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# EcoLogistics Principles- Transport Department, Kerala

**DARING  
CITIES  
2020**

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Government of Kerala



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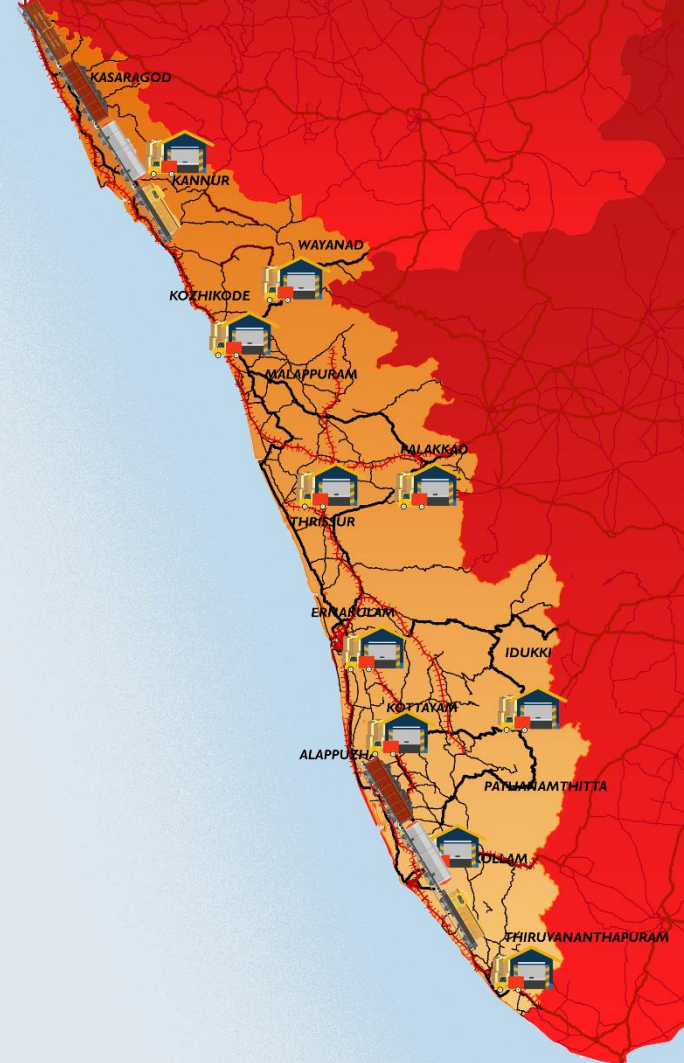
# Transport Network -Kerala

## Road

- Kerala has 8 National Highways (NH) that connects all the major cities and towns within the state.
- The length of national highways within Kerala is 1,524km.
- In addition to National Highways, there are around 50 State Highways with length of 4341.6 Km and district roads 18,900 km.

## Rail

- The rails connect most of the major towns and cities comprising of goods depots in 8 districts except those in the highland districts of Idukki and Wayanad.
- The State has a rail network of 1,257 km length with a total track length of 1,588 km, and operates in total around 72 freight train trips per day.
- Considering the presence of railways infrastructure, significant share of goods getting transported through road is planned to be shifted to rail mode.
- Promoting roll on roll off services by rail mode has become crucial so that vehicle traffic composition, accident rate and vehicular pollution on roads can be reduced.





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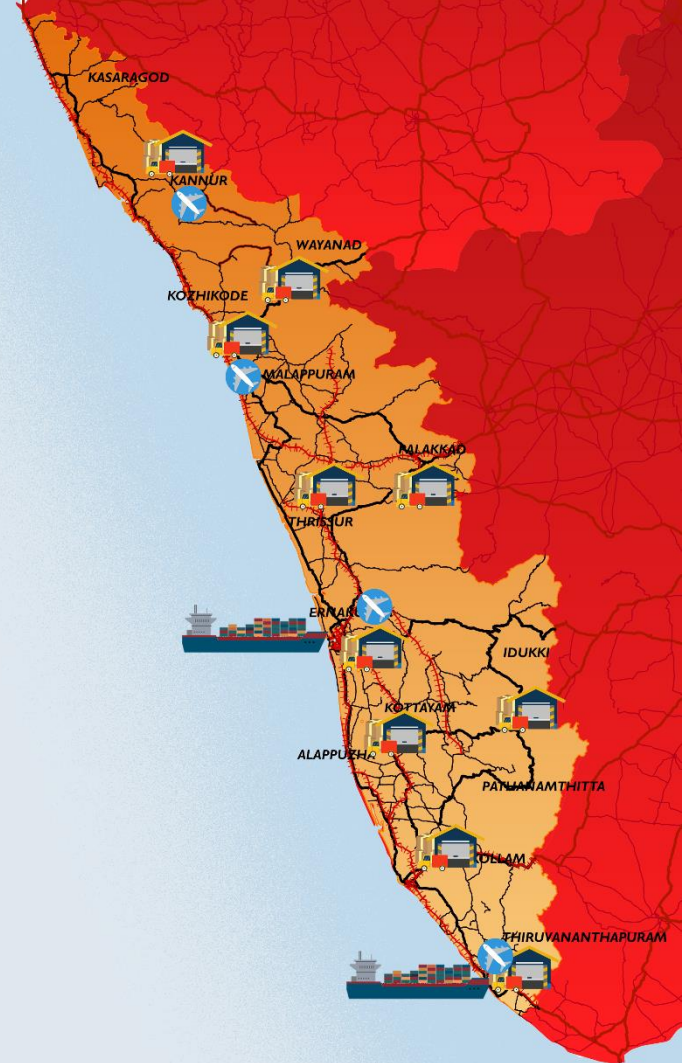
# Transport Network -Kerala

## Air

- Kerala has four international airports namely Cochin International Airport Limited (CIAL), Thiruvananthapuram International Airport, Kannur International Limited and Calicut International Airport.
- Cargo transport is operated from three of the airports which connect to almost all the parts of country and abroad.

## Water

- There are 67 navigable routes in the State. 1687 km of inland waterways and 18 docks with 585 km coastal route. The total length of the waterways in the state is 1895km.
- Kerala has one major port at Kochi, 17 minor ports and an upcoming international shipping terminal at Vizhinjam. Vizhinjam International Transshipment Terminal will be the first deep water transshipment terminal in India.
- Cargo terminals have been set up at nine locations in the state with safe berthing arrangement for inland vessels, storage go-downs, cargo handling equipment, but more needs to be introduced.





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# Institutional Reforms-Freight

Introduction of three new departments at different hierarchy for better management of passenger and goods movement to be set up under Kerala government soon.

## Proposed institutional structure under Transport Department

### 1. Directorate of Mobility

For state-wide planning and Implementation of Mobility programmes

- The Directorate of Mobility is envisioned to act as a think tank and advisory in the area of mobility and as an institution for policy formulation, integrated planning, design of frameworks and overall supervision of mobility improvement programs and projects within the State of Kerala.

### 2. Metropolitan transport Authorities

For coordinated actions on Integrated Urban mobility including Urban Freight

- The MTA's are being set up in three major cities three major cities responsible for the planning, supervision, co-ordination, development and regulation of Urban Transport in the Urban mobility areas with emphasis on both passenger and freight movement.

### 3. Kerala Logistics Ports Ltd

Institution to improve freight transport efficiency, infrastructure and services

- The organization will manage the needs of the logistic sector and development of required infrastructure such as Logistic hubs, IT and communications centre, road assistance units, resting facilities and amenities which will improve transport efficiency, reduce logistic costs, accidents, pollution and congestion on the roads.



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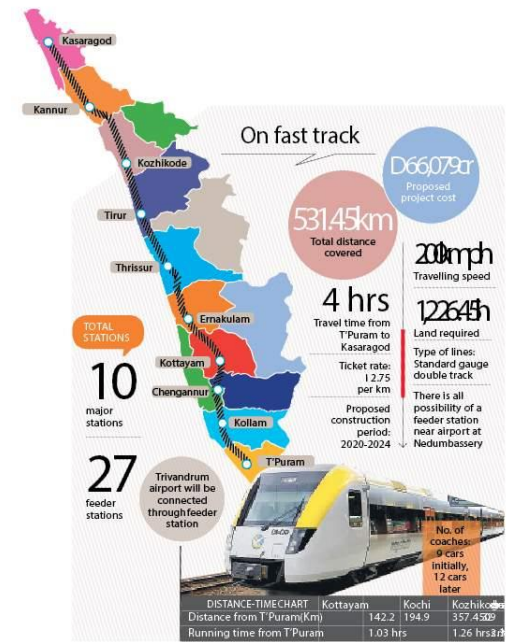
# Multi-Modal Integration

## The silverline project –

- Currently, there's around 2500 trucks bringing in commodities from neighbouring states for consumption in the state and the on-road movement of trucks needs to be reduced over time.
- For achieving this, gradual restrictions will be imposed in a phased manner on inter-district truck movement and alternate transport facilities has to be made for making the goods movement happen efficiently.
- The proposal is to use the rail for passenger movement during the day time and use it as Ro-Ro service for transportation of trucks during the night time throughout the state covering 11 eleven districts.
- The project is intended to become the lifeline for the state but integrating various other modes of transport still is very crucial and for that logistics parks are to be operational in all the major districts.
- It will systematically reduce minimum of 500 trucks moving on road per day. The transport department is facilitating the inter-modal integration

## Existing ro-ro service operated by konkan railways

- The Konkan railway corporation limited (KRCL) has been a pioneer in the concept of Roll on-roll off service in India for 21 years.
- Currently KRCL in collaboration with southern railways have started service between surathkal in Karnataka to Kozhikode in Kerala





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# Multi-Modal Integration

## Proposal for Multi-Modal logistics hub–

- The Kochi city only has one railway station which has a goods depot located in kalamassery mainly catering to transportation of raw materials for construction such as cement, steel etc. with direct connectivity to the national highways, warehousing clusters, industries and transport companies located very near to it.
- The Important Issues that can be observed here is the:
  - under-utilization of the existing railway networks for the transportation of freight, for Multi-Modal Connectivity,
  - Lack of developed infrastructure with required automation to promote warehousing and distribution.
  - Unsafe and dangerous handling of goods for loading and unloading procedures at the rail yards.
- A Multi-Modal Logistics Hub is being proposed for the area, which will serve as a goods interchange facility between rail and road mode with parking and layover facility for the goods vehicles, Provision of resting space and mandatory road safety classes to the drivers intended to reduce road accidents and efficient driving to reduce emissions happening from the freight sector.





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# Multi-Modal Integration

## Introduction of hybrid boats for cargo movement–

- Aditya is a solar-powered ferry operating between Vaikkom and Thavanakkadavu. It is India's first solar-powered ferry and the largest solar-powered boat. Aditya costs about 79 USD per month compared to 2867 USD for diesel-powered ones. In three years the Aditya has saved more than 100,000 liters of diesel.
- The Transport Department of the Government of Kerala has decided to replace all of its 48 diesel ferries with solar ones and plans to introduce such hybrid boats for cargo transportation as well.

## Introduction of Ro-Ro vessels

- It is estimated that around 800 container-laden lorries are using the route every day between the International container Transshipment Terminal (ICTT) also known as DP world and Cochin port.
- To reduce the movement by road, two Ro-Ro vessels have been deployed with shorter travel time and distance to connect DP World (ICTT) with Willingdon island and each of these vessels can carry up to 15 TEU container trailers and need a draft of only 2 metres.
- Another proposal is for transportation of furnace oil around 150 metric tonnes from Kochi to KMML Chavara which has recently completed the feasibility study for inland water transportation

