

# A Study on Sustainable Urban Management with the Comparison of Cases in Japan and Vietnam through Program Management Framework

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## Abstract

The urbanization of emerging countries such as Vietnam is progressing and urban problems are becoming more serious. Therefore, it is unlikely that the population of urban areas will permanently increase, and it is necessary to manage urban areas to cope with both "growth" and "shrinkage." This paper studies a way of management of large-scale urban development, which creates large and long lasting social public value, by comparing it with a Japanese case study.

## 1. Introduction

### 1.1 Backgrounds

Urbanization is progressing worldwide, and emerging Asian economies are no exception. The urban population ratio in Vietnam, one of these countries, is significantly increasing from 20% in 1990 to 39% in 2022<sup>2</sup>. The total population of Vietnam is currently still increasing, and this, combined with the rise in the urban population ratio, is causing many urban problems such as traffic and environmental problems in the metropolitan areas in Vietnam, such as Ho Chi Minh City (HCMC) metropolitan area. On the other hand, it is said that Vietnam's total population will start to decline in 2054 according to UN projections<sup>1</sup>, and in 2044 according to a study published in "The Lancet<sup>2</sup>." Although it is unclear how long the population of metropolitan areas such as HCMC will continue to grow, but it is not permanent and then is expected to enter a "shrinking phase" like developed countries. This means that metropolitan areas like HCMC need to tackle with urban problems under growth pressures and the preparation of shrinking stage in parallel. In addition, the urban management is in the complex context of future economic and social structural changes such as industrial, population structure, and digitalization. Then, the urban area must realize public social values that benefit not only specific stakeholders but also society at large in a sustainable manner. The urban management under such situation is "complex," "uncertain," and "risky," and it is necessary to examine and clarify how it should be done.

### 1.2 Research Question

From the above backgrounds, this study focuses on Vietnam, where many urban development projects, mainly large-scale residential projects, have been implemented and the population is increasingly concentrated in urban areas. Emerging economies, such as Vietnam, can use rather short time for urbanization than developed countries, making it difficult to deal with.

It is reasonable to apply the project and program management theory (P2M theory) to cope with "complex," "uncertain," and "risky" circumstances that the sustainable urban management in Vietnam is facing. At the same time, the sustainable urban management, from the viewpoint of a program management, is the large scale, long term, social and public value creation undertakings under complex, uncertain, and risky circumstances. Therefore, the research question is how the program management framework can be applied to the sustainable urban management in emerging countries.

With this recognition, this paper focuses on the large-scale residential and urban development in Vietnam and aims to clarify how the theoretical framework of program management can be applied to sustainable urban management and how it can lead to a desirable implication for the management through a comparison with the Japanese experience.

## 2. Literature review

Project and program management can be applied to a variety of areas, especially for a plant and/or product development, a research and development, and a software development. On the other hand, public and social value creations are also the targets of a project and program management. Okiura and Kubo<sup>3</sup> examined the program management framework application to Official Development Assistance (ODA) by Japan. Nakano et al.<sup>4</sup> studied applying the program management framework to GHS reduction. In relation to a regional vitalization, Nakayama and Kameyama<sup>5</sup> analyzed the platform management of local re-vitalization activities. However, the periods that these studies treated with are several years, not the decades. Thus, there is not enough research on how to create a social public value through the urban development on a large scale and over a long-time horizon.

## 3. Features of large-scale urban development and comparative study approach

### 3.1 Features of large-scale urban development

As shown in previous studies, the public and social value creations, such as ODA and regional development, are also targets. On the other hand, the large-scale urban developments that realize large-scale, long-term "public social value" in this paper have the following characteristics from a project and program management perspective.

1. Takes time to complete (years to decades)
2. The results define the structure of the city and/or region for a long period of time.
3. Needs to respond to changing times over a long period of time.
4. There is no "end" to its value realization as the results are part of the city.
5. The number of stakeholders is huge.

In general, "project" has its "start" and "end." It is the definition of the "project." Concerning urban development projects, if we see them as just construction project(s), there is a start and end. For example, there are official starting and completion dates for large scale urban developments in Tokyo metropolitan area such as "Tama Garden City" and/or "Tama New Town." But they are just for "construction projects." Even if "development = construction" is completed, the development results will exist for a long period of time as a part of the city, and then "values" continue to be created there, by maintaining the results and adjusting to surrounding environment change, as the city will exist for a long period of time. Therefore, it is important to have a "program" viewpoint that does not end with the completion of development, including changes in social conditions and maintenance of the developed product during that period.

These features, except "5. number of stakeholders" can be described as Fig. 1. The basic idea of project management is a recognition and start from "As Is" and then, a realization of "To Be" by conducting the project. Then there is a start and end, however, concerning the urban management to realize that the "To Be" is not the goal. As the timeline is very long (years and decades), the continuous and endless activities for the urban management are necessary and can be considered as an urban management program.

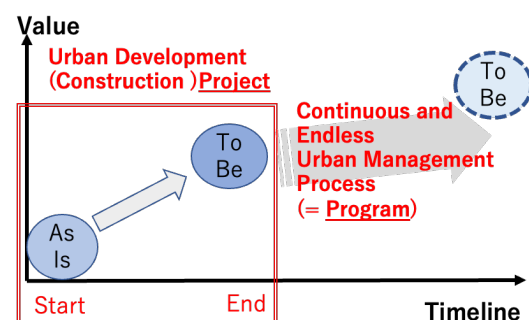


Fig. 1. Features of Large-scale social public value creation

### 3.2 Comparative approach: between Vietnam and Japan

To study the appropriateness of actual urban management activities including whether the set “To Be” is realized or not and the process, it is necessary to observe the development result. To overcome this difficulty, comparison between Vietnam and Japan can be applied. The reasons are as follows.

#### (1) Population trends

Fig. 2 shows the actual population trends and its estimates of Vietnam and Japan. The population trends of Vietnam in around 2020 looks very similar to those of Japan in around 1975 when the number of huge urban development projects were conducted. In addition, the following trends and prospects are also similar.

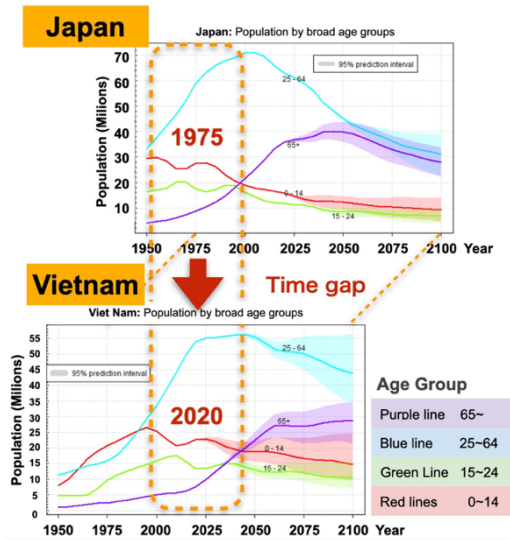


Fig. 2. Population Trends and Prospects <sup>6</sup>

#### (2) Urban development projects

Actual urban development projects in HCMC and Tokyo metropolitan area are studied.<sup>7</sup> The data sources are from Gov. of Japan and those collected in Vietnam. The green dots of Tokyo are the projects built before 1980, and the pink dots are after that. There are a lot of projects in Tokyo and many of them were built before 1980, that we can observe whether the firstly intended “To Be” is realized or not.

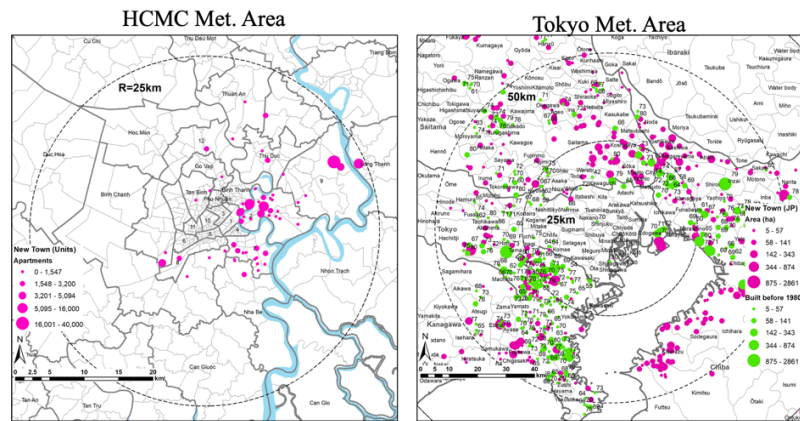


Fig. 3. Distribution of New Urban Development Projects

#### (3) Two timelines between Vietnam and Japan: Relative and Absolute (Calendar)

Considering the previous discussion and analysis, the comparison framework between Vietnam and Japan can be summarized as Fig. 4. Both Japan and Vietnam experienced rapid population growth of metropolitan area and then turned or will turn to a decline in birthrate and an aging society. But the timing is different as shown in the Fig. 4. This is the relative timeline difference.

In Japan, a number of urban development projects to absorb inflow population to metropolitan area(s) were conducted from 1960's to 1970's. In Vietnam, they started from 2010's to 2020s, in the case of HCMC. And it is important not to miss the social, economic, and technological backgrounds between 1960's to 1970's and 2010's to 2020's. This is the absolute (calendar) timeline difference.

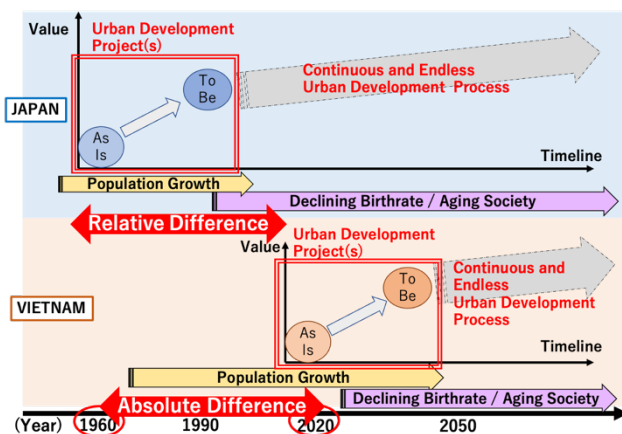


Fig. 4. Two timelines between Vietnam and Japan

## 4. Case study: Tama New Town in Tokyo metropolitan area

### 4.1 Outline and objective of “Tama New Town”

As discussed at chapter 3, to evaluate whether the project(s) create social public value “To Be” as intended or not is important, however, it is natural that it can be done only after the implementation (development) is over. In Vietnam, such phase has not yet come as most of the projects are under implementation. Then, we focus on the relative time difference between urban developments in Vietnam and Japan. In this chapter, “Tama New Town” in Tokyo, which is the large scale residential and urban development in Tokyo. The location, outline and an image are as shown in Fig. 5.

The objective of the development was to build a "healthy residential environment and a comfortable and convenient residential city<sup>8</sup>" by preventing any sprawl due to an uncontrolled development and providing residential lands and housing with a good living environment. Therefore, “To Be” in this case was to realize "healthy residential environment and a comfortable and convenient residential city."



Fig. 5. Outline and an image of Tama New Town

### 4.2 Current situation of “Tama New Town”

The “Tama New Town” development started in 1971, approximately 50 years ago, and the initial construction by a governmental corporation had been completed in 2006. As the problems are observed in Tama New Town, Tokyo Metropolitan Government set up the committee composed of academics and government officials to establish “The Renewal Guidelines for Tama New Town Area<sup>9</sup>” in 2019. In the final report, the committee evaluated the current situation of Tama New Town and the concise summary is shown in Table 1.

Although this summary is so simple to describe the whole current situation of the development with more than 200 thousand residents the reality is more diverse and complexed, however, , to consider from the perspectives of research question of this paper, the summary shows the characteristics of large and long term social public value creation.

Table 1. Current situation and concise evaluation of Tama New Town

Items	Sub-items	Concise Evaluation
○Greenery /Parks		Good (need maintenance)
○Infrastructure	- Neighborhood road - Arterial road	Generally good (Prevent from sprawling) The maintenance is the issue
○Public Transportation	-Railway, Monorail -Public bus	Generally good
○Commercial facilities	- Regional - Neighborhood	Regional : Generally good Neighborhoods: Aging and vacancy problems. Need improvement
○Medical/Recreation / Office facilities		Generally good, but aging office facility and so on. Need more innovative functions
○Community activities, Vibrancy		Generally, not very active and has issues (due to aging residents etc.)
○Housing	- Aging - Vacancy houses	Old apartments are outdated. (New one = OK) There are vacancy housed problem
○Welfare and services to senior residents		There are many issues to be tackled (emerging issue)

Source: Tokyo Metropolitan Government <sup>9</sup> / Summarized and edited by the author

### 4.3 Characteristics of large and long term social public value creation

Although we describe “Tama New Town” as a “project”, this is the complex of various “projects” such as infrastructure, transportation, facility development, housing construction, and software services including welfare and childcare support and so on. The development purpose, in the other word “To Be” was "healthy residential environment and a comfortable and convenient residential city." This short phrase contained a lot of meaning. In that sense, “Tama New Town” should be regarded as a “program”, with the detailed complexity (complexity due to many elements and types) at the development stage.

In parallel, “Tama New Town” had to face the society changes including a population structure, social economic and global circumstances, and advancement of technologies and so on. This is the “dynamic complexity” which arises from interrelationships of elements and their background environment. Decades are long enough for the significant changes happened at the society or region.

These value creation structure with these complexities can be described as Fig. 6. The “To Be” is not simple and has been changed over time. There are the elements that cannot be assumed at the timing of initial planning because some elements appear unexpectedly. What may seem obvious after it appears in reality may not be noticed in the planning stage.

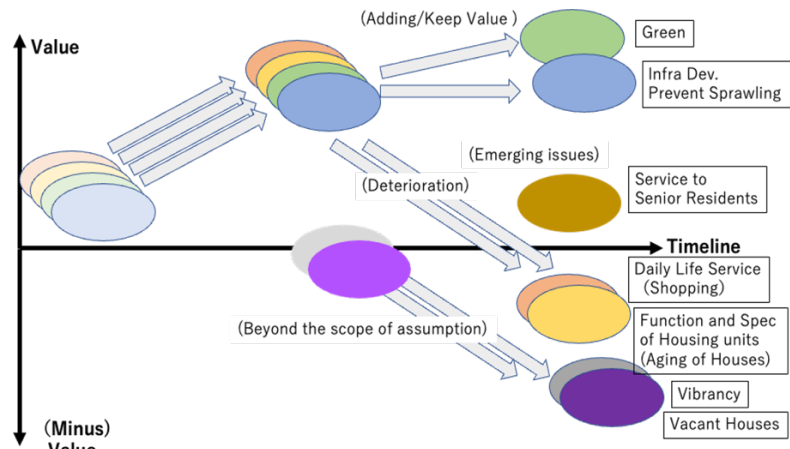


Fig. 6. Conceptual Diagram of Value Created at Tama New Town

## 5. Application of program management framework to Vietnamese urban development

### 5.1 Japanese experiences and its application to Vietnam

As discussed, and reviewed for the features of the large-scale social value creation through the urban development at chapter 3 and 4, the long lasting and the effect of initial intentions will change as time passes. From Japanese experiences, it is impossible to predict everything that will happen in the future in the early stages. At the initial planning stage of Tama New Town, nobody predicted the aging population and houses. What seemed obvious in hindsight could not be foreseen at the time. It is better to consider the factor, the limitation of predicting the future, into the management.

But in the case of Vietnam, there are the Japanese experiences that go ahead on a relative timeline. The relationship can be shown as Fig. 7. In the case of Vietnam, it is also very difficult to predict its future, but the Japanese experiences should be a great help to predict the future and set a “To Be” vision with it.

### 5.2 Application of program integrated management framework

There are the six management frameworks in “program integration management” of P2M theory. It is said that “Profiling”, “Strategy” and “Architecture” managements are done with the vision of “To Be” in the frameworks. While formulating and profiling “To Be”, they should consider the “life cycle” carefully with “value index” management.

The most important management on this context is “platform” management. As the value of urban development should remain long, it is necessary to consider and reflect the needs and ideas of “future generation.” Japan already experienced the results of urban development projects after decades, which can be regarded as a part of Vietnamese experience decades later, as shown in Fig. 7. To this end, it is worth doing to include the experience of countries with differences in the timeline, such as Japan, as a representative of the substitute future generation in Vietnam.

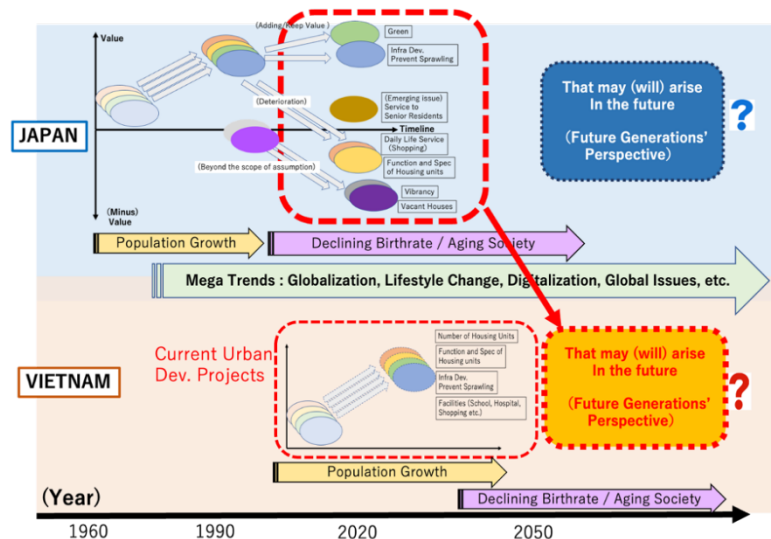


Fig. 7. Value Creation Experiences in Japan and Vietnam

## 6. Conclusions and future issues

This study examined the long-term and large-scale public value realization of urban development and summarized its complexity and difficulties. The study also illustrated the difficulties of forecasting the future, using Japanese case study. With the result, a comparative view between Vietnam and Japan was introduced, and then a proposal for platform management was made based on the effectiveness of relative time difference comparisons.

Future issues include the need to consider how to apply the experience of different time frames to societies with different contexts, and how to transform the experience. In particular, how to consider the different absolute (calendar) time frames is an issue.

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