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A. 'Commuter train is the track to take for future'

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Bangalore is urbanizing on an unprecedented scale and a large number of rural people are expected to migrate mainly to the Bangalore Metropolitan Region (BMR) area. The urbanization process has defined more urban sprawl and a complex transport pattern that present a formidable challenge for urban transport policy-makers.

Addressing traffic problems seems to be the guiding principle of urban transportation policies. Rail transit is a necessary component of a contemporary urban transportation system. Bus, rail, metro, mono rail and suburban rails have all got different uses for commuters.

A variety of transportation strategies such as metro rail, mono rail, LRT, high-speed rail connectivity to the airport and commuter rail have been proposed in Bangalore. Rail transit at grade has the potential to improve the environment, serve the poor and reduce congestion. To combat the traffic, many alternatives to rail corridor such as signal-free road corridors, expressway expansion to the airport, development of underpasses and flyovers are continuously looked for.

A strong and established Indian Railways network exists in Bangalore as a backbone, It is very ideal to exploit this network.

Due to this expanding growth, both in terms of economic activity and urban sprawl, Bangalore gets more population influx and more commuting. Urban planning mechanisms should disperse this population and commuting to new areas and decongest the BBMP areas. Urban rail transit is one such system with existing local rail systems providing passenger service within and around the urban or suburban areas as far as Tumkur, Mandya, Ramanagaram, Doddaballapur, Chikkaballapur, Bangarpet, Hosur, Anekal, etc.

The commuter should be able to travel about 100 km in 1.5 to 2 hours. Only then can the suburban areas get developed fast and pressure on Bangalore eased. Using a rail system on surface with existing infrastructure is a supply-oriented transportation development strategy. This also improves the basic transportation modes such as buses, non-motorized transport, including biking and walking. These are the modes that the vast majority of travelers, particularly the urban poor; depend on.

The surface rail systems such as the suburban rail system in Mumbai are generally cost-effective, and the common man's choice. With a dedicated system, rail is a faster and high-capacity transit.

Rail promotes superior urban form and will attract new riders. It is very necessary to develop a commuter rail system using the existing network of the Indian Railways' backbone and integrate the

new metro system and the existing systems of public transport by buses for a supportive overall urban transport policy. This could also create a transit-oriented development with a long-term sustainable financing. The commuter rail system can have the same capacity as metro systems and still have the scope for running long-distance trains in the same rail network at a much reduced cost.

The challenges for Bangalore rail system are enhancing the existing capacities of the rail systems using newer technologies, some of the infrastructure, including coaches and signaling systems, and increasing the rate of return on the demand and pricing of rail-based transportation system.

This is possible with PPP projects and needs to be done constituting a special purpose vehicle (SPV) to be floated by the State government with support from the Indian Railways, This agency should have a provision for private equity, but it is necessary to provide viability gap funding for such public transportation project to make it successful.

The challenge is also to come up with an appropriate fare policy, revenue-sharing policy with a forward-looking structure of the SPV itself. There is enough scope for exploring the potential of the existing rail network with innovative methods of financing, execution, operation, maintenance and management, as compared to newer costly alternatives like metro rail, mono rail and dedicated corridors.

The commuter rail network in Bangalore can be executed in a shorter period with much less investments, if both the government of Karnataka, the government of India and the Railways in particular work together With the available rail routes, newer rail technologies and information and communication technologies, more innovative intelligent transportation solutions are possible for increasing the capacity and meeting the growing needs of travelers with increased benefits in Bangalore.