BUILDING AN AMBITIOUS PUBLIC TRANSPORT SYSTEM IN HO CHI MINH CITY (VIETNAM)

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Ho Chi Minh City plans to build an extensive public transport system which includes among others metro lines and dedicated bus lanes. Following a statement on the evolution of the municipal public transport system, this paper examines its development and the constraints faced by the authorities in its modernization: funding, land acquisition and institutional issues.

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PADDI
Founded in 2006, PADDI is an innovative cooperation project between the Rhône-Alpes Region (France) and the greater Ho Chi Minh City area. Under the HCMC People’s Committee direct supervision, its goal is to assist the city’s technical agencies in various fields of urban management.

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1 - The greater metropolitan area includes HCMC and its 7 surrounding provinces (i.e. Đồng Nai, Bà Rịa – Vũng Tàu, Bình Dương, Bình Phước, Tây Ninh, Long An and Tiền Giang).

2 - HCMC’s current public transport system relies on urban buses, which are capable of meeting solely 7% of travel needs (Mouhot, 2013). According to the administration, public transport includes travel by urban buses and taxis. Travel by metro and tramway will be counted in this category once available.

3 - Adjustment for the transportation development planning of Ho Chi Minh City in 2020 and beyond (Prime Minister’s Decision n°568/QĐ-TTg dated April 08, 2013).

Ho Chi Minh City (HCMC), Vietnam’s main economic hub, is currently one of South East Asia’s most dynamic cities. With a GDP having expanded by 10% annually for the past consecutive ten years and an annual urban growth rate of 3%, this city is riding on a fast economic and population growth rate (GSO, 2014). In 2013, its population was estimated at 8 million; meanwhile the greater urban area’s population is estimated at approximately 18 million.1

The city’s robust economic growth, coupled with an ever-increasing population, has put pressure on urban infrastructure, especially its transportation system. Between 2003 and 2013, the number of vehicles registered by municipal agencies has increased three-folds (DTC, 2014). By now, roughly six million motorbikes and nearly half a million cars have been registered in HCMC (ibid, 2014). Even though the city was recently qualified as a “motorcycle dependent city” (Khuat Viet Hung, 2006; Nguyễn Thị Cam Van et al., 2013) and its number of motorbikes continues to rise, the growing number of cars (resulted from economic growth that improved the living standards of a part of urban households) has surged significantly by 10% annually since 2007 (DTC, 2014).

The fast growing number of cars has therefore prompted the municipal authority to redefine road lane arrangements, whilst the increased use of cars has worsened the adverse effects caused by motorbikes (i.e. congestion, noise and air pollution, and lack of road safety). Against this backdrop, public transport should be an alternative in HCMC for urban mobility in a near future.2 This is what an ambitious transport plan revised and approved in 2013 envisions for 2030.3

In an effort to tackle road congestion-related problems, to improve environment quality for city residents, and to cope with climate change-related adverse effects, the Government plans on the one hand to modernize the existing road network, and on the other hand to build up an extensive public transport system which includes metro lines of Mass Rapid Transit (MRT) and corridors of Bus Rapid Transit (BRT). Public transport should thus become a serious alternative to individual transport. According to the plan, the objectives set out in 2013 are that the share of public transport will represent 25% of city travel by 2020, 45% by 2030 and eventually 60% after 2030. This newly unveiled plan is certainly ambitious, but there are a number of constraints hindering its successful implementation.
LARGE-SCALE TRANSPORT PLAN WITH A LIMITED BUDGET

The idea of building MRT lines in HCMC began in 1998 with the approval of the master plan for 2020. The plan gives priority to inter-urban rail lines since at that time only 2% of inner city travel, the city should reorganize the bus service and start to build three MRT lines (MVA et al., 1998). In 2004, a second study, funded by Japan, supported the recommendation that future public transport in HCMC should focus on building an MRT network but composed by four lines (Almec et al., 2004). The findings of these two studies were incorporated into a comprehensive transportation plan approved in 2007. Under this document, six MRT lines were planned as well as three additional lines which would be monorail or trams, for a total network’s length of 109 km.

Regarding the impact on spatial organization of the city, the completion of the transport plan adjusted in 2013 should strengthen the polarization of the historical center (Saigon) and start to build three MRT lines (MVA et al., 1998). In 2004, a second study, funded by Japan, supported the recommendation that future public transport in HCMC should focus on building an MRT network but composed by four lines (Almec et al., 2004). The findings of these two studies were incorporated into a comprehensive transportation plan approved in 2007. Under this document, six MRT lines were planned as well as three additional lines which would be monorail or trams, for a total network’s length of 109 km.

The urban rail component of the 2007 plan was modified with the 2013 adjustment which suggested that by 2030, HCMC would be equipped with eight MRT lines, one tramway and two monorail lines, for a total of 216 km (see Figure 2). However, one of the latter plan’s innovations is to complete the urban rail network with six BRT lines, which means an additional 100 km of public transport network. Previously, another study funded by the World Bank in 2005, and resumed by PADDI in 2009, stressed the possibility to adopt BRT lines in HCMC. However, up until 2013, the city authorities did not retain this option in their planning agenda.

Figure 1: Metro Line No1-District 1, preparations of ground works to implement the underground part of the line, September 2014 (Ch. Simon)

Figure 2: Development of Ho Chi Minh City railway transport network for 2020-2030

5 - For instance between HCMC and Vũng Tàu (a city located 100 km southeast of HCMC).
6 - The “HCMC Transport Development Planning to 2020” was prepared by the Ministry of Transport and local consulting companies (TEDI, TDSI) in 2006 and approved on January 22, 2007 by the Prime Minister Decision 101/2007/QĐ-TTg.
7 - Through a technical assistance mission, the Urban Development Management Support Centre conducted a study on the construction of urban metro in HCMC.
since four of the eight MRT lines will connect to the Ben Thanh market. This planning calls for massive urban fabric rearrangement. It will come along with large property development (high rise buildings and underground shopping malls, of which some are already under construction); as well as the transformation of a few District 1 areas into walking streets for pedestrians. Moreover, the combination of various modes of public transport (MRT, BRT and urban bus) will facilitate the development of multimodal interchange hubs and also new urban projects across the metropolitan area.

Once completed, the railway transport network of HCMC will be larger than that of Singapore (160 km in 2013) and will become one of the region’s largest MRT networks, competing with that of Shanghai (530 km in 2013) and of Beijing (465 km in 2013) (Nguyen Quoc Hien and Doan Hong Duc, 2013). The goal set by the government to make HCMC a leading global city of South East Asia is now clearly stated with its plan of establishing the city as one of the region’s largest MRT networks, Singapore (160 km in 2013) and will become a part of the HCMC metropolitan area.

In the implementation of the HCMC transport plan to 2030, construction of public transport facilities would cost USD 18 billion. However, according to a study on financing urban infrastructure, for the 2011-2015 period, the city struggled to cover 9% of investment needs in transport infrastructure (both road and public transport facilities). The city may have USD 10 billion needed (World Bank, 2013). The cost for building this planned public transport system appears disproportionate compared to the city’s investment capacity. Consequently, the local government has to diversify its financing sources, seek international financing (notably ODA), and involve the private sector.

8 - In population censuses conducted in Vietnam, only people with permanent residence permits are counted in areas where the census takes place. Other people (even if they have accommodation for an unspecified period of time) are not counted; whilst they are using urban infrastructure and services (water, transport, etc.).

**CONTRAINTS TO THE DEVELOPMENT OF HCMC’S PUBLIC TRANSPORT SYSTEM**

Apart from the problem of raising capital to build HCMC’s public transport system, fragmentation of funding, land acquisition and resettlement management, as well as institutional steering of the system during implementation and future operation are all challenges to the final realization of this planned system.

**Fragmentation of financing sources**

By the end of the 1990s, several international cooperations with technical assistance agencies were involved in the development of public transport. But the Japanese International Cooperation Agency (JICA) was the first to provide funds. In 2004 this agency published a report on public transport development and delivered a feasibility study which was focused on building an MRT line. JICA then granted a loan to the Vietnamese Government to build the first metro line in HCMC in 2007. Later on, other foreign partners have been involved in funding facilities of this type. The German Government, the Asian Development Bank (ADB) and the European Investment Bank (EIB) have teamed up to fund the first stage of MRT line No2. The two multilateral banks then joined the Spanish Government to fund part of the line No5. More recently, the World Bank has granted loans to launch the first BRT line (see Figure 3). Although these projects were mainly foreign-funded, the Vietnamese Government also contributed 15% of each project and appears for the MRT line No2 project as the second investor, just behind the ADB.

In spite of these agreed financial efforts, and considering the importance of the funds and their technical challenges, the Vietnamese Government obviously needs to call on more financing sources. So far, six donors have granted funds but only four projects (three MRT lines and one BRT line) have been financed, and some of the four are only partially funded.

What about financing of the other lines? Although other donors, such as South Koreans and British as bilateral cooperation partners (Vietnamplus, 2014) and private investors, have expressed certain interest to team up in these projects, little discussion has been concluded. Until now, uncertainty remains (See Figure 4).

9 - For building of MRT lines, loans proposed by the Japanese government, the “Special Terms for Economic Partnership” (STEP), provide a grace period of 10 years, refunding period of 40 years and incredibly low interest rate, less than 1% annually.

**Furthermore, the currently launched MRT projects have seen their cost swell considerably. This situation is a concern to the Vietnamese Government which needs to negotiate with donors for additional budget commitments to cover the hiked costs while still seeking funds for other lines. These challenges remind us that the implementation of any urban mega-project, in any city and any context, would hardly happen without high risks and additional costs (Fließberg, 2007). How can this be different with the case of HCMC?**

If one hand the Vietnamese Government is in need of international financial assistance, on another hand the ODA donors are conversely in a situation to offer, but also to compete against one another. This is explained by the benefits that each ODA supplier can gain in granting loans to the Vietnamese Government. In fact, each donor imposes particular conditions for the granting of their particular loan. “Japanese assistance, which has the most attractive financial offer,” is characterized by a “tied” financial aid. This means that the loan is conditioned with the use of a Japanese-originated technology and expertise. From the study on the metro rolling stock to the ticketing system and the engineering works, all these components will be provided by Japanese companies or Japanese-led international consortiums.

At the opposite, for the metro lines No2 and No5 in which ADB is involved, the financial assistance is considered as “untied”. ADB allows that tender offers are open and that both foreign and local contractors can submit their bids. Moreover, this donor imposes other requirements such as respect for ethical,
social and environmental rules with regards to the implementation of the project. The conditions for loans by Spain and Germany have similar rules to the Japanese, namely “conditional” use of the granted credits. Diversified financing sources are certainly an advantage to HCMC, helping it with access to foreign techniques and technology which at the same time in a situation of being dependent on limited, resettlement is inevitable, especially in underground sections. For instance, in the case of the first phase of line No2, more than 22 hectares of land located in urban districts are to be acquired and 460 households will be relocated and compensated, with a total cost estimated at USD 115 million (MVA et al., 2010). With such conditions, the Government faces two major challenges to build other public transport infrastructure: the establishment of reserves of land and the management of site clearance and resettlement procedures.

13 - On the land market, one square meter in the HCMC outskirts costs around USD 500, and in central districts, the price reaches USD 4,000 (Quartamp et al., 2013). But to calculate compensations, the administration refers to the official land price framework which is irrelevant and lower than the market price. Over recent years however, the gap between the administrated prices and real market prices has tended to decrease.

In this context, the HCMC Land Development Centre is in an unfavourable position to establish land reserves and to provide plots for building the expected infrastructures. Moreover, the land located around the future metro stations where high land value increasing is predicted has already been acquired, notably by well-informed property developers.

12 - It should be noted that there is no private land ownership in Vietnam. According to the 1992 Constitution, land belongs to the People and the State is responsible for its management. Since the land law promulgated in 1993, land users are supposed to have a land use right regulated by the administration. This right can be revoked by authorities to implement projects which are part of the city’s master plan and land users have to be compensated.

11 - One of the most significant examples in this area was the construction of a 1.3 km long section of the first Hanoi’s ring road, the Kim Liên - O Chợ Důa artery. Launched in 1999 and achieved in 2005, this operation had a cost of more than USD 50 million, but the amount of compensation for resettlement represented 75% of the total project cost (Musil, 2013). The administration estimates that the latters are only compensated for their lost property.

Access to land is a major obstacle in every urban transport projects initiated so far in Vietnam, especially for building road infrastructures. Problems in accessing land increase the projects costs and delay the completion of the works. Expropriation, compensation and resettlement procedures are the most difficult stages in the projects' implementations. Unlike road building projects, the first studies on MRT and BRT lines in HCMC gave the impression to simplify the land issue. This was the local authorities’ understandings.

Indeed, MRT lines are built out of ground, either underground or elevated, and then appear to be less land-consuming. As for BRT lines, they are integrated in enlarged road arteries, like the case of the BRT line No1 on Võ Văn Kiệt boulevard, and thus, they do not necessarily need land acquisition. However, since work started on building MRT line No1, along with the study of line No2, land issue has re-emerged as a major concern. Whereas the need for land acquisition is limited, resettlement is inevitable, especially for works on train depots, access to stations, roads and other network deviation (i.e. electrical and sanitary sewers networks), installation of ventilation shaft and safety systems.

In the time between the first land evaluations and that when the government asks for site clearance, which may take several years, land prices have surged, causing fresh disagreements with disaffected households. Moreover, opposition is stronger and more violent with households who do not have regulated land use rights. Indeed, the administration estimates that the latters are only compensated for their lost property.

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Hence, the progress of urban transport projects poses a critical issue of equity to households to administrative procedures and questions the transparency of resettlement regulations.

Institutional and technical management in the learning process

The size of the planned projects, the problems with funding as well as challenges related to land acquisition, require the administration to perform a tougher overall management of current public transport projects. These operations are however conducted in a partitioned framework. Whilst this framework may respond both to the requirement of donors and the development needs, it also questions the transparency of resettlement procedures, and adversely affects the project’s progress. The institutional organization of public transport projects is also beset by the difficulties caused by the involvement of a large number of foreign financial institutions and donors. Other problems specific to Vietnam, such as the technological sophistication, the current HCMC urban transportation system will obviously be processed over step by step. However, the authorization “wait and see” attitude may affect the progress of the current projects as well as do harm to the system’s future efficiency.

Due to the Ho Chi Minh City’s rapid urbanization, building a modern mass transit system is a priority to ensure a sustainable and livable development of the metropolis in the coming decades. To break with current practice of city travel, mainly by motorbikes, the government has no option but to invent a new way of mobility based on fast, efficient, and attractive public transport, ensuring that commuting is viable across the entire metropolitan area.

To cope with this challenge, the city does have an ambitious plan. But its capacity is not up to its ambition. Lacking funding resources and given the sophistication of future facilities like the MRT lines, the future of the municipally public transport infrastructures depends on foreign financial assistance and aid. Challenges in land acquisition, tardy resettlement procedures, and land disputes, have slowed down the completion of works. Issues in go-vanishing of such on-going projects have put the authorities to test. They are now pushed to design a suitable institutional architecture to ensure that facilities’ under construction may function later as a unique “system”.

Given these constraints, it is doubtful that the city public transport system would be built faster than the road network in spite of the pledged construction of the metro lines. The competition amongst donors affects not only the building process, but also how the system will be operated. Finally, there will come the time when the future multimodal public transport system will require the city to create a Public Transport Authority (PTA). The establishment of such body requires a consensus amongst partners of the transport projects (the People’s Committee, the city transport authority and other local technical agencies and donors), but doesn’t appear to be on the municipality agenda given the urgency of the metro construction sites. Furthermore, as various donors are involved in the metro projects, all of them support different PTA models. Then, the management of the body in terms of status, financing and planning are unclear.
partnerships involving the private sector based on proved and successful mechanisms. Moreover, a growing slice of the population resides not only in financial and technical aspects, but also in its capacity to convince the citizens that public transport is the future of a modern metropolis.

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