Designing mobility for liveable and social cities
Case studies from local partners in Bengaluru, Hanoi, Jakarta and Metro Manila

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Cities attract people to their numerous social and economic opportunities. Yet, urban and mobility development in many cities typically cannot keep pace with the influx of people. Despite many cities’ efforts to keep up, their policies tend to lack a prioritized mix of functional and social parameters for urban development. Although the planned development of many Asian megacities has led to economic welfare gains, the progress has come at the expense of quality of life and social equality.

Local partners of the Friedrich-Ebert-Stiftung Regional Project on Climate and Energy in Asia conducted four case studies on urban and mobility development in the region. Covering the cities of Bengaluru (India), Hanoi (Vietnam), Jakarta (Indonesia) and Metro Manila (Philippines), the studies revolved around a central question: How might we design a mobility system in such a way that all people can participate in social and economic life, where economic development is supported and where the negative effects for the society and the climate can be eliminated?

Particular importance was given to rethinking the functional mix, or the spatial combination of different urban functions, and how they enable different transport behaviour.

A report is available for each city. An individual with a professional perspective on urban development was commissioned to produce each study. Each case study looked at the history of transport in the city, the current and ten-year projected planning situation; the affordability, availability and inclusivity of the transport systems; the safety and reliability; and the ecological sustainability. This summary collates the messages of those studies and particular references from each researcher’s opinion. In some aspects, there are significant differences in how cities, their representatives and citizens act or can act in central fields of action for sustainable and socially fair urban and transport.

Status quo
The following basic constellation emerges for all four cities: In recent decades, cities have experienced strong population growth. Sustainable mobility options, such as public transport or cycling, have hardly grown at all or rely on smaller motorized vehicles. There is a high prevalence of two-wheelers, with a trend towards greater motorization and an increase in car ownership in correlation with the increase in purchasing power.

As a result, transport infrastructure is geared towards private motorized vehicles, leaving roads heavily congested. And this leads to noise, particulate matter, CO2 emissions and immense loss of time due to traffic jams during long commutes.

All of the four metropolises are at a point where they need to leave the path dependency of uncontrolled urban and transport development. Walking and cycling are subordinated to cars and two-wheelers due to the emphasis of road infrastructure in urban development. Because of the high prevalence of motorized vehicles, which often share the space with other road users, the risk potential for weak or slow road users is high.

All cities recognize the need to shift from private transport towards more sustainable, safe and inclusive alternatives. Each city government has taken action on different levels with varying degrees of effectiveness. To tackle these challenges, the governments put different initiatives and projects into practice. Among them, the following are noteworthy.
Hanoi has developed a Transportation Master Plan with the goal “to make public transportation a preferable choice by restricting private vehicles and upgrading public transport quality” (Remmei et al., 2021, p. 5).

The new National Transport Policy in Manila is similarly ambitious in formulating a reversal of the status quo by offering a modernizing programme that aims to “confront the central bias for private motorized transport” and “puts walking and cycling ahead of all other modes of mobility” (Esguerra, 2021, p. 4).

In Bengaluru, the draft comprehensive mobility plan (2020) “aims to build a multimodal transport system for equitable mobility access, increase the share of public and intermediate public transport by up to 70 per cent, reduce transport emissions and minimize negative externalities.”

The government of Jakarta is simplifying the city’s transport system by merging several previously unconnected systems into an integrated mass transportation system called Jak Lingko.

**Central fields of action for sustainable and socially fair urban and transport development**

By collecting the available evidence on the various dynamics of urban transport planning and implementation from all chapters of the studies, the following six fields of action relevant for an ecologically sustainable and socially fair urban and transport development emerged as common themes throughout the four studies. The following highlights the aspects which stood out in all the studies and describes how the researchers characterized the dynamics in their respective metropolis.

**Administration and structures**

The cities’ visions and goals highlight a dissonance in decision-making structures, whereby conflicting goals between stakeholders pose a problem to the overall mobility strategy.

In Hanoi, for instance, regulatory measures for encouraging pedestrian traffic are missing or do not achieve their intended purpose. The “unregulated electric motorbikes have further increased personal mobility at the cost of community accessibility” (Remmei et al., 2021, p. 7).

The situation in Bengaluru illustrates the psychological significance of visible change through built infrastructure. Driven by political motivation rather than sustainable considerations, the city government has prioritized “visible infrastructure, such as flyovers, elevated roads, Metros and roads” (Jain, 2021, p. 3).

Jakarta is experiencing a conflict between the goals of socio-ecologically sustainable development and economic growth. Congestion, for example, is presented as “an indication of progress and prosperity of a nation” because it is connected to the “ability of its citizens to buy a car or motorcycle” (Sutanudjaja, 2021, p. 3). The planned transformation of Metro Manila’s transport sector will require a great deal of effort. That transformation needs “to coevolve with the roll-out of projects and tactics for achieving the twin goals of improving mobility and reducing emissions” (Esguerra, 2021, p. 7).

**Common good versus private sector**

In the implementation of planned development projects, the cities show significant differences. Particularly noteworthy is the different role that the private sector has in the development process.

For Metro Manila and Jakarta, the researchers highlighted the conflicting goals and interests of public welfare orientation and economic interests. In the case of Jakarta, privately funded toll roads were used “to create and finance road networks while increasing suburban connectivity to the core city and triggering additional suburban development”. However, as Elisa Sutanudjaja adds, this “duet of suburbanization and massive construction of the toll road network has left a cacophony of congestion and air pollution” (2021, III). In Metro Manila, the “private sector is now not only in property development but also in road, rail and airport building businesses”, which results in considerable influence of the private sector on urban development (Esguerra, 2021, p. 8).

Conversely in Hanoi, found an opposite development: The private sector has a subordinate role whereby “the government often prepares and proposes transportation plans without the involvement or consultation of private investors” (2021, p. 4).

A completely different challenge can be seen in the example of Bengaluru, where no current approved master plan exists because of objections from residents. The “Master Plan 2015, made in 2007, remains the operating framework” (Jain, 2021, p. 3).

**Participation**

Participatory elements are considered an important standard for social urban and transport development. None of the cities provide extensive formal ways or well-functioning processes for public participation. Yet, different levels of public engagement exist.

In Jakarta, public participation is driven by civil society groups who “despite confusing planning systems and rigid methods for public participation”, are “heavily involved in advocating for a better, more sustainable and more equitable city” (Sutanudjaja, 2021, p. III). Hanoi, on the other hand, does not offer a platform for public involvement, and public participation is not commonly practised. Residents are only informed about ongoing projects. But “social media has emerged as a platform for the public to express their concerns” (Remmei et al., 2021, p. 7). Similarly in Bengaluru, public consultations exist but the involvement is merely one-directional, and requesting information about ongoing projects is difficult (Jain, 2021, p. 6). For Metro Manila, the city government organizes technical planning groups that “formalize collaborative and critical engagements that have been building up, beginning with efforts of local [mobility] advocates” (Esguerra, 2021, p. 10).

**Transport-oriented development**

All four city governments recognize the value and necessity of developing efficient and well-connected public transport infrastructure. With the transport-oriented development approach, there has been a change in urban transport planning in all
cities, although the researcher in Jakarta found deficits in the implementation.

In Hanoi, the researcher saw success in adapting transit-oriented development. As a consequence, the first bus rapid transit line opened in 2016 (Remmei et al., 2021, p. 2). But in Jakarta, there is evidence of structural conflicts between objectives of the urban development planning. According to Sutanudjaja (2021, p. 8), the development approach “is not purely driven by the desire to change urban mobility patterns to one based on mass transportation, walking and cycling”. Rather, it is described as “business as usual” and failing to fulfill the design requirements of transit-oriented development.

In contrast with the previous road-centred development in Bengaluru, transit-oriented development will be a mainstay in the coming transportation master plan and will focus on the bus rapid transport (BRT) system, the Metro and suburban railway (Jain, 2021, p. 3). For Metro Manila, Jude Esguerra saw hope in the transit-oriented development approach of the National Economic and Development Authority and the Japan International Cooperation Authority’s “dream” master plan, which “intends to develop new urban agglomerations around the high-capacity transit nodes” northwards and southwards of the city and promises to develop affordable housing along the train corridors. It also aims to achieve “unimpeded travel in and out of Manila” (2021, p. 9).

**Modal shift**

A modal shift is necessary for a socio-ecologically sustainable and equitable transport development. In their political visions, all city governments recognize the need for action for a modal shift towards public transport, cycling and walking. Again, different effects and developments are evident in this transformation. While in all four cities there is development striving to make such a transformation possible, the impact thus far is not sufficient to achieve the goals.

The government in Hanoi promotes and supports the use of public transport with considerable subsidies, and yet, private transport maintains its dominance. As the researcher explained, Hanoi “struggles in balancing between traffic and liveability. That struggle is currently tipping towards increasing traffic.” Despite the high level of accessibility of public transport, the inclination towards private transport relates to having more “flexibility, speed and comparable costs of personal motorcycle” (Remmei et al., 2021, p. III).

The government of Metro Manila initiated several projects to increase safety for cyclists. The projects range from training of local government personnel to development of protected bike lanes and penalizing wrongly parked vehicles. Additionally, the local governments show openness to learning from other good examples and thereby creating needed modal shifts. The researcher highlighted that “the ‘cycling embassy’ of the Netherlands and active transport advocates have been reaching out to assist local governments and operators of private residential and commercial enclaves to persuade them to redesign streets, intersections, curbs and sidewalks for the safety of bikers and pedestrians” (Esguerra, 2021, p. 10).

Jakarta has had mixed responses to its efforts to achieve a modal shift, as demonstrated in the example of a protected bike lane that was constructed as a result of the pandemic crisis. This 11.2-kilometre bike lane “is considered a success and used by various groups, ranging from workers and homemakers to traveling coffee traders. But due to the need for speed riding, its existence is not favourable to the road-cycling community as well as private motor vehicle users” and was therefore criticized (Sutanudjaja, 2021, p. 13).

The fact that a modal shift towards public transport is partly hampered by unclear incentives in the system is evident in Bengaluru, which “charges more for short journeys and penalizes passengers for changing buses during a trip” (Jain, 2021, 8).

**Gender**

Gender is an extremely important field of action in the context of socially just transport development. The overlap between safety, access and fairness for women and LGBTIQ+ groups in the transport system demonstrates great urgency for improvements. All four cities exhibited deficits. For example, safe public transport and adequate infrastructure are major shortcomings in Hanoi. As a result, women and girls “face sexual harassment in public transport, at bus stops and on the streets” (Remmei et al., 2021, p. 11).

Similarly, “sexual harassment and rape repeatedly occur in the various transport modes” in Jakarta. The city government’s response thus far has not sufficiently addressed the problem. One political representative went so far as to suggest to women “not to wear miniskirts” if they want to be protected (Sutanudjaja, 2021, p. 12).

Attempts to provide women and girls better safety are not sufficient in Bengaluru. As Yamini Jain pointed out, “a reserved section of seats are available for women in ordinary buses, and all buses have CCTV cameras inside to help provide security”. Yet, areas of improvement exist, especially during night hours, and “buses, terminals and stations should be more accessible, safe, efficient, user-friendly and digitalized” (2021, p. 9).

In Metro Manila, there are “special coaches in the metros for women, and public transport is among the ‘safe spaces’ where sexual harassment is to be proactively addressed”. However, there is lack of clarity in achieving improvements. There are “no clear goals set for this that would indicate progress” (Esguerra, 2021, p. 10).
Conclusion

The city studies examined whether the current mobility systems of the studied cities should only be optimized, or should be transformed significantly to become more liveable and social cities. The researchers did not answer the question directly. Measured against the challenges and the actual successes for more liveable cities, the conclusion for each city points more in the direction of turning away from the status quo. As the examples in the fields of action illustrate, path dependencies must be fundamentally overcome at various points: at the administrative level, in political leadership, in the orientation towards transport-oriented development and in modal shifts.

The negative effects for society and the climate can only be eliminated when strong alternatives to private transportation are created and people can be successfully convinced to use alternative means of transportation. This process must be done while allowing people to participate in social and economic life. As the subsidy example from Hanoi indicates, monetary incentives are not sufficient to win people over to use public transport. Moreover, alternatives need to be competitive in performance and in terms of safety, especially for vulnerable groups. Regulative instruments are needed to increase the safety of pedestrians and cyclists along with infrastructure development to create safer pedestrian and cycling lanes.

As demonstrated with a Metro Manila example, transit-oriented development has the potential to improve general transport performance without decreasing the liveability of cities. And the development of cities must emphasize a balance between the common good and private economic interests, all with a gender-sensitivity orientation. The example of Bengaluru, although not ideal, reflects attempts to improve the safety of female public transport users. Clear goals need to be set to make improvements.

In addition to the points highlighted in this summary, each city is equally challenged when it comes to implementing technological innovations, from new fleets, vehicle and propulsion concepts to digital tools. Each study analysed the different dynamics. In Bengaluru and Hanoi, for instance, electric vehicles offer great potential to decrease emissions.

The public’s participation in decision-making processes is underrepresented in all cities, although civil engagement occurs in several forms. Metro Manila uses a formalized approach to include civil society. In the other cities, different types of informal engagement exist. Making better use of these initiatives could help to shape the future in a more collaborative way, thereby making each city more inclusive and liveable.

References


