

MINISTRY OF  
EDUCATION AND TRAINING

MINISTRY OF  
CONSTRUCTION

UNIVERSITY OF ARCHITECTURE HO CHI MINH CITY

---

**Pham Tran Hai**

**THE IMPLEMENTATION EVALUATION OF  
THE MASTER PLANS IN HO CHI MINH CITY  
– THEORIES AND PRACTICES**

Field of study : REGIONAL AND URBAN PLANNING  
Code : 9.58.01.05

THE DISSERTATION SUMMARY  
IN REGIONAL AND URBAN PLANNING

HCMC – 2020

This dissertation is accomplished at:  
THE UNIVERSITY OF ARCHITECTURE HCMC

The academic supervisor:  
ASSOCIATE PROF., DR., ARCH. TRAN BUT

The reviewer 1: PROF., DR., ARCH. DO HAU  
The reviewer 2: PROF., DR., ARCH. NGUYEN QUOC THONG  
The reviewer 3: ASSOCIATE PROF., DR., ARCH. LE ANH DUC

This dissertation was defended at University Dissertation Assessment  
Committee organized at The University of Architecture HCMC.  
At ... o'clock, dated ...

This dissertation could be found at:  
GENERAL LIBRARY OF HCMC  
LIBRARY OF THE UNIVERSITY OF ARCHITECTURE HCMC

## **TABLE OF CONTENTS**

<b>TABLE OF CONTENTS .....</b>	<b>1</b>
<b>Part I. INTRODUCTION .....</b>	<b>1</b>
<b>1. Rationale .....</b>	<b>1</b>
<b>2. The subjects and the scope of the study.....</b>	<b>2</b>
<b>3. The objectives of the study .....</b>	<b>2</b>
<b>4. The study methods.....</b>	<b>2</b>
<b>5. The meanings of the study .....</b>	<b>3</b>
<b>Part II. STUDY CONTENTS .....</b>	<b>3</b>
<b>Chapter 1. Overview of the implementation evaluation of the     HCMC Master Plan .....</b>	<b>3</b>
<i>1.1. The plan implementation evaluation .....</i>	<i>3</i>
<i>1.2. The plan system in Viet Nam .....</i>	<i>4</i>
<i>1.3. The HCMC Master Plan in the provincial plan system of         HCMC.....</i>	<i>5</i>
<i>1.4. The implementation evaluation of the HCMC Master Plan         and the issues raised.....</i>	<i>6</i>
<b>Chapter 2. Scientific basis for the implementation evaluation     of the HCMC Master Plan.....</b>	<b>8</b>
<i>2.1. Theoretical basis for the plan implementation evaluation... </i>	<i>8</i>
<i>2.2. International practices for the plan implementation         evaluation.....</i>	<i>10</i>
<i>2.3. Legal basis for the plan implementation evaluation in Viet         Nam.....</i>	<i>12</i>
<b>Chapter 3. Proposing and applying the set of indicators for the     implementation evaluation of the HCMC Master Plan .....</b>	<b>13</b>

<i>3.1. The system of viewpoints for the implementation evaluation of the HCMC Master Plan .....</i>	<i>13</i>
<i>3.2. Proposing the set of indicators for the implementation evaluation of the HCMC Master Plan .....</i>	<i>14</i>
<i>3.3. Implementation evaluation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015 .....</i>	<i>16</i>
<i>3.4. Result analysis of the implementation evaluation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015 .....</i>	<i>19</i>
<b>Chapter 4. Discussion .....</b>	<b>19</b>
<i>4.1. Discussion about the system of viewpoints for the implementation evaluation of the HCMC Master Plan .....</i>	<i>19</i>
<i>4.2. Discussion about the set of indicators for the implementation evaluation of the HCMC Master Plan .....</i>	<i>19</i>
<i>4.3. Discussion about the result of the implementation evaluation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015 .....</i>	<i>20</i>
<b>Part III. CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>20</b>
<b>1. Conclusions .....</b>	<b>20</b>
<b>2. Recommendations .....</b>	<b>22</b>
<b>LIST OF THE PUBLICATIONS OF THE AUTHOR RELATED TO THE DISSERTATION .....</b>	

## **Part I. INTRODUCTION**

### **1. Rationale**

Planning is a complicated forecast science because it depends on many factors; therefore, it is not possible to ensure the accuracy of what are implemented in comparison with what are planned. Results of plan mplementation evaluation are the basis for: (i) revising or promulgating new policies to promote the implementation of the plan; (ii) revising or formulate new plan. Since 1993, three versions of the HCMC Master Plan were formulated, appraised and approved as follows: “The HCMC Master Plan to 2010”, “The Revised HCMC Master Plan to 2020”, “The Revised HCMC Master Plan to 2025”. The implementation evaluation of the HCMC Master Plan has not been relied on comprehensive studies in recent years, so there are many shortcomings as follows: (i) this evaluation has not yet been integrated into the implementation evaluation of of the provincial plan system of HCMC; (ii) this evaluation is insufficient regarding conformance-based and performance-based evaluation factors; (iii) causality relationship between these factors has not been analyzed.

Recognizing the important role and inadequacies in the implementation evaluation of the HCMC Master Plan, a numbers of relevant studies have been carried out, among which, the study “Proposing A Framework for The Implementation Evaluation of Master Plans and Socio-economic Development Plans of HCMC” aimed to evaluate the implementation of the provincial plan system of HCMC via a intergrated set of indicators.

On the basis of the above study, the dessertation is carried out: to develop a system of viewpoints for implementation evaluation of the HCMC Master Plan and on this basis, to propose a set of indicators for

implementation evaluation of the HCMC Master Plan; to evaluate the implementation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015, using the proposed set of indicators; to discuss about the study results and to propose suitable directions for revising / promulgating policies to promote the implementation of the HCMC Master Plan and for revising / formulating the HCMC Master Plan.

## **2. The subjects and the scope of the study**

The subjects of the study: the implementation evaluation of the HCMC Master Plan in the context of provincial plan system of HCMC.

The scope of the study: (i) this dissertation focuses only on the HCMC Master Plan, not all the master plans in HCMC; (ii) this dissertation is limited in implementation evaluation of development indicators which determined by quantitative objectives and quantified qualitative targets of the HCMC Master Plan; (iii) this dissertation is limited in HCMC administrative boundary in the context of HCMC region; (iv) this dissertation results is verified in practice in the period 2010-2020.

## **3. The objectives of the study**

- The objective 1: To develop a system of viewpoints for implementation evaluation of the HCMC Master Plan.
- The objective 2: To propose a set of indicators for the implementation evaluation of the HCMC Master Plan.
- The objective 3: To evaluate the implementation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015, using the proposed set of indicators.

## **4. The study methods**

The study methods (including: analytical – synthesis method, systematic method, expert method and multi-criteria assessment (MCA) method) are used in the following steps: (i) identifying the

issues raised from current situation of the implementation evaluation of the HCMC Master Plan; (ii) developing the scientific basis to solve the issues above; (iii) developing the system of viewpoints for the implementation evaluation of the HCMC Master Plan; (iv) proposing the set of indicators for the implementation evaluation of the HCMC Master Plan; (v) carrying out the implementation evaluation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015; (v) discussing about implementation evaluation results, and recommending and requesting.

### **5. The meanings of the study**

Scientifically, the dissertation results contribute to the plan implementation evaluation theory with: (i) the system of viewpoints for the implementation evaluation of the HCMC Master Plan could be widely applied to strategic plans; (ii) the set of indicators for the implementation evaluation of the HCMC Master Plan could be widely applied for this kind of plan in different period or other master plans of other cities with different scales.

Practically, the dissertation results are the basic for revising / newly promulgating policies to promote the implementation of the HCMC Master Plan, and revising / newly formulating the HCMC Master Plan.

## **Part II. STUDY CONTENTS**

### **Chapter 1. Overview of the implementation evaluation of the HCMC Master Plan**

#### ***1.1. The plan implementation evaluation***

##### ***1.1.1. Relevant concepts regarding to the plan implementation evaluation***

- Plan (regulated at the Law of Planning no.21/2017/QH14).

- Spatial plan: regional plan; special function zone plan; urban plan (master plan; zoning plan; detailed plan; technical infrastructure plan for the cities under the central government); rural plan.
- Planning methods: comprehensive method and strategic method.
- Plan evaluation: ex-ante evaluation, on-going evaluation and ex-post evaluation.
- Plan implementation evaluation: on-going evaluation and ex-post evaluation.

### *1.1.2. The role of the plan implementation evaluation*

In the context of climate change and socio-economic and cultural uncertainty, plan implementation evaluation has an important role for revising / newly promulgating policies to promote the implementation of the HCMC Master Plan, and revising / newly formulating the HCMC Master Plan. In addition, the results of plan implementation evaluation are also the basis for revising the planning methods.

## ***1.2. The plan system in Viet Nam***

### *1.2.1. The categorization of the plan system in Viet Nam*

#### 1.2.1.1. By effective subjects

Before the Law of Planning no. 21/2017 /QH14 in effective, the plan system includes: (i) integrated socio-economic development plans; (ii) sectoral plans; (iii) spatial plans; (iv) resource use plans (land use plans, water resource plans, and mineral resource plans) and environmental protection plans.

After the Law of Planning no. 21/2017 /QH14 in effective, the plan system includes: (i) general plans at following levels: national, regional, provincial, and special administrative – economic unit; (ii) sea plan at the national level; (iii) land use plan at the national level; (iv) other sectoral plans at the national level, including: group of



infrastructure plans, group of resources use plans, group of environmental protection plans and group of biodiversity conservation plans; (v) urban plans and rural plans; (vi) technical and sectoral plans to detail the national, regional, and provincial plans, including spatial plans.

#### 1.2.1.2. By effective territories

The plan system includes following levels: national, regional (inter-provincial); provincial; and local (inter-district and district).

#### *1.2.2. The dissertation viewpoints on the categorization of the plan system in Viet Nam*

The plan system in Viet Nam is categorized as follows:

- Group of general plans, available at different levels: national, regional, provincial, specialized administrative – economic unit.
- Group of sectoral plans: (i) subgroup of industry plans (at national and regional levels); (ii) subgroup of spatial plans; (iii) subgroup of resource use and environmental protection plans.

#### *1.2.3. The dissertation viewpoints on the relationships in the plan system in Viet Nam*

The above groups of plan have an organic and close relationship in three manners: "guidance and compliance", "update" and "support".

### **1.3. The HCMC Master Plan in the provincial plan system of HCMC**

#### *1.3.1. The description of the provincial plan system of HCMC*

Provincial plan system of HCMC is described as categorized with updated information about formulation, appraisal and approval.

#### *1.3.2. The dissertation viewpoints on the role of the HCMC Master Plan in the provincial plan system of HCMC*

The role of the HCMC Master Plan in the provincial plan system of HCMC are: (i) spatially directing the distribution of social resources

and activities in general according to the HCMC Socio – economic General Plan; (ii) creating infrastructure and space for the implementation of industry plans in HCMC, (iii) guiding the protecting, exploiting and using natural resources mentioned at the resource use plans in HCMC; guiding the environmental zoning and environmental infrastructure distribution mentioned in the environmental protection plans in HCMC.

#### ***1.4. The implementation evaluation of the HCMC Master Plan and the issues raised***

##### ***1.4.1. Relevant studies on the plan implementation evaluation in Viet Nam***

The studies on plan implementation evaluation in Viet Nam are: the papers about spatial plan implementation evaluation in the workshop “Evaluating The Formulation and Implementation of Spatial Plans - The Needs and The Methods” organized by Southern Institute of Spatial Planning on 15<sup>th</sup> December 2017; the study “Basic Renovation of Urban Planning in Viet Nam” done by the National Institute of Urban and Rural Planning in 2019; the study “Analyzing and Proposing urban development management model suitable with the conditions of Viet Nam” done by Viet Nam Urban Development and Planning Association in năm 2020; the books “New Residential Areas in Hanoi - Two Decades Looking Back on A Model” (2016) and "New Residential Areas: From Theoretical Origins to Practical Variations" (2018) by Tran Minh Tung; the study “Proposing A Framework for The Implementation Evaluation of Master Plans and Socio-economic Development Plans of HCMC” conducted by the Institute of Development Studies in HCMC in 2017.

### *1.4.2. Relevant studies on the implementation evaluation of the HCMC Master Plan*

#### 1.4.2.1. Reports on the implementation evaluation of the HCMC Master Plan

The implementation of “The HCMC Master Plan to 2010” had not been evaluated due short implementation time (about 3 years). The implementation of “The Revised HCMC Master Plan to 2020” was evaluated with following reports: “The Implementation Evaluation of The HCMC Master Plan to 2010 (period 1998-2005)” and “Study on The Revising HCMC Master Plan to 2025”. The implementation of “The Revised HCMC Master Plan to 2025” was evaluated with following reports: “Reviewing and Evaluating the Implementation of Decision no.24 dated 24<sup>th</sup> January 2010 of The Prime Minister” and “The Formulation, Implementation and Management of Urban Plans in HCMC”.

#### 1.4.2.2. Other studies on the implementation evaluation of the HCMC Master Plan

The other studies on the implementation evaluation of the HCMC Master Plan are: the paper “Urban Development and Management Implemented in Saigon South Urban Area and Phu My Hung New City” at the workshop “Twenty Years of Building and Developing Phu My Hung Urban Area” co-organized by the Phu My Hung Development Company Limited and the HCMC Institute for Development Studies in 17/05/2013; the article “The Role of HCMC Municiple Government Model in Enhancing The Implementation of Urban Development Orientation” published in the Journal of Urban Planning (ISSN: 1859-3054), no.63 of the tenth year (2013), pages 42-45; the paper “Re-Directing Urban Development in HCMC: Lessons

from Seoul, Korea” at the workshop “Architecture - Planning Management of HCMC” co-organized by the HCMC People's Committee and Ministry of Construction on 5-6/11/2015 in HCMC.

#### *1.4.3. Issues raised from the implementation evaluation of the HCMC Master Plan*

The issues are raised as follows: (i) it is necessary to integrate the implementation evaluation of the HCMC Master Plan into the implementation evaluation of provincial plan system of HCMC; (ii) there is a need to have a comprehensively implementation evaluation of the HCMC Master Plan which includes conformance-based and performance-based factors; (iii) it is necessary to analyze the causality relationship between conformance-based and performance-based factors of the implementation evaluation of the HCMC Master Plan, hence to identify the problems raised from the current situation.

### **Chapter 2. Scientific basis for the implementation evaluation of the HCMC Master Plan**

#### ***2.1. Theoretical basis for the plan implementation evaluation***

##### *2.1.1. Current basic viewpoints of the plan implementation evaluation*

Current basic viewpoints of the plan implementation evaluation: planning is the control of the future, plan not to be implemented is a failure (Wildavsky, 1973); the plan is considered effective and successful when it is implemented and achieves more positive than negative outputs (Alexander, 1981); the success of a plan depends on the plan nature: project plan, strategic plan hybrid plan (Faludi, 1989).

##### *2.1.2. Theories for the plan implementation evaluation*

Theories for the plan implementation evaluation include: objective-driven evaluation; theory-driven evaluation and theory-based evaluation; utilisation-driven evaluation; or data-driven evaluation.

### *2.1.3. Methods for the plan implementation evaluation*

#### *2.1.3.1. Quantitative and non-quantitative evaluation*

Quantitative evaluation is rarely used due to difficulties related to methodology and data collection; however, its results are objective, clear and specific. Non-quantitative evaluations which is also known as qualitative evaluations is commonly used; however, its results are subjective, not clear, and not specific.

#### *2.1.3.2. Conformance-based and performance-based evaluation*

The conformance-based evaluation is the comparison between what are implemented and what are implemented; the conformance-based evaluation is suitable with comprehensive and project plans. The performance-based evaluation is based on how effective the plan is and how the plan guides relevant decision-making processes; the performance-based evaluation is suitable with strategic plans.

#### *2.1.3.3. Effectiveness and efficiency evaluation*

Effectiveness evaluation is the comparison between the outputs and outcomes of the plan and the forecast contents of the plan. Efficiency evaluation is the comparison between the costs of the plan implementation with the benefits brought by plan implementation.

### *2.1.4. The set of indicators for the plan implementation evaluation*

According to the study "Proposing A Framework for The Implementation Evaluation of Master Plans and Socio-economic Development Plans of HCMC ", the plan implementation could be evaluated with the set of quantitative indicators.

#### *2.1.5. Factors affecting to the plan implementation evaluation*

Factors affecting the plan implementation include: (i) factors related to the plan nature: plan quality, plan system uniformity, and plan revision; (ii) factors related to the plan context: political institutions,

socio-economic situation, real estate market trends,...; (iii) plan implementation policies.

*2.1.6. The dissertation viewpoints on the application of theoretical basis into implementation evaluation of the HCMC Master Plan*

The dissertation viewpoints include: (i) there is a need to integrate conformance-based and performance-based evaluation in the implementation evaluation of the HCMC Master Plan; (ii) the implementation evaluation of the HCMC Master Plan could be quantitative; (iii) the set of indicators for the implementation evaluation of the HCMC Master Plan should have four groups (“resources”, “activities”, “outputs” and “outcomes”).

**2.2. International practices for the plan implementation evaluation**

*2.2.1. The plan system in other countries*

Description of the plan systems in following countries: UK, Netherlands, Korea, Indonesia, Malaysia, South Africa, New Zealand, Russia, Japan, France, China, Singapore, and Thailand.

*2.2.2. Lessons learnt from the plan implementation evaluation in other countries*

**2.2.2.1. The implementation evaluation of the General Extension of Amsterdam (Netherlands)**

The plan system in the Netherlands was highly appreciated with the flexibility of the superior plans in guiding the subordinate plan; however, this flexibility made the performance of the superior plan difficult to determine. According to Postuma (1987), during the implementation of the General Extension of Amsterdam (period 1935-1955), although original objectives had been changed, this plan still effectively supported relevant decision-making processes.

#### 2.2.2.2. The implementation evaluation of the Shanghai Master Plan (China)

The implementation evaluation of Shanghai Master Plan used following groups of indicators: population growth, land development, industrial structure, infrastructure development, and green spaces. The results show that evaluation indicators related to infrastructure development and green spaces are better than the other indicators.

#### 2.2.2.3. The implementation evaluation of the Chengdu Land Use Plan (China)

The implementation evaluation of the Chengdu Land Use Plan used the 4E group of indicators (Economy, Efficiency, Effectiveness and Equity), which were scored based on statistic data, to measure its performance. The evaluation results shows that the plan performance is generally good. The first three groups had higher scores; the fourth group needs to be improved due to the low participation of all stakeholders in plan implementation and the low level of equity in sharing benefit generated from the plan implementation.

#### 2.2.2.4. The implementation evaluation of the Lyon Master Plan (France)

The set of indicators for implementation monitoring and evaluation of the Lyon Master Plan includes 5 groups (economy, house; environment, green spaces and transport) with 51 indicators.

#### 2.2.2.5. The implementation evaluation of strategic plans and programs in UK and South Africa

The implementation evaluation framework of annual strategic plans and programs in UK and South Africa has five groups of indicators: “resources”, “activities”, “outputs”, “outcomes”, and “impacts”.

#### 2.2.2.6. The implementation evaluation of the Stormwater Management and Stream Water Quality of Papakura District (New Zealand)

The steps to carry out POE (Plan Outcome Evaluation) are: (i) reviewing the logic and the cohesion of the plan elements: issues, goals, objectives, methods, regulations, outputs and terms of supervision; (ii) comparing the plan objectives and the plan outputs; (iii) explain the plan outputs.

#### *2.2.3. The dissertation viewpoints on the application of international practices into the implementation evaluation of the HCMC Master Plan*

The dissertation viewpoints are: (i) the set of indicators for the implementation evaluation of the HCMC Master Plan should be quantitative to clearly and specifically identify the status of urban development; (ii) this set of indicators should include conformance-based and performance-based evaluation indicators; (iii) the causality relationship between the evaluation indicators and between the groups of evaluation indicators should be established and analyzed.

### ***2.3. Legal basis for the plan implementation evaluation in Viet Nam***

#### *2.3.1. Legal regulations for the plan implementation evaluation in Viet Nam*

Before the Law of Planning no.21/2017/QH14 was effective, the regulations on the plan implementation evaluation were guided in the Decree no.92/2006/NĐ-CP.

#### *2.3.2. Legal regulations for the implementation evaluation of the HCMC Master Plan*

The legal regulations for the implementation evaluation of the HCMC Master Plan are: (i) legal documents on the formulation and approval



of spatial plans and master plans of cities under the central government; (ii) the authority decisions approving the HCMC Master Plan; (iii) the contents of HCMC Master Plan; (iv) legal documents to define, collect and process data related to development indicators.

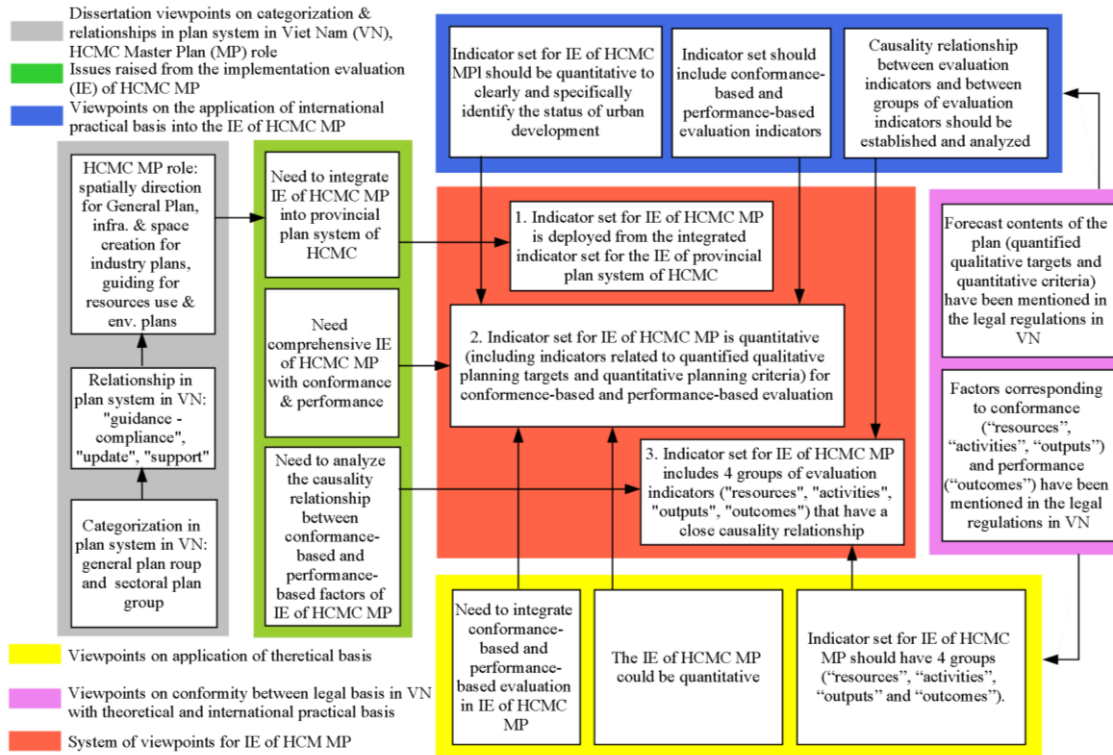
### *2.3.3. The dissertation viewpoints on the conformity between legal basis in Viet Nam with theoretical and international practices*

Forecast contents of the plan (quantitative criteria and quantified qualitative targets) and the factors corresponding to conformance (“resources”, “activities” and “outputs”) and performance (“outcomes” and “impacts”) have been mentioned in the legal documents in Viet Nam.

## **Chapter 3. Proposing and applying the set of indicators for the implementation evaluation of the HCMC Master Plan**

### ***3.1. The system of viewpoints for the implementation evaluation of the HCMC Master Plan***

The system of viewpoints for the implementation evaluation of the HCMC Master Plan are: (i) The set of indicators for the implementation evaluation of the HCMC Master Plan is deployed from the integrated set of indicators of the provincial plan system of HCMC; (ii) This set of indicators is quantitative (including indicators related to quantitative planning criteria and quantified qualitative planning targets) for conformance-based and performance-based evaluation; (iii) This set of indicators includes four groups ("resources", "activities", "outputs", "outcomes") that have a close causality relationship. The process of synthesize this system of viewpoints is described in following figure.



*The process to synthesize the system of viewpoints for the implementation evaluation of the HCMC Master Plan*

### ***3.2. Proposing the set of indicators for the implementation evaluation of the HCMC Master Plan***

The purposes of the implementation evaluation of the HCMC Master Plan: (i) to ensure to integrate comformance-based evaluation (with the groups of indicators: “resources”, “activities” and “outputs”) and performance-based evaluation (with the group of indicators: “outcomes”); (ii) to establish basis for analyzing the causality relationship between indicators.

#### ***3.2.1. Identifying development indicators as planned in the HCMC Master Plan***

The forecast contents of the HCMC Master Plan include qualitative planning targets and quantitative planning criteria. When applying the set of indicators in the implementation evaluation of the HCMC Master Plan, qualitative planning targets are quantified.

#### ***3.2.2. Arranging development indicators into four groups based on the indicators characteristics***

##### **3.2.2.1. “Resources” group**

“Resources” group includes: population, land and finance.

##### **3.2.2.2. “Activities” group**

“Activities” group includes: urban plans, urban area development plans, urban development projects.

##### **3.2.2.3. “Outputs” group**

“Activities” group includes following subgroups: technical infrastructure (transport, energy supply and public lighting, water supply, drainage, communications, wastewater treatment, solid waste treatment, and cemeteries and crematoriums) and social infrastructure (housing, healthcare, culture, education, sports, services – administration, and open spaces).

### 3.2.2.4. “Outcomes” group

“Outputs” group includes following subgroups: technical infrastructure (transport, energy supply and public lighting, water supply, drainage, communications, wastewater treatment, solid waste treatment, and cemeteries and crematoriums) and social infrastructure (housing, healthcare, culture, education, sports, services – administration, and open spaces).

### 3.2.3. Developing a method for calculating evaluation indicators

#### 3.2.3.1. Calculating evaluation indicators corresponding to development indicators

	<b>Pros development indicator (1)</b>	<b>Inverse development indicator (2)</b>	<b>Threshold development indicator (3)</b>
	<i>Positive if increasing (basically)</i>	<i>Positive if decreasing (basically)</i>	<i>Negative if higher or lower than threshold</i>
<i>Planned value in 2015 increases in 2010-2015</i> ( $QH_{2015} > HT_{dk}$ )	(1a) Is planned to increase in 2010-2015 Evaluation indicator: $C_{1a} = (HT_{2015} - HT_{dk}) / (QH_{2015} - HT_{dk})$	(2a) Is planned to increase in 2010-2015 Evaluation indicator: $C_{2a} = 1 + (QH_{2015} - HT_{2015}) / (QH_{2015} - HT_{dk})$	(3a) Is planned to increase or decrease in 2010-2015. Evaluation indicator: $C_{3a} = 1 -  (QH_{2015} - HT_{2015}) / (QH_{2015} - HT_{dk}) $
<i>Planned value in 2015 decreases in 2010-2015</i> ( $QH_{2015} < HT_{dk}$ )	(1b) Is planned to decrease in 2010-2015 Evaluation indicator: $C_{1b} = 1 + (QH_{2015} - HT_{2015}) / (QH_{2015} - HT_{dk})$	(2b) Is planned to decrease in 2010-2015 Evaluation indicator: $C_{2b} = (HT_{2015} - HT_{dk}) / (QH_{2015} - HT_{dk})$	
<i>Planned value in 2015 is unchanged in 2010-2015</i> ( $QH_{2015} = HT_{dk}$ )	(1c) Is planned to be unchanged in 2010-2015 Evaluation indicator: $C_{1c} = 1 + (HT_{2015} - HT_{dk}) / HT_{dk}$ hay $C_{1c} = HT_{2015} / HT_{dk}$	(2c) Is planned to be unchanged in 2010-2015 Evaluation indicator: $C_{2c} = 1 - (HT_{2015} - HT_{dk}) / HT_{dk}$	(3b) Is planned to be unchanged in 2010-2015 Evaluation indicator: $C_{3b} = 1 -  (HT_{2015} - HT_{dk}) / HT_{dk} $

### 3.2.3.2. Calculating evaluation indicators corresponding to the sub-groups, the groups and the set of development indicators

Calculating evaluation indicators corresponding to each: subgroups of development indicators; (ii) the groups of development indicators; (iii) the set of development indicators.

### *3.2.4. Classifying the calculated indicators*

The classification of the evaluation indicators depends on: the pros, the inverse and the threshold development indicators.

## **3.3. Implementation evaluation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015**

### *3.3.1. Collecting data for updating / calculating existing values and planned values of development indicators*

Determine data sources to update / calculate existing values and planned values of each development indicator: contents of HCMC Master Plan and other provincial plans, data of the HCMC Statistic Office, regular reports of HCMC People’s Committee and its affiliated departments, data of the HCMC Institute for Development Studies.

### *3.3.2. Updating / calculating existing values of development indicators at the beginning and the middle of the period and planned values at the middle of the period*

The period of the implementation evaluation of “The Revised HCMC Master Plan to 2025” is 2010-2015, which is the first planning period needed to be reviewed and evaluated in accordance with the Law of Urban Planning no.30/2009/QH12. The values of the each development indicator (related to the technical and social infrastructure, and the social, economic and environmental status) are: existing value at the beginning of the period; existing value at the middle of the period; and planned value of at the middle of the period.

### 3.3.3. Calculating the evaluation indicators of “The Revised HCMC Master Plan to 2025” in the period 2010-2015

#### 3.3.3.1. The evaluation indicators corresponding to the development indicators

The evaluation indicators corresponding to the development indicators are calculated using the method above. The standard value of the evaluation indicators is 1 (100%).

#### 3.3.3.2. Evaluation indicators corresponding to subgroups and groups of development indicators

The valuation indicators of “resources” group

			<b>C</b>		
<b>Resources</b>	Population	<i>Quantity</i>	0,97	1,17	<b>0,58</b>
		<i>Quality</i>	1,26		
	Land	<i>The total urban land area</i>	0,38	0,38	
		<i>Added urban land area</i>	0,38		
	Finance	<i>Total social investment capital</i>	0,27	0,20	
		<i>Total social investment capital for construction works</i>	0,13		

The valuation indicators of “activities” group

			<b>C</b>		
<b>Activities</b>	Urban plans	<i>Zoning plans</i>	0,38	0,56	<b>0,52</b>
		<i>Technical infrastructure plans</i>	0,74		
	Urban area development plans	<i>Total area of new urban areas with fully completed infrastructure</i>	0,40	0,40	
		<i>Total area of new urban areas with partially completed infrastructure</i>	0,40		
	Urban development projects	<i>Total area of industrial park projects with complete infrastructure</i>	0,60	0,60	
		<i>Total area of industrial cluster projects with complete infrastructure</i>	-2,89		
		<i>Total investment of key technical infrastructure projects</i>	0,76		
		<i>Total investment of key social infrastructure projects</i>	n/a		

## The valuation indicators of “outputs” group

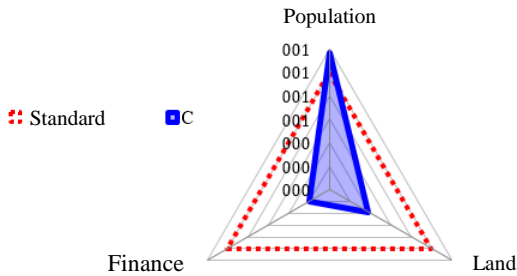
			C	0,78
Outputs	Technical infrastructure	Transport	0,81	
		Power supply and public lighting	1,11	
		Water supply	0,81	
		Drainge	0,77	
		Communication	-	
		Wastewater treatment	0,00	
		Solid waste treatment	0,76	
		Cemeteries - crematoriums	1,67	
	Social infrastructure	Housing	0,81	
		Healthcare	0,99	
		Culture	0,91	
		Education	0,82	
		Sports	0,55	
		Services - Administration	1,00	
	Open space	-0,05		

## The valuation indicators of “outcomes” group

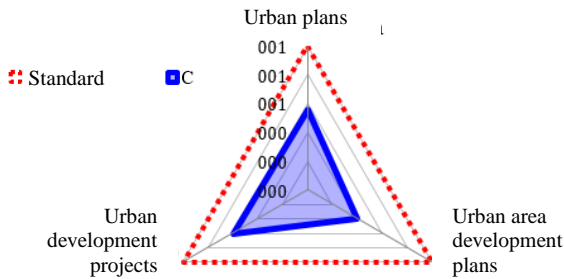
			C	
Outcomes	Technical infrastructure	Transport	1,19	0,89
		Power supply and public lighting	-0,22	
		Water supply	0,57	
		Drainage	-	
		Communication	-	
		Wastewater treatment	0,64	
		Solid waste treatment	1,00	
		Cemeteries - crematoriums	2,00	
	Social infrastructure	Housing	0,48	
		Healthcare	-	
		Culture	1,00	
		Education	1,28	
		Sports	1,20	
		Service - Administration	1,00	
		Open space	0,50	

## 3.3.3.3. Overall evaluation indicator of “The Revised HCMC Master Plan to 2025” in the period 2010-2015

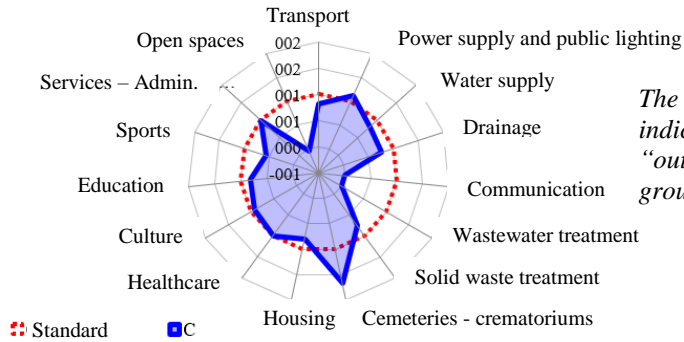
The overall evaluation indicator is C=0,69.



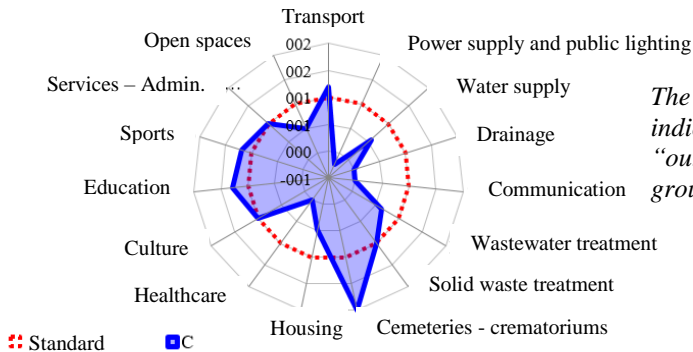
*The evaluation indicators of “resources” group*



*The evaluation indicators of “activities” group*



*The evaluation indicators of “outputs” group*



*The evaluation indicators of “outcomes” group*



### ***3.4. Result analysis of the implementation evaluation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015***

Analyzing: (i) values of the evaluation indicators; (ii) relationship between the values of the evaluation indicators; (iii) other results.

## **Chapter 4. Discussion**

### ***4.1. Discussion about the system of viewpoints for the implementation evaluation of the HCMC Master Plan***

The system of viewpoint for the implementation evaluation of the HCMC Master Plan has a scientific basis and is suitable with the legal framework and the practical context in Chi Minh city. This viewpoints is necessary to propose the set of indicators for the implementation evaluation of the HCMC Master Plan, which is expected to contribute in solving the problems raised which mentioned in Chapter 1. This viewpoints can be applied to different types of plans at the national level (master plans and sectoral plans), the regional level (master plans), the provincial level (master plans) as well as other strategically technical and industry plans.

### ***4.2. Discussion about the set of indicators for the implementation evaluation of the HCMC Master Plan***

The set of indicators for the implementation evaluation of the HCMC Master Plan: (i) is an step forward to make plan implementation evaluation clearer, more convincing and more reliable; (ii) to help determining the factors directly and indirectly affected the plan implementation based on the analyzing of causality relationship between the groups of indicators; (iii) to help overviewing the urban development status more clearly and more detailedly; (iv) to help overview the urban development trends more accurately. This set of indicators can be applied to this kind of plan in different periods as

well as to the master plans of other cities at different sizes / grades / types.

### ***4.3. Discussion about the result of the implementation evaluation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015***

The contents of discussion are: (i) collecting data for updating / calculating existing and planned values of development indicators; (ii) updating / calculating existing and planned values of development indicators; results of the implementation evaluation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015. The discussion are the basis for revising / newly promulgating policies to promote the implementation of the HCMC Master Plan and for revising / newly formulating the HCMC Master Plan.

## **Part III. CONCLUSIONS AND RECOMMENDATIONS**

### **1. Conclusions**

From the dissertation results and the discussions about these results, there are conclusions about how the dissertation objectives are achieved and what are the contributions and limitations of the dissertation.

The dissertation has developed the system of viewpoints for the implementation evaluation of the HCMC Master Plan which is a contribution to plan implementation evaluation theory as follows:

- The set of indicators for the implementation evaluation of the HCMC Master Plan which is deployed from the integrated set of indicators for the implementation evaluation of the provincial plan system of HCMC.
- This set of indicators is quantitative (including indicators related to quantified qualitative planning targets and quantitative planning

criteria) for conformance-based and performance-based evaluation.

- This set of indicators includes four groups of evaluation indicators ("resources", "activities", "outputs", "outcomes") that have a close causality relationship.

This system of viewpoints can be applied to different types of plans at the national level (master plans and sectoral plans), the regional level (master plans), the provincial level (master plans) as well as other strategically technical and industry plans. When applying this system of viewpoints to other general plans, the group “impacts” could be considered for evaluating the economic – social – environmental impacts in the effective territories.

The dissertation has proposed the set of indicators for the implementation evaluation of the HCMC Master Plan as follows:

- Identified the development indicators as planned in the HCMC Master Plan.
- Arranged the development indicators into four groups based on the characteristics of these indicators.
- Developed a method for calculating evaluation indicators corresponding to the development indicators, sub-groups of development indicators, groups of development indicators and for calculating overall indicator for the implementation evaluation of the HCMC Master Plan.
- Classified the calculated indicators.

This set of indicators can be applied to the HCMC Master Plan in different periods (according to the requirements of legal framework in certain periods and the contents of the certain plan, some more indicators may be added, if necessary). In addition, this set of

indicators can be applied to the master plans of the cities under central government as well as of other cities at different sizes / grades / types due to the similarities of these plans; when applied to smaller cities, the number of evaluation indicators may be less, but these indicators are still categorized into the four groups.

The dissertation has carried out the implementation evaluation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015, using the proposed set of indicators, as follows: calculating the evaluation indicators corresponding to development indicators; calculating the evaluation indicators corresponding to sub-groups and groups; calculating the overall evaluation indicator of “The Revised HCMC Master Plan to 2025” in the period 2010-2015 (C=69%).

Even though the database of urban planning and development of HCMC is adequate and synchronized, the results of the implementation evaluation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015 is the basis for: (i) revising / newly promulgating policies to promote the implementation of the HCMC Master Plan; and (ii) revising / newly formulating the HCMC Master Plan.

The system of viewpoints for the implementation evaluation of the HCMC Master Plan, the set of indicators for the implementation evaluation of the HCMC Master Plan as well as the process and the results of the implementation of “The Revised HCMC Master Plan to 2025” in the period 2010-2015 have contributed to the theory and practice of the implementation evaluation of plans in Viet Nam and the HCMC Master Plan in particular.

## **2. Recommendations**

There are several recommendations to the relevant agencies.

The dissertation recommends the HCMC People's Committee about the application of the set of indicators for the implementation evaluation of the HCMC Master Plan:

- To request planning consultants to use this set of indicators in the implementation evaluation of previous planning before revising / newly formulating the HCMC Master Plan.
- To command relevant departments to use this set of indicators to monitor, evaluate and analyze the implementation of the HCMC Master Plan in particular and the urban development in general, as well as to report the current situation of urban development in HCMC quarterly and annually and propose policies to the HCMC People's Committee and related ministries.

The dissertation recommends the HCMC People's Committee about the database for the implementation evaluation of the HCMC Master Plan:

- To command relevant departments to fulfill the database related to development indicators, especially inadequate and unsynchronized data to update / calculate the development indicators. This database should be integrated into GIS maps with the basic data unit as wards and communes; this data should be collected, processed and updated by the Department of Resources and Environment and other relevant departments to analyze the distribution of the development indicators in urban development areas of HCMC.
- To assign a focal department to determine / calculate the development indicators; if necessary, cross-check between departments to ensure the objectivity and accuracy.

The dissertation recommends relevant central government agencies to review and synchronize definitions of the development indicators, to

regulate how to specify / calculate the development indicators more specifically and more clearly (to avoid the situation that the ministries and the localities understand about this specification / calculation in different ways). If necessary, the definition and specification / calculation of important development indicators into the legal document system to create the unity in national statistical works.

The dissertation recommends the HCMC People's Committee develop the direction in revising / newly promulgating policies to promote the implementation of the HCMC Master Plan; and (ii) revising / newly formulating the HCMC Master Plan following the contents mentioned in Chapter 4./.

## **LIST OF THE PUBLICATIONS OF THE AUTHOR RELATED TO THE DISSERTATION**

1. Pham Tran Hai, Vuong Dinh Huy, Le Van Anh, Nguyen Trong Hieu, Chu Pham Dang Quang, Le Tran Kien & Pham Thi Huong Mai (2016), *Study on The Management Policies for Spatial Plan of Special Cities in Viet Nam - The Case of HCMC*, The annual province-level study of the HCMC Institute for Development Studies.
2. Pham Tran Hai (2017), “*Theories and Practices of Plan implementation Evaluation*”, Journal of Development Studies (ISSN: 0866-8094), no.19 (January 2017), pages 70-77.
3. Pham Tran Hai (2017), “The Issues of The Implementation Evaluation of The Cities under The Central Government – The Case of HCMC”, *Journal of Spatial Planning* (ISSN: 1859-3054), no.87 years 14th (2017), pages 64-67.
4. Pham Tran Hai (2017), “The Implementation Evaluation of Urban Plans from The Experience of HCMC, *Journal of Spatial Planning*, no.208-2017, pages 46-49.
5. Pham Tran Hai (2017), “The Implementation Evaluation of The Master Plans of The City under The Central Government from The Experience of HCMC, *Journal of The Builders* (ISSN: 0866-8531), no.307 & 308 (year XXXI ), pages 59-64.
6. Pham Tran Hai, Vuong Dinh Huy, Nguyen Duong Minh Hoang, Le Van Anh, Nguyen Thi Lieu & Hoang Tung (2017), *Proposing A Framework for The Implementation Evaluation of Master Plans and Socio-economic Development Plans of HCMC*, The annual province-level study of the HCMC Institute for Development Studies.

