

Understanding urban transportation in India as polycentric system

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Abstract

This paper attempts to study urban transport planning in India from a polycentric governance point of view. Urban transport planning in India is a relatively new phenomenon and is largely top-down. There have been questions raised about the feasibility of many urban transport projects which have been commissioned. A polycentric governance system with a focus on multiple actors and power centres, a decentralized and participative decision making process offers a different way of understanding governance processes and decision making.

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1. Introduction

Urban transportation planning in India is in a very nascent stage and is constantly evolving. There are different ministries, departments and agencies across the central, state and city levels which are involved in different tasks regarding urban transport planning and implementation. Because of the inherent asymmetry (power, information, resources) between these agencies, it appears that some of these agencies may not be fully co-operative with each other. Project delays, cost-overruns and unwanted projects are typically the result of the power plays between many of such agencies. Over the past decade or so, there has been a growing realization at the central government level that there is a need to move towards sustainable urban transport solutions and that for that there needs to be better co-ordination between implementing agencies. However, these co-ordination efforts are in their infancy and it will be sometime before the outcomes are completely known.

A Western inspired theoretical framework known as ‘institutional economics’ may help understand the rules of the “game”, conditions under which co-operation exists, actor motivation and behavior, appropriate co-ordination mechanisms and governance structures. It has successfully been used to explain behavior, set rules, co-ordination mechanisms and to give useful advice on establishing governance structures for different infrastructures (energy, forests, and water). The question is how applicable this theoretical perspective is in societies which may not completely share the same cultural values such as individualism, egalitarianism and assertiveness which characterize much of American society from which most interpretations of institutional economics originate.

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This paper looks at the applicability of a particular interpretation of institutional economics, i.e. Vincent and Elinor Ostrom's theory of polycentricity to urban transportation planning in India. Section 2 of the paper details the urban transportation situation in India in terms of the services/infrastructure that exists, and the current planning process. Section 3 introduces the topic of institutional economics and then demonstrates how the urban transportation planning process is institutional in nature. Section 3.3 then specifically looks at some of Ostrom's key concepts which can be used to analyze and address issues related to urban transportation planning. It also addresses its limitations in the Indian context and draft a possible research agenda for this topic.

2. Urban transportation in India

2.1. Urbanisation and its linkages with urban transportation

Urban transportation must be looked at within the wider context of urbanization. As of 2007, a majority of people in the world were already living in urban areas and it was expected that the total urban population the world would be at 61% by 2030. Much of this urban growth will be primarily witnessed in developing countries (United Nations, 2007).

Given the population growth that India and its cities are experiencing, it is important to plan adequately well for the provision of different urban infrastructures and services including urban transportation systems. The population living in India's cities and towns is expected to rise from 285 million in 2001 to over 590 million by 2030. Additionally 73% of new employment will be generated in cities. 68 cities will have a population of over a million; close to \$1.2 trillion capital investments will be required to meet the projected demands of Indian cities; and over 7400 km of metros and subways will need to be constructed (McKinsey, 2010).

Throw in the additional factor of urban poverty and the picture gets even more complex. In Mumbai alone, the population of people living in slums (which is a manifestation of urban poverty) is over 50%; in Delhi the figure is 20%; and in Calcutta the percentage is 32% (Badami, 2007). The increased migration of disenfranchised rural folk is only expected to add to urban poverty.

The emphasis placed on migration and urban poverty is important from the urban transportation point of view, because these factors offer pointers in terms how urban transportation infrastructure/services should be planned. If urban transportation can successfully negotiate services for this section of the population over a period of time (transportation is inextricably linked to housing and employment opportunities especially for the urban poor), there is a real chance for overall urban development. The alternative, as one author puts it:

'If urban transport is not managed well it has the potential to choke cities and bring economic activity to a grinding halt. Here lies the promise and peril of urban transport in India.' (Gupta, 2008, p. 1)

2.2. Urban transportation planning in India

Urban transportation planning in India is ever evolving and the term 'planning' with respect to urban transportation has emerged just a decade or so ago. Prior to that, urban transportation planning (read public transportation systems) was limited to a few cities including Delhi, Mumbai, Chennai and Calcutta. These cities had a mix of commuter rail systems, metro rail systems and bus services. Very few cities outside the ones mentioned above had any kind of transportation plans.

The early part of the 21st century saw concerted efforts by the central and provincial governments to bring about 'urban transportation planning'. Some of these measures are listed below:

- Increasing the supply side of transportation by constructing and widening roads, construction of flyovers, etc.
- Investments in mass transit systems like metro rail systems, bus rapid transit systems, mono rail systems, commuter rail systems, etc.
- Promoting the uptake of non-motorized transport systems and investments for the same (creation and maintenance of sidewalks, creation of dedicated cycling corridors).
- Creation of a National Urban Transport Policy with attempts to harmonize various facets of policy making and addressing institutional issues.
- Providing financial backing to line departments and provincial governments to implement policy measures.

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