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## Institutional and financial strengthening of intermediate public transport services in Indian cities

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### Abstract

Within the urban transport framework, Intermediate Public Transport (IPT) like 3 wheelers auto rickshaws, tempos and Tata Magic caters to the daily urban trips in Indian cities. In the absence of an organized city bus service they provide an alternative mode of travel and where public transport is available, they act as a feeder to the system. However, due to the unorganized nature of this sector, it faces many challenges and is often neglected by policy and decision makers of the cities. None of the recent policy initiatives in India like National Urban Transport Policy (NUTP) 2006 and National Urban Renewal Mission focuses on IPT vehicles and its improvements. The recent recommendations of the working group on urban transport, both for the 12th Five Year Plan and the National Transport Development Policy Committee stresses the need to improve the IPT services as these vehicles have a potential of providing clean mobility and low emissions solutions. This paper focuses on the important role of IPT, major challenges faced by this sector and suggest solutions to organize and regularize the system in Indian cities.

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## **1. Introduction**

India is experiencing rapid urbanization and motorization. While the urban population is growing at a rate of 3.16% per year, motor vehicles are growing at a rate of 9%. (Sharma, Jain, and Singh, 2011). In the absence of an organized city bus service, the gap is being filled by intermediate public transport (IPT) modes like 3-wheelers auto-rickshaws, Tempos and Tata magic etc which provide public transport services (India Transport Report- Moving India to 2032, 2014). Based on Study by the Ministry of Urban Development, Government of India (MoUD) in 2008, it is noted that due to deteriorating quality of Public Transport (PT) commuters from middle and high-income groups are switching over to private vehicles and the urban poor prefer to use IPT as an alternative mode to fulfill their travel needs.

The same study by MoUD reveals that para transit index (number of IPT vehicles per 10,000 population) is higher in cities without public transport and lower in cities with public transport. Also further study done by World Resource Institute (WRI), Sustainable Urban Transportation Policy has estimated that Tier I cities (population greater than 4 million) and tier II cities (population between 1- 4 million) have 4 to 16 IPT vehicles serving every 1,000 people, which implies that a significant number of people in Indian cities rely on IPT services for most of their trips. Very limited studies and research have been done in this sector.

Apart from this, review of the recent policy initiatives at the Central Government level in India- National Urban Transport Policy 2006 (policy level document in urban transport with major focus on moving people rather than vehicles in order to make Indian Cities more livable and guiding Central financial assistance towards improving mobility), National Urban Renewal Mission (scheme launched by MoUD for a period of seven years 2005- 2012 with the focus on improving quality of life and infrastructure facilities in 65 cities of India) etc does not focus on IPT vehicles and its improvements. However, the recent recommendations of the working group on urban transport, both for the 12th Five Year Plan (Five Year Plans is monitored by Planning Commission, which determine the allocation of central resource assistance for states in the concept of planning of the various infrastructural sectors) and the National Transport Development Policy Committee (High-Power Expert Level Committee on Urban Transport formed in 2010 by MoUD to recommend the prioritization of investment in the transport sector) stresses the need to improve the IPT Services as these vehicles have a potential of providing clean mobility and low emissions solutions. Therefore the paper focuses on identifying the major role of IPT, challenges faced by this sector and suggest solutions/recommendations to organize and regulate the system in Indian cities.

## **2. Concept of Intermediate Public Transport**

The concept of Intermediate public transport (IPT) differs in the context of developed and developing countries. In developed countries, IPT is often used as a demand responsive system such as shared-ride taxis and dial-a-ride services. In case of developing countries, lower standard of living, high population density and easy availability of cheap labour force have together provided a variety of transport modes fulfilling the gap between public transport and private vehicles. Depending on a city's size and transport characteristics, IPT modes may fall under two broad categories: (1) contract carriage services, which are flexible demand-based services where the passenger determines the destination, and (2) informal public transport (mini bus like) services, characterized by fixed-route services with intermediate stops for boarding and alighting. Both kinds of services exist in India.

This sector faces tremendous challenges in Indian cities due to un-regularized nature of operations. Case studies from the developing countries like Kombis (minibus taxis) of South Africa, the IPT system of Indonesia, Dolmus of Turkey, G-Auto of Ahmedabad (India) and Ecocabs of Fazilka (India) etc, have been studied, to understand the initiatives undertaken by these cities to improve and upgrade the IPT services. All the case studies indicate that the key ingredients for a sustainable IPT system are- (i) Strong regulatory authority fixing the routes, fares, operation regulations, (ii) Provision of proper infrastructural facilities like parking areas, stands, separate lanes etc, (iii) Provision of financial and social benefits to drivers through various government schemes and (iv) Usage of modern technologies like Intelligent Transport System (ITS) and GPS to organize the system.

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