ	Member

S.N.	Department/Official	Role
8.	Representative from Commissioner of Police (Traffic Planning Department)	Member
9.	Representative from Chennai Metropolitan Development Authority	Member
10.	Representative from Directorate of Town and Country Planning	Member
11.	Representative from Tamil Nadu Maritime Board	Member
12.	Representative from Department of Industries & Commerce	Member
13.	Representative from Department of Agriculture Marketing & Agri Business.	Member
14.	Representative from Commercial Taxes Department	Member
15.	Representative from Commissionerate of Transport and Road Safety	Member
16.	Representative from Tamil Nadu Guidance	Member
17.	Representative from Chennai Port Trust	Member
18.	Representative from Kamarajar Port Limited	Member
19.	Representative from VoC Port	Member
20.	Representative from National Highways Authority of India	Member
21.	Representative from Airport Authority of India	Member
22.	Representative from Southern Railways	Member
23.	Representative from GST & Central Excise Department	Member
24.	Representative from Chennai Customs Zone	Member
25.	Representative from Tiruchirappalli Customs Zone	Member
26.	Representative from Container Corporation of India Ltd. (CONCOR)	Member
27.	Representative from Tamil Nadu Warehousing Corporation	Member
28.	Representative from Central Warehousing Corporation	Member
29.	Representative from TN Apex Skill Development Centre for Logistics	Member
30.	Representative from District Collectorate, Coimbatore	Member
31.	Representative from Greater Chennai Corporation	Member
32.	Representative from Geology and Mining Department	Member
33.	Representative from Water Resources Department	Member
34.	Representative from Directorate of Environment	Member

S.N.	Department/Official	Role
35.	Representative from Department of Forests	Member
36.	Representative from Chennai Metropolitan Water Supply and Sewerage Board	Member
37.	Representative from Tamil Nadu Water Supply and Drainage Board	Member
38.	Representative from Commissionerate of Survey and Settlement	Member
39.	Representative from Tamil Nadu Disaster Management Authority	Member
40.	Representative from Department of Tourism	Member
41.	Representative from Representative from Archaeological Survey of India	Member
42.	Representative from Tamil Nadu e-Governance Agency	Member

4.3 Technical Support Unit

A unit can also be established under NPG comprising domain and subject matter experts to provide technical support (TSU) to NPG in implementing and monitoring initiatives for development of logistics in the State.

4.4 Tamil Nadu Industrial Corporation Limited (TIDCO)

The Tamil Nadu Industrial Development Corporation (TIDCO) is a Government of Tamil Nadu enterprise that facilitates large industrial and infrastructure projects in Tamil Nadu involving large investments and significant employment potential.

TIDCO has been nominated as the nodal agency for logistics sector in the State by the Government, and such will play a key role in implementation of the Tamil Nadu Logistics Policy and Integrated Logistics Plan, 2023.

4.5 Implementation of the Logistics Policy

The Logistics Policy provides an overarching strategic framework for holistic development of logistics in the State. Implementation of the Policy interventions on

the ground will be undertaken by TIDCO under the supervision and guidance of the EGoS.

TIDCO will be responsible for the following key activities with respect to implementation of the Policy:

- Coordination with various State and Central Government departments and agencies for operationalisation of provisions of the Policy
- Monitoring the progress of implementation of provisions of the Policy across the identified six themes
- To apprise the EGoS on progress of implementation of policy provisions and issues being faced that require intervention
- To implement directions of the EGoS with respect to implementation of the Policy and subjects concerning logistics in the state
- Recommending amendments to the policy from time to time considering emerging trends, requirements and stakeholder inputs

The EGoS will play a key role in implementation of the Policy by way of:

- Giving directions to any of the State Government departments for implementation of the Policy provisions as required
- Reviewing the progress of implementation of Policy provisions across the six themes
- Facilitating interactions and enabling coordination with the Ministry of Commerce and Industry, Government of India and other Central Government Departments
- Undertaking apex level decision making with respect to matters related to the Policy and its implementation

4.6 Implementation of Integrated Logistics Plan

The effective and efficient functioning of the logistics eco-system in the State requires the inter-connected working of a number of agencies, stakeholders and operators.

The Logistics Plan provides specific actions and initiatives to be taken by various stakeholders across the short-term, medium-term and long-term. Further, it also delineates the primary and secondary responsibility for implementation between various stakeholders i.e. agencies and departments, and provides the Key Performance Indicators to enable monitoring and evaluation of implementation of the Plan.

Given that the responsibility for implementation of identified action items is spread across various stakeholders, the Network Planning Group (NPG), chaired by MD TIDCO, will have a key role in implementation of the Logistics Plan.

The NPG will undertake the following activities with respect to implementation of the Plan:

- Development of specific action plans and proposals, and facilitation of integration and synchronisation of transport and logistics infrastructure projects working with members of the NPG
- Facilitate regular and intensive coordination between various State and Central Government agencies and departments responsible for implementation of the action points under the Plan
- Formation of working groups/ sub-committees by nomination of nodal officers from department and agencies for focussed and fast-tracked implementation of the Plan
- Coordinate, monitor and oversee implementation of the Plan
- Liaison with Finance Department and Central Government agencies for enabling appropriate funding sources for key initiatives

- Undertake data collection and preparation of relevant studies with respect to subjects related to the Plan through the support of the Technical Support Unit and /or external agencies

- Recommend updates and amendments to the Plan considering emerging requirements, stakeholder inputs and outcomes of Plan implementation

The NPG will work in close coordination with the following key Ministries, Departments and Agencies (MDAs) for implementation of the TNLP & TNILP, 2023.

Exhibit 5: Key Ministries, Department and Agencies for implementation of TNLP & TNILP

Sr. No.	Policy objective and focus area	Ministries, Departments and Agencies
1	Enabling integrated and robust logistics infrastructure development	▶ Industries, Investment Promotion and Commerce Department ▶ Agriculture and Farmer's Welfare Department (AFWD) ▶ Highways and Minor Ports Department ▶ Municipal Administration and Water Supply Department ▶ Housing and Urban Development Department ▶ Rural Development and Panchayat Raj Department ▶ Indian Railways ▶ National Highways Authority of India (NHAI) ▶ Major Port Authorities ▶ Airport Authority of India ▶ Transport Department ▶ Corporation, Food and Consumer Protection Department ▶ Labour Welfare and Skill Development Department ▶ Animal Husbandry, Dairying and Fisheries Department ▶ Micro Small and Medium Enterprises Department

Sr. No.	Policy objective and focus area	Ministries, Departments and Agencies
		▶ Revenue and Disaster Management Department ▶ Central Board of Indirect Taxes and Customs (CBIC) ▶ Food and Consumer Protection Department
2	Promoting availability of cost-efficient and high-quality logistics services	▶ Indian Railways ▶ Central Board of Indirect Taxes and Customs (CBIC) ▶ Highways and Minor Ports Department ▶ Airport Authority of India ▶ Transport Department ▶ Industries, Investment Promotion and Commerce Department ▶ Agriculture and Farmer's Welfare Department ▶ Major Port Authorities
3	Creating an enabling environment for logistics activities	▶ Department of Municipal Administration and Water Supply Department ▶ Housing and Urban Development Department ▶ Ministry of Road Transport and Highways, GoI ▶ Highways and Minor Ports Department ▶ Tamil Nadu Generation and Distribution Corporation Ltd. ▶ Commercial Taxes and Registration Department ▶ Tamil Nadu State Police ▶ Industries, Investment Promotion and Commerce Department ▶ Transport Department ▶ Labour Welfare and Skill Development Department ▶ Rural Development and Panchayat Raj Department

Sr. No.	Policy objective and focus area	Ministries, Departments and Agencies
4	Inculcating resilience and sustainability in the logistics ecosystem	▶ Industries, Investment Promotion and Commerce Department (TIDCO) ▶ Indian Railways ▶ Housing and Urban Development Department ▶ National Highways Authority of India ▶ Highways and Minor Ports Department ▶ Municipal Administration and Water Supply Department
5	Adopting new age technologies in logistics	▶ Major Port Authorities ▶ Industries, Investment Promotion and Commerce Department ▶ Tamil Nadu Information Technology Department ▶ National Industrial Corridor Development and Implementation Trust (NICDIT) ▶ Micro Small and Medium Enterprises Department
6	Enabling skill development in the logistics sector	▶ Labour Welfare and Skill Development Department ▶ Transport Department ▶ Tamil Nadu Skill Development Corporation (TNSDC)

ANNEXURE 1

TAMIL NADU LOGISTICS POLICY & INTEGRATED LOGISTICS PLAN

2023

Annexure 1: Overview of Tamil Nadu Economy

4.7 State's Economy

Tamil Nadu is India's second largest state economy, accounting for 9.47%[11] of the country's Gross Domestic Product (GDP) as of 2020-21. The Gross State Domestic Product (GSDP) of Tamil Nadu expanded at a healthy Compounded Annual Growth Rate (CAGR) of 10.02% between 2014-15 and 2020-21 viz-a-vis 9.46% for the country, to reach Rs. 19.03 trillion.

The distribution of Gross (State) Value Added (GVA/GSVA) by sector indicates contribution of primary, secondary, and tertiary sectors in the ratio of 13%: 33%: 54% respectively vis-a-vis 20%: 26%: 54% for the country outlining a vibrant manufacturing sector in the State.

Economic activity in the State is largely concentrated in the western and northern regions including Chennai, Tiruvallur, and Coimbatore – districts that contribute more than 5% to the State's GSDP individually.

In line with its vision of accelerated and inclusive economic growth, the GoTN is taking up numerous initiatives and industrial projects in other regions to harness their economic potential.

4.8 Industrial Profile and Priorities

Tamil Nadu, being one of the most industrialized states in the country has a vibrant and diverse manufacturing sector with around 38,131[12] factories which is the highest in the country.

It features among the leading states across several industries such as automobiles and auto components, textiles, electronics, machinery, garments, food processing,

[11] Industries Department, Policy Note 2022-23

[12] Industries Department, Policy Note 2022-2023

chemicals and leather products, among others. Over the years, numerous well-known companies across industries have set up factories in the State.

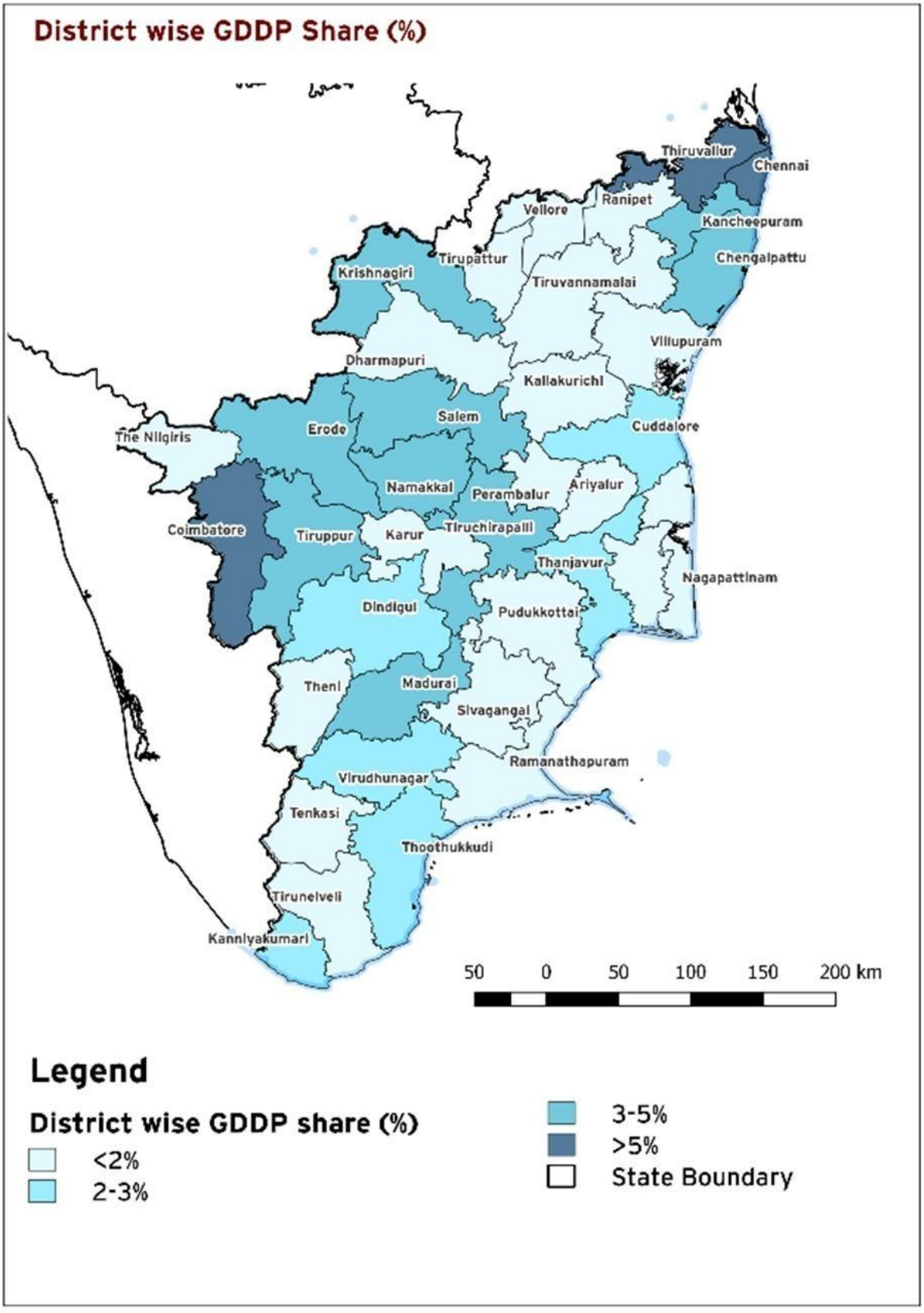
The State is also among the leading states in terms of exports. Major export products from the State include automotive (37% of India's automotive exports), apparel and clothing (45% of India's apparel and clothing exports), machinery (18% of India's machinery exports), electrical machinery and electronics (16% of India's electrical and electronics exports), and footwear (44% of India's footwear exports).

The Government of Tamil Nadu has set a target of for its GSDP to reach USD 1 trillion (~Rs. 76.19 trillion) by 2030. To meet this target, the State has planned to grow the manufacturing sector from USD 48.1 billion in financial year 2020-21 to USD 250 billion in financial year 2030-31[13].

The GoTN has also prepared the Tamil Nadu Export Promotion Strategy 2021 with the goal of increasing exports from Tamil Nadu to USD 100 billion by 2030 from USD 26 billion in 2021. In this context, the State has identified champion sectors to promote exports including Textile & Apparel, Food Processing, Auto & Auto Components, Leather & Footwear, Electronics, and Machinery.

[13] Industries Department, Policy Note 2022-2023

Exhibit 6: Gross District Domestic Product - District-wise share across TN



Source: Information collated and analysed including from public sources

Further, with the vision of making "Tamil Nadu the numero uno destination to invest, innovate and create products", GoTN notified the Industrial Policy, 2021. The Industrial Policy 2021 continues to promote existing focus sectors, which are the drivers of economic growth and development in the State. These focus sectors are Automobile and Auto Components, Chemicals, Electronics & Hardware, Heavy Engineering, Leather, Textiles, Financial Services, and Software.

Additionally, to expand the list of industries in the State, the Government of Tamil Nadu (GoTN) has identified sunrise sectors where investments can be promoted. These sunrise sectors are:

- Aerospace & defence applications
- Agriculture & food processing except edible oil industries
- Renewable energy component manufacturing
- Electronic system design and manufacturing
- Medical electronics, devices, and equipment
- Electric Vehicles, EV Cell & Battery Manufacturing or any green fuel technology such as hydrogen fuel
- Biotechnology
- Pharmaceuticals, Bulk Drugs and Nutraceuticals
- Petrochemicals and Speciality Chemicals
- Footwear, Finished Leather Goods and Polyurethane Fabric
- Technical Textiles including Medical Textiles

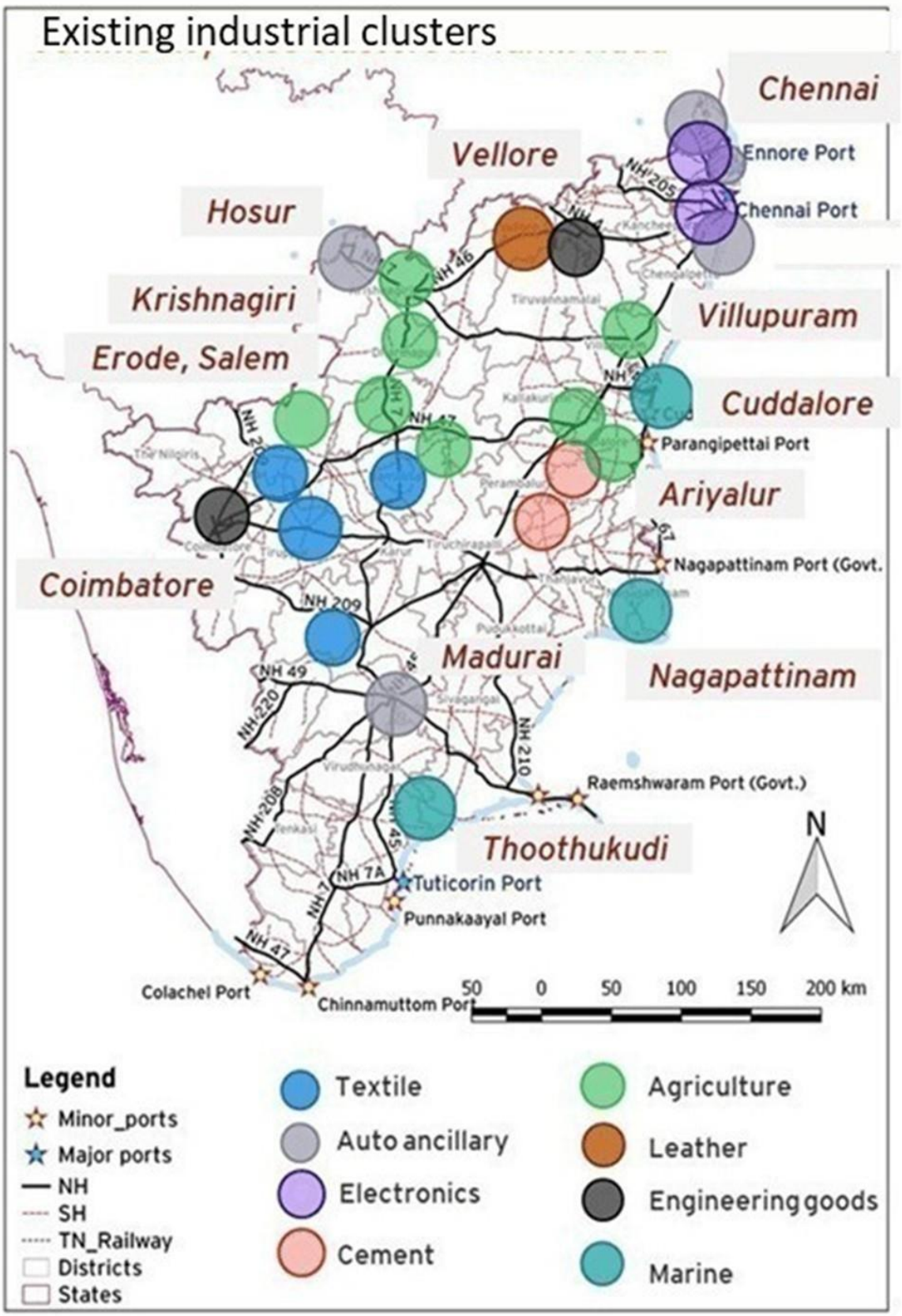
The GoTN has already committed development of several industrial clusters spread across the State.

Tamil Nadu is amongst few states in India that have most of their districts covered under industrial corridor projects. These projects include Chennai Bengaluru Industrial Corridor (CBIC), Chennai Kanyakumari Industrial Corridor (CKIC), Kochi – Coimbatore – Bengaluru Industrial Corridor and the Defence Industrial Corridor projects. Industrial and infrastructural development along these corridors is expected to lead to rapid economic growth. Various industries planned to be developed along these industrial corridors include mobility, armoured vehicles & tanks, space technology, sensors, radars, communication & electronic warfare, Maintenance, Repair, and Operations (MRO), aircraft standard parts & drones, ship & submarine building, steel, textiles, aluminium, and general engineering precision manufacturing etc.

These industrial corridor projects are expected to enable seamless movement of industrial products from various nodes to export gateways (Ports, Airports, and EXIM Terminals) and major consumption centres.

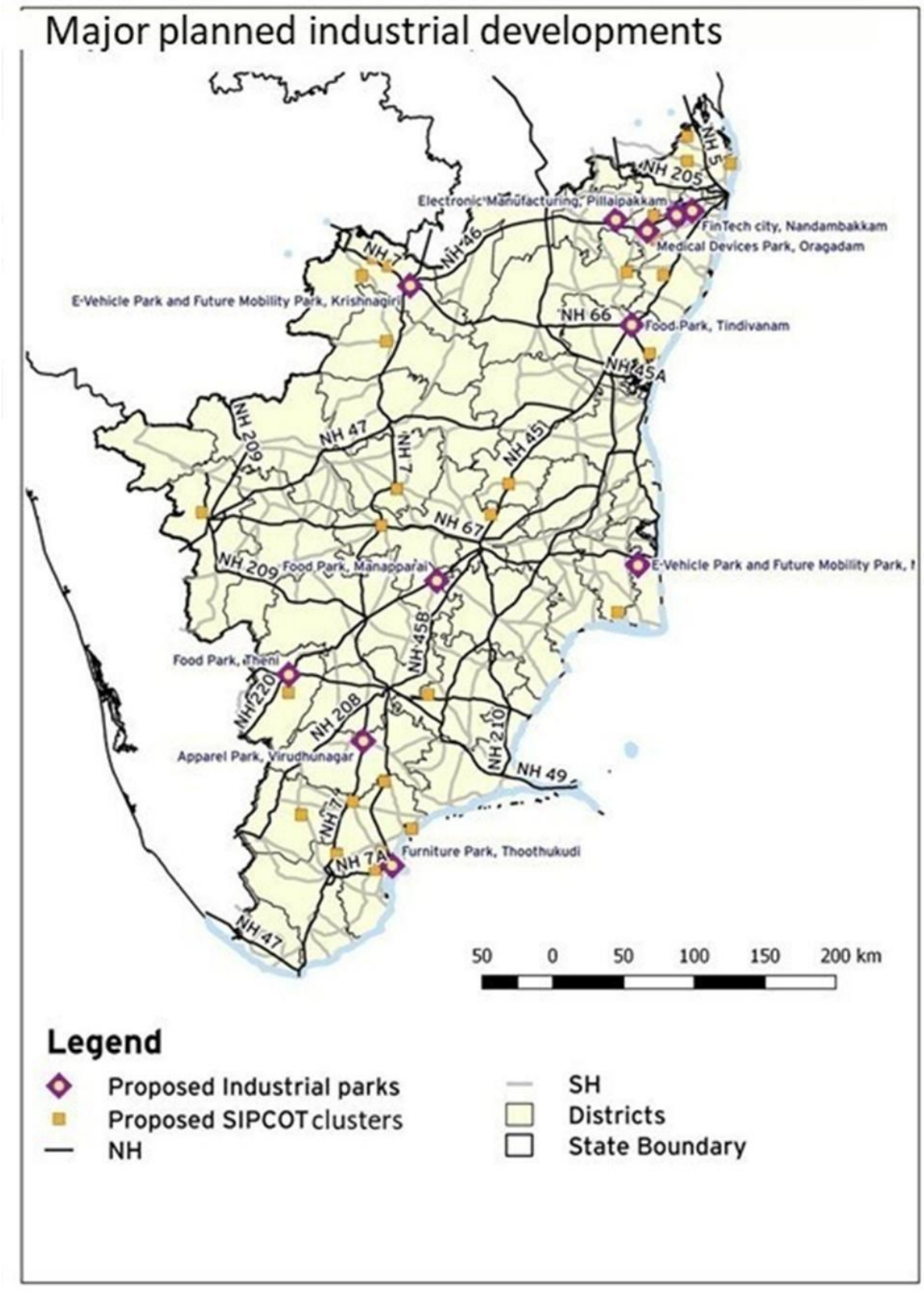
Additionally, these corridors will also connect adjoining states like Karnataka, Andhra Pradesh and Kerala to Tamil Nadu and would help increase the catchment of EXIM terminals beyond the State's boundary by providing state-of-the-art transport and logistics infrastructure and services.

Exhibit 7: Existing industrial clusters/developments in Tamil Nadu



Source: Information collated and analysed including from Industries, Investment Promotion, & Commerce Department, GoTN

Exhibit 8: Upcoming industrial clusters/developments in Tamil Nadu



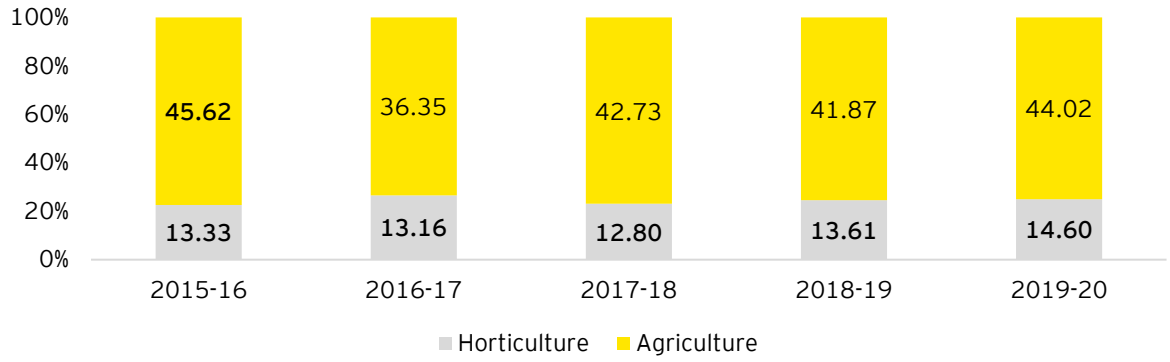
Source: Information collated and analysed including from Industries, Investment Promotion, & Commerce Department, GoTN

4.9 Agricultural Profile

Tamil Nadu falls in a semi-dry sub-humid climatic zone with an area of ~58.62 Lakh Ha under agricultural and horticultural cultivation as of 2019-2020. The area under agricultural cultivation accounts for 75% of the total area under cultivation – with key agricultural products being food grains such as paddy, millets, maize, groundnut, jowar, pulses and cash crops such as cotton, sugarcane and oilseeds. The rest of the area under horticultural cultivation (around 25% of the total area under cultivation) have crops including fruits, vegetables, spices and condiments, medicinal and aromatic plants and flowers.

With the implementation of various State and Central Government schemes, crop intensification and improved agronomic practices for coarse cereals, the production of food grains in the State increased significantly from 75.95 lakh tons in the year 2010-11 to 115.02 lakh tons in the year 2019-20. The State also accounted for 193.68 lakh tons of horticulture production (fruits, vegetables, flowers, medical & aromatic plants), 4.18 lakh bales of cotton, 141.19 lakh tons of sugarcane and 10.75 lakh tons of oilseeds in 2019-20. The following exhibit depicts a snapshot of the trend of agricultural and horticultural production in Tamil Nadu.

Exhibit 9: Area under Agriculture and Horticulture Cultivation in Tamil Nadu (2015-16 to 2019-20)



Note: Numbers in the Exhibit pertain to area under cultivation in Lakh Ha.

Source: Information collated and analysed including from Agriculture and Farmers Welfare Department, GoTN

Exhibit 10: Agriculture and horticulture production in Tamil Nadu (2015-16 to 2019-20)

Year	FY 16	FY 17	FY 18	FY 19	FY 20
Horticulture (Lakh Tons)	166.8	135.9	139.9	166.9	193.7
Food Grains (Lakh Tons)	113.9	52.38	107.1	103.9	115
Cotton (Lakh Bales)	3.27	2.02	4.39	3.20	4.18
Sugarcane (Lakh Tons)	255	189.9	171.5	170.9	141.2
Oilseeds (Lakh Tons)	9.32	6.04	10.38	9.41	10.75

Source: Information collated and analysed including from Agriculture and Farmers Welfare Department, Government of Tamil Nadu

A spatial distribution analysis highlights that the districts of Dharmapuri, Krishnagiri, Namakkal, Salem, Theni, Cuddalore, Villupuram, Kallakurichi, Thiruvannamalai and Erode are major clusters for agricultural and horticultural production.

The State has a number of post-harvest agricultural logistics and marketing facilities including go-downs, cold storages, transaction sheds, drying yards, specialised market complexes and primary processing centers (PPCs), among others – developed by the State and Central Government agencies as well as private sector players. As per the Agriculture and Farmers' Welfare Department's Policy Note of 2021-22, regulated markets within the State have ~469 go-downs with a combined capacity of ~ 5.6 lakh tonnes, ~414 transaction sheds, ~85 traders' shops, ~334 drying yards and ~30 specialised market complexes. As per the Tamil Nadu Agri-Marketing Department, the State has ~194 government owned and 136 privately owned cold storage facilities with an estimated combined capacity of ~ 18,000 tonnes and ~2.3 lakh tonnes respectively. Of these ~44 cold storages are of a capacity of more than 2,000 tonnes – owned primarily by the private sector.

The Government of Tamil Nadu and the Central Government have undertaken several initiatives to develop agricultural processing and associated logistics infrastructure in the State. Development of food parks have been planned at Tindivanam, Mannaparai and Theni to establish large scale agricultural processing and logistics facilities and enhance value creation for farmers in the State. A number

of PPCs are being developed in the State under the Tamil Nadu Supply Chain Management Project. Under the project, ~64 PPCs have been developed across 10 districts, having essential post-harvest logistics and processing infrastructure including go-downs, cold storages, packhouses and processing lines. Depending on the need, some of the PPCs are also equipped with specialised facilities – including individual quick-freezing lines, vapour heat treatment plants and APEDA (Agricultural and Processed Food Products Export Development Authority) accredited packhouses. The project is further being extended to 8 more districts and the works are under progress.

4.10 Enhancing Transport & Logistics

Empirical evidence suggest that efficient logistics characterised by lower costs, shorter lead times and higher reliability have significant impact on the competitiveness of primary and secondary sector value chains for domestic as well as international trade.

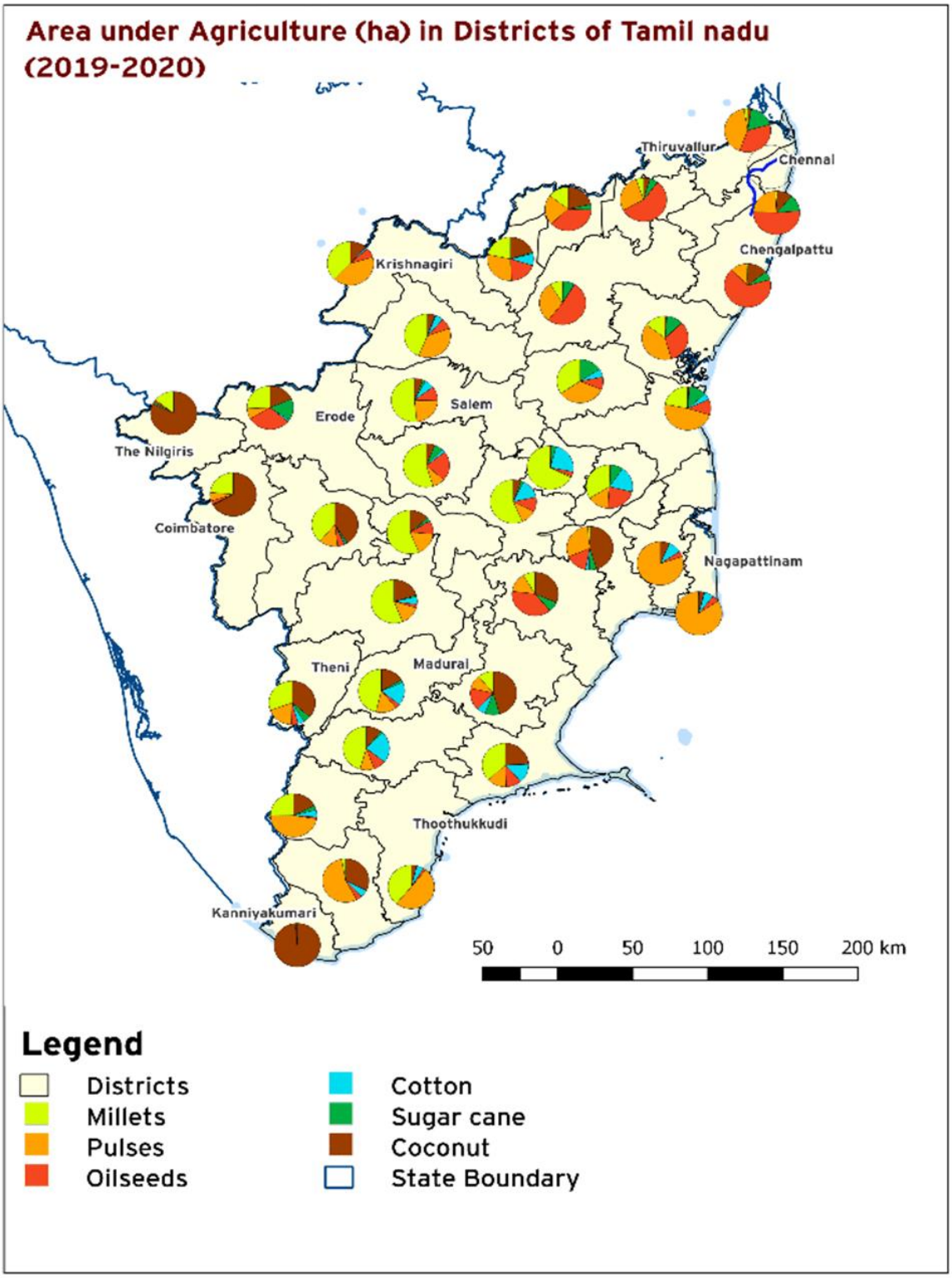
Reliable and cost-efficient supply chains can enable enhanced value preservation/ derivation for agriculture as well as industrial sectors. For instance, while a farmer present in a particular market may otherwise realise a lower share of the value of his produce, with efficient logistics, the same produce can be moved closer to a consumption center – significantly improving the farmer's value derivation, as well as benefiting the consumer on account of lower prices (and potentially better quality). Similarly, with efficient logistics, manufacturing firms can more effectively source raw materials as well as competitively trade in domestic as well as international markets.

At the same time, the potential impacts of inefficient logistics can be indirect/ hidden and yet detrimental to an economy. For instance, a study[14] focussing on the time taken to move containerised products from production sites to the nearest ports suggested that for each additional day, the product was delayed while awaiting

[14] Djankov, Freund, & Pham – **Trading on time -** The Review of Economics and Statistics (2010) 92 (1): 166–173.

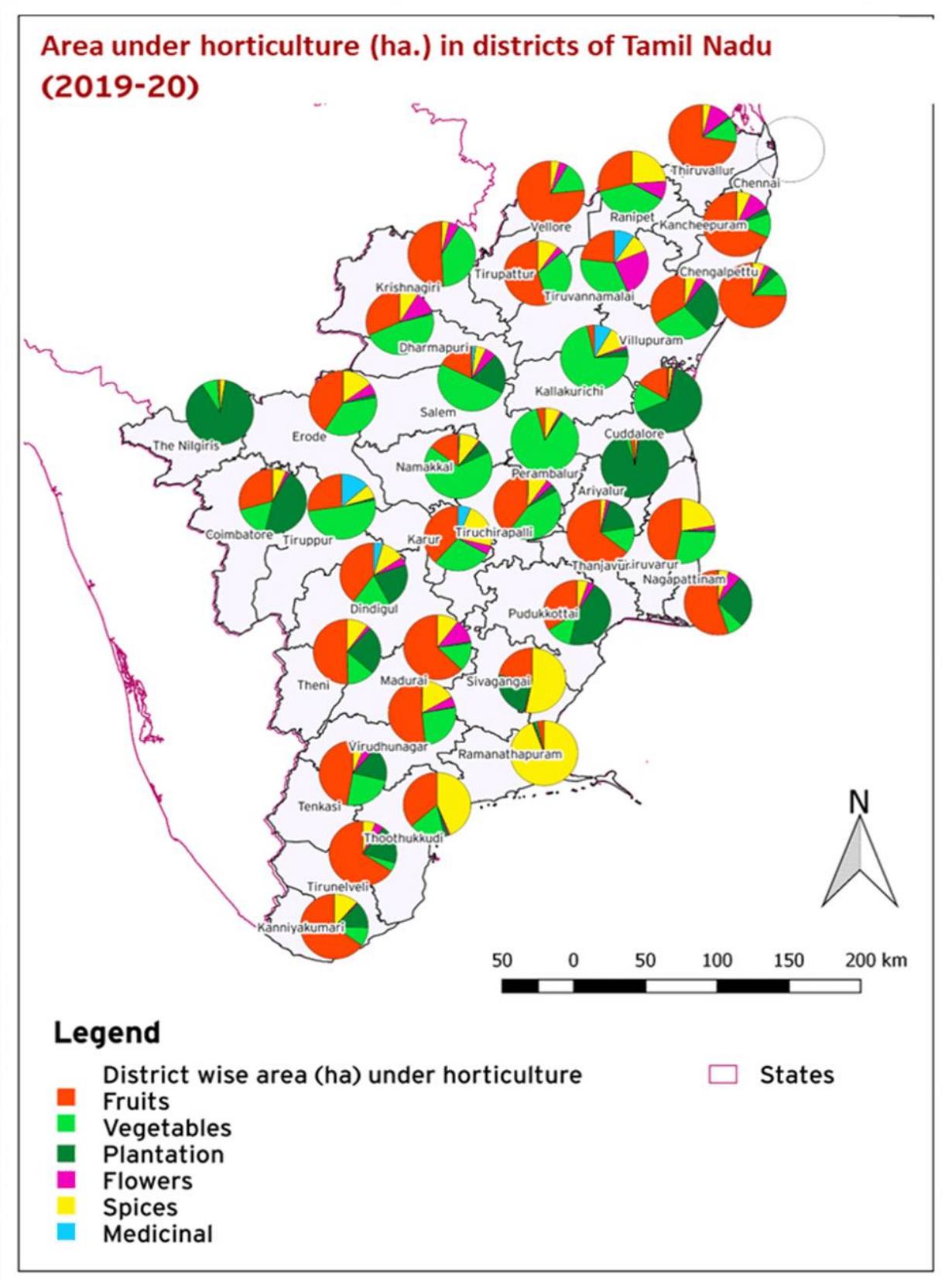
shipment, trade was impacted by more than one percent. Further, another study by the Organisation for Economic Co-operation and Development (OECD) in 2011 suggested that reduction in transportation time by sea by 1 day could increase trade by around 4.5%.

Exhibit 11: District wise distribution of agriculture area by commodity



Source: Information collated and analysed including from Agriculture and Farmers Welfare Department, GoTN

Exhibit 12: District wise distribution of horticulture area by commodity



Source: Information collated and analysed including from Agriculture and Farmers Welfare Department, GoTN

ANNEXURE 2

TAMIL NADU LOGISTICS POLICY & INTEGRATED LOGISTICS PLAN

2023

Annexure 2: Identification of key Policy Levers/ Strategic Themes for Logistics Policy

4.11 Introduction

Globally, the World Bank undertakes preparation of a Logistics Performance Index (LPI) to help countries identify challenges and opportunities in their performance on trade logistics along the logistics supply chain within a country. By comparison and benchmarking with other countries, it also enables countries to analyse ways of improving their logistics performance.

In India, the Ministry of Commerce and Industry developed the Logistics Ease Across Different States (LEADS) Index to measure performance of the logistics eco-systems at a sub-national level – across various states and Union Territories of the country.

The frameworks for preparation of these indices were studied to identify the dimensions considered important for studying and improving logistics performance.

Also, globally emerging themes and good practices in the logistics industry were studied to identify key levers/ themes for bringing about a long-term improvement in the transport & logistics eco-system in the State.

4.12 Logistics Performance Index (LPI) of the World Bank

LPI is based on a survey of logistics operators – multinational freight forwarders and express carriers (companies responsible for moving goods and facilitating trade around the world), and combines the feedback to evaluate logistics performance of countries on six key indicators.

The indicators – identified based on theoretical and empirical research and consultations with logistics professionals, pertaining to two key categories, are[15]:

- Areas for policy regulations (inputs)

[15] Connecting to Compete – Trade Logistics in the Global Economy, 2018, The World Bank

- The quality of trade and transport related infrastructure
- The competence and quality of logistics services
- The efficiency of customs and border management clearance

- Service delivery performance outcomes (time, cost, reliability)
  - The ease of arranging competitively priced international shipments
  - The ability to track and trace consignments
  - The frequency with which shipments reach consignees within the scheduled or expected delivery time

Essentially, the first set of indicators – customs, infrastructure and services, can be seen to cover **areas for policy regulation and strategic interventions** by the government/ public sector that can result in performance of the supply chain in the form of time, cost and reliability indicated by the second set of indicators – timeliness of shipments, competitively priced international shipments, and tracking and tracing.

In the context of international and/ or domestic logistics, 'enabling environment/ regulations' can be seen as the broader and more generalised indicator that can subsume 'the efficiency of customs and border management clearance' for international logistics as well as others like approvals and clearances, law and order, incentives, etc. for domestic logistics.

The indicator pertaining to 'the quality of trade and transport related infrastructure' can be seen to encompass the quality of transport and allied infrastructure (road, rail, waterways, shipping, air transport, cargo terminals, warehousing etc.) as well as soft infrastructure (Information and Communications Technology).

The indicator pertaining to 'the competence and quality of logistics services' captures the important role services play in the delivery of efficient logistics to end users. Cost effective service provision can reduce overall logistics costs for users.

The quality of services provided by operators can in turn be influenced by the extent of competition in the market and availability of skilled professionals.

4.13 Logistics Ease Across Different States (LEADS) Index of the Ministry of Commerce and Industry, GoI

The LEADS index was formulated and launched by MoCI in 2018 wherein the states and union territories were ranked on relative performance of their Exim logistics ecosystem on the basis of feedback of key logistics stakeholders. The index has been evolving to include performance of the logistics ecosystem for domestic freight movement as well as inclusion of select objective (data-based) indicators.

These indicators are summarised below:

(a) Perception based indicators

Perception-based indicators were used to solicit input and feedback from logistics sector stakeholders on the performance of the logistics eco-system in the state/ union territory. The basic structure for LEADS over its three editions, has continued to focus on the three dimensions collectively influencing logistics ease – **Infrastructure, Services, and Operating and Regulatory Environment**.

(b) Objective indicators

Objective indicators – introduced for the first time in the LEADS 2021 edition,

- sought to assess enabling initiatives being undertaken by states / union territories - covering policy, institutional, regulatory, and other initiatives, as well as
- use of available secondary data points - covering availability of logistics infrastructure, services, and facilities across the states.

Based on the above review of the frameworks for preparation of LPI and LEADS, the key strategic themes/ levers for focusing and effecting change with respect to logistics performance can be identified as – **infrastructure, logistics service**

provision and provision of enabling environment for logistics infrastructure & services.

Exhibit 13: LEADS parameters mapped to policy levers and strategic themes

Sr. No	Policy levers and strategic themes for interventions	Leads parameters
1	Infrastructure	▶ Quality of available infrastructure (rail, road , unimodal, multimodal terminals, warehouses and other facilities) ▶ Availability of mobile/internet connectivity
2	Competence, cost effectiveness and quality of logistics services	▶ Quality of logistics services and service providers
3	Enabling environment for logistics activities	▶ Extent of facilitation by state or union territory, ease of obtaining approvals and efficiency of regulatory services (change in land use, Regional Transport Office (RTO), GST etc.) ▶ Institutional mechanism for logistics sector ▶ Policy initiatives – policies and plans, subsidies and incentives, skilling and sustainability ▶ Regulatory and operational – Single window mechanism, change in land use, smart enforcement, enabling first and last mile connectivity, grievance redressal mechanism

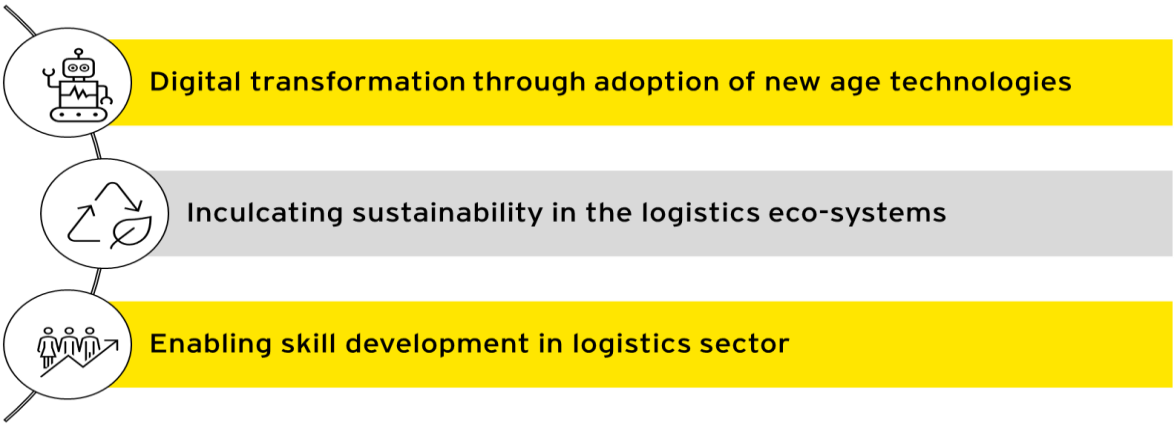
Source: Analyses of the LEADS Report

4.14 Globally emerging themes and good practices in logistics sector

The logistics sector has been evolving and witnessing multiple changes over the past few years. Given the need for the logistics policy and plan for the State to have a longer-term perspective, it is imperative for such trends to be accounted for in the policy and plan.

An analysis of the megatrends and good practices being adopted in the logistics sector across the globe bring out the following key themes.

Exhibit 14: Globally emerging themes and good practices in logistics sector



(a) Digital transformation through adoption of new age technologies

Adoption of digital technology has been one of the most disruptive trends in the logistics sector over the past few years. The sector has been shifting to Logistics 4.0 – a term derived from Industry 4.0 – driving digitisation and technology adoption for automation of logistics activities and networking of components with an ultimate goal of simplifying processes and increasing efficiencies.

Some such technology interventions involve use of big data analytics, Internet of Things and robotics, among others for planning, operations management, inventory management and other relevant logistics activities.

In this context, it would be important for a future-oriented policy and plan to encourage and support the logistics industry to adopt new technologies – especially in the initial stages when the linkage to return on investment could be less clear.

(b) Inculcating sustainability in the logistics eco-system

Environment conservation and sustainability have taken centre stage in policy discussions today. Businesses across the globe have also started focussing on environmental sustainability and have started making efforts to optimize their carbon footprint.

This trend has now also led companies to consider switching to 'greener' supply chains. Though emissions from all logistics activities can be difficult to estimate, the same can be estimated for transport related activities.

Presently, in India, CO2 emissions due to freight transport sector are about 220 million tonnes, with road freight accounting for 95%[16]. Decarbonisation needs to be a priority for governments as well as the industry. Measures for decarbonisation may include interventions such as improved asset utilisation in logistics for storage, transport and handling, shift to greener modes of transport having lower carbon intensity, electrification of urban freight transport and use of alternative fuels, among others. Government support and creating an enabling environment could be of significant importance to encourage and promote this shift in the logistics sector.

(c) Enabling skill development in logistics sector

Although, the logistics industry has undergone significant mechanisation and automation, it is, and is expected to remain largely a manpower intensive business. The sector is furthermore labour intensive at the operational level with extensive involvement of blue-collar workforce. The workforce forms a major input area in terms of logistics services quality which – as outlined above, has been identified as important for high logistics performance.

In 2017, the World Bank and the Kühne Logistics University published a report on skills, competencies, and training in the logistics sector. It drew attention to a common perception that logistics workforce is often in short supply in both developed and developing markets. The difference being that in developing countries, the challenge is with respect to workforce at a managerial level, while in developed countries, it is with respect to blue-collar workforce. One of the key reasons for such a scenario is the low compensation, social security and prestige in blue-collar jobs in the logistics sector (such as truck drivers).

Policy and strategic level interventions are important for enabling availability of skilled workforce in the logistics sector – to enable higher logistics efficiency and

[16] Fast Tracking Freight in India – NITI Aayog

better performance. Furthermore, growth of the logistics sector can generate additional employment.

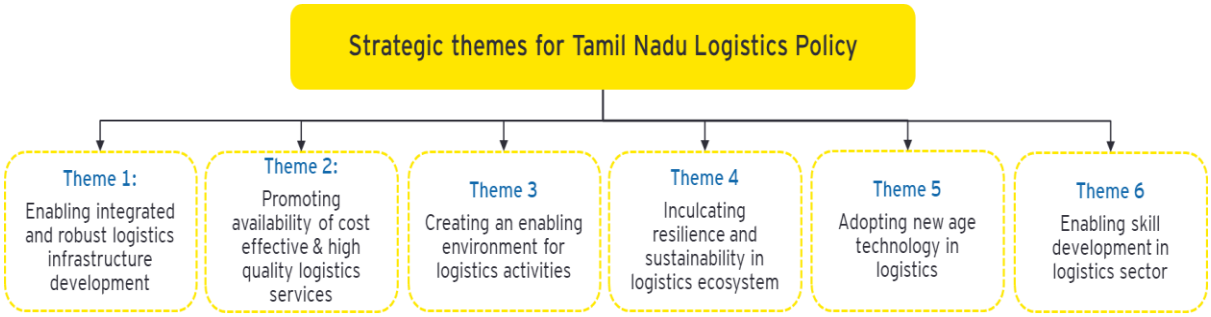
4.15 Strategic themes for TN's Logistics Policy

Based on assessment of the World Bank's LPI, MoCI's LEADS Index and emerging trends and good practices in the logistics sector across the globe, strategic themes and policy levers were identified for the State's logistics policy formulation.

The strategic themes and policy levers were identified such that they not only focus on the key input parameters influencing logistics performance, but also focus on areas important to the development of a future-focused industry.

Accordingly, the Tamil Nadu Logistics Policy focuses on policy initiatives and interventions across 06 strategic themes illustrated in the following exhibit.

Exhibit 15: Strategic themes for Tamil Nadu Logistics Policy



ANNEXURE 3

TAMIL NADU LOGISTICS POLICY & INTEGRATED LOGISTICS PLAN

2023

Annexure 3: Identifying issues, requirements and emerging trends for Logistics Plan

4.16 Overview

A methodical and consultative approach was adopted for mapping existing transport & logistics infrastructure in the State and identifying issues being faced by stakeholders. Towards this end, relevant data was collated and mapped to facilitate a spatial analysis in terms of as-is trunk infrastructure availability, availability of intermodal linkages (railway and road network) and availability of terminal logistics infrastructure across various regions of the State.

Further, logistics costs were mapped for 2 selected Exim freight corridors and 1 selected domestic freight corridor vis-à-vis the logistics value chain of major commodities on these corridors to illustratively study and understand key logistics cost elements and attendant issues.

Along with the above analyses, several stakeholder consultations were undertaken – through one-on-one interactions as well as regional workshops to seek feedback and inputs/ suggestions with respect to issues faced by the stakeholders in accessing and utilising logistics infrastructure and services in the State. The stakeholders included state and central government agencies, logistics operators, developers, and industry users. In addition to the above, observations made under MoCI's LEADS report were also reviewed to assess issues outlined with respect to infrastructure, services and operating and regulatory environment in the State.

Additionally, an assessment of emerging trends and good practices was also undertaken so that the policy and plan can account for the State's logistics sector to be future ready.

4.17 Infrastructure review and stakeholder consultations

Tamil Nadu has a well-functioning logistics eco-system and supports the State's industry. The State has the second longest coastline in the country with the presence of 3 major seaports (at Chennai, V.O. Chidambaranar, and Kamarajar) and

15 minor ports (Kattupalli being the largest developed on PPP). To cater to movement at these ports, several ICDs and CFSs have been developed in the hinterland, serving industries in Tamil Nadu as well as adjoining states.

The State has 4 air cargo terminals at Chennai, Coimbatore, Madurai, and Tiruchirappalli. The State has around 6,600-kilometre network of National Highways, ~11,275-kilometre network of State Highways and 3,852 track kilometre of railway network catering to inter and intra state freight movement. Further, several large transport infrastructure projects are in the pipeline to support economic growth and requirements of the State.

A detailed infrastructure review was undertaken for the State in terms of mapping and study of trunk (railway and road network) and terminal infrastructure for goods transport. This was based on:

- Collection and analyses of data from a number of agencies as well as information in the public domain
- Mapping of information vis-à-vis geographical locations/ coordinates

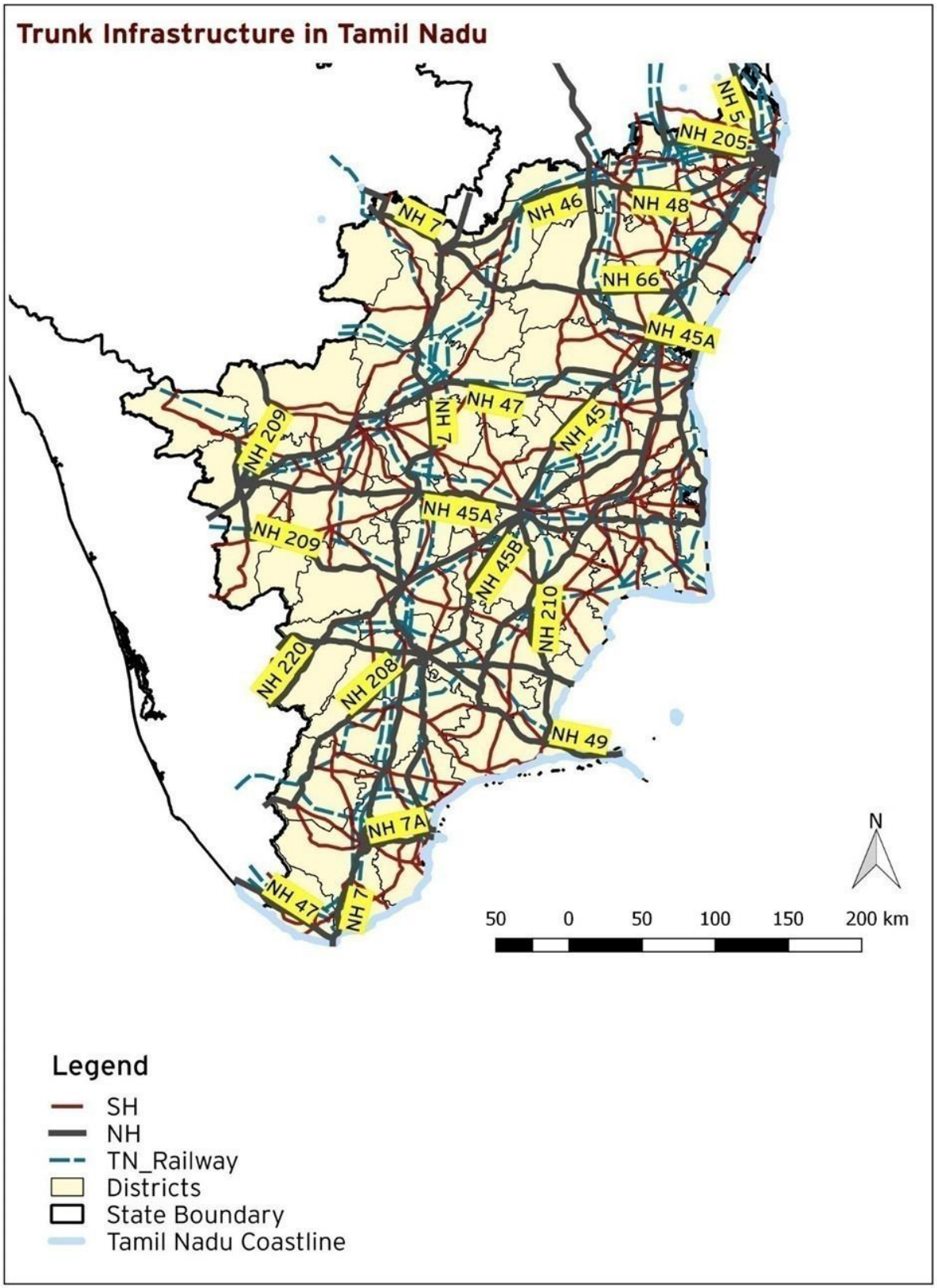
It may be noted that going forward, infrastructure mapping exercise is expected to be substantially supported by using the PM Gati Shakti National Masterplan and Portal.

In summary, the study and mapping of trunk (railway and road network) and terminal logistics infrastructure for goods transport was undertaken as outlined in the following Exhibit. Subsequent exhibits illustrate the results of the infrastructure mapping exercise.

Exhibit 16: Contours of study and mapping of trunk and terminal logistics infrastructure

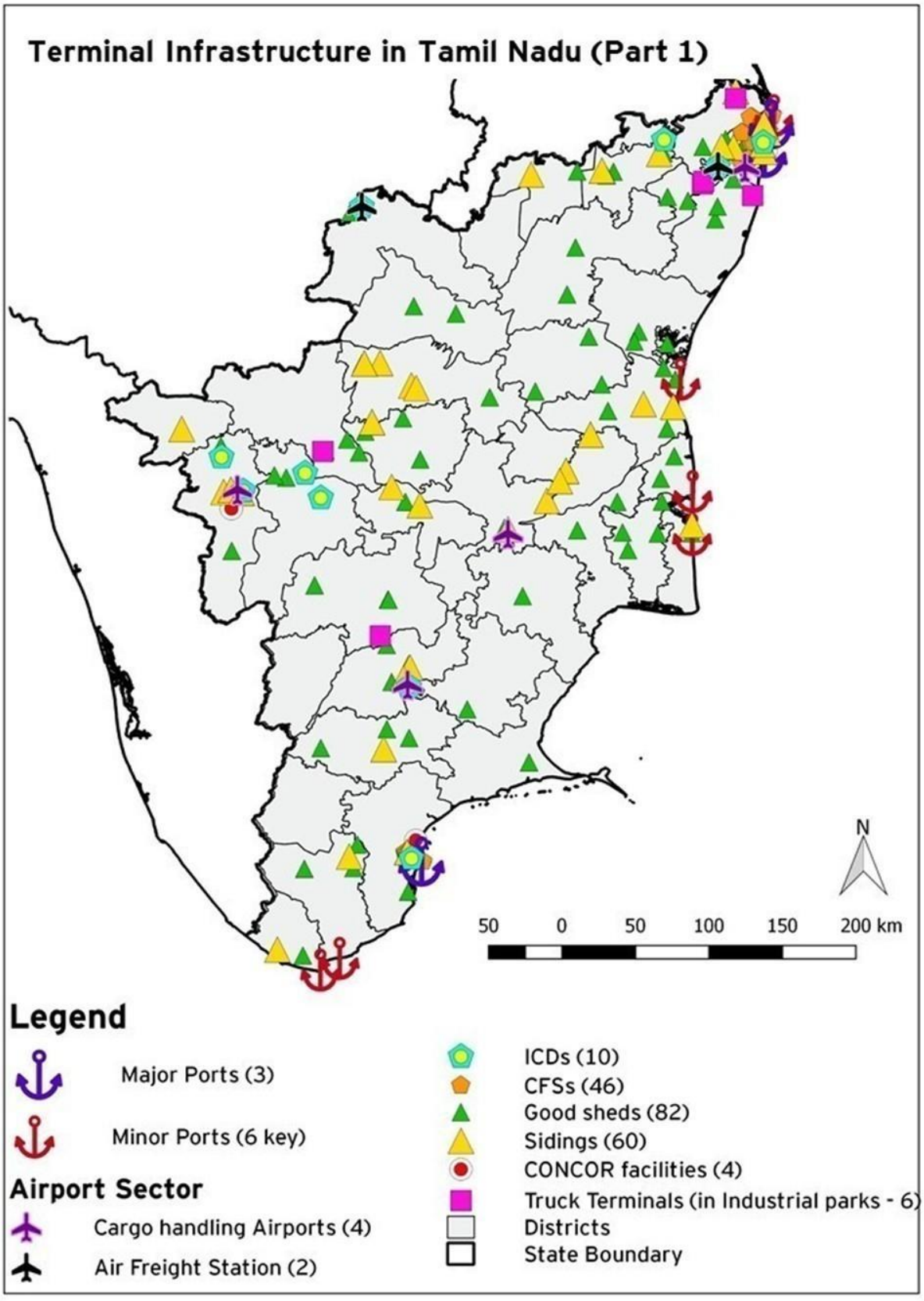
Infrastructure	Aspects studied/ mapped and description
Trunk	Current network – extent and geographical spread/ coverage within the State
	Proximity/ connectivity to key infrastructure/ clusters – ports, airports, logistics parks, industrial clusters/ freight generating locations
	Existing and Planned Projects
	Potential/ required projects & interventions for capacity expansion
Terminal	Spatial distribution of terminals
	Existing capacities of terminal Infrastructure and upcoming connectivity projects
	Potential/ required projects & interventions for capacity expansion and connectivity improvement
	Other measures needed

Exhibit 17: Trunk logistics infrastructure in Tamil Nadu



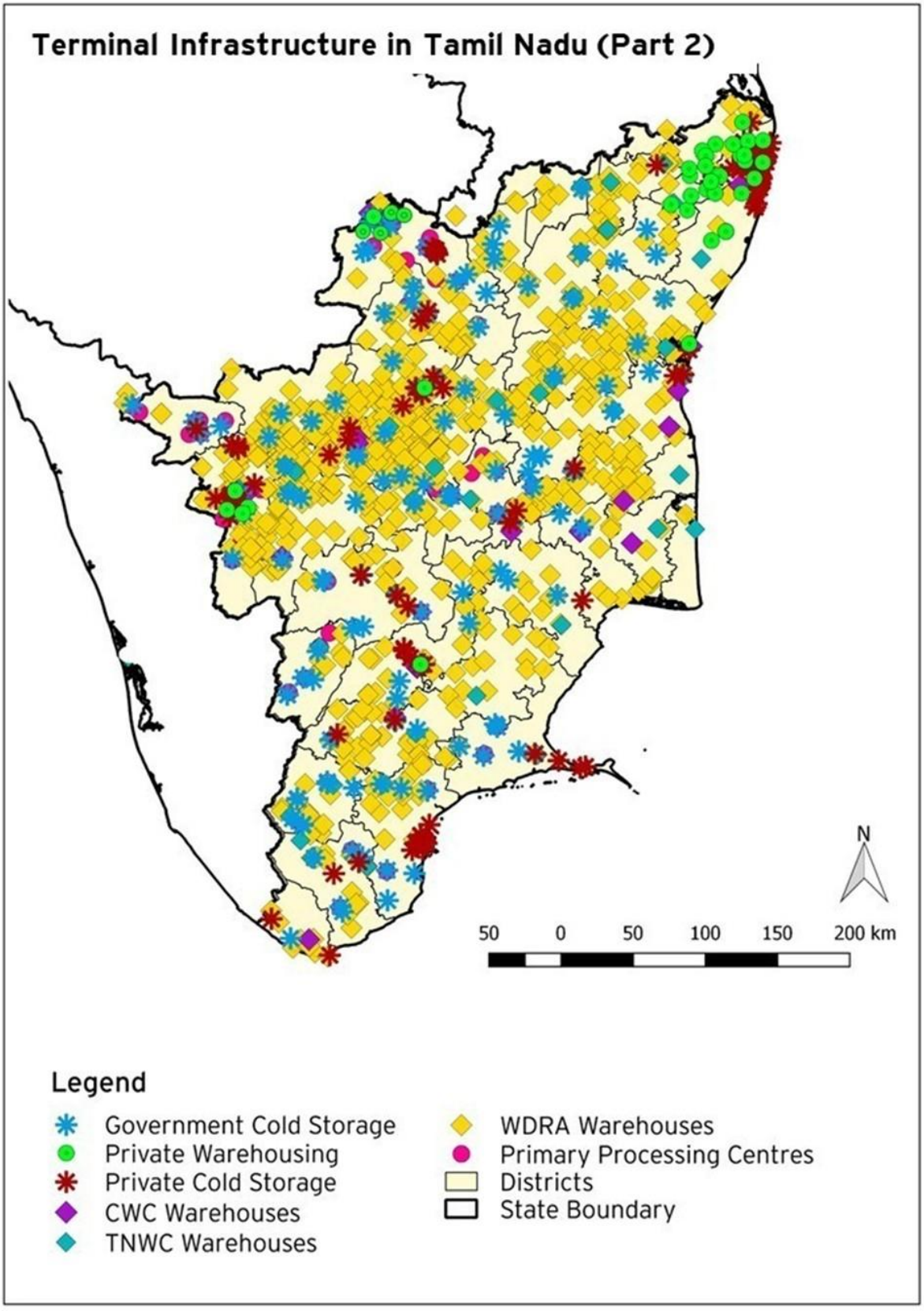
Source: Information collated and analysed including from Highways and Minor Ports Department, GoTN, National Highways Authority of India, and Indian Railways

Exhibit 18: Terminal logistics infrastructure in Tamil Nadu (Part 1)



Source: Information collated and analysed including from Highways and Minor Ports Department, GoTN, Industries, Investment Promotion and Commerce Department, GoTN, Major Port Authorities, Airport Authority of India, and Indian Railways

Exhibit 19: Terminal logistics infrastructure in Tamil Nadu (Part 2)



Source: Information collated and analysed including from Agriculture and Farmers Welfare Department, GoTN, Central Warehousing Corporation, Tamil Nadu Warehousing Corporation, Warehousing Development and Regulatory Authority, GoI and public sources

Based on the present status of logistics eco-system in the State and considering its context of industrialisation as well as focus on further industrial and economic growth, potential issues needed to be addressed were identified and are summarised in the following exhibit. This exercise was based on:

- Studying of extent of trunk, terminal and other infrastructure coverage as well as inter-modal interface across various regions of the State by overlay of various GIS layers of information collated
- Site visits to select locations
- Multiple stakeholder consultations with government agencies, logistics players and user industries on – infrastructure availability and quality; availability, cost effectiveness and quality of services; operating and regulatory environment for logistics in the state.

Exhibit 20: Summary of infrastructure review, site visits and stakeholder consultations

Component	Potential issues
Railway network (Trunk Infra)	• High-capacity utilization of railway lines with ~30% of the network facing congestion having a capacity utilisation of more than 80%. Some of such corridors include: o Chennai and nearby regions o Coimbatore – Chennai o Erode – Nagapattinam o Chennai – Tiruchirappalli o Salem - Tiruchirappalli • Absence of rail connectivity to seaports like Katupalli port, Cuddalore port • Lack of rail connectivity to the key industrial clusters (Sriperumbudur, Oragadam, Irungattukottai)

Component	Potential issues

Road network
 	
(Trunk Infra)
	• High traffic volume to capacity ratio over stretches on the following key corridors:
	  o Hosur – Chennai Port
	  o Chennai – Tiruchirappalli – Madurai – Kanyakumari
	  o Coimbatore – Erode -Krishnagiri
	• Lack of truck lay bays on some of the major routes
	• Suboptimal first/ last mile connectivity and/ or intersection with road corridors at some of the industrial clusters (Hosur, Orgadam, Sriperumbudur, and irangattukottai) and terminal infrastructure (seaports)

Railway terminal infrastructure	• Railway terminals in the state are largely confined to goods sheds with limited to no availability of storage and other ancillary facilities
	• Access roads to a number of goods sheds are in-sufficient in width and require widening and improvements. These include:
	  o Thanjavur
	  o Walajabad
	  o Melpakkam
	  o Ariyalur
	  o Dindigul
	• Absence of operating Private Freight Terminals leading to limited availability rail linked terminals with superior handling and storage infrastructure

Component	Potential issues
Truck terminal facilities	• Absence of organised truck terminals at many of the SIPCOT clusters and industrial regions (under implementation at some locations) • Absence of truck terminals at high cargo density locations lead to on-street parking of vehicles, decreasing the effective capacity of the roads resulting in congestion
Seaports (Terminal Infra)	• Heavy congestion at road stretches between North Chennai Thermal Power Station to Kattupalli Port and Vaikkadu, Bridge (MFL Junction) to Outer Ring Road Junction (ORR) and MFL Junction to Zero Gate (Chennai Port) Via Manali High Road & Ennore Express Road • Mixed configuration or roads leading to bottlenecks (two and four lane combinations), lack of truck parking facility around Chennai, Kattupalli and Ennore port cluster roads leading to queuing of vehicles on the road • Need to fast track implementation of Maduravoyal to Chennai Port elevated corridor project and extending it to Sriperambudur • Absence of rail connectivity infrastructure at Kattupalli and Cuddalore port
Airport freight terminal infrastructure	• Day time restrictions not allowing 24X7 connectivity to Air Cargo Complex at Chennai Airport • High dwell time at Chennai Air Cargo Complex • Absence of air cargo facility at Tuticorin
Exim logistics terminal	• Congestion at the junctions/ roads connecting EXIM terminals/ ICDs – around 20 CFS served by Vaikkadu Bridge

Component	Potential issues
infrastructure (ICDs/ CFSs)	(MFL Junction) to Outer Ring Road Junction (ORR) that does not have a capacity commensurate to handle the cargo flow • Truck and trailers with port bound cargo in at Chennai port cluster parked along the road decreasing the effective carriageway of the road • Absence of multimodal logistics parks/ terminals with Exim facilities in the state (except CONCOR)
Storage infrastructure (warehouses)	• Low occupancy rate of certain warehouses of Tamil Nadu Warehousing Corporation • Lack of modernised warehouses and handling practices, especially in the public sector warehouses • Need of development of warehousing hubs in Tier II and III locations • Lack of data with government agencies on private sector warehousing assets in the state with warehouses being treated as commercial developments during development registration process
Agriculture logistics infrastructure	• Limited availability of high-capacity reefer vans constraining reach to distant markets • Limited Primary Processing Centres (PPCs) at some of the key horticulture intensive regions • Inadequate infrastructure like ripening chambers, dehumidifier and reefer trucks in rural collection centres leading to huge post harvesting losses
Logistics services	• Air cargo services at the Chennai Airport are adversely affected by lack of 24/7 connectivity

Component	Potential issues
	• Unavailability of mechanised handling facilities and modern storages, especially at TNWC warehouses • High cargo dwell time/customs clearance time at Chennai Airport and seaports • Absence of Kisan Rail services in Tamil Nadu vis-a-vis other states • Non-availability of modern rail linked terminals/storage in the state with heavy reliance on goods sheds for rail services • Limited availability of high-capacity reefer vehicles in the State • High freight tariffs, and lack of adequate storage infrastructure and manpower at ICD Irugur limits its potential • Unavailability of scheduled container rail services in the state except for a few routes by CONCOR • Limited adoption of technology in logistics companies except a few large players • Limited availability of skilled workforce for logistics, drivers for heavy truck movement • There is limited visibility of workforce availability within the logistics ecosystem • Limited penetration of coastal shipping in the state
Operating and regulatory environment	• No explicit notification by the government allowing logistics facilities to operate 24/7 • Absence of single window clearance mechanism for all logistics related activities

Component	Potential issues
	• Panchayat level approvals not available in the existing single window clearance system for warehousing projects • Multiple physical checks of goods carrying vehicles by commercial tax officers/enforcement agencies • Day time restrictions for freight vehicles in urban areas especially like Chennai increases the logistics time and cost for cargo movement • Clearances/approvals for the movement of over dimensional cargo and project cargo is time taking • Incentives under Industrial Policy 2021 for logistics facilities that include allocation of land in SIPCOT clusters, are not applicable for relatively smaller logistics development especially in tier II and tier III cities • Maximum permissible height for warehousing development is lower than other states • Imposition of sub-leasing charges in SIPCOT cluster make built to suit warehousing difficult due to increase in costs • There is no grievance redressal mechanism for issues faced by logistics sector businesses

4.18 Review of select freight corridors and learnings from LEADS

As mentioned earlier, Tamil Nadu is India's second largest state economy, accounting for 9.47%[17] of the country's Gross Domestic Product (GDP) as of 2020-21. It is one of the most industrialized states and has a strong manufacturing base of 'champion sectors' – 6 sectors identified by the state government to focus with respect to the State's export thrust. These sectors account for 70% of export of the

[17] Industries Department, Policy Note 2022-23

State and includes automobiles and auto components, textile, food processing, leather and footwear, electronics and communication as well as machinery.

As per a study by the National Council of Applied Economic Research (NCAER), while the proportion of logistics costs[18] with respect to the GVA varies across sectors, it can be substantial proportion with respect to value chain in some sectors. The logistics costs as a proportion of GVA across some of the key sectors in Tamil Nadu are illustrated in the following exhibit[19].

Exhibit 21: Logistics costs as a proportion of GVA for certain sectors

Sr. No.	Sector	Logistics costs (% of GVA)
1	Agriculture and Allied	21.6%
2	Textile, Wearing Apparels and Leather Products	7.91%
3	Consumer electronics, Electronic components including Computer etc.	4.19%
4	Cement	12.97%
5	Machinery and equipment	17.98%

Source: Information collated and analysed including from National Council of Applied Economic Research

Inadequate or inefficient transportation, logistics, and trade-related infrastructure can limit a country's ability to compete on a global scale. Empirical studies suggest that inefficient logistics can raise the cost of doing business and reduce potential of trade growth by 10 to 15% - impacting integration of domestic and international markets.

Accordingly, the study and identification of measures for reduction of logistics costs becomes a key imperative for competitiveness of the industry in the State.

[18] The NCAER report only looks at transport and direct logistics costs, and does not include the inefficiency cost represented primarily by the cost of carrying inventory in the system

[19] Quantifying India's Logistics Costs – NCAER, September 2019

Selecting key freight corridors

To specifically study logistics cost for key commodities and review potential ways of reducing the same, 2 major EXIM freight corridors and 1 major domestic freight corridor were studied. The objective of this exercise was to create a framework for mapping logistics costs on these corridors with respect to key commodities and identify potential issues (as well as measures for reduction) vis-à-vis logistics costs.

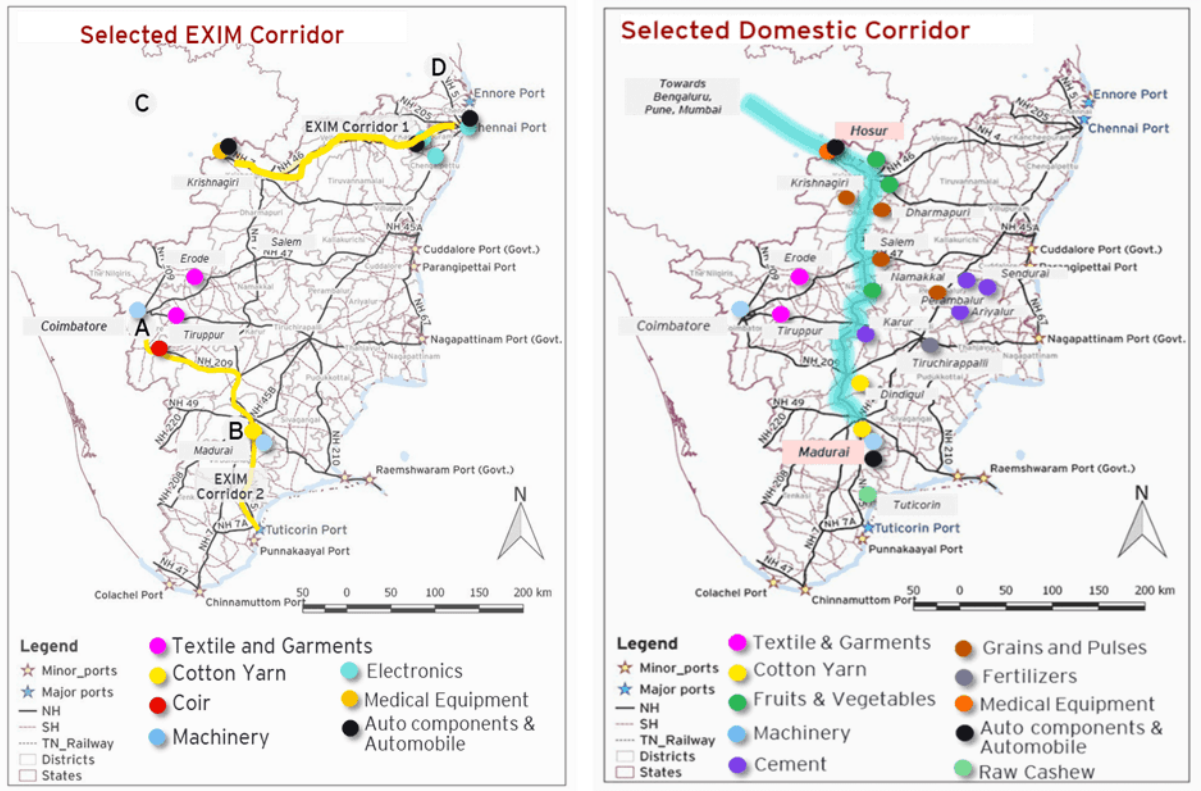
The corridors were short-listed with reference to key industrial and trade clusters contributing to major economic activity in the State and corridors over which freight moves with respect to these clusters.

Trade in Tamil Nadu is supported by three major ports for EXIM trade and a widespread network of rail goods sheds and warehouses supporting domestic trade. The movement of freight to/ from the major EXIM gateways in Tamil Nadu, as well as key interstate and intrastate routes was studied. This was further validated through stakeholder consultations with logistics service providers, transportation businesses, warehouse players, railways, ports and users.

The 2 major EXIM corridors and 1 major domestic corridor finally identified for mapping logistics costs were as follows:

- Hosur to Chennai - EXIM
- Coimbatore to Tuticorin - EXIM
- Madurai to Hosur, Bangalore, Mumbai, Gujarat and Northern States-Domestic

Exhibit 22: Identified Exim and domestic corridors for studying logistics costs



Source: Information collated and analysed including from Industries, Investment Promotion and Commerce Department, GoTN

EXIM Corridors

Hosur to Chennai is a 300 km corridor with significant presence of industries along the route. A diverse range of manufactured commodities move over this corridor – primarily for EXIM trade, including automobiles and auto components, electronics, granite, leather, pharmaceuticals, and machinery with 97% of the movement in containerized form.

In terms of logistics infrastructure, freight movement over this corridor utilizes inland container depots, container freight stations, large warehousing space, and three major ports for EXIM trade – the most important of them being Chennai Port.

The 2nd EXIM corridor connects the Coimbatore cluster to Tuticorin and is 370 kilometer long, with industries alongside including textile and garments, machinery and engineering goods, and cotton yarns.

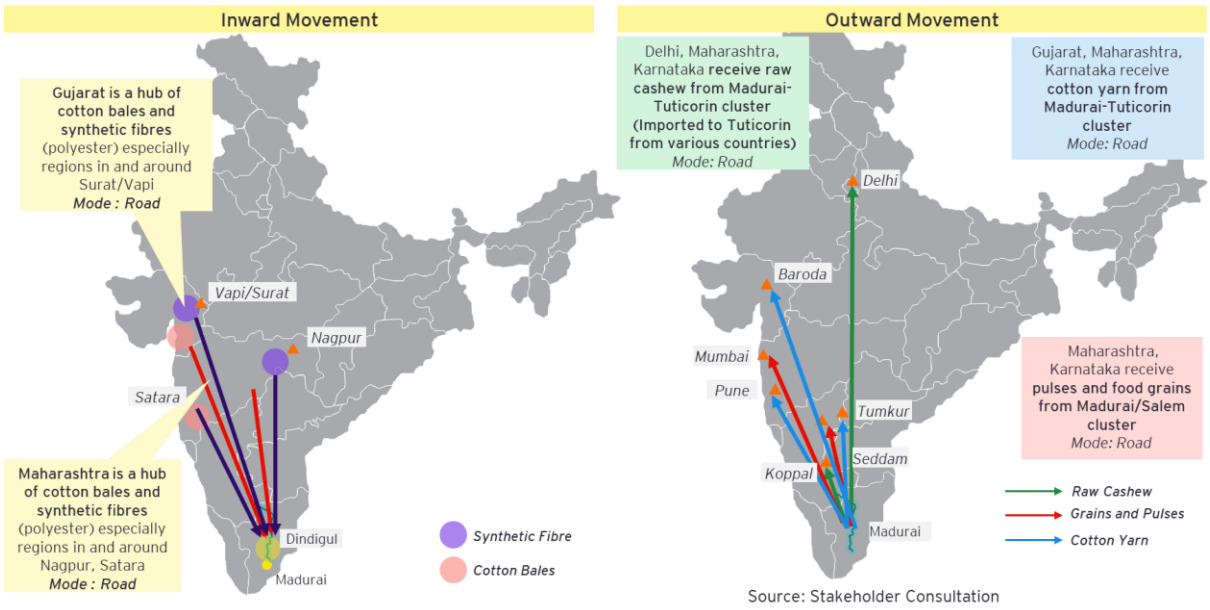
In terms of logistics infrastructure, there are ICDs in Coimbatore region and Madurai, and CFSs near Tuticorin Port which facilitate EXIM trade. Freight movement over this corridor is largely by road on account of shorter (lead) distance.

Domestic Corridor

The identified domestic corridor extends for 420 km between Madurai and the Hosur region. Agriculture produce, cotton yarn, cotton bales, raw cashew, and synthetic fiber are the major commodities that move along the mentioned route.

These commodities move from Madurai to Gujarat, Maharashtra, and other northern states in closed body trucks. Madurai also serves as an aggregation point for industries operating in neighboring districts. Currently, cotton is also moved by coastal shipping from Gujarat to Tuticorin port – however with a low contribution to the overall trade volumes compared to movement by road (coastal shipping taking twice the time taken by road transport).

Exhibit 23: Key Origin-Destination points vis-à-vis the identified Domestic Corridor



Source: Information collated and analysed including from Indian Railways and stakeholder consultations

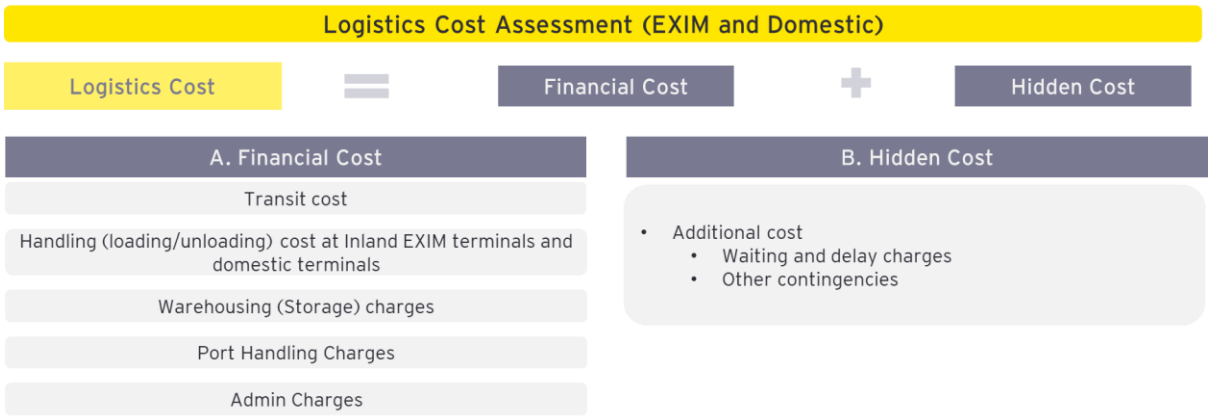
Logistics Cost Assessment

Logistics costs on these corridors were mapped with respect to commodities contributing bulk of the movement on these corridors by mapping value chains of such commodities and identifying attendant costs (direct financial and indirect costs).

Transit, handling, administrative, and storage charges were taken together under direct costs. Indirect costs – extra expenses incurred as a result of delays, traffic, tolls, and other uncontrollable events were identified in terms of potential variability with respect to logistics time.

Inventory costs were not considered in this assessment since they can vary widely based on industry type and nature of trade.

Exhibit 24: Approach for Logistics Cost Assessment

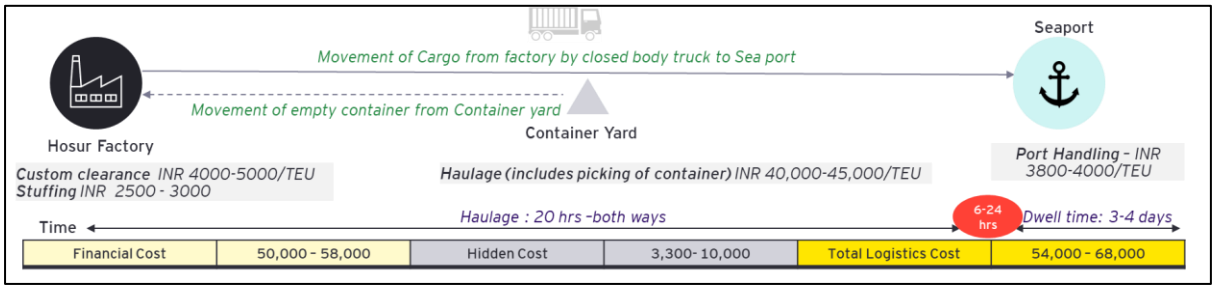


For the EXIM corridors, movement patterns of containers were reviewed in terms of Direct Port Entry/ Delivery, via CFS, and via ICD to the gateway ports. Key issues that came up based on the review of EXIM corridors were associated with higher haulage prices because of empty container repositioning from long lead distances, high waiting time at port entry resulting in (delay) charges, and delays because of congestion at key nodes.

These (delay) charges account for 7% to 15% of the overall logistics cost. The following exhibit illustrates the movement of automobile and automobile

components in containerized form from Hosur region as part of Direct Port Entry movement, in which the exporter has to reposition the empty container all the way from Chennai cluster for stuffing activity at Hosur. This leads to increase in haulage costs due to extra movement of empty container on account of which the exporter has to pay 1.2 times the actual freight. Further, congestion at Chennai port results in waiting time of minimum 6 hours to a maximum of 1.5 days for the trailers to enter the port gate – resulting in high waiting time and associated indirect logistics cost. The subsequent exhibit illustrates the impact of various types of container movements along the selected corridors on indirect costs.

Exhibit 25: EXIM Corridor Direct Port Entry (DPE) Movement



Source: Information collated and analysed including from stakeholder consultations

Exhibit 26: Indirect Logistics Cost

Hosur – Chennai Corridor

Commodity	Combination	Mode	Indirect cost %	
			Min	Max
Auto components	Hosur – Chennai port	DPE	6%	15%
		DPD	6%	15%
	Hosur – CFS - Chennai port	Export	10%	19%
		Import	10%	19%
Auto components / Electronics	Sriperumbudur – CFS - Chennai port	Export	16%	27%
		Import	14%	25%
	Red Hills - CFS - Chennai Port	Export	16%	28%
		Import	16%	27%
Automobile	Sriperumbudur - Chennai port	Export	43%	56%

Coimbatore – Tuticorin Corridor

Commodity	Combination	Mode	Indirect cost %	
			Min	Max
Machinery	Coimbatore - Tuticorin port	DPE	5%	6%
		DPD	6%	10%
	Coimbatore - CFS- Tuticorin port	Export	6%	9%
		Import	4%	7%
	Coimbatore - ICD Irugur- Tuticorin port	Export	4%	7%
		Import	4%	7%
Textile and Garments	Tirrupur/Erode - CFS - Tuticorin port	Export	5%	9%
Coir	Pollachi - CFS - Tuticorin port	Export	6%	9%
Cotton Yarn	Madurai - CFS - Tuticorin port	Export	7%	11%
Waste paper	Tuticorin port - CFS - Coimbatore	Import	6%	10%
Wooden Logs	Tuticorin port - CFS - Dindigul/Madurai	Import	6%	9%

Source: Information collated and analysed including from stakeholder consultations

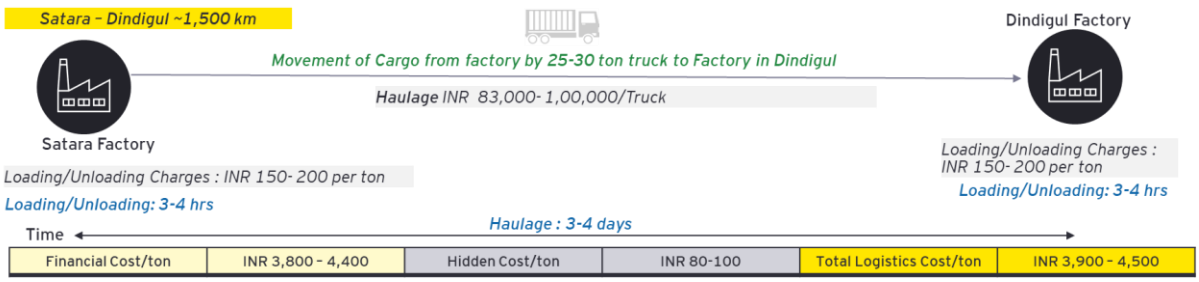
For the domestic corridor, cargo movement by road was reviewed along with the role of warehousing and other aggregation points along the value chain. Given the nature of cargo being moved – commodities moving along the corridor being time sensitive, where multiple handling was not generally required, movement by road was found to be the most preferred option due to reliability of service and no requirement for inter-modal handling.

It was also observed that the trade quantum was directionally imbalanced on this corridor due to which trucks had to return empty or wait for a few days at the destination to attract return cargo. This impacts the overall logistics costs due to higher haulage charges and other hidden costs.

The following exhibit illustrates how cotton bales are predominantly moved from various cotton-producing districts around Satara to industrial estates manufacturing cotton garments in Dindigul. The overall trade cycle takes around 3 to 4 days, and the cotton bales are transported in a 25-30 tonne truck from the factory near Satara to the facility that manufactures cotton clothing in Dindigul. Road transportation was being preferred by users given the time-sensitive nature of demand. Also, for certain products/ cargo types, users wanted to avoid multiple handling – inherent in transportation by rail, in order to avoid losses.

Analysis suggests that with increase in the (lead) distance, haulage cost (per ton/km) generally reduces. However, it was observed that for certain OD pairs, the co-relation was inverse due to absence of return cargo volumes – because of which transport companies were seeking higher tariffs on haulage to cover up costs for empty movement.

Exhibit 27: Domestic Corridor Movement



Source: Information collated and analysed including from stakeholder consultations

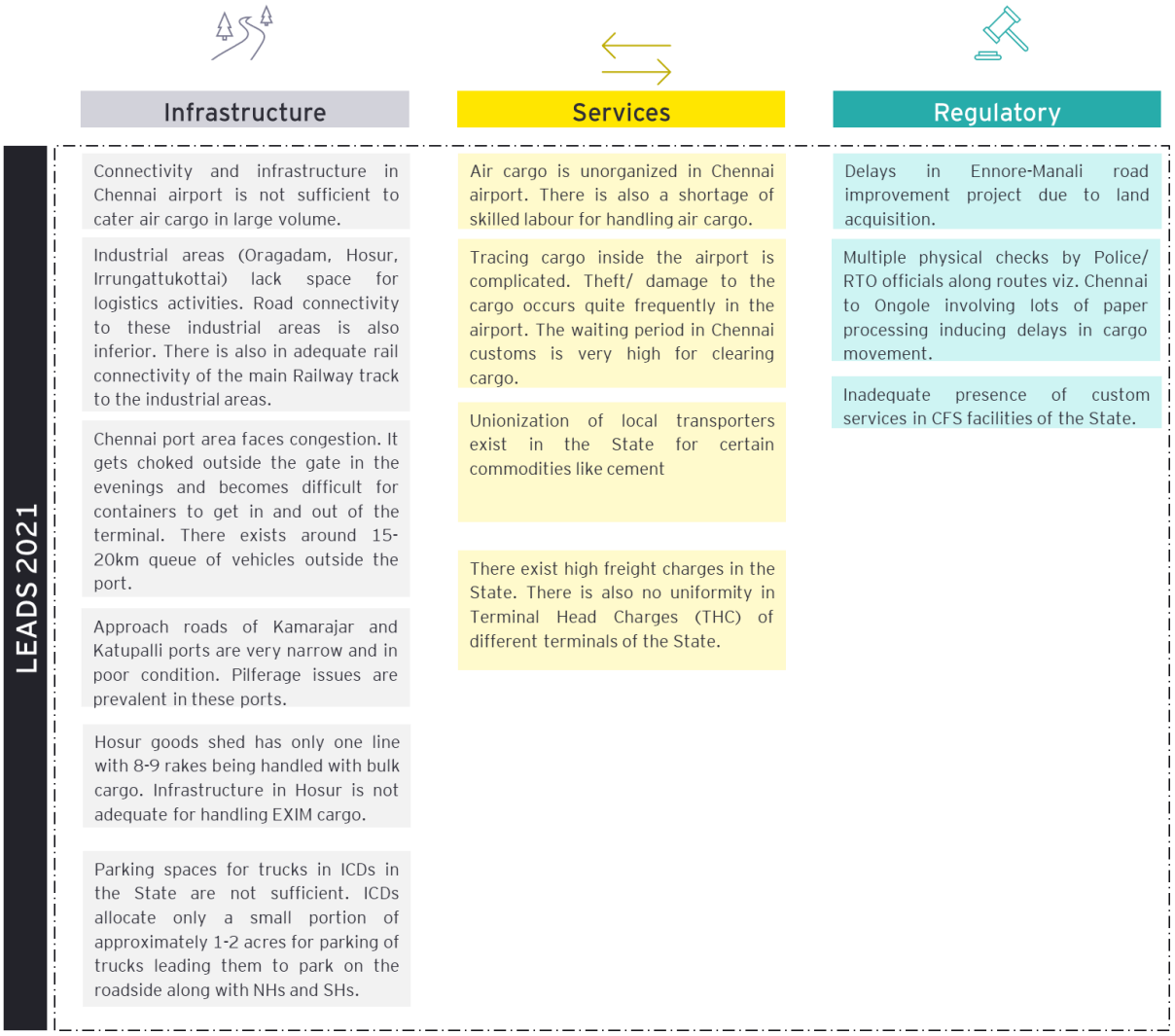
The use of alternative modes of transport was reviewed and it was found that use of coastal shipping and rail could entail cost reduction of ~20-27% when compared to road transportation, provided that adequate volumes were available for movement between the specific Origin-Destination (OD) pairs. Coastal shipping could provide economies of scale and cheaper transportation for large volumes. However, due to lack of return cargo volumes, there is an impact on charges – limiting freight movement by coastal shipping.

However, the overall time required for movement of freight by these alternative modes was found to be higher as compared to the time required for transportation by road (and the attendant service reliability).

Learnings from LEADS

Tamil Nadu has ranked 4th in LEADS 2021 ranking, compared to its 5th position in the 2019 edition. Some of the key issues highlighted in the LEADS Report are presented in the following exhibit.

Exhibit 28: Issues highlighted in LEADS Report 2021



Source: LEADS 2021, Ministry of Commerce and Industry

The State has taken several steps to improve performance of the logistics ecosystem including appointment of a nodal agency for integrated development of the logistics sector, granting priority status to logistics etc.

To address issues that involve multiple agencies – including central government agencies, the State Government has constituted a Network Planning Group (erstwhile State Logistics Cell) with representation from State as well as Central Government departments.

To enhance competitiveness for trade as well as improve sustainability of logistics operations, the State could prioritise effecting improvement in service quality and

reliability at the gateway terminals as well as enhancing trunk infrastructure connectivity to industrial nodes.

4.19 Emerging trends

Internationally, technology adoption in the logistics sector has gained traction especially given the issues the logistics sector has faced in recent years. The logistics sector is more inclined now to deploying technology for enhancing efficiencies, building resilience, reducing costs and ensuring sustainability of operations.

The World Bank's Logistics Performance Index report mentions that while low-income countries were mainly focused on logistics infrastructure and facilitation, middle-income countries were focused on improving skills and services. High-income countries, on the other hand, were found to be putting more emphasis on adoption of green logistics and infusion of technology in the existing networks.

The Unified Logistics Interface Platform is an initiative of the Central Government to integrate data from various sources under one umbrella to support improvement of logistics efficiency and reduction of logistics costs. The platform will have the ability to promote Multi Modal Logistics Transport/ efficient operations with integration of digital initiatives of various agencies (Freight Operations Information System (FOIS), Port Community System (PCS), Air Cargo Community System (ACCS), Indian Customs Electronic Gateway (ICEGATE), etc). This platform is also proposed to enable interfaces that enable tracking and tracing concepts towards improving logistics service and reliability.

Progressively, efforts are also being made around the world to explore alternative or improved modes of transport that reduce logistics costs and/ or promote green logistics/ sustainability. In this context, pilot projects for e-highways have been undertaken in a few places. Also, Roll-On Roll-Off (Ro-Ro) services have been experimented with to address specific logistic requirements. Presently, Indian Railways is carrying out such services over select routes.

A few global case studies are summarised below – showcasing efforts to improve logistics efficiency through solutions involving technology adoption as well as adoption of new sustainable solutions.

Global Case Study 1: Truck Ticketing System to reduce Congestion at terminals

The truck ticketing system is an information sharing platform between stevedores/ Terminal operators/ Port and trucking companies, which essentially aids scheduling of truck arrivals at the port to reduce long queues and truck congestion at the yards.

The digital system serves as a central information hub, directing service providers with information to ensure smooth entry into ports and avoiding queuing outside the port gate due to random arrivals. The system allows the ports and terminal operators to set a quota for the maximum number of trucks allowed to enter during a specific per-define time window which are set out based on operational requirements.

This solution can significantly reduce waiting times, lowering one of the components of logistics cost as well as promoting sustainability by reducing vehicular emissions.

The digital initiative has been adopted at the ports of Los Angeles and Long Beach which used a vehicle booking system to control the number of trucks arriving at the terminal at different times of the day. Adoption of the system has improved the truck terminal flow and has reduced the truck waiting time at the Port.

The Port of Baltimore, Port of Vancouver and Port of Hamburg have adopted the use of Truck Appointment system as adopted in the US. The system has also proved to be quite successful in other cargo sectors with adoption at the Vancouver Airport cargo complex where the appointment system coordinates with terminal and trucking companies for efficient transfer of cargo and seamless movement of trucks.

Empirical evidence suggest that adoption of Truck Ticketing System can reduce the indirect cost or delay by 15 to 20% and improve throughput of the terminals.

Global Case Study 2: Green Logistics and E-Highways

Countries in the West are now becoming pro-active towards reducing carbon emissions by adoption alternative systems and fuel technologies on freight carrying systems.

Inland freight movements generally use road transport with road transport having a good market share as compared to rail transport and waterways. Road freight transport faces issues on account of increasing fuel costs, and sustainability. Shifting road freight to transport modes with lower carbon emissions is a complex undertaking that requires flexibility in both approach and solution.

The World Business Council for Sustainable Development (WBCSD) estimates that the global freight volume will triple between 2000 and 2050. Only around one-third of this additional volume can be moved by rail. As a result, CO2 emissions from trucked freight are expected to double by 2050. In this scenario, ensuring that these emissions are reduced as quickly as possible will require initiatives to be taken up with high priority – especially in developing countries.

The European Commission has set an overall target of 55% for greenhouse gas emission reduction by 2030. With an aim to reduce the significant amount of greenhouse emissions, the European Commission came up with two concepts: energy efficiency improvement and shift to alternate fuels.

One of the initiatives that has been piloted over the last few years is Electric Highways (E-Highways) – where a lane is dedicated for movement of trucks which can take electric supply using a pantograph and also on fuel). The technology has been tested in pilot projects in Germany and Sweden.

The first E-Highway in Germany was commissioned in 2017 for a 10 km stretch which is currently operational as part of first phase of a pilot project to determine long-term viability. The project estimates that if 30% of the trucking industry adopt e-vehicles, the country could avoid dumping extra 6 million tons of Co2 along with a saving of $22,000 in annual fuel costs.

Subsequently, two other corridors have been planned with e-highway in Germany. Recently a pilot project at the Port of Los Angles was tested to carry freight traffic using the E- Highway concept which is currently operational under a pilot model stage with the aim to reducing carbon emission and logistics costs.

ANNEXURE 4

TAMIL NADU LOGISTICS POLICY & INTEGRATED LOGISTICS PLAN

2023

Annexure 4: Logistics Plan Investment Quantum for identified three freight corridors in TN

The Integrated Logistics Plan outlines identified interventions, key performance indicators (KPIs), timelines as well as key stakeholders' responsible for their implementation to effectively implement the Logistics Policy measures. The Plan outlines interventions in the short to medium term (2-5 years) as well as the long term (5-10 years) identified as per the initial study. As mentioned earlier, to align with the emerging requirements as well as developments in the industry, the plan will be updated on a rolling basis while also considering outcomes of identified interventions and inputs from stakeholders.

The Plan initiatives and interventions includes ones that require investments for infrastructure creation (trunk, terminal infrastructure as well as required inter-modal connectivity), priority projects undertaken by government for improvement of trade and fiscal incentives/supports as well as ones that are focused on enabling process, regulations and due coordination. Below exhibit showcases the framework for estimation of the envisaged first set of investments under the Logistics Plan.

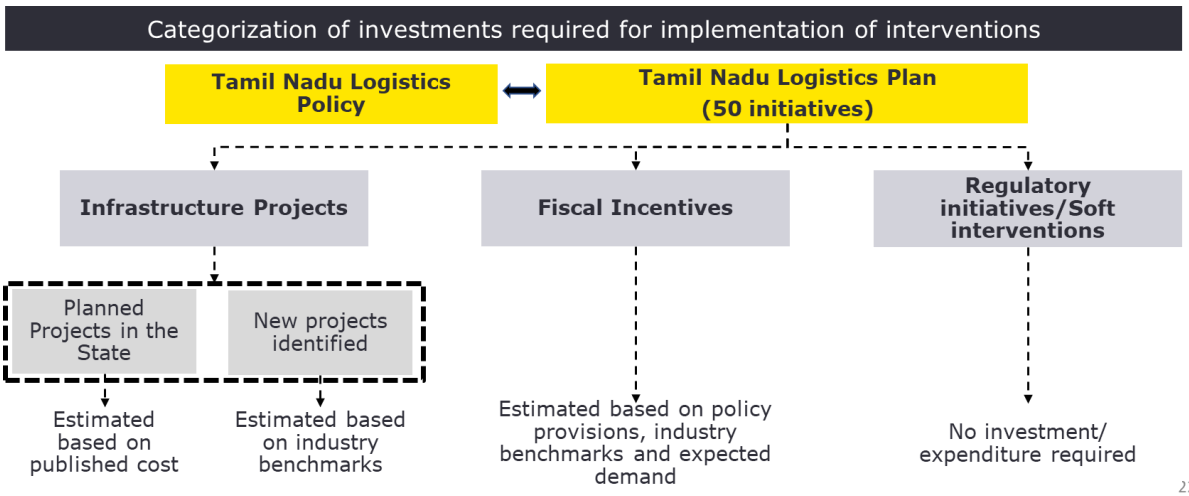
An initial phase investment outlay of ~Rs. 62,541 Crores[20] has presently been estimated based on the assessment carried out for the identified three (2 EXIM, 1 Domestic) freight corridors in the State. The investment outlay will change on addition of interventions as the plan is envisaged to be updated on rolling basis considering emergence of new trends and requirements. Further it is also proposed to conduct detailed study of other freight corridors in the State to identify additional interventions and associated investments.

The Integrated Logistics Plan focuses on 50 interventions across the 6 policy strategic themes over the next 10 years – covering envisaged interventions for creation, augmentation and improvement of trunk and terminal infrastructure, incentivisation/ fiscal support to various segments of the logistics industry as well

[20] The envisaged investment quantum is estimated considering industry benchmarks at 2022 prices excluding the cost of land as applicable

as capacity building. The investment outlay will change on addition of interventions as the plan is envisaged to be updated on rolling basis considering emergence of new trends and requirements.

Exhibit 29 Framework for estimation of investment quantum



The below Exhibit illustrates the estimated investment across key segments of the logistics eco-system in the State.

Exhibit 30: Estimated investment across key segments under the Plan (In Rs. Crore)

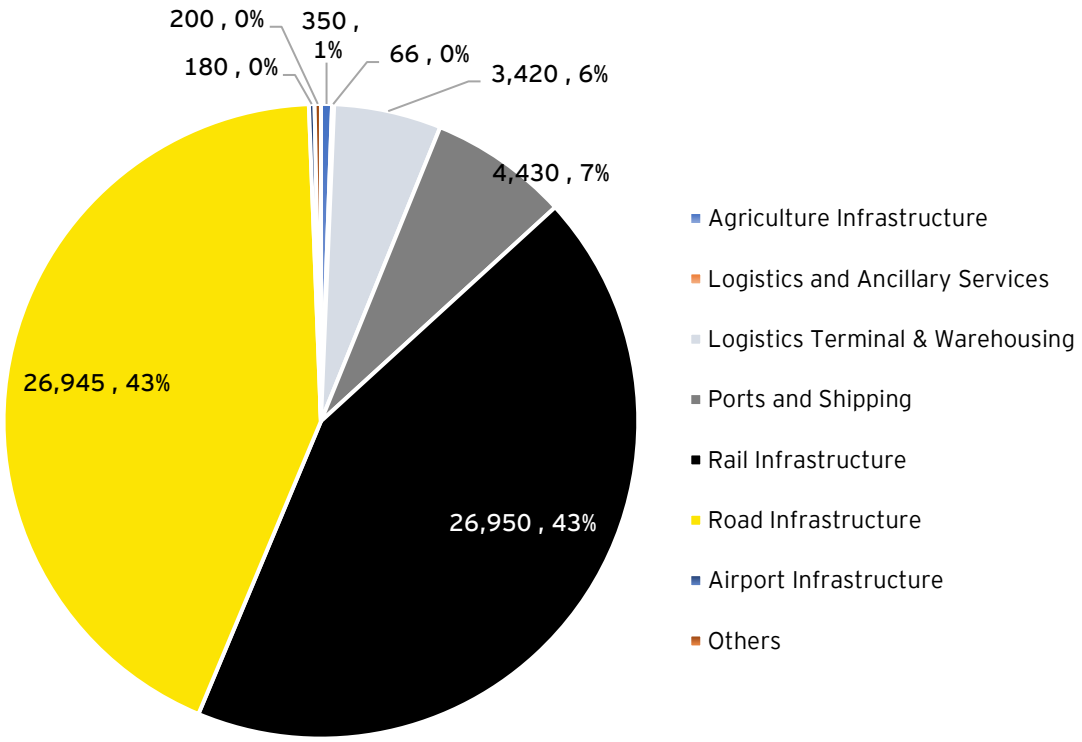
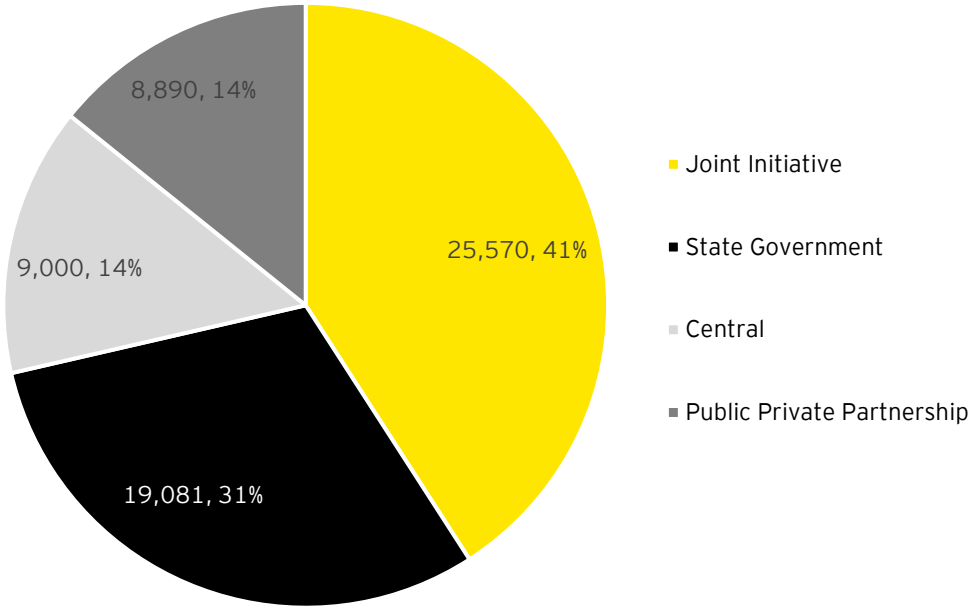


Exhibit 31: Potential sources of investment outlay envisaged for implementation of Plan initiatives (Rs. Crore)



Plan initiatives and interventions identified as being under the purview of the State Government and its agencies have an envisaged investment outlay of ~Rs. 19,081 crore over the next 10 years. The Plan also covers initiatives that would need involvement of the State Government and its agencies as well as Central Government and its agencies – with such initiatives accounting for an investment outlay of ~Rs. 25,570 crore.

Abbreviations

AAI	Airport Authority of India
ACCS	Air Cargo Community System
AFS	Air Freight Station
AFWD	Agriculture and Farmer's Welfare Department
APEDA	Agricultural and Processed Food Products Export Development Authority
ASSOCHAM	The Associated Chambers of Commerce and Industry of India
BISAG	Bhaskaracharya National Institute for Space Applications and Geo-informatics
CAGR	Compounded Annual Growth Rate
CBIC	Chennai Bengaluru Industrial Corridor
CFS	Container Freight Stations
CKIC	Chennai Kanyakumari Industrial Corridor
CMDA	Chennai Metropolitan Development Authority
CONCOR	Container Corporation of India Ltd.
CF & CPD	Cooperation, Food and Consumer Protection Department
DFC	Dedicated Freight Corridor
DPE	Direct Port Entry
DTCP	Directorate of Town and Country Planning
ECBC	Energy Conservation Building Code
EXIM	Export-Import
FAR	Floor Area Ration
FICCI	Federation of Indian Chambers of Commerce & Industry
FOIS	Freight Operations Information System
FTWZ	Free Trade Warehousing Zone
GDP	Gross Domestic Product
GIS	Geographic Information System
GPS	Global Positioning System
GSDP	Gross State Domestic Product
GST	Goods & Services Tax
GSVA	Gross State Value Added
GVA	Gross Value Added
ICD	Inland Container Depots

ICEGATE	Indian Customs Electronic Gateway
IDTR	Institute of Driving Training & Research
IEF	Industrial Ecosystem Fund
IMS	Integrated Management System
ISO	International Organization for Standardization
KPI	Key Performance Indicators
LDB	Logistics Data Bank
LEADS	Logistics Ease Across Different States
LEEP	Logistics Efficiency Enhancement Programme
LPI	Logistics Performance Index
MDA	Ministries, Departments and Agencies
MEPZ	Madras Export Processing Zone
MMLP	Multi-modal Logistics Parks
MRO	Maintenance, Repair, and Operations
MTPA	Million Tonnes per Annum
NCAER	National Council of Applied Economic Research
NHAI	National Highways Authority of India
NICDIT	National Industrial Corridor Development and Implementation Trust
NPG	Network Planning Group
NRP	National Rail Plan
OECD	Organisation for Economic Co-operation and Development
OHSAS	Occupational Health and Safety Assessment Series
ORR	Outer Ring Road
OSR	Open Space Reservation
PCS	Port Community System
PFT	Private Freight Terminal
PHDCCI	PHD Chambers of Commerce and Industry
PMMSY	Pradhan Manttri Matsya Sampada Yojna
PPP	Public Private Partnership
RFID	Radio Frequency Identification
RTO	Regional Transport Office
SIPCOT	State Industries Promotion Corporation of Tamilnadu Ltd.
TANGEDCO	Tamil Nadu Generation and Distribution Corporation Ltd.
TANSEED	Tamil Nadu Startup Seed Grant Fund
TANSIDCO	Tamil Nadu Small Industries Development Corporation Ltd.
TIDCO	Tamil Nadu Industrial Development Corporation Ltd.
TNLP	Tamil Nadu Logistics Policy

TNILP	Tamil Nadu Integrated Logistics Plan
TNMB	Tamil Nadu Maritime Board
TNSDC	Tamil Nadu Skill Development Corporation
TNWC	Tamil Nadu Warehousing Corporation
TSU	Technical Support Unit
ULB	Urban Local Body
ULIP	Unified Logistics Interface Platform
USD	United States Dollar
VOC	V.O. Chidambaranar
WBCSD	World Business Council for Sustainable Development

Industries, Investment Promotion and Commerce Department

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