

## Case Study of Delhi

Urban freight is extremely important for the social and economic viability of urban areas.

It has been found that goods transport account for nearly 10 to 15 percent of total vehicle kilometres travelled.

They consume almost 30% of the total energy.

In fact, it is a big challenge for the policy planners of developing countries to manage urban freight traffic. In India it has been found that the intensity of urban freight traffic tends to increase with increasing city size, Delhi being no exception.

Delhi is the capital city of India with 1,500 square kilometres of area, 16.3 Million population, and it has been found that nearly Half a million tons of traffic moves in and out every day in the city carried by nearly 70,000 trucks.

And if you see the Walled City of Delhi, which is the commercial hub of Delhi, it is found that nearly 37,000 establishments handle nearly 27 different kinds of commodities, of which 7 to 8 are the major wholesale commodities, which are traded virtually all over northern India.

We have a different variety of distribution systems in the whole city, and a different base of managing the logistics through what is called auctioning in the wholesale markets, to wholesale direct distribution and through retail.

If you see the Indian scenario of urban freight on dense roads of Delhi, you will find a very mixed form of traffic, right from mechanised to non-motorized transport.

The goods traffic in the city arrive in trucks and the container, which, because of the lack of space, get parked on the peripheral roads or the bounded networks.

And the transfer on handling facilities, then is taken by non-motorised transport.

The Indian urban wholesale markets are actually located at really crowded areas. And it is often very difficult for the urban freight modes to actually move in a very efficient manner. We got a variety of modes like: ranging from handcarts, to bullet carts, to push carts, to cycle rickshaw.

And it is a very heavily human resource dependent freight logistics which we often find in Indian cities. One of the main reasons being that you have a great supply of labour.

And it gives you some kind of job opportunities to be engaged in the area of city logistics.

The wholesale markets being very crowded, the freight has to co-exist with the passenger movement and often this really affects the efficiency of freight distribution to its last-mile end. You have different varieties of freight being handled through non-mechanised transport and ranging from: cartons, to bags, to packets, to medicines. And it is all in its own manner of

efficiency is being managed, by various innovative methods, through transfer of goods from retail to the godowns and vice versa.

You often also find very innovative methods of actually loading the vehicles. From the godowns through inclined ways, innovative ways of transferring the commodities into the heavy vehicles; all very very heavily human resource dependent logistic performances.

Often it is also found that the goods handling areas, where the handling takes place is often in the public spaces. It is often very very unorganised. And this all affects ultimately the efficiency of urban freight logistics in a developing country. And now probably one of the largest growing economy of the world, the Indian cities and the large cities in India.

The freight is often actually, handled right from the personal cars that are used for handling the freight movement. And obviously the last-mile is taken care by the head loads in all its dimensions.

Because that being probably the cheapest form of the last-mile delivery to the final destinations in these markets. We also find that often, the engagement of freight logistics between different kinds of vehicles is normally not done very efficiently and which again affects the turnover. Some of the very emerging issues are the concept of the logistics sprawl, which happens, Delhi being no exception, the consequent freight movement and the transport dependent greenhouse gas emissions coupled with the noise and the safety issues are the very major serious concerns.

Also, we find that retail stores are coming upon suburbs, because of the land economics and the paucity of retail stores in the main city.

And this again adds to a lot of distribution costs. You also have the emerging trends of what we call the e-commerce and the growth of home deliveries. Which again have its own logistical implications in terms of use of two-wheelers and the use of auto rickshaw for delivery of freight to the users at the homes. And finally, the Indian cities are witnessing a lot of weak institutional set-ups, capacity and planning issues which ultimately affect.

The school of planning and architecture is one of the national institutes of national importance in the country, declared by the act of parliament.

We have the department of transport and planning which offer a two-year master degree program.

And one of the core program of the department being the urban freight and logistics. The graduates who are graduating from department are serving different capacities and dimensions all over the country and even outside. We try to inculcate the latest principles of urban freight and city logistics into our teaching curriculum.