

Urbanization and Challenges to Sustainable Urban Land Development in the Ho Chi Minh City Metropolitan Area

Vien Thuc Ha* and Hieu Ngoc Nguyen**

| ARTICLE INFO | ABSTRACT |
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| <p>Received: June 10, 2019.</p> <p>Received in revised form: September 11, 2019.</p> <p>Accepted: October 21, 2019.</p> <p>Published online: December 20, 2019.</p> | <p>In 1986 the Vietnamese government adopted a series of what are now well-known economic reforms more popularly referred to as <i>Đổi Mới</i>. In the decades following the adoption of these reforms, annual economic growth rates have typically ranged 6.5% to 7%, placing the Vietnamese economy among the world's fastest growing over the last three decades. The rapid industrialization and urbanization that have accompanied this rapid economic growth pose challenges to sustainable development in Vietnam. Land conversion to non-agricultural uses is one of the most concerning issues in this process with profound economic, social, and environmental implications. This paper reviews the current situation and discusses how land was managed for urban and industrial development using an institutional approach. Arguments and recommendations for the situation were developed upon a case study in Ho Chi Minh City metropolitan area, which is Vietnam's largest and most dynamic.</p> |
| <p>Keywords: Sustainable urban development, Rapid urbanization, Urban land management, Land use change.</p> | |

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* Vietnamese German University, Dinh Duong New City, Vietnam.

** Corresponding author. Vietnamese German University, Dinh Duong New City, Vietnam. E-mail: hieu.nn@vgu.edu.vn

This paper uses institutional analysis in a case study of Ho Chi Minh City to discuss urban development management, including efforts to reduce land conversions to urban uses. The paper consists of four parts. Part I reviews the situation that lead to rapid urban land conversion over the last three decades. Part II outlines the development context of Ho Chi Minh City. Part III analyzes the institutional and legal foundations that drive spatial development. The paper then closes with leading conclusions to draw from the case study.

Development Background

Vietnam has experienced rapid urbanization over the last three decades. In the period 1990 to 2017, the number of cities and towns jumped from 500 to 780. At the same time, Vietnam's overall level of urbanization increased from 19% to over 34%. More remarkable was the growth in urban land consumption in the Ho Chi Minh City region and within the city itself (Figures 1 and 2, respectively). Urban land use increased from 600 km² to 3,000 km² in over that same 1990 to 2017 time period, surpassing both Thailand and South Korea in total area of urban land use. The pace of land conversion has slowed to 2.8% since 2010, but still remains high (World Bank 2015).

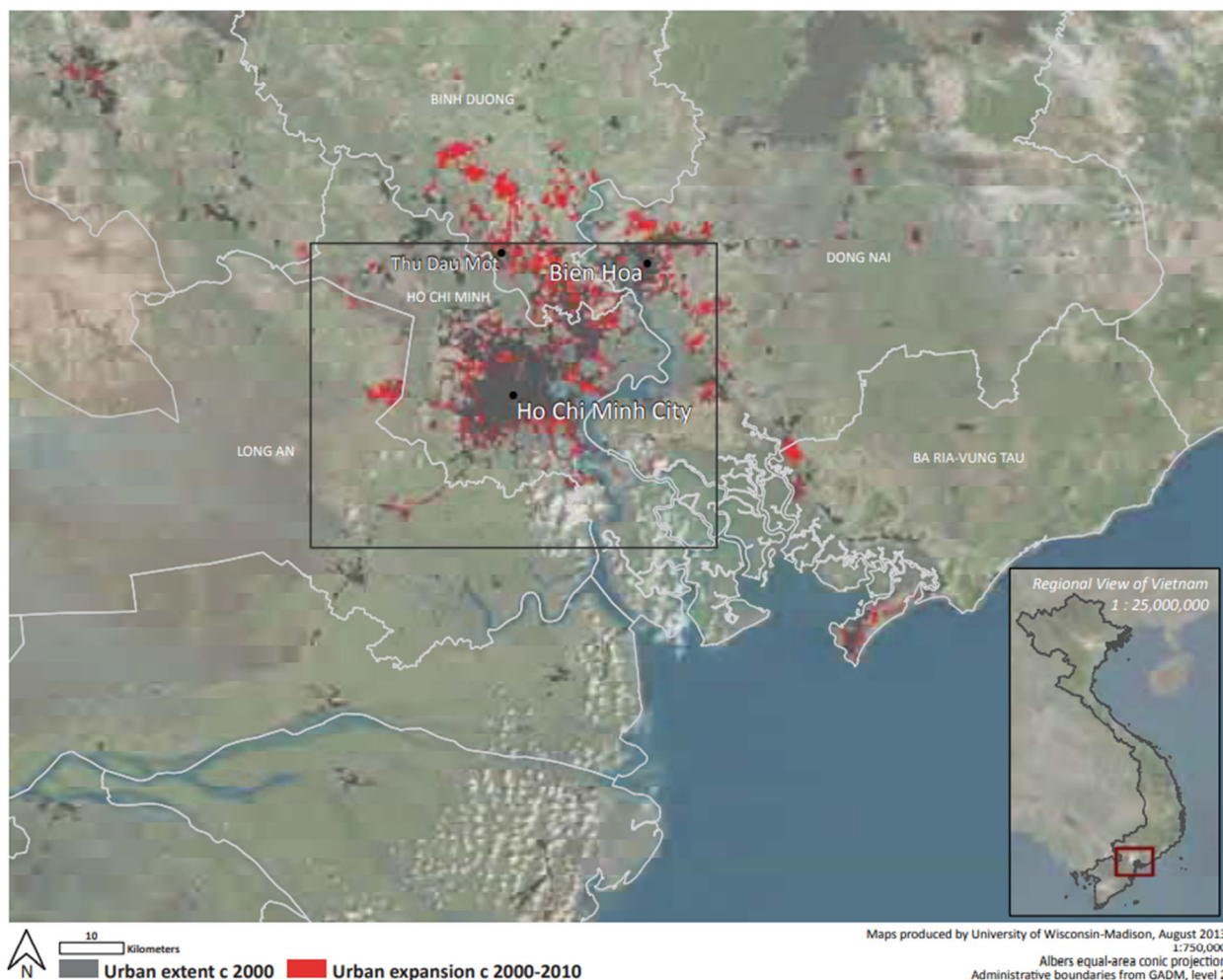


Figure 1. Urban Expansion in Ho Chi Minh City Region, Vietnam, 2000-10.

Source: World Bank 2015.

The urban growth distribution in Vietnam is unbalanced. The highest growth is highly concentrated to the largest two urban regions – Hanoi and Ho Chi Minh City. Both cities and

their respective their surrounding regions together accommodate more than half of urban population. Most migrants prefer moving to the larger metropolitan areas over smaller towns or secondary cities due to perceived future income differences and job opportunities. The area of southeastern Vietnam, including Ho Chi Minh City is the most dynamic, urbanized, and highly developed in the country. Over the past several decades, differential rates of urban growth among large and small cities has restructured the urban system with two primate cities that now dominate the urban hierarchy.

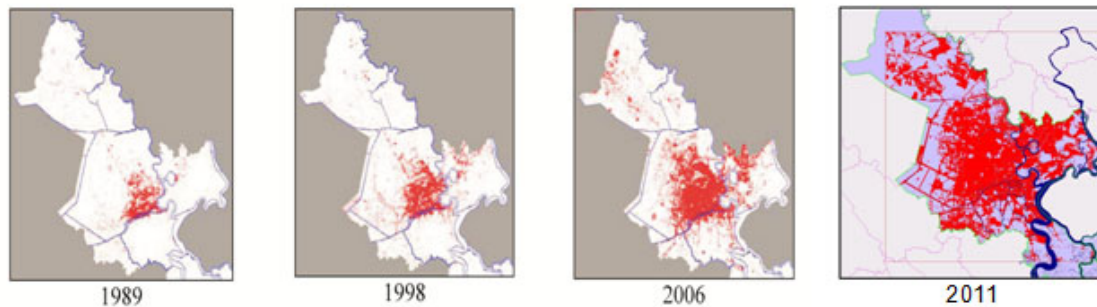


Figure 2. Urban Land Expansion, Ho Chi Minh City, Vietnam, 1989-2011.

Source: DONRE 2012.

There are several key features driving urban land development. Housing development and improvement is considered most the important factor. Housing provision is a key target for consumers since Vietnam launched the renovation. In 1990, average housing level in Hanoi was only 5 m² per person. Most of household savings were invested to housing development and improvement, thus resulting in tremendous change in city landscapes. In 2015, urban housing level reached 23m² per person and urban housing production is running at a pace of new 500,000 units or 35 million m² per year.

Industrialization, too, has played an important role in urban land development. Since the first industrial park (IP) was built to red-carpet foreign direct investment (FDI) in 1986, 325 industrial zones were built, 223 operated in almost all provinces and cities that occupy about 96,300 hectares in 2017 (Ministry of Planning and Investment 2017). This figure excluded industrial clusters under District authorities and small-scale scattered industrial warehouses.

Further, the increasing productivity via automation in agricultural sector has pushed redundant laborer to move to cities and industrial zones. Electrical and mechanical innovation in agricultural machinery has liberated farmers from growing rice and rearing livestock. Nearly half of the 16 million of families in rural areas received support via remittances from young family members working in urban areas.

There are several concerns surrounding urbanization and land development in Vietnam. Widespread urban sprawl in the peri-urban area is the result of inadequate development management. Sprawl, characterized by leap-frog development is observed in most cities (Hieu 2016a, Nham 2016, and Perucca et al. 2012). Land consumption is occurring at a pace of two to three times the pace of population growth, signaling a clear trend of sprawl type development (Dong 2013). Urban expansion is encroaching into lower elevation flood-prone areas and in violation of policies to protect wetland and other wet areas. Ho Chi Minh City's expansion into low laying areas correlates with increased flood hazards, particularly during high tide events (Dung 2011).

The two mega-cities are struggling to become effective urban regions and the transformation process to a new regional structure is challenged by management capacity. Mass Rail Transit systems (MRT) are underfinanced and hinder the goal of achieving Transit

Oriented Development (TOD) and to create a system of networked development nodes of jobs and public sub-service centers to reduce daily commuting needs. Flood and water management is under threats with weak control of expansion to low elevated land (Hieu, 2016b; Hieu and Nam 2016). Unnecessary competition of capital investment over industrial parks (IP) and especially logistics hub lead to over expansion of port capacity even as there is not enough of a transport infrastructure network to serve the logistics needs (Xuan and Jonathan, 2012).

Ho Chi Minh Development Context

Ho Chi Minh City is the largest city in Vietnam that easily plays the most important role of national economy. Ho Chi Minh City is the largest transport and logistic hub in the southern of Vietnam with busiest international airport and sea port. Although covers only 0.6% of the country area (2,095 km²) and 6.6% (~8.5millions) of the total population in 2017, it produces more than 20% of national GDP and contributes 30% of revenues to the national budget.

Ho Chi Minh City is transforming to a megapolitan agglomeration. Population in the city proper is only 8.5 million (2017); however, total population commute daily to and from the urban core may reach 13 million. After 2000, 70% spatial growth was outside of city administrative boundary. Inside this boundary, the built-up area rose 3.5 times while population grew only 2.4 times from 1985 to 2015.

The urban sprawling form is an inevitable result of peri-urban development. The population density models show a clear pattern of sprawl. In 2015, average population density in the suburb is below 2500 person/km², less than 1/10 of the city core density (35000/km²). The city core's population keep growing with massive housing development projects along the CBD area.

The sprawling pattern poses fiercer challenges to its growth. Peri-urban areas suffer from poor service levels due to rapid expansion without proper utility services (Perucca et al., 2012). The city is going to use up its land stock, and its current main growth extension to the south and east are challenging the ecological balance of the region where threats of the urban flooding, water salinity, and climate change are escalating along the urbanization process as shown land use maps and the development plan (Figure 3).

Institutional Analysis of Land Development Management in Ho Chi Minh City

Basically, there are three groups of factors that drive the land conversion outcome, including:

- a. Characteristics of the (urban) planning system, including system design, urban land use and development plan making methods,
- b. Development management system, including land development management tools, institutional arrangements of governmental agencies, and capacity of authorities;
- c. Related market and land administration policies, including duties for using land (taxes, charges, and fees), fines and sanctions as well as land valuation system.

However, due to the limitation of the research, the discussion will not analyze organizational or individual capacities of government agencies. Debates only focus on system design, regulations, and institutional issues in the following sections.

Urban Planning and Management System

Vietnam's urban planning system has been evolving within a transitional economy. Under the earlier command economy, cities were developed under a 'master plan' approach to allocate resources for major public development projects. There was no property market with very limited participation of private sector before 'Renovation' from 1986. Over the past three decades, a new urban planning system with new development plans and controlling tools, planning codes, and regulations introduced to examine private proposals.

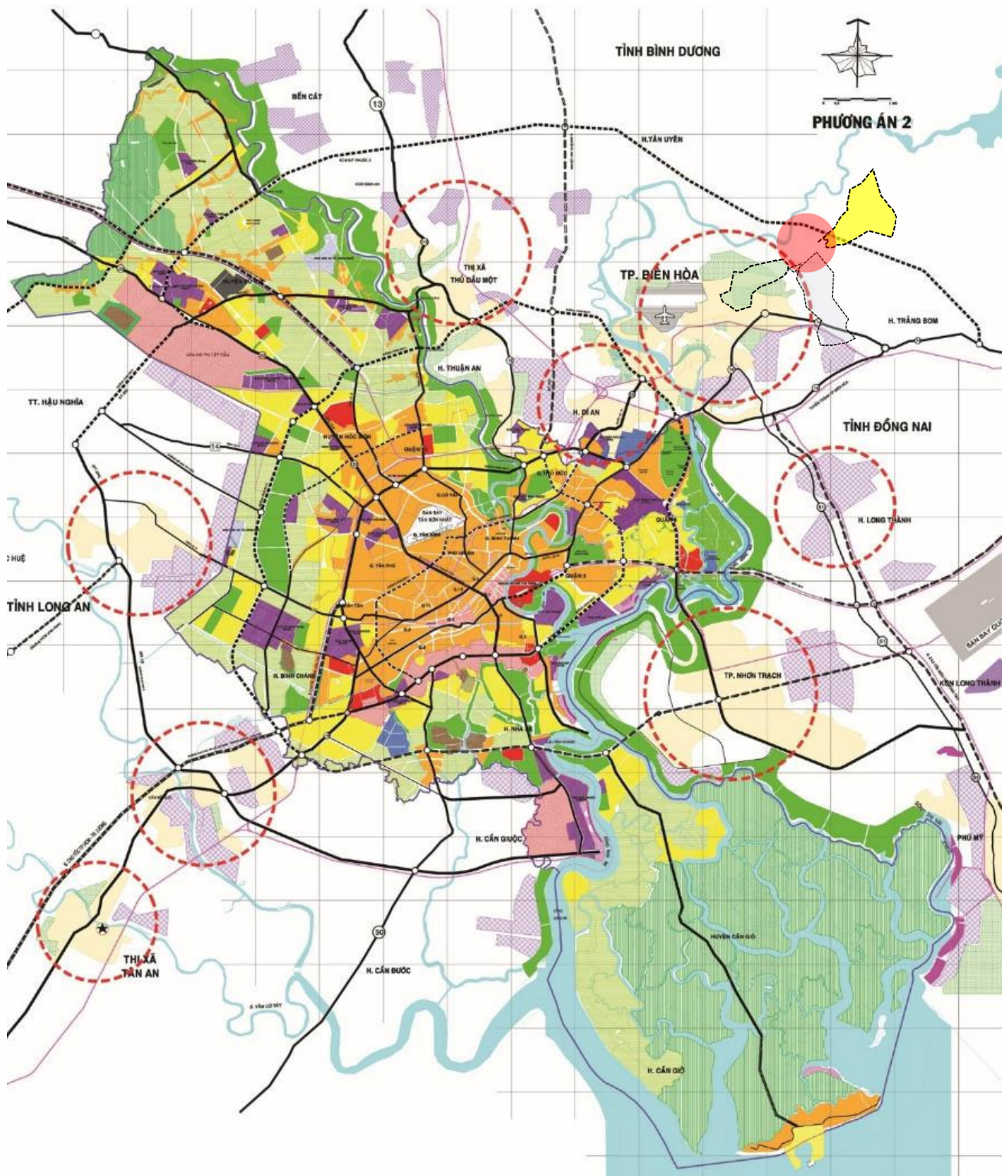


Figure 3. Urban Plan for the Core City.

Source: DONRE. 2012.

However, the new system remains more ‘top-down’ in form with a coordinated urban planning system that is lacking with inadequate capacity to cope with market driven development. The Social Economic Development Plan (SEDP in oval at center of Figure 4)

remains as the ‘umbrella’ for all spatial related plans that control public resources allocation only. SEDP was not designed to monitor development on geographic and timing bases and is unaccountable to resources from the market. Sector plans (dotted rectangle, Figure 4) created master sector plans for implementing projects from public resource. These plans are often rigid, long term plan, so rarely be prepared to the changing context such as cutting off investment plans and repeated modifications in shorter than 5-year interval, which occur regularly. The absence of area-based monitoring agency with capability to cope with high pressure for development in peri-urban and explained for uncontrollable leap-frog land use and sporadic land conversion.

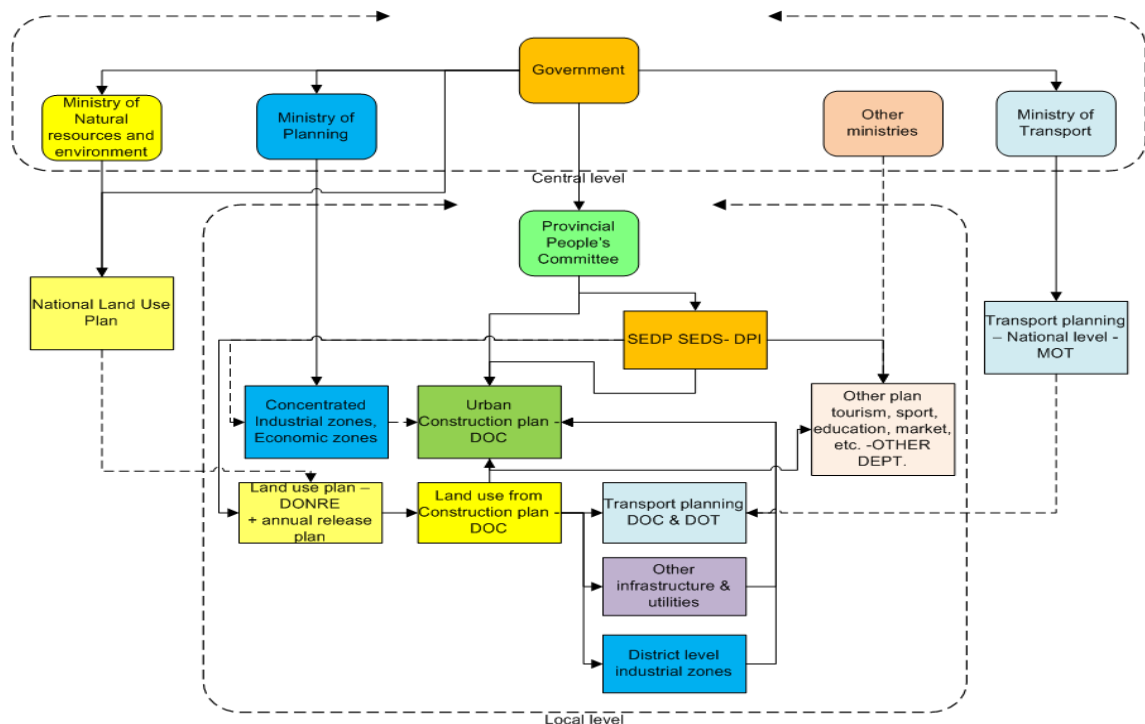


Figure 4. Urban Planning System in Vietnam.

Source: Hieu 2016a.

The plan making and adoption methods also are a concern. City (spatial) master plans are produced with long term population projection (20-25 years compound growth rate) and desired GDP growth rate. Using a long-term higher growth rate to calculate compound interest would result in exponential spatial growth. For example, with 3-4% population and 10% GDP growth, 20 to 25 years prediction will double current urban spatial consumption. This vision would absorb easily ‘any potential development projects’ within the enlarged boundaries (the fact that land development in Ho Chi Minh City inflated at a rate 2.4 times higher than population growth from 1990 reinforces this claim). Furthermore, there is no proper economic and financial analyses during plan making process at city and zoning level. Only at detailed plan level, the adoption would touch upon resource issues; however, there is no request for calculating the impact of new development to local public budget. No measurement means no control.

Another concern is sector planning problem on industrial park development. The existing design of industrial park plan's adoption undermine the role of construction sector (Figure 5). The size, function, and location of IP were calculated by job creation and environmental formula. As many provincial authorities in the Ho Chi Minh City region moved

their IP to nearer the border of Ho Chi Minh City, its locations had weak link to existing social infrastructure. The problem is IP location and layout were prepared without calculation for housing for workers and urban – related utilities for habitation. Until recently where the demand for housing for poor workers mounted, a new policy on social housing enabled local authorities to convert a part of vacant IP area for social housing. However, there paradox remain as most industrial parks receive generous grant of land lease (most request double their existing space for future expansion), while workers are packed in poor slum-like housing clusters nearby.

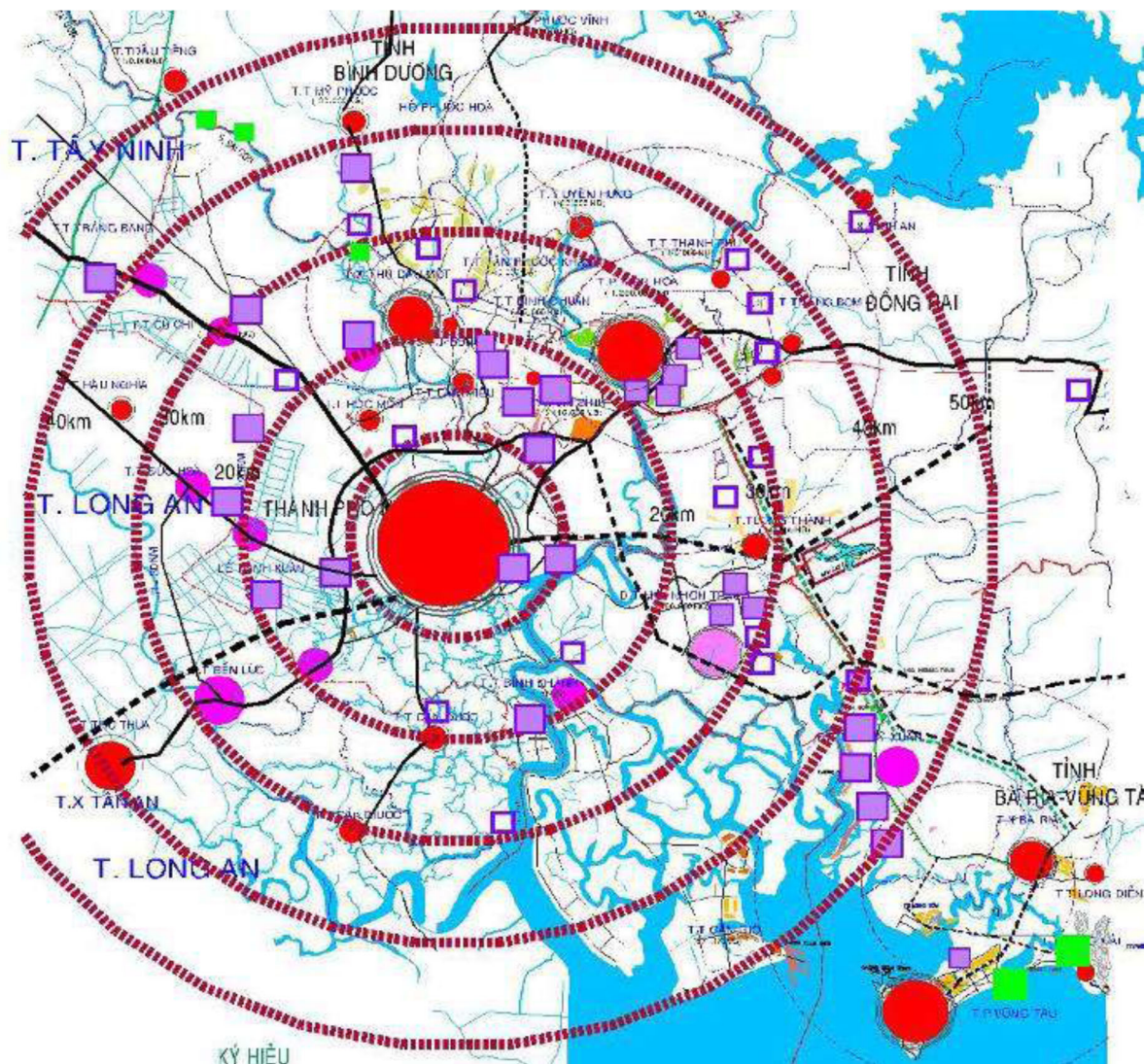


Figure 5. Industrial Parks in Ho Chi Minh City Region.

Source: Minh et al 2008.

Urban Land Development Management System

Urban Land management relies on land use plans that do not support the control of sprawl. Both land use plans from construction (DOC) and natural resource (DONRE) departments have authorities over land use allocation. DOC's land use plan controls the actual land conversion by adopting individual development projects. DONRE's plan made rooms for conversion by proposing annual land release plan for conversion to City's Council. The fact is that DONRE's

proposal is driven by GDP growth, which is constantly higher than actual development proposals. DONRE's focuses on total converted area regardless how much development has leapfrogged. They did not play the role of the gate keeper for manage resource effectively.

The existing land monitoring system is not functioning properly in combatting project hoarding behavior. The current (urban) land management system relies on key principle that they will withdraw any idle project beyond 12 months (or 24 months if project is being delayed). This regulation attempted to ensure developers would use land promptly. However, this regulation relies on the integrity of inspectors, where better monitoring tools, and effective & transparent regulations are in place. However, all of them are often in trouble. The reality was that developers could hold up the project through political terms with a number re-starts to avoid check-up regulations (Liem 2014). In 2014, Ho Chi Minh City asked developers to withdraw 490 projects, including 162 housing projects (Son 2014). In 2017, there remain 570 pending projects, occupying over 20,000 hectares, with some remaining idle for more than 20 years (DONRE HCMC, 2017). Very few were withdrawn thus far.

Compulsory purchase land acquisition in new urban areas encouraged hoarding behavior in the primary market. Before enactment of the 2013 Land Law, most of industrial parks and new urban areas (private developers) acquired land using compulsory purchase method. This enabled developers to buy agricultural land at crops yield revenue price (in 30 years) and sell at urban freehold land price. One Phu My Hung developer paid only ~\$15000 per hectare of agriculture land in Nha Be District during late 1990s and sold it later for than 10 times that price (Du Huynh 2017). The profit margin of land conversion reduced significantly as cost of resettlement and compensation increased later. Developers, however, still realize their profit target by holding land for future increase and defer to pay land use fee (which is significant – up to 20% of selling price) until they implement their development phase.

After 2009 and then 2013, the warning of vacant urban land propelled central Government to introduce new policies to damper speculation behavior. Thanks to high inflation from 2008 to 2012, freezing market from economic downturn, primary market speculation halted together with State's policies. The national land value base significantly increased from 2014, even doubling in some areas of Ho Chi Minh City. This pushed down urban land conversion pace considerably. Regulations on sanctioning deferral land use fee payment, together with Directives from Ministry of Construction requested developers to acquire land before proposing new housing project lift up barriers for land conversion. Developers found more opportunities in mergers and acquisition from old projects than asking for new ones.

Other Related Land Taxes and Public Budget Revenues

An effective way to control of land speculation is taxing system; however, it seems that land tax does not play its roles. The rate of tax on land use rights transfer is 2% rarely mind the buyers (or 25% of increase value; however, 25% increase is infrequently applied) (2007). The fee to use (residential) land is nominal: only 0.03% to 0.15% (if over 3 times than average quota) failed to discourage speculation behavior (2010). Especially, there is no property tax on holding multiple land plots or flats. These made up a neutral environment for buying more land and property.

An important factor motivating excessive urban land conversion is the hunger of the public budget for infrastructure development. Legal regulation does not enable local government has no revenue from property tax or infrastructure impact fees. Meanwhile, the city must subsidize some utilities such as sewage, garbage collection, and especially buses. They must also rely upon collecting land use fees from expansion to finance infrastructure redevelopment or development. If there are no national subsidies, the best way to balance the sheet is to accept or even encourage one-off land use fees from land conversion proposal. This definitely provides a boost to sprawl type development.

In fact, the Build and Transfer (BT) and BOT also help in financing infrastructure, though current BT (and some BOT) projects continue to be based upon one-off land use fee mechanism. Land sales during 2000 – 2010 were up to 30% (Nguyen Thi Canh, 2013). This revenue dropped sharply recently to 21% in 2012 and less than 5% in 2014 due to difficulties in land sales during the recession period. Given the public debt and national deficit recently, however, the city may have to push up BT/BOT programs, which may possibly result in a new wave of spatial expansion.

Concluding Remarks

This article covered just some of the critical institutional issues that influenced urban land development processes in Ho Chi Minh City over past several decades of urbanization. Although this case is unique in geographic and development context, our lessons could be valuable for some cities.

Firstly, the necessity of integrated development management with proper design of urban planning system seems to be a central issue for managing urbanization process. Improving the monitoring capacity should be priority solve the project-based development and silo management towards area-based development. This requires improvement of legal tools, decision making processes, and institutional arrangement ensure this integration.

Secondly, the method of plan-making and adoption could be improved with resource planning integrated with spatial development. The preparation and adoption of master and zoning plans should be prepared with feasible analysis of resource mobilization using market signals. The adoption of detailed plans should have based on evidences on the impacts to local infrastructure and to local budget.

Last, but not least, we need a proper incentivized system to drive both public authorities and other stakeholders to improve land management performance. Problems from inappropriate land valuation, property tax, and revenues for local budget are recognizable. City authorities need to sustain their revenue by charging property instead of relying on the one-off land use fee approach. Proper delegation and building local autonomy would be the solution to improve responsiveness and foster innovation to satisfy local infrastructure development.

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