Improved public transport to curb car use and fuel consumption in Asian cities
A research framework for integrating rickshaw usage with Bus Rapid Transit

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Introduction

Transport sector is one of the major sources of greenhouse gas (GHG) emissions. Three-quarters of transport-related emissions are from road traffic; mostly to the result of rapid increases in motor vehicle use
Public transportation is often very poor and the minimum infrastructure for non-motorized transport (NMT) is not provided or restricted in Asian cities. Many cities have implemented Bus Rapid Transit (BRT) systems, while others are planning to do so as a means of tackling increasing transport problems. As the number of joint trips is increasing, better integration of various modes could improve the capacity of public transport where NMT could provide feeder or access facilities to mass transit. Improved public transport, well connected with NMT could provide better access to public transport and provides an opportunity to curb car use as

Transportation in Asian Cities

Increasing trend of car use
Increasing fuel demand of transport sector
Dependence on non-motorized mode

Improved Public Transport to Curb Car Use

Many cities in Asia are looking BRT as a potential for solving transport problems

Integrated Multi-Modal Public Tra
Transport integration could be of various types and provide many benefits
Integrated multi-modal transport system is necessary for convenient, fast, safer interchanges between mode

Public Transport Integration with NMT
Many BRT systems are currently physically integrated with other modes, such as park & ride facilities, metro, buses, bicycles. However, until now there is no BRT or metro system which is integrated with rickshaws

Policy about Rickshaw

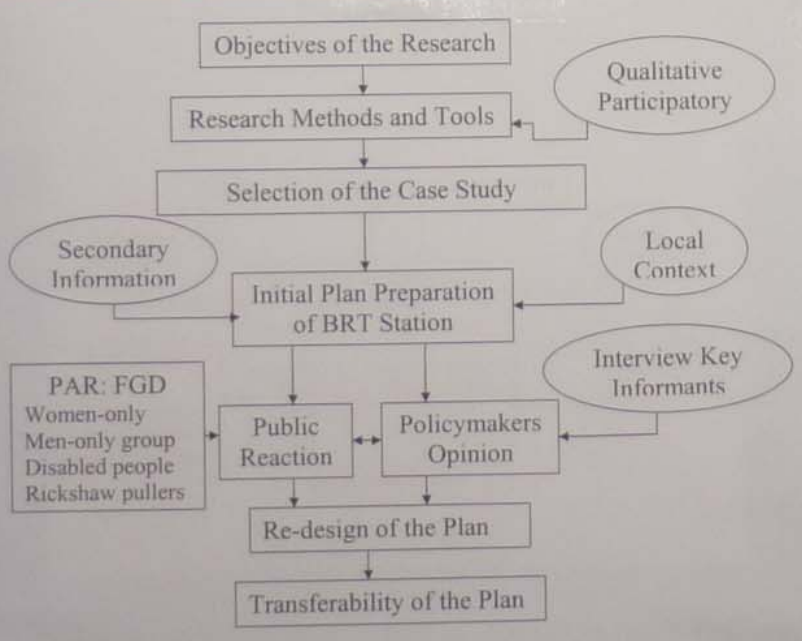
Against:

Rickshaw has been restricted in many cities
- Create congestion
- Poor image

For:

Should be promoted for sustainability
- Environment friendly
- Provide access to certain area and certain people
- Can provide feeder service (access leg) to public transport

Research Outline for Integrating BRT with Rickshaw



Rickshaw-city:

Rickshaw per 1000 people is 3 (or 1% of rickshaw trips) and

More than 0.3 million people (or 30 sq km land area).

Candidate cities:

Dhaka and Chittagong (Bangladesh)

Delhi and Kolkata (India)

Bandung and Yogyakarta (Indonesia)

2 to 6 locations of existing or possible BRT stations (depending on available resource) to represent the whole city.

Conclusions

Transport policy need to take advantage of all transportation modes, encourage their use for the most appropriate circumstances while prioritizing access. BRT systems well integrated with rickshaws, walking, and cycling, together with effective traffic management, can create a favourable environment to curb congestion and boost the quality of urban life as well as help to reduce car use and fuel consumption

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