Kaohsiung 2010 Papers: Share/Transport in India – Threats, Challenges, Opportunities

Sharing is an inherently natural process of establishing a joint use of resources It is a primarily self-initiated and regulated process. In this regard share transport can be seen as an informal, unregulated or loosely regulated, low-cost (even works on micro credit, when loose change is unavailable to complete the transaction), small or medium scale sharing of transport infrastructure (such as roads, streets and spaces) and/or vehicles in time and/or space. Sharing of Transport in this format, across the Indian Sub-continent and indeed many other developing countries in South-East Asia, has always been a part of the informal public transport network and is mostly as old as the city itself.

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Threat and Challenges to Share/Transport in India

In India, streets have always been shared between mobility, recreational (festivals and celebrations) and commercial (bazaars) functions, and this holds true even today. Indian streets retain this character, though it is degrading fast and the scales of sharing between functions is rapidly changing. Typically 4 to 6 seater capacity horse-drawn carriages or 'Tongas' were shared on a fixed routes (usually main streets leading to the bazaars or the station) for a nominal price. This mode in bigger towns has been replaced by multi seater auto rickshaws, vans, jeeps and even mini buses.

Typically, the mobility problems faced by cities increase with their size. As increase in sprawl results in additional long trip distances, mobility becomes expensive and time-consuming generating the requirement of riding comfort and service quality.

Traditional shared transport which works at margins and is thus associated with poor vehicle maintenance, pollution and high vehicle occupancy; is perceived to have limited ability to meet the mobility demands of these mega cities. This drives a demand for high-capacity rail and bus based formal public transport systems, which often come at the cost of shared transport, which is seen as a competing mode and must be done away with. Higher mobility demand drives the need for wider roads which replace smaller, much calmer and sharing friendly streets. Some would argue that this is a need based transition in share/transport from smaller units or quantum to much larger units, which is really the formal rail and bus based public transport system. On the other hand large public transport network is formal, state controlled, intensely regulated, capital intensive, unfriendly and rigid. This is a departure from salient characteristics of sharing which is self-regulated and operated, friendly, small-scale and low-cost; and thus it may be argued that formal, centrally managed and regulated public transport is not really a share/transport model. In mega cities, large-scale investments in transportation are typically seen as investments in the cities development. This drives the desire in smaller and smaller towns to go for bigger and bigger, formal public transport schemes even if the current trip distances are low and requirement for the same is dismal.

These then come with a financial feasibility prerequisite of elimination of informal competing modes along with narrow friendlier streets.

Examples in India are the provision of large number of urban buses (12m long) to small organically developed towns (such as Varanasi and Kanpur); along with the requirement a central special purpose vehicle/organization (SPV) for regulation and development of Public Private Partnership (PPP) operations; under the Jawahar Lal Nehru National Urban Renewal Mission (JnNURM) promoted by Ministry of Urban Development (MoUD), Government of India (GoI).

This PPP model for introduction of public transport in small cities and towns has met with little or no success (examples are the cities of Rajkot and Bhopal), and is in fact resulting in the erosion and fragmentation of the existing, efficient share/transport in these cities.

In India share transport is already flourishing in smaller towns and cities because it effectively serves the mobility, economic and social needs of the people. This is expected as it is based on a model which has evolved from the local demands and requirements, and is flexible enough to adapt to any changes in the same.

Here, the top down approach in the name of urbanization, which is not aligned with local imperatives (Roychaoudhary, A., 2010); is threatening it's elimination. We are at a 'turning point' in India. Here in smaller towns a shift of policies towards a more controlled, formal and expandable city structure, is threatening to override the share/transport in the name of its modernization to 'Public Transport'. In larger cities, this process has already been successfully undertaken.

Share transport which was the backbone of mobility, was marginalized and restricted resulting in its natural transformation to an Intermediate Public Transport (IPT) status, which in the absence of any formal integration results in its complete or near elimination (example includes 'Phat Phat Seva' in Delhi).

Here too we are at the (re-) turning point. Take the example of Delhi. Bicycle sharing was common in Delhi until 1960's. Bicycles were available on a nominal rent of about 0.06 Rupees per hour or 0.25 rupees for a day, at all cycle repair shops.

This phenomenon is extinct in the modern-day city. Here sharing is again being introduced as public bike rental projects with the backing of public bodies, NGOs and large corporate investments such as Delhi Metro Rail Corporation (DMRC) or Delhi Integrated Multi-modal Transit Services Ltd. (DIMTS).

But can such limited efforts revive share transport in Delhi? The answer is an obvious no. Current public bike schemes have no patronage, not more than ten bicycles are rented in a day from each station. This is because the city structure has been damaged beyond repair; it is no longer conducive for walking, cycling or sharing in any form.

Opportunities for Share Transport in India
It is evident that share/transport can play a vital role in providing sustainable, low-cost, environment as well people friendly mobility and lifestyle to the city. This generates the need to preserve it in small and medium cities (cities with less than 5 million population) and revive it in bigger cities and metropolitan areas (typically cities with greater than 5 million population).

This can be initiated, if share/transport is given recognition and due consideration in the National Urban Transport Policy (NUTP) and the Motor Vehicle Act (MVA). In addition NUTP level interventions would need to be made less top down oriented and more inclusive to local requirements.

In smaller towns and cities, this would result in policy and funding interventions from JnNURM (phase 2) and local governments, which are conducive to preservation and strengthening of share/transport. This would include integration of share transport (both infrastructure and vehicles) in the mobility and development plan of these cities.

Large cities are less responsive to central government policies on transportation as their reliance on central and state funds is less. These cities mostly generate their own revenue for transport infrastructure interventions. Here private vehicle centric policies and large investment in car friendly infrastructure (such as grade separators and wider carriageways) has already been implemented.

The process of reviving share transport in mega cities will have to necessarily start with the process of reviving the road infrastructure and making it people friendly. This is evident from the fact that share transport is closer to public transport and necessarily relies of walking as a feeder trips. NUTP and MVA effect city level transport policies and can result in changes to mostly private vehicle centric city master and mobility plans.

These positive changes can help revive shared transport in the mega cities by introducing the planning and designs for people and sharing friendly streets, integrating shared modes with public transport modes (with provision of financial assistance such as gap funding), etc.

A people- (cycling, pedestrian, para-transit, etc.) friendly road infrastructure would greatly improve the effectiveness of programmes to revive share transport such as public bike sharing programmes in the city. In addition friendlier policies towards shared transport would enhance public participation and self initiation of these projects; and make them much more feasible and attractive for use.

Reference: Roychoudhary, A., et. al., Centre for Science and Environment, City Action, Citizen's Report on Air Quality and Urban Mobility, Kanpur., 2010