The Comprehensive Urban Development Programme in Hanoi Capital City of the Socialist Republic of Vietnam (HAIDEP)

> FINAL REPORT Vol.3 Pilot Projects

> > March 2007

ALMEC Corporation Nippon Koei Co., Ltd. YACHIYO Engineering co., Ltd.



Japan International Cooperation Agency (JICA) Hanoi People's Committee

The Comprehensive Urban Development Programme in Hanoi Capital City of the Socialist Republic of Vietnam (HAIDEP)

FINAL REPORT Vol.3 Pilot Projects

March 2007

ALMEC Corporation Nippon Koei Co., Ltd. YACHIYO Engineering co., Ltd.



The exchange rate used in the report is

J. Yen 115 = US\$ 1 = VND 16,000

(average in 2006)

PREFACE

In response to the request from the Government of the Socialist Republic of Vietnam, the Government of Japan decided to conduct the Comprehensive Urban Development Programme in Hanoi Capital City and entrusted the program to the Japan International Cooperation Agency (JICA).

JICA dispatched a team to Vietnam between December 2004 and March 2007, which was headed by Mr. IWATA Shizuo of ALMEC Corporation and consisted of ALMEC Corporation, Nippon Koei Co., Ltd., and Yachiyo Engineering Co., Ltd.

In collaboration with the Vietnamese Counterpart Team, the JICA Study Team conducted the study including field surveys; demand forecast; conduct of pilot projects; formulation of comprehensive urban development program and subsector master plans for urban development, urban transportation, urban water and sanitation, and living conditions; and conduct of prefeasibility studies on the selected priority projects. It also held a series of discussions with the relevant officials of the Government of Vietnam. Upon returning to Japan, the Team duly finalized the study and delivered this report.

I hope that this report will contribute to the sustainable development of Hanoi City and to the enhancement of friendly relations between the two countries.

Finally, I wish to express my sincere appreciation to the officials of the Government of Vietnam for their close cooperation.

March 2007

MATSUOKA Kazuhisa Vice President Japan International Cooperation Agency March 2007

MATSUOKA Kazuhisa

Vice President Japan International Cooperation Agency Tokyo

Subject: Letter of Transmittal

Dear Sir,

We are pleased to formally submit herewith the final report of the Comprehensive Urban Development Programme in Hanoi Capital City in the Socialist Republic of Vietnam.

This report compiles the results of the study which was undertaken both in Vietnam and Japan from December 2004 to March 2007 by the Team comprising ALMEC Corporation, Nippon Koei Co., Ltd., and Yachiyo Engineering Co., Ltd.

We owe a lot to many people for the accomplishment of this report. First, we would like to express our sincere appreciation and deep gratitude to all those who extended their extensive assistance and cooperation to the Team, in particular the Hanoi City People's Committee.

We also acknowledge the officials of your agency, the JICA Advisory Committee, and the Embassy of Japan in Vietnam for their support and valuable advice in the course of the Study.

We hope the report would contribute to the sustainable development of Hanoi City.

Very truly yours,

IWATA Shizuo Team Leader Comprehensive Urban Development Programme in Hanoi Capital City

THE COMPREHENSIVE URBAN DEVELOPMENT PROGRAM IN HANOI CAPITAL CITY OF THE SOCIALIST REPUBLIC OF VIETNAM (HAIDEP)

FINAL REPORT

VOL.3 PILOT PROJECTS

Pilot Project A: Sustainable Development and Preservation of the Ancient Quarter

Pilot Project B: District Planning

Pilot Project C: Improvement Plan and Str ategy for Outside-of-Dyke Area Pilot Project A: Sustainable Development and Preservation for the Ancient Quarter

PILOT PROJECT A

"SUSTAINABLE DEVELOPMENT AND PRESERVATION FOR THE ANCIENT QUARTER"

TABLE OF CONTENTS

1. INTRODUCTION

1.1	Context	A-1-1
1.2	Objectives	A-1-2
1.3	Basic Approach	A-1-3
1.4	Coverage	A-1-4
1.5	Methodology	A-1-5

2. STUDY ON THE ANCIENT QUARTER

2.1	Brief History of the Asian Quarter	A-2-1
2.2	Current Physical Setting	A-2-3
2.3	Profile of Residents	A-2-8
2.4	Economic Condition	A-2-12
2.5	Social Condition	A-2-26
2.6	Transportation	A-2-34
2.7	Cultural Values	A-2-49
2.8	Townscape	A-2-66
2.9	Current and Past Policy Intervention	A-2-70
2.10	Issues	A-2-74

3. PILOT ACTIVITIES IN HANG BUOM STREET AND BLOCK

3.1	Project Framework and MethodologyA-3-1
3.2	Current Condition of and Issues in the Action AreaA-3-6
3.3	Development Orientation for Hang Buom and Selection of Pilot Actions A-3-36
3.4	Implementation of Selected Actions and Lessons LearnedA-3-41
3.5	Proposed Block Redevelopment ModelA-3-55
3.6	Proposed Street Development PlanA-3-75

4. ORIENTATION FOR SUSTAINABLE DEVELOPMENT OF THE ANCIENT QUARTER

4.1	Basic Orientation	A-4-1
4.2	Strategies and Actions	A-4-3
4.3	Concept Plan of Block and Street Development	A-4-11
4.4	Proposed Transportation Plan	A-4-16
4.5	Proposed Business Model	A-4-18

4.6	Proposed Urban Design Guideline	.A-4-24
4.7	Proposed Institutional Mechanism and Implementation Measures	.A-4-35
4.8	Proposed Institutional Mechanism and Implementation Measures	.A-4-39

5. CONCLUSION AND RECOMMENDATIONS

5.1	Conclusion	A-5-1
5.2	Recommendations	A-5-1

Appendix

LIST OF TABLES

Table 2.2.1	Water Level of Flood in the AQ	A-2-7
Table 2.2.2	Duration of Flood in the AQ	A-2-7
Table 2.3.1	Population, Density and Population Growth of 10 Communes in the AQ	A-2-8
Table 2.3.2	Characteristics of Households	A-2-10
Table 2.3.3	Income of Jobless and Small Vendors	A-2-10
Table 2.3.4	Vehicle and Appliance Ownership by Income	A-2-11
Table 2.4.1	Type of Company	A-2-16
Table 2.4.2	Distribution of Company	A-2-16
Table 2.4.3	Types of Occupation	A-2-16
Table 2.4.4	Working Place of AQ Residents	A-2-17
Table 2.5.1	Profile of Households by Income Group	A-2-27
Table 2.5.2	Housing Condition	A-2-31
Table 2.5.3	Housing Condition by Ownership	A-2-32
Table 2.5.4	Housing Issues by Ownership	A-2-32
Table 2.5.5	Dissatisfaction of Living Condition (%)	A-2-33
Table 2.6.1	Road Inventory	A-2-36
Table 2.6.2	Modal Share by Purpose (%)	A-2-37
Table 2.6.3	Location of Car Parking	A-2-41
Table 2.6.4	Location of Motorcycle Parking	A-2-42
Table 2.6.5	Vehicle Ownership and Bus Service Use by Commune (%)	A-2-45
Table 2.6.6	Assessment of Trip (%)	A-2-46
Table 2.7.1	Types of Cultural Value	A-2-50
Table 2.7.2	Types of Religious Buildings	A-2-50
Table 2.7.3	List of Religious Sites	A-2-52
Table 2.7.4	List of Revolutionary Relics	A-2-54
Table 2.7.5	List of Other Public Sites	A-2-54

Table 2.7.6	List of New Cultural Sites	A-2-55
Table 2.7.7	Criteria for Evaluation of Ancient House	A-2-56
Table 2.7.8	Typical Styles of Ancient Houses	A-2-57
Table 2.8.1	Assessment on Important Factors to Affect Landscape by Residents	A-2-67
Table 2.8.2	Favorite Landscape by Residential Area (%)	A-2-67
Table 2.8.3	Change In Landscape In Historical Area (%)	A-2-68
Table 2.8.4	Satisfaction with the Neighboring Landscape (%)	A-2-68
Table 2.9.1	Main Contents of the Regulation of Decision 45	A-2-70
Table 2.9.2	Major Past Projects/ Reports	A-2-72
Table 2.10.1	Core Values for Preservation, Revitalization and Development	A-2-74
Table 2.10.2	Assessment of Traditional Culture	A-2-76
Table 3.1.1	Advantages and Disadvantages of the Project Approach	A-3-4
Table 3.1.2	Objectives and Methods of Participatory Planning	A-3-5
Table 3.2.1	Business Types along the Four Streets in the Block	A-3-12
Table 3.2.2	Ownership of Houses in the Block	A-3-17
Table 3.2.3	Housing Age in the Block	A-3-19
Table 3.2.4	Living Space in the Block by Street	A-3-19
Table 3.2.5	Reasons for Dissatisfaction with Living Condition	A-3-19
Table 3.2.6	Assessment of Quality of Housing Condition	A-3-21
Table 3.2.7	Ownership of Facilities in the Bloc	A-3-23
Table 3.3.1	Proposed Strategies and Action Plans for "Preservation and Promotion of Cultural	
	Values with Participation of Stakeholders"	A-3-37
Table 3.3.2	Proposed Strategies and Action Plans for "Preservation and Promotion of Cultural	
	Values with Participation of Stakeholders"	A-3-38
Table 3.3.3	Proposed Strategies and Action Plans for "Encouraging Efforts of Residents and	
	Communities to Improve Living Conditions"	A-3-38
Table 3.3.4	Proposed Strategies and Action Plans to "Build up a Civilized Street of	
	Trade and Tourism"	A-3-39
Table 3.3.5	Proposed Strategies and Action Plans for "Establishing Operation and Management	
	Mechanism of the Street with Participation of Stakeholders"	A-3-40
Table 3.4.1	Selected Actions for implementation in Hang Buom	A-3-41
Table 3.4.2	Selected Actions and Results of "Event Week in Hang Buom Street"	A-3-42
Table 3.4.3	Selected Actions and Results of "Photo-Voice Exhibition"	A-3-43
Table 3.4.4	Selected Actions and Results of "Improvement Business Environment of Restaurants	
	and Food Shops"	A-3-44
Table 3.4.5	Selected Actions and Results of "Improvement of Townscape and	
	Attractiveness of the Street"	A-3-45
Table 3.4.6	Selected Actions and Results of "Installment Public Dustbins for	
	Creating Clean Street"	A-3-46

Table 3.4.8 Selected Actions and Results of "Enhancement of Traffic Capacity" A-3.44 Table 3.4.9 Selected Actions and Results of "Reorganization of Parking" A-3.44 Table 3.4.10 Selected Actions and Results of "Proposal for Quan De Communal House Improvement" A-3.56 Table 3.4.11 Selected Actions and Results of "Introduction of Community-Based Model of Living Condition Improvement" A-3.57 Table 3.4.12 Selected Actions and Results of "Consultation for Consensus Building among Residents for Living Condition Improvement" A-3.57 Table 3.5.1 Comparison Between W/O and Expected Impacts of the Project A-3.56 Table 3.5.1 Comparison Between W/O and Expected Impacts of the Project A-3.67 Table 3.5.1 Intangible Values and Implication to Spatial Planning A-3.67 Table 3.5.1 Problems of Living Condition and Implication to Spatial Planning A-3.67 Table 3.5.5 Proposed Street Images and Activities A-3.66 Table 3.5.6 Indicators for Evaluation A-3.67 Table 3.5.7 Stakeholders, Risks and Returns A-3.67 Table 3.5.9 Future Condition of the Block after Redevelopment A-3.47 Table 3.5.11 Result of Financial Evaluation A-3.77 Tabl	Table 3.4.7	Selected Actions and Results of "Dismantling Improper Advertisement Boards"	A-3-47																																																																																																
Table 3.4.10 Selected Actions and Results of "Proposal for Quan De Communal House Improvement" A-3-51 Table 3.4.11 Selected Actions and Results of "Introduction of Community-Based Model of Living Condition Improvement" A-3-51 Table 3.4.12 Selected Actions and Results of "Consultation for Consensus Building among Residents for Living Condition Improvement" A-3-51 Table 3.5.1 Comparison Between W/O and Expected Impacts of the Project A-3-51 Table 3.5.2 Tangible Values and Implication to Spatial Planning A-3-61 Table 3.5.3 Intangible Values and Implication to Spatial Planning A-3-61 Table 3.5.4 Problems of Living Condition and Implication to Spatial Planning A-3-61 Table 3.5.5 Proposed Street Images and Activities A-3-61 Table 3.5.6 Indicators for Evaluation A-3-61 Table 3.5.7 Stakeholders, Risks and Returns A-3-61 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-61 Table 3.5.1 Result of Financial Evaluation A-3-77 Table 3.5.1 Result of Financial Evaluation A-3-77 Table 3.5.1 Result of Financial Evaluation A-3-77 Table 4.5.1 Proposed Business Models A-4-11 <td>Table 3.4.8</td> <td>Selected Actions and Results of "Enhancement of Traffic Capacity"</td> <td>A-3-48</td>	Table 3.4.8	Selected Actions and Results of "Enhancement of Traffic Capacity"	A-3-48																																																																																																
House Improvement" A-3-50 Table 3.4.11 Selected Actions and Results of "Introduction of Community-Based Model of Living Condition Improvement" A-3-5 Table 3.4.12 Selected Actions and Results of "Consultation for Consensus Building among Residents for Living Condition Improvement" A-3-5 Table 3.5.1 Comparison Between W/O and Expected Impacts of the Project A-3-5 Table 3.5.2 Tangible Values and Implication to Spatial Planning A-3-6 Table 3.5.3 Intangible Values and Implication to Spatial Planning A-3-6 Table 3.5.4 Problems of Living Condition and Implication to Spatial Planning A-3-6 Table 3.5.5 Proposed Street Images and Activities A-3-6 Table 3.5.6 Indicators for Evaluation A-3-6 Table 3.5.7 Stakeholders, Risks and Returns A-3-6 Table 3.5.8 Current Condition of the Block after Redevelopment A-3-6 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-6 Table 3.5.11 Result of Financial Evaluation A-3-7 Table 4.5.1 Proposed Business Model by Scale A-4-1 Table 4.5.1 Proposed Business Model by Scale A-4-2 Table 4.6.3 Guideline for M	Table 3.4.9	Selected Actions and Results of "Reorganization of Parking"	A-3-49																																																																																																
Table 3.4.11 Selected Actions and Results of "Introduction of Community-Based Model of Living Condition Improvement". A-3-5 Table 3.4.12 Selected Actions and Results of "Consultation for Consensus Building among Residents for Living Condition Improvement". A-3-5 Table 3.5.1 Comparison Between W/O and Expected Impacts of the Project A-3-5 Table 3.5.2 Tangible Values and Implication to Spatial Planning A-3-6 Table 3.5.3 Intangible Values and Implication to Spatial Planning A-3-6 Table 3.5.4 Problems of Living Condition and Implication to Spatial Planning A-3-6 Table 3.5.5 Proposed Street Images and Activities A-3-6 Table 3.5.6 Indicators for Evaluation A-3-6 Table 3.5.7 Stakeholders, Risks and Returns A-3-6 Table 3.5.8 Current Condition of the Block A-3-6 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-6 Table 3.5.11 Result of Financial Evaluation A-3-7 Table 3.5.11 Result of Financial Evaluation A-3-7 Table 4.5.1 Proposed Business Model by Scale A-4-11 Table 4.5.2 Examples of Recommended Business Models<	Table 3.4.10	Selected Actions and Results of "Proposal for Quan De Communal																																																																																																	
Living Condition Improvement* A-3-5 Table 3.4.12 Selected Actions and Results of "Consultation for Consensus Building among Residents for Living Condition Improvement". A-3-5 Table 3.5.1 Comparison Between W/O and Expected Impacts of the Project A-3-5 Table 3.5.2 Tangible Values and Implication to Spatial Planning. A-3-6 Table 3.5.3 Intangible Values and Implication to Spatial Planning. A-3-6 Table 3.5.4 Problems of Living Condition and Implication to Spatial Planning. A-3-6 Table 3.5.5 Proposed Street Images and Activities. A-3-6 Table 3.5.6 Indicators for Evaluation A-3-6 Table 3.5.7 Stakeholders, Risks and Returns A-3-6 Table 3.5.8 Current Condition of the Block A-3-6 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-6 Table 3.5.10 Assumptions for Evaluation A-3-7 Table 3.5.11 Result of Financial Evaluation A-3-7 Table 3.5.11 Result of Financial Evaluation A-3-7 Table 4.5.2 Evaluation Indicators for the Block Development Plan A-4-11 Table 4.5.1 Proposed Business Model by Scale A-4-21 Tab		House Improvement"	A-3-50																																																																																																
Table 3.4.12 Selected Actions and Results of "Consultation for Consensus Building among Residents for Living Condition Improvement". A-3-57 Table 3.5.1 Comparison Between W/O and Expected Impacts of the Project A-3-57 Table 3.5.2 Tangible Values and Implication to Spatial Planning A-3-67 Table 3.5.3 Intangible Values and Implication to Spatial Planning A-3-67 Table 3.5.4 Problems of Living Condition and Implication to Spatial Planning A-3-67 Table 3.5.5 Proposed Street Images and Activities A-3-67 Table 3.5.6 Indicators for Evaluation A-3-67 Table 3.5.7 Stakeholders, Risks and Returns A-3-67 Table 3.5.9 Future Condition of the Block A-3-67 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-67 Table 3.5.1 Result of Financial Evaluation A-3-77 Table 3.5.1 Result of Financial Evaluation A-3-77 Table 4.3.1 Evaluation Indicators for the Block Development Plan A-4-11 Table 4.3.2 Evaluation Indicators for the Street Development Plan A-4-11 Table 4.5.1 Proposed Business Model by Scale A-4-22 Table 4.5.2 Examples of Re	Table 3.4.11	Selected Actions and Results of "Introduction of Community-Based Model of																																																																																																	
Residents for Living Condition Improvement". A-3-55 Table 3.5.1 Comparison Between W/O and Expected Impacts of the Project A-3-55 Table 3.5.2 Tangible Values and Implication to Spatial Planning A-3-65 Table 3.5.3 Intangible Values and Implication to Spatial Planning A-3-66 Table 3.5.4 Problems of Living Condition and Implication to Spatial Planning A-3-66 Table 3.5.5 Proposed Street Images and Activities A-3-66 Table 3.5.6 Indicators for Evaluation A-3-66 Table 3.5.7 Stakeholders, Risks and Returns A-3-67 Table 3.5.8 Current Condition of the Block A-3-67 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-67 Table 3.5.1 Result of Financial Evaluation A-3-77 Table 3.5.1 Result of Financial Evaluation A-3-77 Table 4.5.1 Proposed Business Model by Scale A-4-11 Table 4.5.2 Evaluation Indicators for the Street Development Plan A-4-11 Table 4.5.1 Proposed Business Model by Scale A-4-22 Table 4.5.2 Evaluation of Ancient Houses A-4-22 Table 4.6.3 Guideline for Preservati		Living Condition Improvement"	A-3-51																																																																																																
Table 3.5.1 Comparison Between W/O and Expected Impacts of the Project A-3-5 Table 3.5.2 Tangible Values and Implication to Spatial Planning A-3-6 Table 3.5.3 Intangible Values and Implication to Spatial Planning A-3-6 Table 3.5.4 Problems of Living Condition and Implication to Spatial Planning A-3-6 Table 3.5.5 Proposed Street Images and Activities A-3-6 Table 3.5.6 Indicators for Evaluation A-3-6 Table 3.5.7 Stakeholders, Risks and Returns A-3-6 Table 3.5.9 Future Condition of the Block A-3-6 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-6 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-6 Table 3.5.10 Assumptions for Evaluation A-3-7 Table 3.5.11 Result of Financial Evaluation A-3-7 Table 3.5.11 Result of Financial Evaluation A-3-7 Table 4.3.1 Evaluation Indicators for the Block Development Plan A-4-10 Table 4.5.1 Proposed Business Model by Scale A-4-20 Table 4.5.2 Examples of Recommended Business Models A-4-20 Table 4.6.3 <td< td=""><td>Table 3.4.12</td><td>Selected Actions and Results of "Consultation for Consensus Building among</td><td></td></td<>	Table 3.4.12	Selected Actions and Results of "Consultation for Consensus Building among																																																																																																	
Table 3.5.2 Tangible Values and Implication to Spatial Planning. A-3-55 Table 3.5.3 Intangible Values and Implication to Spatial Planning. A-3-61 Table 3.5.4 Problems of Living Condition and Implication to Spatial Planning. A-3-61 Table 3.5.5 Proposed Street Images and Activities. A-3-61 Table 3.5.6 Indicators for Evaluation. A-3-61 Table 3.5.7 Stakeholders, Risks and Returns. A-3-61 Table 3.5.8 Current Condition of the Block A-3-61 Table 3.5.9 Future Condition of the Block after Redevelopment. A-3-61 Table 3.5.9 Future Condition of the Block after Redevelopment. A-3-61 Table 3.5.10 Assumptions for Evaluation. A-3-77 Table 3.5.11 Result of Financial Evaluation A-3-77 Table 4.3.1 Evaluation Indicators for the Block Development Plan A-4-10 Table 4.3.2 Evaluation Indicators for the Street Development Plan A-4-11 Table 4.5.1 Proposed Business Model by Scale A-4-22 Table 4.5.2 Examples of Recommended Business Models A-4-22 Table 4.6.3 Guideline for Preservation of Ancient Houses A-4-22		Residents for Living Condition Improvement"	A-3-52																																																																																																
Table 3.5.3 Intangible Values and Implication to Spatial Planning A-3-64 Table 3.5.4 Problems of Living Condition and Implication to Spatial Planning A-3-64 Table 3.5.5 Proposed Street Images and Activities A-3-64 Table 3.5.6 Indicators for Evaluation A-3-66 Table 3.5.7 Stakeholders, Risks and Returns A-3-66 Table 3.5.8 Current Condition of the Block A-3-66 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-66 Table 3.5.10 Assumptions for Evaluation A-3-73 Table 3.5.11 Result of Financial Evaluation A-3-74 Table 4.3.1 Evaluation Indicators for the Block Development Plan A-4-11 Table 4.3.1 Evaluation Indicators for the Street Development Plan A-4-12 Table 4.5.1 Proposed Business Model by Scale A-4-22 Table 4.5.2 Examples of Recommended Business Models A-4-22 Table 4.6.3 Guideline for Preservation of Ancient Houses A-4-22 Table 4.6.4 Guideline for Materials of Buildings A-4-22 Table 4.6.5 Guideline for Advertisement Boards A-4-22 Table 4.6.6 Guideli	Table 3.5.1	Comparison Between W/O and Expected Impacts of the Project	A-3-57																																																																																																
Table 3.5.4 Problems of Living Condition and Implication to Spatial Planning. A-3-63 Table 3.5.5 Proposed Street Images and Activities. A-3-63 Table 3.5.6 Indicators for Evaluation. A-3-63 Table 3.5.7 Stakeholders, Risks and Returns. A-3-63 Table 3.5.8 Current Condition of the Block A-3-63 Table 3.5.9 Future Condition of the Block after Redevelopment. A-3-63 Table 3.5.10 Assumptions for Evaluation A-3-73 Table 3.5.11 Result of Financial Evaluation A-3-74 Table 4.3.1 Evaluation Indicators for the Block Development Plan A-4-11 Table 4.3.1 Evaluation Indicators for the Street Development Plan A-4-11 Table 4.5.1 Proposed Business Model by Scale A-4-11 Table 4.5.2 Examples of Recommended Business Models A-4-22 Table 4.6.3 Guideline for Preservation of Ancient Houses A-4-22 Table 4.6.3 Guideline for Preservation of Facades A-4-22 Table 4.6.3 Guideline for Materials and Colors of Buildings A-4-22 Table 4.6.4 Guideline for Signboards A-4-22 Table 4.6.5 Guideline for Sig	Table 3.5.2	Tangible Values and Implication to Spatial Planning	A-3-59																																																																																																
Table 3.5.5Proposed Street Images and Activities.A-3-64Table 3.5.6Indicators for EvaluationA-3-61Table 3.5.7Stakeholders, Risks and ReturnsA-3-61Table 3.5.8Current Condition of the BlockA-3-61Table 3.5.9Future Condition of the Block after RedevelopmentA-3-61Table 3.5.10Assumptions for EvaluationA-3-77Table 3.5.11Result of Financial EvaluationA-3-77Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-11Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.5.1Proposed Business Model by ScaleA-4-12Table 4.5.2Examples of Recommended Business ModelsA-4-22Table 4.5.3Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-22Table 4.6.4Guideline for Materials of BuildingsA-4-22Table 4.6.5Guideline for Advertisement BoardsA-4-22Table 4.6.6Guideline for SignboardsA-4-22Table 4.6.7Guideline for SignboardsA-4-22Table 4.6.8Guideline for SignboardsA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-23Table 4.6.10Guideline for Street FixturesA-4-33Table 4.6.11Guideline for Street FixturesA-4-33Table 4.6.11Guideline for Street FixturesA-4-33Table 4.6.11Guideline for Street FixturesA-4-33 <tr <td=""><td< td=""><td>Table 3.5.3</td><td>Intangible Values and Implication to Spatial Planning</td><td>A-3-60</td></td<></tr> <tr><td>Table 3.5.6 Indicators for Evaluation A-3-60 Table 3.5.7 Stakeholders, Risks and Returns A-3-60 Table 3.5.8 Current Condition of the Block A-3-61 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-61 Table 3.5.10 Assumptions for Evaluation A-3-73 Table 3.5.11 Result of Financial Evaluation A-3-74 Table 4.3.1 Evaluation Indicators for the Block Development Plan A-4-10 Table 4.3.1 Evaluation Indicators for the Street Development Plan A-4-11 Table 4.5.1 Proposed Business Model by Scale A-4-12 Table 4.5.2 Examples of Recommended Business Models A-4-22 Table 4.5.1 Guideline for Building's Height A-4-22 Table 4.6.2 Guideline for Preservation of Ancient Houses A-4-22 Table 4.6.3 Guideline for Materials of Buildings A-4-22 Table 4.6.4 Guideline for Materials and Colors of Buildings A-4-22 Table 4.6.5 Guideline for Sanitary Condition A-4-22 Table 4.6.6 Guideline for Sanitary Condition A-4-22 Table 4.6.9 Guideline for Sanitary Condition A-4-2</td><td>Table 3.5.4</td><td>Problems of Living Condition and Implication to Spatial Planning</td><td>A-3-62</td></tr> <tr><td>Table 3.5.7Stakeholders, Risks and ReturnsA-3-67Table 3.5.8Current Condition of the BlockA-3-68Table 3.5.9Future Condition of the Block after RedevelopmentA-3-68Table 3.5.10Assumptions for EvaluationA-3-77Table 3.5.11Result of Financial EvaluationA-3-77Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.5.1Proposed Business Model by ScaleA-4-12Table 4.5.2Examples of Recommended Business ModelsA-4-22Table 4.6.1Guideline for Building's HeightA-4-22Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Materials of BuildingsA-4-22Table 4.6.4Guideline for Materials and Colors of BuildingsA-4-22Table 4.6.5Guideline for SignboardsA-4-22Table 4.6.8Guideline for SignboardsA-4-22Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-33Table 4.6.11Guideline for Street FixturesA-4-34</td><td>Table 3.5.5</td><td>Proposed Street Images and Activities</td><td>A-3-64</td></tr> <tr><td>Table 3. 5.8Current Condition of the BlockA-3-6iTable 3.5.9Future Condition of the Block after RedevelopmentA-3-6iTable 3.5.10Assumptions for EvaluationA-3-7iTable 3.5.11Result of Financial EvaluationA-3-7iTable 4.3.1Evaluation Indicators for the Block Development PlanA-4-1iTable 4.3.2Evaluation Indicators for the Street Development PlanA-4-1iTable 4.5.1Proposed Business Model by ScaleA-4-2iTable 4.5.2Examples of Recommended Business ModelsA-4-2iTable 4.6.1Guideline for Preservation of Ancient HousesA-4-2iTable 4.6.2Guideline for Preservation of FacadesA-4-2iTable 4.6.3Guideline for Materials of BuildingsA-4-2iTable 4.6.4Guideline for Advertisement BoardsA-4-2iTable 4.6.5Guideline for Advertisement BoardsA-4-2iTable 4.6.6Guideline for SignboardsA-4-2iTable 4.6.9Guideline for SignboardsA-4-2iTable 4.6.10Guideline for SignboardsA-4-2iTable 4.6.20Guideline for SignboardsA-4-2iTable 4.6.31Guideline for SignboardsA-4-2iTable 4.6.4Guideline for SignboardsA-4-2iTable 4.6.5Guideline for SignboardsA-4-2iTable 4.6.6Guideline for SignboardsA-4-2iTable 4.6.7Guideline for SignboardsA-4-2iTable 4.6.8Guideline for SignboardsA-4-2iTable 4.6.9Guideline for SignboardsA-4-2i</td><td>Table 3.5.6</td><td>Indicators for Evaluation</td><td>A-3-66</td></tr> <tr><td>Table 3.5.9Future Condition of the Block after RedevelopmentA-3-6iTable 3.5.10Assumptions for EvaluationA-3-7iTable 3.5.11Result of Financial EvaluationA-3-7iTable 3.5.11Result of Financial EvaluationA-3-7iTable 4.3.1Evaluation Indicators for the Block Development PlanA-4-1iTable 4.3.2Evaluation Indicators for the Street Development PlanA-4-1iTable 4.3.1Proposed Business Model by ScaleA-4-1iTable 4.5.2Examples of Recommended Business ModelsA-4-2iTable 4.6.1Guideline for Building's HeightA-4-2iTable 4.6.2Guideline for Preservation of Ancient HousesA-4-2iTable 4.6.3Guideline for Preservation of FacadesA-4-2iTable 4.6.4Guideline for Materials of BuildingsA-4-2iTable 4.6.5Guideline for Materials and Colors of BuildingsA-4-2iTable 4.6.6Guideline for SignboardsA-4-2iTable 4.6.7Guideline for SignboardsA-4-2iTable 4.6.8Guideline for SignboardsA-4-2iTable 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-2iTable 4.6.11Guideline for Street FixturesA-4-3iTable 4.6.11Guideline for Street FixturesA-4-3i</td><td>Table 3.5.7</td><td>Stakeholders, Risks and Returns</td><td>A-3-67</td></tr> <tr><td>Table 3.5.10Assumptions for EvaluationA-3-73Table 3.5.11Result of Financial EvaluationA-3-74Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.3.1Proposed Business Model by ScaleA-4-11Table 4.5.2Examples of Recommended Business ModelsA-4-21Table 4.5.3Guideline for Building's HeightA-4-22Table 4.6.4Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.9Guideline for Senitary ConditionA-4-24Table 4.6.10Guideline for Street FixturesA-4-24Table 4.6.11Guideline for Street FixturesA-4-34</td><td>Table 3. 5.8</td><td>Current Condition of the Block</td><td>A-3-68</td></tr> <tr><td>Table 3.5.11Result of Financial EvaluationA-3-74Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.5.1Proposed Business Model by ScaleA-4-12Table 4.5.2Examples of Recommended Business ModelsA-4-21Table 4.5.3Guideline for Building's HeightA-4-22Table 4.6.4Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for SignboardsA-4-24Table 4.6.7Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34</td><td>Table 3.5.9</td><td>Future Condition of the Block after Redevelopment</td><td>A-3-68</td></tr> <tr><td>Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-10Table 4.5.1Proposed Business Model by ScaleA-4-11Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.5.1Guideline for Building's HeightA-4-21Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-22Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.11Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34</td><td>Table 3.5.10</td><td>Assumptions for Evaluation</td><td>A-3-73</td></tr> <tr><td>Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-13Table 4.5.1Proposed Business Model by ScaleA-4-19Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.5.2Guideline for Building's HeightA-4-22Table 4.6.1Guideline for Preservation of Ancient HousesA-4-22Table 4.6.2Guideline for Preservation of FacadesA-4-22Table 4.6.3Guideline for Materials of BuildingsA-4-22Table 4.6.4Guideline for Materials of BuildingsA-4-22Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-22Table 4.6.6Guideline for Advertisement BoardsA-4-22Table 4.6.7Guideline for SignboardsA-4-22Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-30Table 4.6.11Guideline for Street FixturesA-4-30</td><td>Table 3.5.11</td><td>Result of Financial Evaluation</td><td>A-3-74</td></tr> <tr><td>Table 4.5.1Proposed Business Model by ScaleA-4-19Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.5.1Guideline for Building's HeightA-4-21Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-36Table 4.6.11Guideline for Street FixturesA-4-37</td><td>Table 4.3.1</td><td>Evaluation Indicators for the Block Development Plan</td><td>A-4-10</td></tr> <tr><td>Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.6.1Guideline for Building's HeightA-4-21Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-22Table 4.6.4Guideline for Materials of BuildingsA-4-22Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-22Table 4.6.6Guideline for Advertisement BoardsA-4-22Table 4.6.7Guideline for SignboardsA-4-22Table 4.6.8Guideline for Sanitary ConditionA-4-22Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-23Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-33Table 4.6.11Guideline for Street FixturesA-4-33</td><td>Table 4.3.2</td><td>Evaluation Indicators for the Street Development Plan</td><td>A-4-13</td></tr> <tr><td>Table 4.6.1Guideline for Building's HeightA-4-22Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for SignboardsA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34</td><td>Table 4.5.1</td><td>Proposed Business Model by Scale</td><td>A-4-19</td></tr> <tr><td>Table 4.6.2Guideline for Preservation of Ancient HousesA-4-24Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34</td><td>Table 4.5.2</td><td>Examples of Recommended Business Models</td><td>A-4-20</td></tr> <tr><td>Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34</td><td>Table 4.6.1</td><td>Guideline for Building's Height</td><td>A-4-22</td></tr> <tr><td>Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34</td><td>Table 4.6.2</td><td>Guideline for Preservation of Ancient Houses</td><td>A-4-23</td></tr> <tr><td>Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-20Table 4.6.6Guideline for Advertisement BoardsA-4-20Table 4.6.7Guideline for SignboardsA-4-20Table 4.6.8Guideline for Sanitary ConditionA-4-20Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-20Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-30Table 4.6.11Guideline for Street FixturesA-4-30</td><td>Table 4.6.3</td><td>Guideline for Preservation of Facades</td><td>A-4-24</td></tr> <tr><td>Table 4.6.6Guideline for Advertisement BoardsA-4-2Table 4.6.7Guideline for SignboardsA-4-2Table 4.6.8Guideline for Sanitary ConditionA-4-2Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-2Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-3Table 4.6.11Guideline for Street FixturesA-4-3</td><td>Table 4.6.4</td><td>Guideline for Materials of Buildings</td><td>A-4-25</td></tr> <tr><td>Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-29Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-30Table 4.6.11Guideline for Street FixturesA-4-31</td><td>Table 4.6.5</td><td>Guideline for Materials and Colors of Buildings</td><td>A-4-26</td></tr> <tr><td>Table 4.6.8 Guideline for Sanitary Condition A-4-24 Table 4.6.9 Guideline for Telecom, Media Equipment's Location A-4-24 Table 4.6.10 Guideline for Use of Sidewalk and Carriageway A-4-34 Table 4.6.11 Guideline for Street Fixtures A-4-34</td><td>Table 4.6.6</td><td>Guideline for Advertisement Boards</td><td>A-4-27</td></tr> <tr><td>Table 4.6.9 Guideline for Telecom, Media Equipment's Location A-4-29 Table 4.6.10 Guideline for Use of Sidewalk and Carriageway A-4-30 Table 4.6.11 Guideline for Street Fixtures A-4-30</td><td>Table 4.6.7</td><td>Guideline for Signboards</td><td>A-4-28</td></tr> <tr><td>Table 4.6.10 Guideline for Use of Sidewalk and Carriageway A-4-30 Table 4.6.11 Guideline for Street Fixtures A-4-30</td><td>Table 4.6.8</td><td>Guideline for Sanitary Condition</td><td>A-4-28</td></tr> <tr><td>Table 4.6.11 Guideline for Street Fixtures</td><td>Table 4.6.9</td><td>Guideline for Telecom, Media Equipment's Location</td><td>A-4-29</td></tr> <tr><td></td><td>Table 4.6.10</td><td>Guideline for Use of Sidewalk and Carriageway</td><td>A-4-30</td></tr> <tr><td>Table 4.8.1 Stakeholders and Roles of AQ Management</td><td>Table 4.6.11</td><td>Guideline for Street Fixtures</td><td>A-4-31</td></tr> <tr><td></td><td>Table 4.8.1</td><td>Stakeholders and Roles of AQ Management</td><td>A-4-41</td></tr>	Table 3.5.3	Intangible Values and Implication to Spatial Planning	A-3-60	Table 3.5.6 Indicators for Evaluation A-3-60 Table 3.5.7 Stakeholders, Risks and Returns A-3-60 Table 3.5.8 Current Condition of the Block A-3-61 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-61 Table 3.5.10 Assumptions for Evaluation A-3-73 Table 3.5.11 Result of Financial Evaluation A-3-74 Table 4.3.1 Evaluation Indicators for the Block Development Plan A-4-10 Table 4.3.1 Evaluation Indicators for the Street Development Plan A-4-11 Table 4.5.1 Proposed Business Model by Scale A-4-12 Table 4.5.2 Examples of Recommended Business Models A-4-22 Table 4.5.1 Guideline for Building's Height A-4-22 Table 4.6.2 Guideline for Preservation of Ancient Houses A-4-22 Table 4.6.3 Guideline for Materials of Buildings A-4-22 Table 4.6.4 Guideline for Materials and Colors of Buildings A-4-22 Table 4.6.5 Guideline for Sanitary Condition A-4-22 Table 4.6.6 Guideline for Sanitary Condition A-4-22 Table 4.6.9 Guideline for Sanitary Condition A-4-2	Table 3.5.4	Problems of Living Condition and Implication to Spatial Planning	A-3-62	Table 3.5.7Stakeholders, Risks and ReturnsA-3-67Table 3.5.8Current Condition of the BlockA-3-68Table 3.5.9Future Condition of the Block after RedevelopmentA-3-68Table 3.5.10Assumptions for EvaluationA-3-77Table 3.5.11Result of Financial EvaluationA-3-77Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.5.1Proposed Business Model by ScaleA-4-12Table 4.5.2Examples of Recommended Business ModelsA-4-22Table 4.6.1Guideline for Building's HeightA-4-22Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Materials of BuildingsA-4-22Table 4.6.4Guideline for Materials and Colors of BuildingsA-4-22Table 4.6.5Guideline for SignboardsA-4-22Table 4.6.8Guideline for SignboardsA-4-22Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-33Table 4.6.11Guideline for Street FixturesA-4-34	Table 3.5.5	Proposed Street Images and Activities	A-3-64	Table 3. 5.8Current Condition of the BlockA-3-6iTable 3.5.9Future Condition of the Block after RedevelopmentA-3-6iTable 3.5.10Assumptions for EvaluationA-3-7iTable 3.5.11Result of Financial EvaluationA-3-7iTable 4.3.1Evaluation Indicators for the Block Development PlanA-4-1iTable 4.3.2Evaluation Indicators for the Street Development PlanA-4-1iTable 4.5.1Proposed Business Model by ScaleA-4-2iTable 4.5.2Examples of Recommended Business ModelsA-4-2iTable 4.6.1Guideline for Preservation of Ancient HousesA-4-2iTable 4.6.2Guideline for Preservation of FacadesA-4-2iTable 4.6.3Guideline for Materials of BuildingsA-4-2iTable 4.6.4Guideline for Advertisement BoardsA-4-2iTable 4.6.5Guideline for Advertisement BoardsA-4-2iTable 4.6.6Guideline for SignboardsA-4-2iTable 4.6.9Guideline for SignboardsA-4-2iTable 4.6.10Guideline for SignboardsA-4-2iTable 4.6.20Guideline for SignboardsA-4-2iTable 4.6.31Guideline for SignboardsA-4-2iTable 4.6.4Guideline for SignboardsA-4-2iTable 4.6.5Guideline for SignboardsA-4-2iTable 4.6.6Guideline for SignboardsA-4-2iTable 4.6.7Guideline for SignboardsA-4-2iTable 4.6.8Guideline for SignboardsA-4-2iTable 4.6.9Guideline for SignboardsA-4-2i	Table 3.5.6	Indicators for Evaluation	A-3-66	Table 3.5.9Future Condition of the Block after RedevelopmentA-3-6iTable 3.5.10Assumptions for EvaluationA-3-7iTable 3.5.11Result of Financial EvaluationA-3-7iTable 3.5.11Result of Financial EvaluationA-3-7iTable 4.3.1Evaluation Indicators for the Block Development PlanA-4-1iTable 4.3.2Evaluation Indicators for the Street Development PlanA-4-1iTable 4.3.1Proposed Business Model by ScaleA-4-1iTable 4.5.2Examples of Recommended Business ModelsA-4-2iTable 4.6.1Guideline for Building's HeightA-4-2iTable 4.6.2Guideline for Preservation of Ancient HousesA-4-2iTable 4.6.3Guideline for Preservation of FacadesA-4-2iTable 4.6.4Guideline for Materials of BuildingsA-4-2iTable 4.6.5Guideline for Materials and Colors of BuildingsA-4-2iTable 4.6.6Guideline for SignboardsA-4-2iTable 4.6.7Guideline for SignboardsA-4-2iTable 4.6.8Guideline for SignboardsA-4-2iTable 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-2iTable 4.6.11Guideline for Street FixturesA-4-3iTable 4.6.11Guideline for Street FixturesA-4-3i	Table 3.5.7	Stakeholders, Risks and Returns	A-3-67	Table 3.5.10Assumptions for EvaluationA-3-73Table 3.5.11Result of Financial EvaluationA-3-74Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.3.1Proposed Business Model by ScaleA-4-11Table 4.5.2Examples of Recommended Business ModelsA-4-21Table 4.5.3Guideline for Building's HeightA-4-22Table 4.6.4Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.9Guideline for Senitary ConditionA-4-24Table 4.6.10Guideline for Street FixturesA-4-24Table 4.6.11Guideline for Street FixturesA-4-34	Table 3. 5.8	Current Condition of the Block	A-3-68	Table 3.5.11Result of Financial EvaluationA-3-74Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.5.1Proposed Business Model by ScaleA-4-12Table 4.5.2Examples of Recommended Business ModelsA-4-21Table 4.5.3Guideline for Building's HeightA-4-22Table 4.6.4Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for SignboardsA-4-24Table 4.6.7Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 3.5.9	Future Condition of the Block after Redevelopment	A-3-68	Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-10Table 4.5.1Proposed Business Model by ScaleA-4-11Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.5.1Guideline for Building's HeightA-4-21Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-22Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.11Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 3.5.10	Assumptions for Evaluation	A-3-73	Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-13Table 4.5.1Proposed Business Model by ScaleA-4-19Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.5.2Guideline for Building's HeightA-4-22Table 4.6.1Guideline for Preservation of Ancient HousesA-4-22Table 4.6.2Guideline for Preservation of FacadesA-4-22Table 4.6.3Guideline for Materials of BuildingsA-4-22Table 4.6.4Guideline for Materials of BuildingsA-4-22Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-22Table 4.6.6Guideline for Advertisement BoardsA-4-22Table 4.6.7Guideline for SignboardsA-4-22Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-30Table 4.6.11Guideline for Street FixturesA-4-30	Table 3.5.11	Result of Financial Evaluation	A-3-74	Table 4.5.1Proposed Business Model by ScaleA-4-19Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.5.1Guideline for Building's HeightA-4-21Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-36Table 4.6.11Guideline for Street FixturesA-4-37	Table 4.3.1	Evaluation Indicators for the Block Development Plan	A-4-10	Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.6.1Guideline for Building's HeightA-4-21Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-22Table 4.6.4Guideline for Materials of BuildingsA-4-22Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-22Table 4.6.6Guideline for Advertisement BoardsA-4-22Table 4.6.7Guideline for SignboardsA-4-22Table 4.6.8Guideline for Sanitary ConditionA-4-22Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-23Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-33Table 4.6.11Guideline for Street FixturesA-4-33	Table 4.3.2	Evaluation Indicators for the Street Development Plan	A-4-13	Table 4.6.1Guideline for Building's HeightA-4-22Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for SignboardsA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 4.5.1	Proposed Business Model by Scale	A-4-19	Table 4.6.2Guideline for Preservation of Ancient HousesA-4-24Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 4.5.2	Examples of Recommended Business Models	A-4-20	Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 4.6.1	Guideline for Building's Height	A-4-22	Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 4.6.2	Guideline for Preservation of Ancient Houses	A-4-23	Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-20Table 4.6.6Guideline for Advertisement BoardsA-4-20Table 4.6.7Guideline for SignboardsA-4-20Table 4.6.8Guideline for Sanitary ConditionA-4-20Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-20Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-30Table 4.6.11Guideline for Street FixturesA-4-30	Table 4.6.3	Guideline for Preservation of Facades	A-4-24	Table 4.6.6Guideline for Advertisement BoardsA-4-2Table 4.6.7Guideline for SignboardsA-4-2Table 4.6.8Guideline for Sanitary ConditionA-4-2Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-2Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-3Table 4.6.11Guideline for Street FixturesA-4-3	Table 4.6.4	Guideline for Materials of Buildings	A-4-25	Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-29Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-30Table 4.6.11Guideline for Street FixturesA-4-31	Table 4.6.5	Guideline for Materials and Colors of Buildings	A-4-26	Table 4.6.8 Guideline for Sanitary Condition A-4-24 Table 4.6.9 Guideline for Telecom, Media Equipment's Location A-4-24 Table 4.6.10 Guideline for Use of Sidewalk and Carriageway A-4-34 Table 4.6.11 Guideline for Street Fixtures A-4-34	Table 4.6.6	Guideline for Advertisement Boards	A-4-27	Table 4.6.9 Guideline for Telecom, Media Equipment's Location A-4-29 Table 4.6.10 Guideline for Use of Sidewalk and Carriageway A-4-30 Table 4.6.11 Guideline for Street Fixtures A-4-30	Table 4.6.7	Guideline for Signboards	A-4-28	Table 4.6.10 Guideline for Use of Sidewalk and Carriageway A-4-30 Table 4.6.11 Guideline for Street Fixtures A-4-30	Table 4.6.8	Guideline for Sanitary Condition	A-4-28	Table 4.6.11 Guideline for Street Fixtures	Table 4.6.9	Guideline for Telecom, Media Equipment's Location	A-4-29		Table 4.6.10	Guideline for Use of Sidewalk and Carriageway	A-4-30	Table 4.8.1 Stakeholders and Roles of AQ Management	Table 4.6.11	Guideline for Street Fixtures	A-4-31		Table 4.8.1	Stakeholders and Roles of AQ Management	A-4-41
Table 3.5.3	Intangible Values and Implication to Spatial Planning	A-3-60																																																																																																	
Table 3.5.6 Indicators for Evaluation A-3-60 Table 3.5.7 Stakeholders, Risks and Returns A-3-60 Table 3.5.8 Current Condition of the Block A-3-61 Table 3.5.9 Future Condition of the Block after Redevelopment A-3-61 Table 3.5.10 Assumptions for Evaluation A-3-73 Table 3.5.11 Result of Financial Evaluation A-3-74 Table 4.3.1 Evaluation Indicators for the Block Development Plan A-4-10 Table 4.3.1 Evaluation Indicators for the Street Development Plan A-4-11 Table 4.5.1 Proposed Business Model by Scale A-4-12 Table 4.5.2 Examples of Recommended Business Models A-4-22 Table 4.5.1 Guideline for Building's Height A-4-22 Table 4.6.2 Guideline for Preservation of Ancient Houses A-4-22 Table 4.6.3 Guideline for Materials of Buildings A-4-22 Table 4.6.4 Guideline for Materials and Colors of Buildings A-4-22 Table 4.6.5 Guideline for Sanitary Condition A-4-22 Table 4.6.6 Guideline for Sanitary Condition A-4-22 Table 4.6.9 Guideline for Sanitary Condition A-4-2	Table 3.5.4	Problems of Living Condition and Implication to Spatial Planning	A-3-62																																																																																																
Table 3.5.7Stakeholders, Risks and ReturnsA-3-67Table 3.5.8Current Condition of the BlockA-3-68Table 3.5.9Future Condition of the Block after RedevelopmentA-3-68Table 3.5.10Assumptions for EvaluationA-3-77Table 3.5.11Result of Financial EvaluationA-3-77Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.5.1Proposed Business Model by ScaleA-4-12Table 4.5.2Examples of Recommended Business ModelsA-4-22Table 4.6.1Guideline for Building's HeightA-4-22Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Materials of BuildingsA-4-22Table 4.6.4Guideline for Materials and Colors of BuildingsA-4-22Table 4.6.5Guideline for SignboardsA-4-22Table 4.6.8Guideline for SignboardsA-4-22Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-33Table 4.6.11Guideline for Street FixturesA-4-34	Table 3.5.5	Proposed Street Images and Activities	A-3-64																																																																																																
Table 3. 5.8Current Condition of the BlockA-3-6iTable 3.5.9Future Condition of the Block after RedevelopmentA-3-6iTable 3.5.10Assumptions for EvaluationA-3-7iTable 3.5.11Result of Financial EvaluationA-3-7iTable 4.3.1Evaluation Indicators for the Block Development PlanA-4-1iTable 4.3.2Evaluation Indicators for the Street Development PlanA-4-1iTable 4.5.1Proposed Business Model by ScaleA-4-2iTable 4.5.2Examples of Recommended Business ModelsA-4-2iTable 4.6.1Guideline for Preservation of Ancient HousesA-4-2iTable 4.6.2Guideline for Preservation of FacadesA-4-2iTable 4.6.3Guideline for Materials of BuildingsA-4-2iTable 4.6.4Guideline for Advertisement BoardsA-4-2iTable 4.6.5Guideline for Advertisement BoardsA-4-2iTable 4.6.6Guideline for SignboardsA-4-2iTable 4.6.9Guideline for SignboardsA-4-2iTable 4.6.10Guideline for SignboardsA-4-2iTable 4.6.20Guideline for SignboardsA-4-2iTable 4.6.31Guideline for SignboardsA-4-2iTable 4.6.4Guideline for SignboardsA-4-2iTable 4.6.5Guideline for SignboardsA-4-2iTable 4.6.6Guideline for SignboardsA-4-2iTable 4.6.7Guideline for SignboardsA-4-2iTable 4.6.8Guideline for SignboardsA-4-2iTable 4.6.9Guideline for SignboardsA-4-2i	Table 3.5.6	Indicators for Evaluation	A-3-66																																																																																																
Table 3.5.9Future Condition of the Block after RedevelopmentA-3-6iTable 3.5.10Assumptions for EvaluationA-3-7iTable 3.5.11Result of Financial EvaluationA-3-7iTable 3.5.11Result of Financial EvaluationA-3-7iTable 4.3.1Evaluation Indicators for the Block Development PlanA-4-1iTable 4.3.2Evaluation Indicators for the Street Development PlanA-4-1iTable 4.3.1Proposed Business Model by ScaleA-4-1iTable 4.5.2Examples of Recommended Business ModelsA-4-2iTable 4.6.1Guideline for Building's HeightA-4-2iTable 4.6.2Guideline for Preservation of Ancient HousesA-4-2iTable 4.6.3Guideline for Preservation of FacadesA-4-2iTable 4.6.4Guideline for Materials of BuildingsA-4-2iTable 4.6.5Guideline for Materials and Colors of BuildingsA-4-2iTable 4.6.6Guideline for SignboardsA-4-2iTable 4.6.7Guideline for SignboardsA-4-2iTable 4.6.8Guideline for SignboardsA-4-2iTable 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-2iTable 4.6.11Guideline for Street FixturesA-4-3iTable 4.6.11Guideline for Street FixturesA-4-3i	Table 3.5.7	Stakeholders, Risks and Returns	A-3-67																																																																																																
Table 3.5.10Assumptions for EvaluationA-3-73Table 3.5.11Result of Financial EvaluationA-3-74Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.3.1Proposed Business Model by ScaleA-4-11Table 4.5.2Examples of Recommended Business ModelsA-4-21Table 4.5.3Guideline for Building's HeightA-4-22Table 4.6.4Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.9Guideline for Senitary ConditionA-4-24Table 4.6.10Guideline for Street FixturesA-4-24Table 4.6.11Guideline for Street FixturesA-4-34	Table 3. 5.8	Current Condition of the Block	A-3-68																																																																																																
Table 3.5.11Result of Financial EvaluationA-3-74Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-11Table 4.5.1Proposed Business Model by ScaleA-4-12Table 4.5.2Examples of Recommended Business ModelsA-4-21Table 4.5.3Guideline for Building's HeightA-4-22Table 4.6.4Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for SignboardsA-4-24Table 4.6.7Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 3.5.9	Future Condition of the Block after Redevelopment	A-3-68																																																																																																
Table 4.3.1Evaluation Indicators for the Block Development PlanA-4-10Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-10Table 4.5.1Proposed Business Model by ScaleA-4-11Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.5.1Guideline for Building's HeightA-4-21Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-22Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.11Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 3.5.10	Assumptions for Evaluation	A-3-73																																																																																																
Table 4.3.2Evaluation Indicators for the Street Development PlanA-4-13Table 4.5.1Proposed Business Model by ScaleA-4-19Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.5.2Guideline for Building's HeightA-4-22Table 4.6.1Guideline for Preservation of Ancient HousesA-4-22Table 4.6.2Guideline for Preservation of FacadesA-4-22Table 4.6.3Guideline for Materials of BuildingsA-4-22Table 4.6.4Guideline for Materials of BuildingsA-4-22Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-22Table 4.6.6Guideline for Advertisement BoardsA-4-22Table 4.6.7Guideline for SignboardsA-4-22Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-30Table 4.6.11Guideline for Street FixturesA-4-30	Table 3.5.11	Result of Financial Evaluation	A-3-74																																																																																																
Table 4.5.1Proposed Business Model by ScaleA-4-19Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.5.1Guideline for Building's HeightA-4-21Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-36Table 4.6.11Guideline for Street FixturesA-4-37	Table 4.3.1	Evaluation Indicators for the Block Development Plan	A-4-10																																																																																																
Table 4.5.2Examples of Recommended Business ModelsA-4-20Table 4.6.1Guideline for Building's HeightA-4-21Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-22Table 4.6.4Guideline for Materials of BuildingsA-4-22Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-22Table 4.6.6Guideline for Advertisement BoardsA-4-22Table 4.6.7Guideline for SignboardsA-4-22Table 4.6.8Guideline for Sanitary ConditionA-4-22Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-23Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-33Table 4.6.11Guideline for Street FixturesA-4-33	Table 4.3.2	Evaluation Indicators for the Street Development Plan	A-4-13																																																																																																
Table 4.6.1Guideline for Building's HeightA-4-22Table 4.6.2Guideline for Preservation of Ancient HousesA-4-22Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for SignboardsA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 4.5.1	Proposed Business Model by Scale	A-4-19																																																																																																
Table 4.6.2Guideline for Preservation of Ancient HousesA-4-24Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 4.5.2	Examples of Recommended Business Models	A-4-20																																																																																																
Table 4.6.3Guideline for Preservation of FacadesA-4-24Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 4.6.1	Guideline for Building's Height	A-4-22																																																																																																
Table 4.6.4Guideline for Materials of BuildingsA-4-24Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-24Table 4.6.6Guideline for Advertisement BoardsA-4-24Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-24Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-34Table 4.6.11Guideline for Street FixturesA-4-34	Table 4.6.2	Guideline for Preservation of Ancient Houses	A-4-23																																																																																																
Table 4.6.5Guideline for Materials and Colors of BuildingsA-4-20Table 4.6.6Guideline for Advertisement BoardsA-4-20Table 4.6.7Guideline for SignboardsA-4-20Table 4.6.8Guideline for Sanitary ConditionA-4-20Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-20Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-30Table 4.6.11Guideline for Street FixturesA-4-30	Table 4.6.3	Guideline for Preservation of Facades	A-4-24																																																																																																
Table 4.6.6Guideline for Advertisement BoardsA-4-2Table 4.6.7Guideline for SignboardsA-4-2Table 4.6.8Guideline for Sanitary ConditionA-4-2Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-2Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-3Table 4.6.11Guideline for Street FixturesA-4-3	Table 4.6.4	Guideline for Materials of Buildings	A-4-25																																																																																																
Table 4.6.7Guideline for SignboardsA-4-24Table 4.6.8Guideline for Sanitary ConditionA-4-24Table 4.6.9Guideline for Telecom, Media Equipment's LocationA-4-29Table 4.6.10Guideline for Use of Sidewalk and CarriagewayA-4-30Table 4.6.11Guideline for Street FixturesA-4-31	Table 4.6.5	Guideline for Materials and Colors of Buildings	A-4-26																																																																																																
Table 4.6.8 Guideline for Sanitary Condition A-4-24 Table 4.6.9 Guideline for Telecom, Media Equipment's Location A-4-24 Table 4.6.10 Guideline for Use of Sidewalk and Carriageway A-4-34 Table 4.6.11 Guideline for Street Fixtures A-4-34	Table 4.6.6	Guideline for Advertisement Boards	A-4-27																																																																																																
Table 4.6.9 Guideline for Telecom, Media Equipment's Location A-4-29 Table 4.6.10 Guideline for Use of Sidewalk and Carriageway A-4-30 Table 4.6.11 Guideline for Street Fixtures A-4-30	Table 4.6.7	Guideline for Signboards	A-4-28																																																																																																
Table 4.6.10 Guideline for Use of Sidewalk and Carriageway A-4-30 Table 4.6.11 Guideline for Street Fixtures A-4-30	Table 4.6.8	Guideline for Sanitary Condition	A-4-28																																																																																																
Table 4.6.11 Guideline for Street Fixtures	Table 4.6.9	Guideline for Telecom, Media Equipment's Location	A-4-29																																																																																																
	Table 4.6.10	Guideline for Use of Sidewalk and Carriageway	A-4-30																																																																																																
Table 4.8.1 Stakeholders and Roles of AQ Management	Table 4.6.11	Guideline for Street Fixtures	A-4-31																																																																																																
	Table 4.8.1	Stakeholders and Roles of AQ Management	A-4-41																																																																																																

LIST OF FIGURES

Figure 1.3.1	Basic Approaches of the Project	A-1-3
Figure 1.4.2	Project Action Area	A-1-4
Figure 2.2.1	Ancient Structure of the Ancient Quarter	A-2-3
Figure 2.2.2	Historical Change of the AQ and Surrounding Areas Quarter	A-2-4
Figure 2.2.3	Mid-Rise Buildings in Front	A-2-5
Figure 2.2.4	In-efficient Land Use with Low-Rise Buildings Inside Block	A-2-5
Figure 2.2.5	Dishwashing on Sidewalk	A-2-7
Figure 2.2.6	Cleaning of Drainage	A-2-7
Figure 2.4.1	Various Business in A Q	A-2-13
Figure 2.4.2	Registered Business by Sector in A Q	A-2-15
Figure 2.4.3	Types of Informal Business	A-2-19
Figure 2.4.4	Wholesale Markets	A-2-22
Figure 2.5.1	Plan and Unique Features of Tube House	A-2-31
Figure 2.5.2	Dilapidated Housing Conditions	A-2-32
Figure 2.5.3	Dissatisfaction on Housing	A-2-33
Figure 2.6.1	Road Network	A-2-35
Figure 2.6.2	Work Trip by Motorcycle	A-2-39
Figure 2.6.3	Streets with Heavy Through-Traffic Volume (Supposition)	A-2-39
Figure 2.6.4	Through-Traffic of Work Trip by Motorcycle	A-2-39
Figure 2.6.5	Traffic Facilities and Signs in the A Q	A-2-40
Figure 2.6.6	Car Parking Area	A-2-41
Figure 2.6.7	Motorcycle Parking Area	A-2-42
Figure 2.6.8	One-Way System	A-2-43
Figure 2.6.9	Bus Route	A-2-44
Figure 2.6.10	Assessment of Bus Service	A-2-46
Figure 2.6.11	Factors for Improvement of Bus Service	A-2-46
Figure 2.6.12	Expected Public Transport in the Future	A-2-46
Figure 2.6.13	Supported/Agreed Transport Measures (%)	A-2-47
Figure 2.7.1	Location Map of Religious Sites	A-2-51
Figure 2.7.2	Location Map of Ancient Houses in 2005	A-2-58
Figure 2.7.3	Location of Traditional Handicraft Streets	A-2-60
Figure 2.7.4	Traditional Handicraft Streets	A-2-61
Figure 2.7.5	Intangible Values	A-2-62
Figure 2.7.6	Traditional Lion Dance in the Past and Present	A-2-63
Figure 2.7.7	Neglected Statues in Quan De Temple	A-2-64
Figure 2.7.8	Loss of Cultural Function of Quang Lac Theater	A-2-64
Figure 2.8.1	Changes of Townscapes in Hang Buom Street	A-2-66

Figure 2.8.2	Negative Townscape Elements	A-2-68
Figure 2.8.3	Positive and Negative Townscape Elements	A-2-69
Figure 2.9.1	Examples of Proposed Plans in the Past Projects	A-2-73
Figure 2.10.1	Values of the Ancient Quarter	A-2-74
Figure 2.10.2	Linkages of Values in the Ancient Quarter	A-2-76
Figure 3.1.1	Basic Framework of the Pilot Project	A-3-2
Figure 3.1.2	Participatory Planning Approach	A-3-4
Figure 3.2.1	Building Storey of the Block	A-3-7
Figure 3.2.2	Open Space of the Block	A-3-7
Figure 3.2.3	Assessment of Urban Service	A-3-8
Figure 3.2.4	Composition of Residents by Age and Sex	A-3-13
Figure 3.2.5	Composition of Head of Household by Age	A-3-16
Figure 3.2.4	Major Business Types along the Four Streets in the Block	A-3-12
Figure 3.2.5	Example of Housing Types in 4 Streets	A-3-16
Figure 3.2.6	Ownership of Houses	A-3-18
Figure 3.2.7	Current Inner Courtyard for Community	A-3-20
Figure 3.2.8	Degraded Housing Condition in Hang Buom Street	A-3-22
Figure 3.2.9	Parking in Ta Hien Street	A-3-25
Figure 3.2.10	Tangible Cultural Values in the Street and the Block	A-3-27
Figure 3.2.11	Violations in Building Height in Hang Buom	A-3-29
Figure 3.2.12	Number of Storeys in Hang Buom Street	A-3-29
Figure 3.2.13	Improper Façade of Buildings in Hang Buom Street	A-3-30
Figure 3.2.14	Improper Commercial Space In Front of Historical Sites	A-3-30
Figure 3.2.15	Degraded Traditional Houses in Hang Buom Street	A-3-31
Figure 3.2.16	Satisfaction of Townscape	A-3-33
Figure 3.2.17	Overall Framework of Current Situation and Issues	A-3-35
Figure 3.5.1	Effects of the Block Redevelopment Plan	A-3-55
Figure 3.5.2	Proposed Block Plan	A-3-56
Figure 3.5.3	Potential Analysis of Current Land use	A-3-58
Figure 3.5.4	Proposed Conceptual Plan	A-3-58
Figure 3.5.5	Cultural Values of the Block	A-3-61
Figure 3.5.6	Future Images of Commercial Activities in the Block	A-3-64
Figure 3.5.7	Street Façade of Hang Buom Street	A-3-65
Figure 3.5.8	Indicators for Project Evaluation	A-3-66
Figure 3.5.9	Settlement and Floor Plan	A-3-69
Figure 3.5.10	Project Structure	A-3-71
Figure 4.3.1	Proposed Block Development Plan of the AQ	A-4-14
Figure 4.3.2	Proposed Street Development Plan of the AQ	A-4-15
Figure 4.4.1	Future Transportation Plan	A-4-17

Figure 4.7.1	Proposed Organization Framework for the AQ	A-4-32
Figure 4.8.1	Institutional Arrangement for AQ management	A-4-40
Figure 5.2.1	Proposed Network for Preservation of Core Values of the Ancient Quarter	A-5-2

ABBREVIATIONS

AQ	Ancient Quarter
AQMB	Ancient Quarter Management Board
AUSAID	Australian Agency for International Development
CACC	Center of Architecture and Construction Consultancy
DONRE	Department of Natural Resources, Environment, and Land
HAIDEP	The Comprehensive Urban Development Programme in Hanoi Capital City
HIS	Household Inventory Survey
HUCE	Hanoi University of Civil Engineering
IAR	Institute for Architectural Research
IT	Information Technology
IUTP	International Understanding Through Photography
IUOTP	International Unexploded Ordnance Training Program
JICA	Japan International Cooperation Agency
M/C	Motorcycle
MICE	Meeting, Incentive, Conference, and Event
MOC	Ministry of Construction
MONRE	Ministry of National Resources and Environment
NMT	Nuclear Materials Technology
NMTS	Nordic Mobile Telecommunication System
PC	People's Committee
SIDA	Statistics of Department of Planning and Investment
SENA	South East New Adventures
SWECO	Sweden's largest engineering consulting firm
TUPWS	Department of Transport and Urban Public Works Services
UNESCO	United Nations Educational, Scientific and Cultural Organization
URENCO	Urban Environmental Company
VND	Vietnam Dong

1 INTRODUCTION

1.1 Context

The Ancient Quarter (AQ) has submitted its application to the UNESCO World Heritage. However, it is at present experiencing strong external and internal pressures such as rapid urbanization which causes the further inflow of population to this already densely populated area, resulting in small living spaces and poor living environment due to the lack of public space and parks, as well as deteriorating infrastructure. In addition, increased rate of motorization results in traffic congestion and worsens traffic safety and air quality. Moreover, due to its attractive business environment, there is a continuous inflow of investments and people from outside the AQ. However, the absence of proper regulation and monitoring has unfortunately resulted in various violations on building regulations thereby spoiling the social coherence upon which the AQ's existence is built. Thus, more comprehensive and sustainable policy interventions for AQ are necessary to ensure that it will keep its historical value as well as adjust accordingly to the changing times.

The core issue that must be addressed for the AQ is the urgent establishment of workable mechanism on sustainable development. Sustainability must comply with cultural, social and economic aspects and should also consider the residents of the AQ, citizens of Hanoi and the national and international communities. And because of the enormous impact of urbanization on the AQ, conservation of its cultural heritage alone through strict enforcement of regulations will not be the solution. In fact, economic development is inevitable because of the huge opportunities with which the AQ and its residents are presented. Improvement of living condition is also important. Therefore, in order to promote sustainable development and conservation, the guiding principle in policy development for AQ should be the three aspects of "preservation of cultural value," "improvement of living conditions," and "economic development."

1.2 Objectives

In order to meet these three requirements, one of the most fundamental planning elements to establish is "how to reorganize or increase the space in the AQ for residential and economic activities while properly maintaining its cultural values." Without reorganization or the addition of space, living conditions may not improve nor can new businesses and economic activities be accommodated.

Specific objectives of this pilot project are as follows:

- (i) To formulate workable preservation and development methods.
- (ii) To establish shared vision for the future of AQ and determine goals and strategies on sustainable development.
- (iii) To select priority action(s) for implementation and monitor the impacts.
- (iv) To incorporate the results of the Pilot Project into the Master Plan and make necessary recommendations.

1.3 Basic Approach

In this pilot project, therefore, the following key steps were undertaken (see Figure 1.3.1):

- (i) Establishment of the identity of the AQ to clearly determine what must be preserved.
- (ii) Obtained firm consensus on the direction the AQ should adopt.
- (iii) Identification of specific problems faced by the AQ and the opportunities it offers based on the formulated development orientation, strategies and actions.
- (iv) Conduct of a pilot project to test the applicability of strategies and to identify lessons which are then considered during the overall effort to conserve and develop the AQ as well as the HAIDEP Master Plan for Hanoi.
- (v) Recommended measures on sustainable development and management of the AQ.



Figure 1.3.1 Basic Approaches of the Project

1.4 Coverage

While overall study was conducted for the entire Ancient Quarter, a street and a block of Hang Buom commune (Hang Buom-Ta Hien-Luong Ngoc Quyen-Hang Giay, which is approximately 4,700m2) and Hang Buom Street (approximately 200m) were selected to comprehensively study development and conservation issues as well as implement priority actions (see Figure 1.4.1).





1.5 Methodology

(1) **Project Organization**

The HAIDEP Study Team organized a pilot project team comprising of JICA experts and national consultants who specialize in the cultural, socio-economic and town planning fields. The Ancient Quarter Management Board provided advice and monitoring throughout the course of the project as a counterpart.

(2) Working Group

A local working group comprised of commune PC and local residents was organized.

(3) Stakeholder Meetings and Focus Group Discussions

Stakeholders including residents, business people, private enterprises, and visitors, were involved through various meetings, discussions and consultations conducted throughout the project.

(4) Implementation

The project was implemented through a participatory approach wherein key stakeholders including government officials, academics, researchers, and representatives of residents were consulted and involved at key steps of the project process.

2 STUDY ON THE ANCIENT QUARTER

2.1 Brief History of the AQ

Along with Royal Citadel, the AQ is an existing vestige of ancient Thang Long imperial city which brings national pride and historic sense of uprightness to the people of Hanoi. The AQ, which was organized since the 15th century, was composed of 36 guilds. Each guild was a residential area where people lived, manufactured and conducted business. In the past, the residents of this area have experienced some major and life-altering periods. Vietnam's renovation period has led to many significant changes in the economy and society of Hanoi in general and of AQ in particular. AQ then had become the busiest traditional commercial and residential center with the highest density of enterprises and residents in Vietnam. And until now, the AQ still keeps its function of a big trading center, one of the values of history.

(1) French Colonial Period from 1887

The French colonization of Indo-China and Hanoi has resulted in massive social and economic changes. Under the French colonial capitalist, the number of urban workers, crafts men and traders increased rapidly as well, fuelled by significant migration of poor peasants into the colonial centers, the cities. And during this French period, the main infrastructures constructed were solely for commercial purposes, thus, the foundation of commercial and handicraft streets thereby increasing the numbers of workers and craftsmen. Hanoi had a very large floating population, about 75,000 in 1921 and about 180,000 in 1937, a significant portion of the population1.

(1) From 1945 until 1954

When the fighting ended in 1947 with the French retaking Hanoi, people were reluctant to return because of delayed restoration of services, destruction of homes, lack of commerce and capital, exorbitant costs of living, and patriotic distaste at the idea of returning to a zone of French control. In 1948-1949, Hanoi's population may have been as low as 10,000. Battle between the French and Ho Chi Minh's forces had a big effect on the economy. All of the city's essential services and most of its industry were destroyed. After 1947, various kinds of small businesses provided an economic base for the population. City services and commercial life were revived. However, later on, small businesse gradually returned to the city, providing an economic base for a rapidly expanding population driven into urban migration by a declining rural economy. City services and commercial life were revived, though almost entirely dependent on France.

(2) From 1954 until Doi Moi

After its independence from France, particularly from 1954 to 1998, the population of Hanoi increased 6.68 times and was mostly concentrated in AQ. This population boom was mainly attributed to the increase in the number of traditional craftsmen or traders, state-officers and people favored from state-policy. Hanoi's economic and urban planners were strongly influenced by former Soviet Union and Chinese models of economic planning and urban design. In the late 1950s, industry development increased in Hanoi as hundreds of private enterprises were merged into state-run and enterprise cooperatives and new factories were established by former Soviet Union and China. The State then

¹ "Old Hanoi", Mark Sidel, Oxford University Press

took over the role of private traders. Craftsmen were obliged to join cooperatives. Trading activities in the AQ dropped heavily after 1955; there was no street trading and most retail spaces were converted into living areas. By 1960, private economic activities were virtually eliminated. The phase of state economic planning and administration was plagued by economic stagnation and the consequences of the war between Vietnam and the United States.

(3) After Doi Moi

Doi Moi (Renovation) policy in 1986 and the successive introduction of market-economy reforms paved the way for a modern consumer society in Hanoi, particularly in the AQ, and a boom in the creation of private businesses by individuals or families has began. In the early 1990s, the population of AQ increased due to the increase of migrants from other regions. During this period, the population of AQ was around 80,000; the main reason for this rapid population growth is the outsiders' attraction to the ongoing business activities. However, in the next period, there was a decline in population growth rate because some households moved out of the AQ, with around 2,799 households moving out from the period of 1999 to 20002.

² Statistic Office of Hoan Kiem Dist in 2000

2.2 Current Physical Setting

1) Location and Layout of the AQ

History of the development of the AQ is rooted in its location and positional relationship between the Citadel and the Red River (see Figure 2.2.1). The capital was transferred from Hoa Lu to Hanoi in 1010, with the location of the Royal Citadel selected to protect it from flooding of the Red River. The AQ then flourished serving as the merchant area, providing the Citadel with goods and giving access to the Red River Waterways. The Ancient Quarter ("Pho Co" in Vietnamese) was called "Ke Cho", meaning "market place", indicating its function.



Figure 2.2.1 Ancient Structure of the AQ

Source: "Hanoi, an ancient city in transition", Helena Hallman, 1999

At present, the AQ is surrounded by borderlines; in the east by the road toward the Red River bank, in the north by the railway-line and in the west by the Citadel. These boundaries resulted in highly densed areas with limited expansion as well as practically cutting its physical and social linkages with neighboring areas.

The altitude of the AQ as well as the Citadel is slightly higher than other areas so it is believed that damage of flooding is not as serious as the other areas. As shown in the map, in 1873, there were many small ponds and one river called Tu Lich River which connects north of the Citadel and the Red River. Until 1889, the Tu Lich River was the main transportation route passing by the rice market to the Citadel until the time it was filled. These waterways and ponds were filled in when French donation started. At the same time, many immigrants started to live here and new buildings occupy most of these open spaces.

The street network was developed based on the historical change of function. The first developed area of the AQ was close to the Citadel, which became the working and residential area. The second area was the gate to the harbor and the Red River waterways. These two areas in west and east had more interrelation and tradition in the ancient history than that in the north-south direction.



Figure 2.2.2 Historical Change of the AQ and Surrounding Areas

Source: Verious publications

2) Land Use

The AQ is mostly mixed-use; with most of the land area being used as either for residential, commercial, or both, with households running their businesses at home. In terms of public spaces, though public facilities such as schools and hospitals existed, open spaces are quite limited. Residents enjoy open space only on streets, sidewalk, or go to neighboring open space such as Hoan Kiem Lake.

The characteristic of the landuse is a longitudinal land plot with façade next to the street. The so-called "tube house" is the main building structure to distinguish original land plots. The front part of the street is used for business activities, while the rear part is used for residential purposes.

In terms of the type of landuse, the AQ is known for its market streets which were formed before the construction of residential houses and shops along the street. Gradually, the entire area of land contiguous to the street was used for business purposes. The increased demand for residential space then resulted in the continuous expansion of the

rear of the houses. This caused the narrowing of the open spaces inside the block and the formation of the typical longitudinal and narrow land plot on which tube houses were built. As an example, there are some land plots which has length of over 60m while the width is more than 10 times shorter than the length.

Thus, vertical development has been one of the solutions to maximize the land area in the AQ. So far, there is a regulation to control maximum height to three floors or 12m in front and four floors or 16m behind. Though there are some mid-rise buildings such as mini hotels which violate this regulation, most of the buildings inside the buildings are 2 or 3 stories (see Figure 2.2.3 and Figure 2.2.4). At present, ongoing arguments on the height control in the AQ among governments, experts and citizens are in terms of townscape preservation mainly, but not for effective utilization of limited land area.

Figure 2.2.3 Mid-Rise Buildings in Front

Figure 2.2.4 Inefficient Land Use with Low-Rise Buildings Inside Block



Source: HAIDEP Study Team

3) Infrastructure

(1) General

The infrastructure system in the AQ at present is insufficient, poor and dilapidated. Such condition results in negative impacts such as urban environment pollution, poor living conditions and public health deterioration that limit the urban development and the future economic benefits of the whole city. Because of rapid economic development and an increased demand of urban services in the residential and commercial areas, capacities of old and limited infrastructure have faced its limit.

(2) Power Supply

The power sources for Hanoi are Hoa Binh hydroelectric plant and Pha Lai thermo-electric plant. However, these sources are unable to meet the future demands of the society. At present, the AQ uses the power transformer posts of 6KV/ 0,4KV provided by Yen Phu 110KV power transformer post. There are 69 power transformer posts of 6KV/0.4KV located in 9 communes in AQ. These posts are big, unsightly and often located on the pavements without consideration on the negative aesthetic effects it gives to the image of the townscape. In addition, the power supply network is unsafe. Most of the low voltage grid installed overhead on steel and concrete poles is placed along the pavement. Because of the narrow streets, the power cables are very near the residential houses that

do not follow the safety and aesthetic standards of the townscape.

(3) Water Supply

At present, 99.4% of households in the AQ use the Finland water supply system. However, the water supply network and services of Hanoi are unable to provide adequate capacity and water pressure for the present requirements of the residents in the AQ.

According to the survey data of AQMB in 2003, only 48% to 50% of the total amount of produced water are directed to the users; the rest however is lost during water supply processing and distribution. This system loss may be attributed to the very antiquated condition of the water supply infrastructure which was built a century ago. In addition, there exists many illegal water piping that further causes the leakage of water in the AQ. However, in the latest HIS (2005), more than 60% of the AQ's residents are satisfied with the current water supply, with only 10% unsatisfied with the water price, water quality, water supply time, and pressure.

Therefore, the water supply in the AQ has improved significantly during the years. However, the average water supply in AQ is only 50 liters/per/day, much lower than the standard of water supply that is regulated in the Prime Minister's Decision 50/2000/QD-TTg (160 liters/per/day in 2006, and 170 liters/per/day in 2010).

The source of water that supplies the households in the AQ is either a common tap or tank located on the pavement or a single tap inside the house. The water pressure can be so low that electric pumps are often used to pump water into the houses. These tanks which are located on the pavement are one of the main reasons for water leaking which can then result in the pollution of the main water supply source. And this is the main factor that impacts the water quality in the AQ. In addition, many households wash their dishes outside, either in the common water facilities inside or at the sidewalks (see Figure 2.2.5), a practice which causes unsanitary condition. According to the HIS, 73.1% of the residents state that the most important issue of water supply is ensuring water quality.

(4) Drainage and Sewerage

Direct collection of household and industrial sewage into open gutters along AQ streets has resulted in many problems such as environmental pollution and threat to public health. The surface water, as well as household and industrial sewage is jointly collected. Rainwater is collected and directed by a series of down pipes into a collection pipe that run into the street. There is a series of gutters in the streets that collect most of the surface drainage and convey it into pipes and duct which in turn discharge into an open channel and then into the rivers.

The drainage and sewage directions through underground pipes are divided into 3 zones:

- (i) North area: discharged to Thuy Khe channel and To Lich river
- (ii) East area: discharged to Kim Nguu river
- (iii) West area: discharged to Lu river and To Lich river

Because of overcrowding and lack of maintenance over many years, there is much damage to the duct and pipe system. Overflowing gutters and catch pits occur every time it rains.

According to HIS results, 12.9% of the residents believe that the drainage and sewerage systems in the AQ are poor. Ankle-length flooding usually occur when it rains, usually

lasting a half day. Hence, the drainage and sewerage systems in the AQ are deemed insufficient.

In general, the peoples' practice and behavior does not help. Customers, visitors and residents throw garbage and wastewaters directly to the gutters. And even if staffs of URENCO company as well as cleaning staff assigned by local government regularly work on the cleaning of drainage as well as for garbage collection (see Figure 2.3.6), this still doesn't ease the sewerage and drainage problems because the cause is not only degraded infrastructure but also the peoples' behavior and practice.

Figure 2.2.5 Dishwashing on Sidewalk

Figure 2.2.6 Cleaning of Drainage





Source: HAIDEP Study Team

Table 2.2.1Water Level of Flood in the AQ

(%)	Ankle-Length	Knee-length	Waist-Deep	Higher than Waist	Total
Normal	90.0	3.3	0.0	0.8	100
Past 3years	72.2	24.9	2.5	0.4	100
Most serious	57.6	34.0	6.4	0.7	100

Source: HAIDEP-HIS, 2005

(%)	Less than Half Day	Half Day – One Day	1-3 Days	4-5 Days	Total
Normal	99.4	0.6	0	0	100
Past 3years	87.6	12.0	0.4	0	100
Most serious	79.6	14.4	5.6	0.4	100

Table 2.2.2Duration of Flood in the AQ

Source: HAIDEP-HIS, 2005

2.3 **Profile of Residents**

1) Population

At present, there are about 80,000 people living in a total area of about 100ha. Based on statistics, the population density is 623per/ha, two times higher than that of Hoan Kiem District (330per/ha). But in reality, it is said that the AQ is the most highly-densed area in Hanoi with more than 1,000per/ha. The communes which have highest number of residents are Hang Buom, Dong Xuan and Hang Bo (See Table 2.3.1).

In the early 1990s, the population of AQ increased due to the increase of migration from other regions. The population of AQ at this time was around 80,000 and the main reason for this rapid population growth is the attraction of migrants to business activities. In the next period, the population growth rate started to decline because some households moved out and transferred to other residential areas.

The specific characteristic of this area is this is not only a crowded living area but also an exciting business area. There are also over 1,300 registered enterprises, tens of thousand of business households and many informal business activities. All these factors caused a high pressure on population density in this area.

Population density still increases due to the following reasons:

- i) Increasing business area makes residential area narrower.
- ii) Height and area of buildings and houses.
- iii) Many residents don't want to move out as they have lived here for many generations where they also have the chance to do small business to earn for their daily living.

Until now, population has been slightly increased. In 2020, it is expected that population will be decreased due to natural reduction and resettlement. While the population of the whole of Hanoi City is expected to increase (2.4% growth rate from 2003-2020), the population of the Hoan Kiem District will be decreased (-2.3%) (Table 2.3.2).

Commune	Total Area						Density	(per/ha)	Annual Pop Growth		
Commune	(ha)	1999	2003	2005	2020	1999	2003	2005	2020	1999-2003	2003-2020
Hang Bac	9.4	7,655	7,849	8,052	5,272	815	836	857	121	0.6	-2.3
Ly Thai To	26.3	7,240	7,605	7,801	5,108	276	290	297	561	1.2	-2.3
Hang Buom	12.5	9,720	10,361	10,628	6,960	780	832	853	195	1.6	-2.3
Dong Xuan	17.2	10,486	10,651	10,926	7,155	611	621	637	559	0.4	-2.3
Hang Dao	6.0	5,807	5,895	6,047	3,960	973	988	1,014	417	0.4	-2.3
Hang Ma	13.2	8,507	9,482	9,727	6,369	644	717	736	664	2.7	-2.3
Hang Bo	11.2	7,781	8,047	8,255	5,405	692	716	734	482	0.8	-2.3
Cua Dong	14.2	7,810	8,355	8,571	5,612	551	590	605	481	1.7	-2.3
Hang Bong	18.2	6,966	7,538	7,732	5,063	383	415	426	396	2.0	-2.3
Hang Gai	11.3	8,289	8,824	9,051	5,927	731	778	798	279	1.6	-2.3
TOTAL	139.3	80,261	84,607	86,790	56,831	576	607	623	408		

Table 2.3.1 Population, Density and Population Growth of 10 Communes in the

Source: Hanoi Statistical Year Book, HAIDEP-HIS, 2005

Note: The data includes the entire 10 communes. Some areas of Ly Thai To and Hang Bong Commune are out of the boundary of the AQ.

2) Profile of Residents

(1) General

The AQ has been a traditional center which showcases the national embodiment and the people from many backgrounds such as those coming from craft villages like craftsmen, artisans and businessmen. These people from rural areas have developed the traditional atmosphere and social network of the AQ. There is a large number of businessmen and the business activities play an important role here, creating more jobs for residents and help them improve their lives. In addition, residents with both traditional skills and knowledge of commercial activities have created a diverse and exciting environment in AQ.

Though there are various business opportunities including informal business, some people, especially the aged and retired, cannot gain access to job opportunities. Thus, economic growth including emerging new businesses and tourism development doesn't contribute in the creation of job opportunities and generation of incomes for the original residents.

Since original residents who know tradition and values of the AQ are the main actors for sustainable development of the AQ, the issue is how to attain an improved quality of life and economic condition while keeping the traditions of family and society.

(2) Structure of Household

The modern family structure is dominant in AQ. According to HIS, each household of AQ has 4.2 members in average, which is almost the same as the average of Hanoi City (4.3 members). Basically, the family with 3 to 5 members account for 72.37% of the total.

Based on the HIS, the ratio of the old people (over 60 years old) is 18.6% while that ratio of Hanoi is 16.7%. Therefore, the living condition and living environment for old people should be a concern because most of them have low income. At the same time, the number of AQ residents who are of working age (from 18 to 60 years old) is high (62%). This is an advantage for AQ but there are also problems of creating jobs for young people.

(3) Income Level

Average household income of AQ is 3,577,000VND/month, which is 1.4 times higher than the average of Hanoi. Monthly expenditure for infrastructure is relatively high excluding transportation (see Table 2.3.2).

			AQ	Hanoi
Area (ha)			100	92,097
Net Population	on Density (pers	sons/ha)	603	36
	No. of HH		14,374	760,000
Household	Ave. No. of L	iving Together	4.2	4.3
	Ave. HH Incor	me (VND000/month)	3,577	2,567
	Car		2.2	2
Vehicle	Motorovolo	One	43.0	43
Ownership	Motorcycle	More than 2	40.0	40
(%)	Bicycle		5.9	12
	No vehicle		5.2	2
	Transportation	ı	218.0	256
Average	Electricity		228.0	169
Monthly Expenditure	Water Supply		46.9	41
(VND000)	Sewerage Se	rvices	12.8	8
(Solid Waste M	lanagement	13.1	8

Table 2.3.2Characteristics of Households

Source: HAIDEP-HIS, 2005

Diversity among AQ residents is clearly shown in occupation structure. Businessmen comprise only 21.5% while students and out of job residents (i.e. jobless, retired, minor) take up 48.3%.

In terms of income gap by occupation, unemployed people in AQ belong to the lowincome group; most of them earn less than 800,000VND/month. Small vendors, which account for 6.4% of total, can earn a relatively high income even though they are regarded as operating "informal business" (see Table 2.3.3).

Income	Job	less	Small V	/endors	Total		
income	No.	%	No.	%	No.	%	
400 & less	289	39.1	20	5.4	1,097	2.6	
400-800	308	41.6	75	20.4	5,857	14.0	
800-1500	115	15.5	116	31.6	15,179	36.4	
1500 & more	28	3.8	156	42.5	19,587	46.9	
Total	740	100.0	367	100.0	41,720	100.0	

Table 2.3.3Income of Jobless and Small Vendors

Source: HAIDEP-HIS, 2005

The average income of AQ resident is 3,670,000VND/month (229.4US\$/month), which is 1.4 times higher than the average income of Hanoi residents (2,567,000VND/month, 160.4US\$/month). Due to the different features of occupation, the income of groups of residents varies and there is a distinction between groups.

The gap between the rich and the poor3 can be shown through their ownership of various household appliances and occupation (see Table 2.3.4). Households with 4,000,000 VND income has the highest ownership rate for expensive household appliances and equipment like air conditioners, mobile phones and washing machines. It is 7 to 8 times higher than households that only have the income of 800,000 VND/month. More than half of households with incomes more than 3 million VND/month have 2 motorcycles. On the

³ Based on the poverty level standard enforced by the Prime Minister for the period 2006 - 2010, poverty level is set at 260,000VND/person/month for those living in urban areas.

other hand, more than half of poor households with incomes under 800,000VND/month don't have any vehicles.

	Vehic	le Owne	ership		Machine Ownership							
Car	1 M/C	2 M/C	Bicycle	No Vehicle	TV	Radio	Refrige rator	Washing machine	Air-con	Computer	Mobile phone	
0.0	23.5	3.3	20.2	53.0	96.7	69.8	73.2	16.8	6.7	13.3	10.3	
0.0	50.2	14.6	20.8	14.5	95.8	56.3	78.9	31.9	19.8	22.3	35.5	
0.0	58.7	28.5	10.5	2.3	100.0	60.5	86.8	40.3	14.4	29.9	38.1	
0.0	53.5	42.2	3.1	1.2	98.6	56.3	95.1	52.3	21.6	32.2	56.0	
3.2	39.7	52.4	2.4	2.4	100.0	73.1	97.6	70.0	43.1	48.4	74.7	
5.3	25.0	67.8	0.9	1.0	99.5	71.1	96.6	76.1	54.4	57.0	84.2	
2.2	41.3	45.4	5.9	5.2	98.9	65.0	92.2	57.5	33.7	40.5	61.5	
	0.0 0.0 0.0 0.0 3.2 5.3	Car 1 M/C 0.0 23.5 0.0 50.2 0.0 58.7 0.0 53.5 3.2 39.7 5.3 25.0	Car1 M/C2 M/C0.023.53.30.050.214.60.058.728.50.053.542.23.239.752.45.325.067.8	0.0 23.5 3.3 20.2 0.0 50.2 14.6 20.8 0.0 58.7 28.5 10.5 0.0 53.5 42.2 3.1 3.2 39.7 52.4 2.4 5.3 25.0 67.8 0.9	Car1 M/C2 M/CBicycleNo Vehicle0.023.53.320.253.00.050.214.620.814.50.058.728.510.52.30.053.542.23.11.23.239.752.42.42.45.325.0 67.8 0.91.0	Car1 M/C2 M/CBicycleNo VehicleTV0.023.53.320.253.096.70.050.214.620.814.595.80.058.728.510.52.3100.00.053.542.23.11.298.63.239.752.42.42.4100.05.325.067.80.91.099.5	Car1 M/C2 M/CBicycleNo VehicleTVRadio0.023.53.320.253.096.769.80.050.214.620.814.595.856.30.058.728.510.52.3100.060.50.053.542.23.11.298.656.33.239.752.42.42.4100.073.15.325.0 67.8 0.91.099.571.1	Car1 M/C2 M/CBicycleNo VehicleTVRadioRefrige rator0.023.53.320.253.096.769.873.20.050.214.620.814.595.856.378.90.058.728.510.52.3100.060.586.80.053.542.23.11.298.656.395.13.239.752.42.42.4100.073.197.65.325.0 67.8 0.91.099.571.196.6	Car1 M/C2 M/CBicycleNo VehicleTVRadioRefrige ratorWashing machine0.023.53.320.253.096.769.873.216.80.050.214.620.814.595.856.378.931.90.058.728.510.52.3100.060.586.840.30.053.542.23.11.298.656.395.152.33.239.752.42.42.4100.073.197.670.05.325.0 67.8 0.91.099.571.196.676.1	Car 1 M/C 2 M/C Bicycle No Vehicle TV Radio Refrige rator Washing machine Air-con 0.0 23.5 3.3 20.2 53.0 96.7 69.8 73.2 16.8 6.7 0.0 50.2 14.6 20.8 14.5 95.8 56.3 78.9 31.9 19.8 0.0 58.7 28.5 10.5 2.3 100.0 60.5 86.8 40.3 14.4 0.0 53.5 42.2 3.1 1.2 98.6 56.3 95.1 52.3 21.6 3.2 39.7 52.4 2.4 2.4 100.0 73.1 97.6 70.0 43.1 5.3 25.0 67.8 0.9 1.0 99.5 71.1 96.6 76.1 54.4	Car1 M/C2 M/CBicycleNo VehicleTVRadioRefrige ratorWashing machineAir-conComputer0.023.53.320.253.096.769.873.216.86.713.30.050.214.620.814.595.856.378.931.919.822.30.058.728.510.52.3100.060.586.840.314.429.90.053.542.23.11.298.656.395.152.321.632.23.239.752.42.42.4100.073.197.670.043.148.45.325.0 67.8 0.91.099.571.196.676.154.457.0	

 Table 2.3.4
 Vehicle and Appliance Ownership by Income

Source: HAIDEP-HIS, 2005

2.4 Economic Condition

1) General

All economic activities in AQ will have the same impacts on natural, social and living environment. This economic development process will result in many social and environmental problems, decrease the value of the streets and affect the sustainable development of AQ.

There are about 1,400 registered companies and an estimated 10,000 household businesses in AQ which are of diverse business fields. Besides, there are thousands of informal business activities being operated by local residents and people from surrounding areas.

The special economic activities in AQ are trade, tourism and services (see Figure 2.4.1). These economic activities not only play an important role to Hanoians but also affect the transactions among northern provinces of Vietnam and surrounding areas of Hanoi.

The strong development of economy in AQ has contributed much to the budget of local authorities and of the government. The rapid development of private sector has created a large proportion of jobs for AQ residents.

Historically, AQ was famous for its role as a busy trade center. All kinds of products were sold here, with 36 streets with the names of "Hang" established. The streets were both residential and commercial space. In 1889, the French built Dong Xuan Market, one of the biggest markets in Hanoi, making AQ a more exciting place. Up to now, the AQ is still the biggest trade center in Hanoi with commercial activities present in every street and particularly in markets.

2) Characteristics of Business Types

The main functions of business in the AQ are wholesale and retail; both big wholesale markets and small business households of wholesale and retail sustain the economic development. In addition, traditional economic activities like craft production and sales, informal business like vending and cyclo attract visitors as well as local residents. Characteristics of major business types are described in Figure 2.4.1.

The main characteristic of the economic sector in the AQ is the clustered and diversified small scale businesses supported by individual households. While private companies and modern franchise shops have been established, what sustains the economy of the AQ is wholesale and retail household business. Here, 92.3% of small factories are private or mix-owned and registered as a household business in nature.

(1) Informal Business

Small shops and outlets of informal business activities such as selling tea water, cigarettes, newspapers, footwear, vehicle repair shops, etc. can be popularly seen in streets and are typical aspects of AQ. The people involved in these businesses are basically AQ's residents, especially the retired and unemployed. Busiest time for these economic activities is between 7 a.m. to 6 p.m. The most popular business type is selling tea water, with about 5-15 tea water-selling outlets per street.

(2) Traditional Craft Industry

Traditional craft industry in the AQ plays a specific role in Hanoi. Types of traditional craft production are commodities, consumer goods like bags, aluminum frame, glass doors,

woodwork, home furniture, and some engraving and carving crafts like silver and bronze. The special features are manufacture, retail and wholesale. Many traditional handicrafts are replaced by other new products because of their low values and competitiveness. Currently, there are about 21 streets (or 30% of total streets in AQ) which have remained specializing in selling traditional crafts such as silver, silk, traditional medicine, etc. But most of these craft streets do not produce anymore the goods but are instead involved only in selling these craft products. Thus, craft trading now remains the symbol of relationship between the AQ and original craft villages in the rural area. Current issues are how to preserve tradition of craft industries and how to reduce negative environmental impacts and dangerous production activities.

(3) Traditional Food Industry

Historically, not only Vietnamese culture but also French and Chinese cultures have flourished. In particular, Chinese gastronomic culture has become a part of tradition in some streets. Since many foodstuffs are gathered from neighboring regions, food industry is successful and many people come to the AQ to buy the local foods with best quality, especially during Tet holiday.

(4) Wholesale Market

There are 3 major wholesale markets: Dong Xuan (built in 1889), Hang Da and Hang Be. Various commodities and foodstuffs come from northern regions and China.

(5) New Businesses

After Doi Moi policy, many new businesses have been established. Though most of them are not related to traditional industries in the AQ, these can attract many domestic customers, especially young generation. Tourism-related industries such as tourist agencies, internet café, bar and restaurants are now one of the major industries.



Figure 2.4.1 Various Business Types in the AQ

3) Economic Structure

After nearly 20 years of Doi Moi, the economic structure of the AQ has accordingly modernized. First is the change in ownership form. Most of economic sectors in the AQ have changed to private ownership (93.9%), the rest remaining to be some decisive state-owned economic sectors (only 4.5%). In addition, about 1.6% is foreign-owned companies, and although private ownership is not much, it has created its own strength in communes of the AQ.

Furthermore, transaction of business activities in the AQ is expanding. Many entrepreneurs no longer follow the business households or individual businesses model. Most have established private companies or legal entities for more convenient transactions. Many companies have registered their head offices in AQ and the number of companies has increased. According to recent statistics, there are 1,430 companies and enterprises in the AQ or 35.8% of total companies in Hoan Kiem District (3,999 companies) or 4% of total in 9 inner districts (35,377 companies).

Limited companies hold the biggest proportion in all communes of AQ (1,024 companies), followed by joint stock companies (273 companies). According to the final report of Hoan Kiem District's economic situation in 2005, the private economic sector has increased by 7.4% as compared in 2003. And the number of private companies went up to 77.4% as compared with the plan. Among these companies, some have been established and developed from small traditional workshops. Furthermore, there are now a lot of trading and tourist companies, as well as companies dealing in software, computer products or in stock market, etc. However, most of these companies are small and medium ones, with the authorized capital of less than 10billion VND.

Along with this development trend, businessmen and small factories have been changing to keep up with the development process. There are many big companies which export products to the international market. Besides, some foreign investors have been interested to invest in the AQ. This shows that the AQ is an area with potential to become an internationally-competitive economic center with its uniqueness and traditional values.

4) Scale of Economy by Sector

Economic sectors are mainly categorized into 5 sectors: (i) trade, (ii) service, (iii) retail business, (iv) hotel and restaurant, and (v) other industries (see Figure 2.4.2). According to the Report on economic situation in 2004 of Hoan Kiem People's Committee, the rate of development of turnover of commerce, tourism and service in the District increased to 18.9%; contribution for national budget increased to 10.4%.



Figure 2.4.2 Registered Business by Sector in AQ

Source: Department of Trade, Service and Price, Hanoi 2004

On the other hand, retail and wholesale trade activities also make up a high rate of 20.4% of total. This kind of activity has started many years before and it has been currently maintained in almost all streets. Furthermore, AQ has attracted many tourists coming for sightseeing, as it is the trade and tourist center. Thus, new activities like hotel and restaurant business have expanded, taking up about 12.5% of total.

AQ has contributed much to the income of Hoan Kiem District and Hanoi. In 2004, the assigned tax plan of Hoan Kiem district was VND 192billion (US\$3.2bil). And with the effort of Hoan Kiem district, a tax collection of VND 212billion (US\$3.5bil) was reached, or 110.6% of the plan; an increase of 28.1% as compared to the previous year. On the other hand, the non-state sector realized a 104.5% collection, or a 29.4% increase as compared with the same period of last year.

In addition, it is particularly interesting that there are approximately 10,000 business households in AQ. Street-lined businesses can sustain vibrant commercial activities, most of which occupying pedestrian space with commodities. Because of the narrow store frontage and way of living of many households living inside the street, some residents share the frontage for different business activities.

5) Types of Company and Employment

The AQ has the highest number of companies and business households. There are about 1,380 registered enterprises which take up 36.7% in Hoan Kiem District or 3.8% of Hanoi's. Half of them are private enterprises (52.7% of total), followed by governmental agencies (37.0%) and the foreign–owned companies (0.9%). This composition is almost comparable with the whole Hanoi (see Table 2.4.1). Of which, Hang Ma commune has the highest proportion of 15.4% (212 companies) while Hang Dao commune has only 59 companies (or 4.3%). The difference in density of companies is due to the commercial characteristics of each commune (see Table 2.4.2).

		Government	Collective	Private	Mixed	Foreign	Total
AQ	No.	9,181	335	14,438	1,524	421	25,899
70	%	35.4	1.3	55.7	5.9	1.6	100.0
На	inoi	37.0	3.8	52.7	5.7	0.9	100.0

Table 2.4.1	Type of Company
-------------	-----------------

Source: HAIDEP-HIS, 2005

						AQ						Hoan Kiem	
	Hang	Ly Thai	Hang	Dong	Hang	Hang	Hang	Cua	Hang	Hang	Total	District	Hanoi
	Bac	То	Buom	Xuan	Dao	Ма	Во	Dong	Bong	Gai	(10com)	(19com)	
No.	143	166	167	139	59	212	99	171	129	95	1,380	3,758	36,149
%	10.4	12.0	12.1	10.1	4.3	15.4	7.2	12.4	9.3	6.9	100.0	36.7	3.8

Source: Statistics of Department of Planning and Investment, Hanoi

Diversity of residents in AQ is shown clearly in occupation structure. According to the result of HIS, businessmen comprise 21.5%; the unemployed, retired people and students comprise 46.6% of total, with the unemployed accounting for 19.1% (see Table 2.4.3). Managers and professional workers stay mainly in Hang Dao (18.2%), Hang Bo (27.3%) and Hang Buom (18.2%). While there are businessmen in all communes, they are clustered most in communes like Hang Gai (17.4%), Hang Bo (15.3%), Dong Xuan and Hang Ma (over 13%). Unemployed and retired people live mainly in communes like Dong Xuan (17.8%), Hang Buom (17.8%) and Hang Bac, Hang Bo, Hang Gai (over 11%).

		AQ		Hanoi
		No.	%	Tianoi
Professionals	Managers of branches, administrative levels, units	30	1.3	1.9
	Professional Workers	97	4.2	3.2
	Technical and associate professionals	87	3.8	3.7
Sub Total		214	9.3	8.8
	Skilled agriculture, forestry and fishery workers	1	0.0	10.4
	Clerical workers	397	17.3	11.8
Skilled Workers	Service workers and shop and market sales persons	61	2.7	1.1
	Craftsmen and related traders	56	2.4	4.4
	Plant/ machine operators & assemblers	25	1.1	1.6
	Sub Total	540	23.6	29.3
Students	Elementary	418	18.2	21.5
Siddenis	High school& University	121	5.3	4.8
	Sub Total	539	23.5	26.3
l la succelar rad	Housewife	84	3.7	2.2
Unemployed	Jobless/retired	743	32.4	22.9
	Sub Total	827	36.1	25.1
Unskilled Workers		58	2.5	4.6
Small-scale vendors		105	4.6	5.5
Military people, police, others		8	0.3	0.1
Sub Total		171	7.5	10.2
Total		2,291	100.0	100.0

Table 2.4.3	Types of Occupation
-------------	----------------------------

Source: HAIDEP-HIS, 2005

Nighttime population in 2003 is 84,607 while daytime population is 96,516 (see Table 2.4.4). During daytime, the AQ absorb many employees both from urban and rural areas. Among the workers who live in the AQ, more than half of them work inside of the AQ. Since many companies are clustered in the AQ or surrounding area, residents can enjoy good access to their working place. As a work destination, the origins of workers in the AQ are diversified. Among the total trip of workers coming by motorcycle, more than half come from neighboring areas. In the future, while number of residents will be decreased, number of employees will be increased. Thus, planning for an efficient working environment (creation of job opportunity, traffic management, etc.) is one of the main issues, as well as residential population control.

	No.	%
Hang Bac	54	3.8
Ly Thai To	44	3.1
Hang Buom	90	6.4
Dong Xuan	153	10.9
Hang Dao	52	3.7
Hang Ma	58	4.1
Hang Bo	140	10.0
Cua Dong	56	4.0
Hang Bong	51	3.6
Hang Gai	102	7.2
AQ Subtotal	800	56.9
Hoan Kiem (excluding AQ)	133	9.5
Ba Dinh	105	7.5
Hai Ba Trung	87	6.2
Dong Da	96	6.8
Urban Core Subtotal	1,221	86.8
Тау Но	22	1.6
Thanh Xuan	49	3.5
Cau Giay	37	2.6
Hoang Mai	19	1.4
Long Bien	22	1.6
Urban Fringe Subtotal	149	10.6
Tu Liem	8	0.6
Thanh Tri	2	0.1
Suburban Subtotal	10	0.7
Soc Son	7	0.5
Dong Anh	6	0.4
Gia Lam	2	0.1
Rural Subtotal	15	1.1
Other provinces	12	0.9
Total	1,407	100.0

 Table 2.4.4
 Working Place of AQ Residents

Source: HAIDEP-HIS, 2005

6) Trading Sector

Traditional and modern trade activities exist and develop in the streets of the AQ. New activities are those shops involved in fashion and souvenir items while traditional ones are involved in laying, curving jewelry, mother of pearls, or selling of votive papers.

Traders buy wholesale products here and sell to retailers in Hanoi and other neighboring

provinces concentrated in big markets (Dong Xuan, Hang Da, Hang Be) and some streets such as Hang Ngang, Hang Dao, Dong Xuan, Hang Duong. The Dong Xuan market was officially built in mid-1889 during the French colonial days. With easy access to nearby transport, especially after the French built the Long Bien bridge crossing the Red River, the Dong Xuan area became a busy commercial area famous not only in Hanoi, but also all over the north. The turn over during the first 6 months of 2005 was nearly US\$1mil. On the other hand, about 1,000 households in Hang Da Market and 300 in Hang Be Market are involved in business activities such as selling of poultry, vegetables, clothes, and cosmetics.

Originally, the AQ has both selling and production functions. However, because of the physical difficulties and changes of demands, most of these traditional businesses have been lost. Now, only a few streets have retained traditional handicraft business such as Lo Ren, Lan Ong, Hang Bac, Hang Ma. In Lo Ren and Lang Ong streets, people produce metalworks which causes environmental problems due to production of dust and noise.

At present, the shops diversified and no longer form household business only. Most of the small factories and business households have changed the nature of their business or has expanded to interdisciplinary trade companies. In particular, there have been 1,400 enterprises registered as head offices in AQ and most of them are trade or service companies.

The following are the result of interview survey among 18 companies in AQ:

- (i) Some companies in AQ have been established based on the traditional business activities of their families; the rest are companies dealing with new products like electronic goods, computers, software, telecommunication, advertising, etc.
- (ii) Operating period of these companies is relatively short: 94.4% are only in operation from 1 to 10 years; 61.1% have been operating from 1 to 5 years.
- (iii) The number of workers in companies is bigger than that in other business forms. However, 83.3% are companies which have an average of 30 workers each. A total of 16.7% enterprises employ more workers, but still below 100. There were more male than female workers in large companies (62.4% and 37.6% respectively).
- (iv) Turnover in these companies is higher than that in other businesses. About 53.3% have the annual turnover of over 1 billion VND.
- (v) From their trading experience, the enterprise owners have promoted the advantages of the AQ as a trade center to build companies and business offices. Thus, the business of these companies is more effective with a big number of workers and their turnover is also higher than that of other business or production models.

7) Informal Businesses

More than thousands of informal business activities are being operated by local residents and people from surrounding area. These informal activities are cyclo (bicycle taxi), xe-om (bike taxi), vendors of flowers and commodities, and secondary businesses such as food stands, sewing, etc. which are also income sources for both residents and vendors from the rural area (see Figure2.4.3).

Based on the results of the HIS, more than 30% of residents don't have official or permanent jobs. They earn their living by engaging in some small business activities like opening of tea outlets, xe om (motorcycle taxi), portering, etc. These informal businesses

come about in accordance with the requirements of the residents. In fact, these informal businesses support daily lives of residents as well as increase vitality and attractiveness of the AQ for citizen and tourists.

Vending: Fruits, vegetables, daily commodities, etc.	
Local food service: noodle, rice, bread, grilled meats, coffee, tea, beer, sweets, etc.	
Transport service: cyclo (pedi cab), xeom (bike taxi)	
Others: Service (barber, shoe paste, manicure, etc.) Sales (newspaper, cigarette, lottery, gas, etc.) Repair (bicycle, motorcycle, footwear, watch, key, etc.)	

Figure 2.4.3 Types of Informal Business

Source: HAIDE Study Team
8) Service Sector

Besides the trading aspect, the AQ also has a strong position in services: with the AQ developing rapidly in food services and other services for tourists.

AQ not only is the first urban centre of Hanoi but also is the place where the Chinese and Vietnamese cultures come together. Thus, the first strong position of AQ is that it has a developing culinary culture. For that reason, the food and drink services in AQ has been expanding and developing abundantly until now.

In the past, the food and drink services developed to meet the demands of businessmen. In particular, there were many Chinese restaurants in Hang Buom and Ta Hien streets. The image of the butchers, vendors selling junk food have been in the books of Hanoi. The drink and food services in AQ have developed constantly. Numerous restaurants and food outlets have been opening to satisfy the residents' taste. At present, there have been 322 food and drink establishments. And in addition to fine dining restaurants, food outlets on the pavements also appear everywhere, known by almost all Hanoians. Restaurants in Ta Hien are well-known; worth mentioning are the likes of "Cha ca La Vong," which is already considered an institution showcasing Vietnam's specialties.

9) Wholesale Sector

One image of the AQ and Vietnam's capital city is the lively scenes of daily hustle and bustle at the Dong Xuan market, the biggest market in Hanoi. For centuries, Dong Xuan, alongside the Red River, has been a busy commercial centre of activity. The streets around the Dong Xuan market are usually very busy with vendors offering products made by the handicrafts guilds that surround the city. With easy access to nearby transport, the Dong Xuan area became a busy commercial area famous not only in Hanoi, but also all over the north. During the Tet Festival (or Lunar New Year Festival), the market is always extremely busy. Specialties from regions all over the country found their way to this thriving market, ranging from expensive items down to items like vegetables, fish or mushrooms. The Dong Xuan market reflects the daily life of Hanoi people and is a popular place for locals and visitors to the capital city, who come not just to buy things but also to learn about the culture of the people in the city.

(1) Dong Xuan Market

Today, Dong Xuan Market is under the control of Dong Xuan Joint Stock Company. With 1,946 stores, its turnover has reached 15,046 million VND (about US\$940,375) in the first 6 months of 2005 or accounting for 68.7% of the turnover plan of 2005. Of which, 12,160 million VND (US\$760,000) is the turnover from leasing kiosks and stores, 2,558 million VND (US\$159,875) is from services and the balance of 328 million VND (US\$20,500) is from other incomes like export-import, finance and etc.

Recently, the appearance of Dong Xuan Night Market has made Dong Xuan a cultural point of Hanoi. In structure, Dong Xuan Night Market is divided into 3 major types of business:

- (i) Fine art works business located at the lobby of Dong Xuan Market includes 18 shops
- (ii) Culinary business located in Hang Khoai includes 11 shops
- (iii) Garment and clothing business located in Hang Khoai and open air places includes 130 business points.

Because of the relatively new establishment of the Dong Xuan Night market, organization still has many difficulties such as diversification of commodities to meet customers' and tourists' demands, security and hygienic conditions, especially food safety. With the rapid development of trade today, Dong Xuan Market still keeps its important role as the trading market center of Hanoi.

(2) Hang Da and Hang Be Market

Hang Da and Hang Be markets are the two other big markets in the AQ. Hang Da Market is a big market in Hanoi with a total area of 3,000 m2; with about 20 small food outlets and 572 stores selling poultry, vegetables to old clothes, cosmetics, etc. Hang Be has around 325 stores specializing on selling fresh foodstuff and cooked foods. These two markets have very high demands form Hanoians who prefer fresh food everyday instead of going to the supermarkets.

The Hanoi authorities are planning to develop a new face for Dong Xuan, Hang Be and Hang Da markets. They intend to develop the current market system by modernizing markets to meet the requirements of sustainable development.

Together with the development of urban and goods markets, several big supermarkets have been established in the new urban areas. However, AQ is still expected to keep its role as a center of business and traditional products in the future. One of the issues in the economic sector is whether trade markets will be maintained in the future and still be an economic center of Hanoi.

Figure 2.4.4 Wholesale Markets



Source: HAIDE Study Team

10) Tourism Sector

The AQ not only has traditional values but also cultural and architectural values which make it more attractive to tourists. According to the latest statistics of Hanoi Administration of Tourism, the number of tourists to Hanoi has been increasing from 20% to 30% per year. In addition, 30% to 35% of tourists who come to Vietnam also choose to visit Hanoi. Together with the increase in number of tourists, AQ has consistently been an attraction for tourists during visiting tours.

The AQ which is located in the center of Hanoi Capital has the most beautiful sceneries. A stroll around the AQ enables tourists to enjoy the beauty of Hoan Kiem Lake, visit Ngoc Son Temple as well as shop in some big trade centers like Trang Tien Plaza, Fivimart super market, etc.

Moreover, AQ is also located near important official offices of Hanoi and Vietnam Government such as Hanoi Post & Telecommunication, Vietnam State Bank, Department of Electric Power, etc. This advantage in location promotes the ideal condition for the

development of new tourist service MICE (Meeting, Incentive, Conference, and Event), wherein attending international conferences is combined with sightseeing tours by the host country.

The rapid growth of quality tourist services in AQ is also a factor that promotes the increase in number of foreign tourists. Here, many tours which choose Hanoi as a destination or as an origin to other tourist spots in Vietnam are widely opened and diversified. Many mini-hotels and internet cafés are being operated, providing convenient and comfortable space for tourists, providing services of entertainments and international information exchange.

According to the latest statistics, there are about 400 hotels with more than 10,000 rooms in Hanoi. Among them, there are about 100 hotels located in the Hanoi's AQ alone. Hotels in the AQ are mostly located in Cau Go (8 hotels), Luong Ngoc Quyen (6 hotels) and Ma May (7 hotels). Hotels in the AQ are mini-hotels with price ranges of US\$10-30/day/room. These hotels are often managed by tour and trade limited companies. Though these mini-hotels are popular among transients and backpackers who enjoy cheap price, there exists as well as potential demands for accommodations with better service and facilities for long-staying travelers and businessmen.

11) Advantages of Economic Development

(1) Concentration of Businesses

The renovation process of Vietnam has led to the profound changes in the economy and society of Hanoi in general and of AQ in particular. AQ has become the business center with the busiest and highest density of enterprises in Vietnam backed by its convenient location and high land value and popularity. While many businesses are sustained by small household businesses and informal sectors, the number of formal companies has increased over time. This process has proven that economic activities in AQ are moving toward industrialization trend and trade activities will be more professional and promising to have a trade centre with high trading frequency.

(2) Cluster of Traditional Small Businesses

Household business model still maintains and develops which confirms a tight social and trade relationship among residents of AQ. With such given advantages, this model will still maintain and develop the establishment of trade streets with characteristics of economy, unique culture and high economic efficiency.

(3) Traditional Handicrafts

Strong development of trade and production of handicraft products has made a unique specific characteristic for Hanoi AQ. High aesthetic products like gold, silver jewelry, silk clothes, ceramic, etc. has great competitiveness. Trade and production of these products have helped to keep and maintain cultural value. Therefore, development trend of trade streets and exporting companies is suitable and has created a new soul and vitality for Hanoi's AQ.

(4) Booming of Service Sector

Moreover, AQ is strongly developing in the field of services, particularly in the food and beverage services (e.g. restaurants, bars, etc). These services should be encouraged as they help to maintain and develop the national culinary culture. This also is a development

trend that increases the attraction of the streets as well as economic efficiency.

12) Disadvantages of Economic Development

(1) Less Competitiveness of Traditional Business

Traditional businesses have been sustained by social and economic linkages with rural areas. Quality and competitiveness of products were the values of these traditional businesses. After economic development, many industrial and cheap commodities have been sold in the AQ and supermarkets have been established in surrounding areas. Thus, competitiveness of traditional businesses has been lost, as well as the social linkage which has taken over business.

(2) Pressure on Living Environment

Development of economic activities has continuously limited the present living place. The narrow living spaces coupled with increasing population are the main causes of declining quality of living conditions, dilapidated houses and polluted environment. This is also the reason why there are illegal construction activities and expansion of houses resulting in lack of and unsafe common space.

(3) Insufficient Infrastructure and Pressure on Environment

Each company or business household is greatly affected by its natural environment and socio-economic surroundings. Services like electricity and telephone are not sufficient to supply growing commercial needs and costs of these services are still high. Bad hygienic environment such as open-air drainage results in unsanitary conditions and regular flooding. Thus, infrastructure and public services of AQ cannot meet increasing demands from both residents and business entities.

(4) Worsening Traffic Condition

The emerging traffic conditions characterized by traffic congestions as well as the present limited public transport have not met the present demand. This limitation of transport means in the streets of AQ has greatly affected business activities. In addition, the lack of parking spaces results in both unsafe and inconvenient conditions for business entities, residents and visitors.

(5) Inadequate Management Policy and Assistance Services for Business Activities

AQ's regulations at present restrict activities of renovation and construction of ancient houses, with a limitation in building height. These regulations further cause difficulties for enterprises to improve and expand their limited areas and many of them in turn violate the regulation to build modern and mid-rise buildings. The ownership situation in AQ is very complex; state-ownership is difficult to transfer which causes difficulties for companies and investors in AQ. Although the business trend in AQ is gradually changing from semiformal sector to a formal one, the administrative procedures are still troublesome. Some law regulations are not specific for each business sectors and cannot control the situation of companies and business household. Moreover, tax collection and tax regulations are not appropriate and does not correspond to scale and efficiency of companies. Some social policies are not effective which limit the control of responsibility of companies and the labor protection, such as, for instance, in the field of buying social insurance for workers, etc.

(6) Insufficient Business Environment

There's a limitation in the provision of information, training and promoting trade, as well as a lack of regulations and guidelines in approaching science & technology to create a refined business model. Activities of business associations have not improved business cooperative and communal spirit.

(7) Lack of Human Resource and Management Skills

In the development of sectors like trade, tourism, culinary services, production and trade of traditional handicraft products, there are still contradictions and limitation. Most of trade and service companies in AQ serve as the direct trading venues for customers; these companies have not prioritized investment in human resources development. Furthermore, they lack in capital and cause big competition. Business activities like food services, hotel and tourism are mostly small scale investments and lack cooperation among operators. Staff members are not professionally trained, and service quality is still below par in terms of international standards. Tourism services are offered almost spontaneously and easily, lacking in close management and supervision thus result in severe competition among operators.

(8) Low Quality of Products and Services

At present, these original business households collect goods from many sources, including products whose sources are not clearly known for the quality. Products in many streets have low value; most come from China and has low quality but very cheap prices thereby directly competing and affecting with other traditional products. Traditional handicraft products are mostly sold on retail basis; companies do not actively invest on a larger scale for possible sale in the export markets. Moreover, these business households still lack capital, management skills and knowledge.

(9) Complicated and Inadequate Investment Environment

High population density and changing business environment cause the rapid change of real estate market. The attraction of business environment makes frequent trade of real estate causing the complexity in ownership. Therefore, it's very difficult for authorities to make plan and improvement of streets.

(10) Causing Social and Economic Gaps

For these business households in the AQ, the gap is further increased between those who have the advantage of having frontage which makes their business more viable, thereby increasing their profit, as compared with business households located in the inner areas whose incomes become lower due to low visibility thus lower sales potential. Given almost the same level of cost of living, the income discrepancy further increases the gap thus making it difficult to preserve both the tangible and intangible values of the AQ.

(11) Changes of Traditional Commercial Linkages

Traditionally, commercial activities in AQ has been sustained by small business households including wholesale, retail and handicrafts as well as big wholesale markets such as Dong Xuan, Hang Da and Hang Be. These businesses are taken over through social linkages between original villages, family and social relationships. This means these commercial linkages are the intangible values of AQ.

(12) Unbalanced Harmonization Between Traditional and Modern Businesses

Many modern businesses have been established such as tourist agencies, hotels, fashion, arts, IT industries, etc. While these new businesses don't have traditional values of the AQ, they attract young generations and tourists. The issue for future economic development is how to enhance attractiveness and harmonize traditional and modern businesses.

However, informal business activities in the streets are not being controlled and monitored. And the absence of such a plan allows these activities to freely develop and proliferate, thereby affecting the aesthetic beauty of the streets, another intangible value of the AQ.

2.5 Social Condition

1) Livelihood

There is a large discrepancy in terms of livelihood reputation in the AQ. Some Vietnamese like and respect the tradition of the AQ as well as its convenience and economic values, while others regard the AQ as a slum in Hanoi.

Based on the result of HIS, the average income level in the AQ is higher than the average in Hanoi. There are many economic values of various commercial activities, high land and floor prices, convenient location, etc. But at the same time, however, the AQ is also home to the many poor of Hanoi. Livelihood in the AQ is now degrading not only because of economic issues but also because of social, cultural and physical issues.

Traditionally, residents in the AQ had led their lives in the traditional and cultural manner with family and neighbors as well as their hometown in the rural area. Commercial activities also rooted in its tradition of handicraft guilds. Physically, one household occupies one traditional house, mainly a tube house, to enjoy their cultural and spiritual life. Household businesses are enough to provide for their livelihoods. Many residents still respect their traditional and spiritual life in the AQ until now.

After independence, particularly after the Doi Moi policy, the values and livelihood in the AQ drastically changed because of heightened economic development pressure. Influx of immigrants resulted in limitation in living spaces and has caused frictions between neighbors and outsiders. Some traditional commercial activities have disappeared and modern activities, which are not within the traditions of the AQ, have proliferated. Since newcomers and young generation do not give as much attention to the tradition and culture of the AQ, the whole atmosphere of the AQ as a traditional, cultural, urban space has drastically changed. Both private and public spaces are now experiencing chaos.

Given such situation, residents of the AQ now find it difficult to practice their cultural and spiritual lives. Most of residents are dissatisfied with their housing conditions; the only thing left to enjoy is its convenience and the presence of urban services in the urban center.

From the statistical data, it is difficult to find many gaps in housing condition since capacity of space is already limited so even rich households cannot afford enough living spaces (see Table 2.5.1). Income gap can be seen from differences in vehicle and goods ownership. The richer the residents become, the more they enjoy life with high-class goods and facilities.

			Lov	v.	Mic	ldle	Ні	gh	То	tal
			Under 0.8m		-			0		Hanoi
	% of House	nold	4.4	11.0	12.3	23.7	18.3	30.3	100.0	_
Household	No. of HH		630	1,587	1,775	3,404	2,629	4,349	14,374	760,000
	Ave. No. of I	_iving Together	2.1	3.1	4.0	4.1	4.3	5.0	4.2	4.3
		% of Self-owned)	73.3	68.1	77.4	75.7	81.7	80.3	77.4	92.0
		Detached	43.5	40.5	48.7	54.2	56.4	53.7	51.8	82.0
	$T_{1}(p_{0}, (0/))$	Apartment	16.3	22.6	22.9	14.5	13.6	7.7	14.3	14.0
	Type (%)	Traditional	36.7	36.9	28.4	31.3	30.0	38.1	33.6	4.0
Housing		High-rise	3.5	0.0	0.0	0.0	0.0	0.5	0.3	1.0
riousing	Ave. No. of r	rooms	3.1	2.4	2.1	2.1	2.8	3.0	2.6	3.7
	Ave. space (Ave. space (m ²)		34.6	30.9	36.1	48.7	55.9	44.0	88.0
	Ave. house age (years) Living area per person (m ² /per)		74.5	86.2	75.8	75.1	69.3	73.8	74.9	32.0
			21.7	11.3	7.8	8.8	11.2	11.2	10.5	20.5
	car		0.0	0.0	0.0	0.0	3.2	5.3	2.2	2.0
Vehicle	motorovolo	One	23.5	50.2	58.7	53.5	39.7	25.0	41.3	43.0
Ownership	motorcycle	Morethan2	3.3	14.6	28.5	42.2	52.4	67.8	45.4	40.0
(%)	Bicycle		20.2	20.8	10.5	3.1	2.4	0.9	5.9	12.0
	No Vehicle		53.0	14.5	2.3	1.2	2.4	1.0	5.2	2.0
	TV		96.7	95.8	100.0	98.6	100.0	99.5	98.9	98.0
	Radio		69.8	56.3	60.5	56.3	73.1	71.1	65.0	58.0
Goods	Refrigerator		73.2	78.9	86.8	95.1	97.6	96.6	92.2	71.0
Ownership	Washing Ma	chine	16.8	31.9	40.3	52.3	70.0	76.1	57.5	41.0
(%)	Air-con		6.7	19.8	14.4	21.6	43.1	54.4	33.7	19.0
	Computer		13.3	22.3	29.9	32.2	48.4	57.0	40.5	32.0
	Mobile Phon	e	10.3	35.5	38.1	56.0	74.7	84.2	61.5	43.0

Table 2.5.1	Profile of Households by Income Group
-------------	---------------------------------------

Source: HAIDEP-HIS, 2005

2) Social Network and Family Relationship

Social network and family relationships are rooted in their original hometown and its culture, and traditional commercial activities. These are the intangible traditional values of the AQ which have been there for long periods of time.

People of the AQ were mostly immigrants since 1950s and people who joined the Resistance Movement of the country who were provided state housing in the 1970s and 1980s. The residents in the AQ come from different craft villages. Residents of the same villages often settle in the same street line, produce and trade the same goods. Families of one lineage usually live near each other or from one original family forming several extended families, with members of each family often working together on the same trade. People working on the same trade usually join the same guild. Each guild had its own strict rules to protect interest of the community and its members. The social tradition is maintained, developed and is relied upon in ensuring harmony for the benefit of each family, lineage and guilds. Guilds not only play economic but also social role.

Therefore, in every street line, there are close relations among each other, relations which are highly capable of adjusting with one another. Each individual becomes attached with the community he belongs to and sees his image in that community. It is an important foundation to maintain a living tradition that has been a constant for hundreds of years for AQ.

The family serves not only as a reproducing unit but as well as a social cell, the smallest community environment. Being born to and to grow up in a family, it serves as the person's first school where ethics, order, discipline, family rules, and trade are learned. Therefore, the family plays a decisive role in the formation of the person's trade personality. Residents living in the AQ respect family values such as obedience and submissiveness, courteousness, traditions, respect for elders, and generosity to those younger. Families of the same lineage often gather in one street line, working on the same trade. Each lineage has its family register which is like a book which records the lineage history and obituary of each dead member of the family. Lineage and family register books serve to adjust behavior of each person, and plays an important educational role in knowing one's family history.

3) Living Condition

(1) Condition of Traditional House

Housing in the AQ is faced with many inner issues with distinguishing characters that are relatively complicated and multi-directional. Functionally, because the AQ is a residential area with a long history of trading exchanges and commerce until now, the houses there serve both living and business purposes. Historically and architecturally, the AQ still maintains several old and ancient houses that are strongly connected to the AQ's history of traditional values development. The houses are low-rise on small and narrow streets that make this area a friendly urban space.

Most of the houses in the AQ have a tube like shape, with narrow land plot (2-6m in width and 20-60m in length), low-rise, has narrow frontage and one entry from street façade. They are therefore often referred to as a "tube house" (see Figure 2.5.1). Originally, the tube house was used by one family and has private rooms and facilities. In the middle of a tube house, there were small inner courtyard for providing natural sunlight and ventilation. In the back of the house, there is another entrance to access the opposite side or small pond. This is a signature of AQ's urban structure: water channel networks connecting with Red River to Thang Long Citadel for delivery of goods and transport of people.

(2) Characteristics of Tube House

The main characteristics of the tube house are (i) narrow frontages and considerable depth, (ii) inner courtyards, (iii) narrow alleys, (iv) mezzanines, (v) common facilities, and a (vi) shop house in front (see Figure 2.5.1).

Most of the tube houses in the AQ are shared by several families. The layout pattern is unstructured and many private rooms like living rooms and bedrooms, which are parallel to a common alley, are very small and don't have windows. Front rooms are used as shops, with the shopkeeper's sleeping place or stock space.

Mezzanines in the tube house were originally used as a refuge during flooding or as storage space for shop commodities. But nowadays, because of increase the increasing number of family members, they are used for sleeping or study rooms for children.

The alley through each house and inner courtyard is very narrow at less than 100cm width. This is very dark at night and difficult to pass each other especially by motorcycle. Though this is not safe and wide enough to share with other residents, this is the only approach to access each house.

Inner courtyard is a unique feature of the tube houses in the AQ (see Figure 2.6.1). The

inner courtyards play a very important role in providing natural light and facilitating natural ventilation for long and narrow "tube houses" which were built alongside each other. In addition, it is a place for outside domestic activities such as washing and drying of clothes and cooking. It also has a miniature garden with bonsai and small pool for community. This inner courtyard can separate between living and service spaces (kitchen, bathrooms, toilet); in other words, a semi-openspace between private and public space. Moreover, inner courtyards are reserved spaces for development. However, these inner courtyards are gradually disappearing because of the expansion of the living spaces due to increase in the number of household members.



Figure 2.5.1 Plan and Unique Features of Tube House





Narrow and dark alley to access each house



Inner courtyard as multifunctional common space (drying of clothes and water space, motorcycle parking, storage, etc.)



Mezzanine for additional living space

Source: HAIDE Study Team

(3) Physical Condition of Housing

Narrow living space is one of the most serious issues of AQ. Living area is only 44.0m2 and 10.5m2/person, which is nearly half the average in Hanoi. Migration to the AQ affected the living space as well as resulted in social conflict between original and new residents. Because of increase of furniture and household goods, most of the spaces have been occupied (see Figure 2.5.2). Common spaces such as common water facilities and toilets have been degraded. Many young generations have moved out from the AQ because they cannot have private space. Many business households expand commercial space at the cost of living space and its privacy. Residents therefore are faced with difficulties in both physical and social condition because of the narrow living spaces.

The average age of a house in the AQ is 74.9 years. The average stay in each house is 55.2 years (see Table 2.5.2). In terms of characteristics of "traditional houses", which are mostly tube houses and where one third of households in AQ live, average house age is 84.4 years and average living area is only 36.9m2. These houses have typical housing problems such as narrow living space, aged traditional houses and insufficient improvement in living conditions.

		AQ	Hanoi
Average space (m ²)	44.0	88	
Living area per persor	n (m²/person)	10.5	20.5
Ave. number of rooms	3	2.6	3.7
Ave. house age (year	s)	74.9	32
Years stayed (years)	54.7	-	
	Detached	51.8	82
Turpo	Apartment	14.3	14
Туре	Traditional	33.6	4
	High-rise	0.3	1
Housing ownership	Self-owned	77.4	92
	State-owned	19.8	
Land use right (% of self-owned)		75.2	89

Table 2.5.2	Housing Condition
-------------	-------------------

Source: HAIDEP-HIS, 2005

(4) Sanitary Condition

Because of dilapidated urban facilities, such as drainage and sewerage systems, and lack of sunlight and ventilation, sanitary conditions have been worsening which affect the residents' health and quality of life (see Figure 2.5.2). Since many households live in one building and share these urban facilities, these are not well maintained. In some houses, drain pipes are exposed and waste water flow directly from upper floor to ground and run through common alleys. Though these issues can be solved not by one household but by the entire neighborhood, residents are reluctant to solve these issues because of constraints in the financial, knowledge, techniques, as well as lack of motivation.

Figure 2.5.2 Dilapidated Housing Conditions



Shared common kitchen and water facilities





Common alley occupied with household goods



Exposed drainage in the common space

Shared common toilet

Source: HAIDE Study Team

(5) Housing Ownership

Nearly 20% of houses in the AQ are state-owned (see Table 2.5.3). Housing conditions and issues are different by ownership (see Table 2.5.4). But in general, state-owned houses, group-owned or religious houses, have common problems such as narrow space and aged houses.

Table 2.5.3	Housing Co	ndition by	Ownership	ір	
	N lu una la la un				

	Number		Ave.		Years	Rental fee	
Ownership	No.	%	space (m²)	Ave. house age (years)	stayed (years)	(000VND/ month)	
Self-owned	519	77.2	56.0	52.1	48.9	-	
State-owned house for rental	133	19.8	30.1	83.6	64.3	59	
Group-owned or religious house	15	2.2	30.4	over 100	41.7	150	
Others	5	0.6	-	-	-	-	
Total/ Average	672	100.0	44.0	54.2	54.7	69.1	

Source: HAIDEP-HIS, 2005

Table 2.5.4	Housing Issues by Ownership
-------------	-----------------------------

Ownership	Residents	Issues
State-owned (DONRE)	State employees, retirees	 Lack of finance for improving the houses Rental fees are so low which makes it impossible to maintain and improve the house Residents do not want to pay for their house's improvement and maintenance because these houses do not belong to them
Joint ownership of state and individual	One or several households, state employees, retirees	 Misunderstanding often occurs when one household improved their house that affects other households Many clustered households which do not share a familial
Private-owned	One or several households	relationship have to share the same toilet, bathroom and other public services which usually cause conflicts in terms of appile communication
Company-owned	Company staff	terms of social communication.

(6) Assessment on Living Condition by Residents

According to the assessment on living condition conducted in the HIS survey, residents are satisfied with both urban service and access to service (see Table 2.5.5). Urban services of the AQ are better provided by the other area of Hanoi, and the advantage of AQ is high accessibility and convenience to various services.

Though residents enjoy physical and economical benefits due to its locational advantage, they are dissatisfied with housing condition, particularly in the areas of tranquility, housing and air quality.

In terms of housing issues, narrow space, limited airflow and lack of sunlight make living condition worse (see Figure 2.5.3).



Figure 2.5.3 Dissatisfaction on Housing

Table 2.5.5Dissatisfaction of Living Condition (%)

		AQ	Hanoi
	Safety/ security	8.3	11.1
	Flood	14.8	27.4
	Housing	37.5	20.4
Living	Air quality	32.2	26.3
Environment	Tranquility	44.2	19.0
	Sanitary condition	22.0	20.1
	Landscape	22.1	23.8
	Greenery	18.5	29.3
	Power supply	3.1	6.7
	Water supply	5.3	37.5
Urban Service	Gas supply	4.1	8.0
	Telecom	1.8	5.2
	Solid waste collection	7.7	11.5
	to market	2.8	12.5
	to health care	7.1	16.1
A	to public transport	27.2	32.6
Access to Services	to primary school	5.1	6.6
00171000	to park and green space	14.2	38.3
	to entertainment facilities	16.5	32.4
	to public admin office	10.7	19.0

Source: HAIDEP-HIS, 2005

Source: HAIDEP-HIS, 2005

2.6 Transportation

1) General

Transportation and its facilities in the AQ are not only means of transport and logistics, but also as an urban structure to sustain residential and commercial activities, trace of tradition as a cluster of merchant guilds. The structure of grid-shaped network was aimed at effectively connecting Red River and the Citadel and to deliver goods, and each street formed a cluster of craftsmen's and merchant's guilds.

Even now, road space which provides not only traffic space but also space for various activities is a significant landscape element that helps build the image of the AQ as a city with wide sidewalks, abundant street trees and scenic street life. Thus, how to develop and preserve the road space is an important political issue. Secondary and tertiary roads are necessary to provide space for vehicles and pedestrians alike. Though primary roads are required for efficient and smooth traffic flows, secondary and tertiary roads are in turn utilized for traffic, peoples' activities and improvement of the environments.

At present, because many visitors, customers as well as through traffic gather, traffic congestion and parking issues are seriously affecting the people's safety, as well as the townscape and the environment. Transport issues in the AQ must be carefully considered and should not be limited to effective means of transport but also to the required urban structure to support commercial activities, to preserve townscape and to sustain people's daily life.

2) Road Network

Road network in the AQ needs to be evaluated from two aspects: one is from transport and logistic function, the other is for cultural and commercial values with originality. The road network has been developed spontaneously without schematic planning. This is the historical feature where streets were formed for trading purposes, especially for NMT such as rickshaws, bicycles and pedestrians. Basically, the network was formed by a number of horizontal axes and vertical axes (see Figure 2.6.1). As often found in very old cities, the street density in the AQ is very high. This reflects that the system was originally built for other means of transport as walking, carts and horses. The streets are mostly narrow with the width of the carriageway varying from 6m to 9m. The sidewalks are normally narrow, between 2m and 4m wide, especially some streets which have a little sidewalk or none at all (from 0.5m to 1m such that of Ta Hien). The width of the road as well as the sidewalk are relatively identical in some streets (e.g. Hang Giay, Luong Ngoc Quyen, Cha Ca, etc.); the disproportion of the remaining streets between the largest and the narrowest is rather big, especially on the sidewalk due to the illegal expansion on the household that encroaches on the sidewalk. Thus, it is necessary to guard against similar encroachments in the future and to retrieve space for the sidewalk for pedestrians' use. Few streets in the AQ are suited for other vehicles other than 2-wheelers. Only 5 passageways can be considered to have enough width for 4-wheelers, as follows: (i) Hang Ma - Hang Chieu (east -west), (ii) Hang Bong -Hang Gai (east -west), (iii) Hang Giay - Dong Xuan - Hang Duong-Hang Ngang-Hang Dao (north-south), (iv) Hang Cot-Hang Da (north-south), and (v) Duong Thanh (north-south).





		Т	able 2.6.1	Road	Invento	ry					
		Total	Sidewalk	Road	Carriage	Sidewalk		Sidewalk Width		Pavement Type	
Name of Road	Length	width	width	area	Way	Leng	gth (m)	(r	n)		
	(km)	(m)	(m)	(ha)	Width (m)	Left	Right	Left	Right	Carriage Way	Side Walk
Bat Su	0.207	12.00	6.00	0.25	6.00	200	200	3.00	3.00	A	B
Bat Dan	0.248	14.00	6.00	0.35	8.00	240	240	3.00	3.00	A	B
Cao Thang	0.133	16.00	8.00	0.21	8.00	133	133	4.00	4.00	Α	В
Cha Ca	0.180	12.00	4.00	0.22	8.00	175	175	2.00	2.00	Α	В
Cho Gao	0.160	10.00	2.00	0.16	8.00	160	160	1.00	1.00	Α	В
Cua Dong	0.220	25.00	13.00	0.55	12.00	220	220	6.50	6.50	Α	В
Dinh Liet	0.180	10.00	4.00	0.18	6.00	200	200	2.00	2.00	A	В
Dong Thai	0.072	5.00	2.00	0.04	3.00	70	70	1.00	1.00	BG	В
Duong Thanh	0.468	15.50	7.50	0.73	8.00	460	460	3.50	4.00	A	В
Dao DuyTu	0.288	11.00	5.00	0.32	6.00	280	280	2.50	2.5	BG	В
Dong Xuan	0.170	15.00	5.00	0.26	10.00	160	160	2.50	2.50	A	В
Gia Ngu	0.260	10.00	4.00	0.26	6.00	260	260	2.00	2.00	A	В
Gam Cau	0.140	8.00	3.00	0.11	5.00	300	300	1.50	1.50	C	B
Ha Trung	0.207	<u>10.00</u> 13.00	4.00 6.00	0.21	6.00 7.00	207	207	2.00	2.00	A	B B
Hang Buom Hang Bong	0.300	13.00	6.00	0.39	9.00	280 700	280 700	3.00	3.00 3.00	A A	B
Hang Bong Hang Bac	0.662	15.00	5.00	0.99	7.00	268	268	2.50	2.50	A	B
Hang Be	0.280	12.00	6.00	0.34	6.00	170	160	3.00	3.00	A	B
Hang Bo	0.172	13.00	6.00	0.21	7.00	260	260	3.00	3.00	A	B
Hang But	0.068	10.00	4.00	0.07	6.00	65	65	2.00	2.00	A	B
Hang Chai	0.085	7.00	2.00	0.06	5.00	80	80	1.00	1.00	A	B
Hang Chieu	0.276	13.00	5.00	0.36	8.00	270	270	2.50	2.50	A	B
Hang Chinh	0.130	12.00	6.00	0.16	6.00	130	130	3.00	3.00	Α	В
Hang Can	0.158	13.00	5.00	0.21	8.00	158	158	2.50	2.50	Α	В
Hang Ca	0.124	11.00	5.00	0.14	6.00	124	124	2.50	2.50	BG	В
Hang Cot	0.138	16.00	8.00	0.22	8.00	135	135	4.00	4.00	Α	В
Hang Da	0.140	14.00	6.00	0.20	8.00	140	140	3.00	3.00	А	В
Hang Dau	0.184	13.00	5.00	0.24	8.00	180	180	2.50	2.50	A	В
Hang Gai	0.273	17.00	6.00	0.46	11.00	270	270	3.00	3.00	A	В
Hang Giay (Dong Xuan)	0.267	15.00	8.00	0.40	7.00	260	260	4.00	4.00	A	В
Hang Giay (Hang Buom)	0.219	18.00	6.00	0.39	12.00	210	210	3.00	3.00	A	В
Hang Ga	0.314	14.00	6.00	0.44	8.00	314	314	3.00	3.00	A	В
Hang Hom	0.127	11.00	5.00	0.14	6.00	127	127	2.50	2.50	A	B
Hang Khoai Hang Luoc	0.080	13.50 13.00	5.50 5.00	0.11 0.30	8.00 8.00	250 230	330 230	3.00 2.50	2.50 2.50	A A	B B
Hang Muoi	0.234	15.00	8.00	0.30	7.00	100	100	4.00	4.00	A	B
Hang Manh	0.152	12.00	6.00	0.18	6.00	150	150	3.00	3.00	A	B
Hang Ma	0.380	14.00	6.00	0.53	8.00	340	340	3.00	3.00	A	B
Hang Ngang	0.150	13.00	5.00	0.20	8.00	150	150	2.50	2.50	BG	B
Hang Non	0.216	12.00	6.00	0.26	6.00	210	210	3.00	3.00	A	B
Hang Phen	0.110	13.00	6.00	0.14	7.00	100	100	3.00	3.00	A	B
Hang Quat	0.200	14.00	6.00	0.28	8.00	200	200	3.00	3.00	Α	В
Hang Ruoi	0.108	12.00	6.00	0.13	6.00	100	100	3.00	3.00	Α	В
Hang Thiec	0.144	12.00	6.00	0.17	6.00	130	130	3.00	3.00	Α	В
Hang Thung	0.216	15.00	6.00	0.32	9.00	190	215	3.00	3.00	А	В
Hang Tre	0.308	16.00	8.00	0.49	8.00	300	300	4.00	4.00	A	В
Hang Vai	0.236	12.00	6.00	0.28	6.00	230	230	3.00	3.00	А	В
Hang Dieu	0.286	14.00	6.00	0.40	8.00	280	280	3.00	3.00	A	В
Hang Duong	0.182	13.00	5.00	0.24	8.00	180	180	2.50	2.50	BG	В
Hang Dao	0.201	13.00	5.00	0.26	8.00	200	200	2.50	2.50	BG	В
Hang Dong	0.131	12.00	6.00	0.16	6.00	125	125	3.00	3.00	A	В
Luong Van Can	0.308	12.50	4.50	0.39	8.00	300	300	2.00	2.50	A	B
Luong Ngoc Quyen	0.324	10.00	4.00	0.32	6.00	320 180	320 180	2.00	2.00 3.00	A	B B
Lan Ong Lo Ren	0.180	12.00 14.00	6.00 6.00	0.22	6.00 8.00	128	128	3.00 3.00	3.00	A A	B
Ma May	0.130	14.00	5.00	0.18	6.00	286	286	2.50	2.50	A	B
Nguyen Huu Huan	0.200	23.00	5.00	1.17	12.00	200	200	5.00	6.00	A	B
Nguyen Quang Bich	0.310	11.00	5.00	0.13	6.00	120	120	2.50	2.50	A	B
Nguyen Sieu	0.120	12.00	6.00	0.13	6.00	180	120	3.00	3.00	A	B
	0.100	.2.00	0.00	<i>V.LL</i>	0.00			0.00	5.50		5

Name of Road	Length		Sidewalk Road width area		Carriage Way	Sidewalk Length (m)		Sidewalk Width (m)		Pavement Type	
Name of Road	(km)	(m)	(m)	(ha)	Width (m)	Left	Right	Left	Right	Carriage Way	Side Walk
Nguyen Thiep	0.193	12.00	6.00	0.23	6.00	190	190	3	3	Α	В
Nguyen Thien Thuat	0.221	12.00	6.00	0.27	6.00	220	220	3	3	Α	В
Nguyen Van To	0.180	12.00	6.00	0.22	6.00	180	180	3	3	А	В
Nha Hoa	0.128	10.00	4.00	0.13	6.00	128	128	2.00	2.00	А	В
Phung Hung	1.130	20.00	10.00	2.26	10.00	1100	1100	5.00	5.00	А	В
Thanh Ha	0.181	10.00	4.00	0.18	6.00	180	180	2.00	2.00	А	В
Thuoc Bac	0.328	12.00	6.00	0.39	6.00	305	305	3.00	3.00	A	В
Tran Nhat Duat	0.640	25.00	8.00	1.60	17.00	640	640	4.00	4.00	А	В
To Tich	0.096	8.00	2.00	0.08	6.00	96	96	1.00	1.00	BG	С
Ta Hien	0.216	10.00	4.00	0.22	6.00	200	200	2.00	2.00	Α	В
Yen Thai	0.140	8.00	4.00	0.11	4.00	140	140	2.00	2.00	BG	В
O Quan Chuong	0.080	14.00	6.00	0.11	8.00	80	80	3.00	3.00	А	В

Source: HAIDEP Study Team

Note: Pavement Type: A=Asphalt, BG=Bituminous Gravel, C=Cement Concrete, G=Gravel, B=Block, E=Earth

3) Traffic Demand

Based on the HIS results, about half of the workers living in the AQ work inside or in the neighboring area of the AQ, and nearly half go to work to Dong Da and Ba Dinh area. As a working place, the AQ absorb workers from various areas, including the opposite side of Red River and the out of dyke area.

For any trip purpose, motorcycle is the primary mode of transport of households in AQ, especially for work and private purpose (see Table 2.6.2 and Figure 2.6.2). Students use bicycle and public bus as well as motorcycle to go to school. More than half of the households of AQ walk for private purpose.

	To Home	At work	Private	To school	To work
Bicycle (including Cyclo)	20.0	11.6	16.9	39.3	7.0
Motorcycle (including Xe Om)	72.9	64.0	77.6	51.7	87.8
Car (including taxi)	2.1	11.0	2.8	0.0	2.1
Public Bus	4.0	5.2	1.9	7.5	2.3
Private Bus	0.7	3.5	0.6	0.8	0.7
Truck	0.1	4.7	0.0	0.0	0.0
Others	0.2	0.0	0.0	0.6	0.1
Sub-total (excluding walking)	100.0	100.0	100.0	100.0	100.0
Walk	38.4	20.7	53.1	26.6	14.0
Total (including walking)	100.0	100.0	100.0	100.0	100.0

Table 2.6.2Modal Share by Purpose (%)

Source: HAIDEP-HIS, 2005

It seems that there are many through-traffic passing through the AQ, especially from north to south (see Figure 2.6.3 and Figure 2.6.4). Although though-traffic volume survey in the AQ was not conducted, it is observed that this through-traffic puts heavy pressure and causes the worsening of the street conditions. The major streets which connect from north to south around the AQ are only (i) Hang Dao-Hang Giay street (one way from north to south), (ii) Luong Van Can-Hang Cot street (one way from south to north) and (iii) Trang Quang Khai-Tran Nhat Duat street (the dyke road). It is estimated that the motorcycles use Chuong Duong bridge to go to Long Bien district or north-east region then pass Tran Nhat Duat, which is the boundary of the AQ and is wide enough. The through-traffic which builds up traffic congestion in the AQ is assumed to be the motorcycles which run between north (Ba Dinh and Tay Ho districts) and south (Hoan Kiem and Hai Ba Trung

districts). Hang Bong-Hang Gai-Cau Go-Hang Trung street is the only one which connect between east and west, and it is the one way street for cars. So through-traffic between east and west seems not to affect transport condition much. To manage and control traffic volume properly, restriction of the volume of through-traffic is the most priority issue.



Figure 2.6.2 Work Trip by Motorcycle

Source: HAIDEP-HIS (2005)

4) Transport Facilities

The equipments for transportation in the AQ have been provided for in recent years with a remarkable amount of investment which was relatively sufficient (see Figure 2.6.5). However, frequent changes and putting many kinds of signs result in difficulties for traffic participants especially those coming from other areas. In some streets, installment of signboards is not appropriate because of overlapping functions which also lead to confusion and misunderstanding. It is therefore necessary to have the more logical and scientific arrangement, avoiding changing too many times causing to lose direction of passer-by.

At present, traffic signs used as traffic control in the AQ is applied at limited level since most of traffic junctions are small and simple. The primary traffic signs are the two-phase control with time-scale of 30 seconds for each phase. In fact, the same as other areas in Hanoi, many motorcycle drivers neglect traffic signals, especially during midnight. It is also said that traffic condition in the AQ is safer than other areas because cars and motorcycles cannot pick up speed because of its congestion and limited space. Though, this observation is bordering to cynicism, such observation may be true to some extent.

The dashed-line at the middle of streets is to help drivers recognize their lanes and two opposite directions on the street. Lines in few streets are to separate lanes between non-motorized vehicles and motorized vehicles (automobiles, motorcycle, etc.). White dotted-line on sidewalks of some streets is for separating space for pedestrians and other uses such as commodity display or motorcycle parking.

Some types of standardized signboards for transportation have been installed in the AQ. However, they are not very visible to drivers and their poor designs do not always aesthetically complement with the charm of the AQ.



Figure 2.6.5 Traffic Facilities and Signs in the AQ

Source: HAIDEP Study Team

5) Traffic Management

(1) Parking

Before 1st of April 2004, the AQ has only a small concentrated parking area for cars but not for motorcycles or bicycles. Motorcycles and bicycles mainly park on sidewalks or indoor. After the decision of "Cultural Street", temporary parking areas emerged to serve parking demands of those streets. Besides, some parking lots have been designated to hopefully become long-term, if not permanent, parking lots in the whole area.

Dynamic economic and living activities demand more parking spaces; but increasing the number of parking spaces is restricted by the limitation of land area. Driver's behavior in

choosing a parking location, such as on-road parking, on-surface and in multi-storey building, are distinct by trip purpose and other factors. It reveals that the effectiveness of the parking location usage can be improved if the drivers' behavior in choosing parking location is known.

Parking management in the AQ lacks knowledge of parking behavior in choosing parking locations. This makes it more difficult to develop effective parking policies. Understanding parking behaviors is an effective way to analyze the effects of parking policy measures. By that, parking system may be reorganized by time and location for more reasonable and comfortable parking.

	Location	Length (m)	Width (m)	No. of Parking
1	Hang Giay street (east side between Hang Dau and Gam Cau street)	48.0	2.3	6
2	Dong Xuan market (both sides of Dong Xuan and Hang Khoai)	87.7	2.5 - 6.0	18
3	Both sides of Cua Dong street (between Phung Hung and Hang Ga)	110.0	2.5	36
4	Along the left side street of Hang Dieu (between Duong Thanh and Hang Non)	49.5	2.5	8
5	Along Tran Nhat Duat street and Tran Quang Khai (between Cao Thang and Gia Ngu)	685.0	2.5	114

Source: HAIDEP Study Team

Figure 2.6.6 Car Parking Area



Tran Nhat Duat Street Source: HAIDEP Study Team Cua Dong Street

The decision to give back the sidewalk to pedestrians was made after the implementation of the "Cultural street." On those streets, motorcycles and other vehicles are not allowed to park along the sidewalks from 7am to 5pm to make sidewalks available for pedestrians. However, some streets virtually transformed to temporary parking areas instead.

On weekends, a large number of visitors come to the AQ because of attraction generated by many commercial and gastronomic services, particularly on Hang Dao - Dong Xuan. Thus, parking areas with small capacity becomes overloaded. This leads to the uncontrolled parking situations on sidewalks or roads to accommodate the demand for parking spaces. Such situation adversely affects traffic circulation, safe transportation and the streetscape.

	Location		Length (m)	Width (m)	No. of Parking
ent	1	Along Phung Hung, on the right (from Nguyen Van To to Gam Cau)	641	2.00	512
Permanent	2	Dong Xuan market (both sides of Hang Khoai and Nguyen Thien Thuat)	137.65 +137.65	1.40	65+40
Ре	3	Both sides of Gia Ngu (between Hang Dao and Dinh Liet)			30
	4	Along the right side of Hang Giay (between Hang Khoai and Gam Cau)	30	1.40	15
	5	The parking areas on the left side of Hand Dao - Hang Ngang - Hang Duong	200	1.40	112
	6	The right side of Lon Ngo Gach, (between Hang Duong and Hang Giay)	70	1.40	39
mpe	7	Right side of Dao Duy Tu	190	1.40	105
Te	8	Left side of Hang Thung	25	1.40	14
	9	Right side of Hang Gai	80	1.40	45
	10	Right side of Hang Chinh	55	1.40	30
	11	Left side of Hang Giay	35	1.40	20

Table 2.6.4 Location of Motorcycle Parking

Source: HAIDEP Study Team

Figure 2.6.7 Motorcycle Parking Area



Motorcylcle parking designated by Commune PC (Gia Ngu Street)



Motorcycle parking on carriage way (Hang Ngang Street)



Orderly motorcycle parking on sidewalk (Nguyen Huu Huan Street)



Uncontrolled motorbike parking on sidewalk (Hang Buom Street)

(2) One-way system

One-way system is one of the main measures of traffic management. Most of the main roads are designated as one-way in pairs. But at present, this system can only be applied to cars but not for motorcycles. One-way system for motorcycles is only designated along (i) Hang Bong-Hang Gai and Hang Giay-Hang Duong-Hang Dao, (ii) Ly Nam De and Phung Hung, (iii) Hang Hom and Hang Man, and (iv) Nguyen Huu Huan and Hang Tre. There are no east-west roads which are designated one-way.

So far, one-way system is effective for car management in terms of space and safety. Cars need to get around inside the AQ, so this system seems to contribute in decreasing car traffic volumes to some extent. The remaining issue is whether to regulate motorcycle traffic under this system or not. At present, only 4-pair streets are designated as one-way streets for motorcycle. Motorcycles, although still high in volume, run smoothly and in order in these streets. But for pedestrians going across in other streets, they still need to pay much attention for both directions. In addition, the pair of Hang Dao – Hang Giay and Luong Van Can-Hang Cot one-way streets are the only streets that connect from north to south, so many through-traffics concentrate to pass through.

Since the volume of motorcycles is quite large, traffic management for motorcycle is necessary. To increase the impact of one-way system, not only cars but also motorcycles need to be controlled properly. One-way system makes impacts on not only physical barriers but also psychological effects for drivers. To implement a pedestrianization in the whole AQ, it is necessary to plan for a comprehensive traffic control system. The one-way system is effective as the first step to manage transport in the AQ.



Figure 2.6.8 One-Way System

Source: HAIDEP Study Team

6) Public Transport

Hanoi public transport is less developed and buses merely take the main role. In the last five years, Hanoi concentrated on investing and developing the Public Transport by bus and reached a considerable achievement; raised the bus lines from 20 lines with more than 300 buses in 2000 to nearly 40 lines with more than 800 buses in 2004.

In the AQ, there are 9 bus routes (No. 1, 3, 8, 9, 14, 24, 31, 34, and 36) (see Figure 2.6.9). Most of these buses run the boundary streets of the AQ like Trang Quang Khai - Tran Nhat Duat (east boundary), Hang Bong-Hang Gai-Cau Go-Han Thung (south boundary), Ly Nam De – Hang Dau (west and north boundary). The bus routes which may affect the traffic condition in the AQ are Luong Van Can-Hang Cot, Hang Da-Hang Ga and Duong Thanh. These streets are always crowded with motorcycles and pedestrians because of presence of popular commercial areas. In particular, there is Hang Da Market in front of the roundabout of Hang Da and Duong Thanh. Mixed-traffic of buses with non-motorized vehicles worsens the traffic condition.



Figure 2.6.9 Bus Route

Based on the HIS result, bus service use is relatively high in AQ (17.1%) as compared with the average of Hanoi (see Table 2.6.5). The reasons of no use by non-bus users are "No available bus route" (65.2%), "Far from bus stops" (14.1%) and "Uncomfortable on-board" (13.0%).

	No Vehicle	Bicycle	1 M/C	2 M/C	Car	Bus service use (more than once in a week)
Hang Bac	12.5	9.4	42.2	35.9	0.0	20.3
Ly Thai To	0.0	0.0	49.8	50.2	0.0	0.0
Hang Buom	5.9	1.9	38.7	51.5	2.0	16.5
Dong Xuan	5.9	8.7	39.8	41.8	3.8	15.5
Hang Dao	4.8	4.7	40.7	46.7	3.1	20.6
Hang Ma	9.3	9.5	39.7	39.6	1.9	15.1
Hang Bo	1.1	5.6	46.6	45.6	1.1	18.9
Cua Dong	2.8	8.4	38.1	47.9	2.8	20.0
Hang Bong	0.0	10.1	44.7	45.2	0.0	10.0
Hang Gai	5.1	3.1	41.1	47.5	3.2	15.5
AQ	5.2	5.9	41.3	45.4	2.2	17.1
Hanoi	2.2	12.4	40.7	43.1	1.6	13.7

 Table 2.6.5
 Vehicle Ownership and Bus Service Use by Commune (%)

Source: HAIDEP-HIS, 2005

In fact, a convenient location and traffic accessibility are some of the attractive points of the AQ. Some residents however expressed that they don't like the bus passing through the AQ, because the size of the bus is too large to be passing through the congested streets, poses danger to pedestrians and have negative environmental impacts. The bus users assess bus service as good due to "Bus fare", "On-board security", and "Operating hours" (see Figure 2.6.10). These are positive opinions for bus in terms of price, safety and punctuality. On the contrary, the main negative opinions from non-bus users are "Waiting condition", "Convenience of transfer" and "Accessibility of bus stop". They are not satisfied with the condition and inconvenient location of bus stops. This result indicates that bus service in the AQ benefit only those users who have easy access to bus stops, but for non-users, especially among residents, bus transport mode is viewed negatively due to its size, harsh driving and environmental effects.

At the same time, most of the residents want public transport service improvement and expansion (96.3%). The important factors for improvement of bus service are "Route network", "On-board comfort", "Convenience of transfer" (see Figure 2.6.11). In addition, the most expected public transport is bus (See Figure 2.6.12).

It is necessary to plan the proper location of bus route and bus stop in terms of accessibility to residents, and to improve bus service in terms of traffic safety and environmental aspects. To reduce the negative impacts and improve bus service, mini bus service will be adequate for the AQ. In addition, driving behavior needs to be improved.



Figure 2.6.10 Assessment of Bus Service

Source: HAIDEP-HIS, 2005

7) Assessment on Transport

More than 70% feel that traffic situation in AQ is bad. But in terms of accessibility, such as travel time, convenience as well as safety, more than half of residents evaluate it to be good (see Table 2.6.6).

	Very bad	Bad	So-so	Good	Very good
Travel time	0.2	2.3	37.7	58.4	1.4
Convenience	0.1	2.1	29.6	66.9	1.4
Safety	0.0	3.3	40.9	54.5	1.3
Overall	0.1	2.1	36.2	60.7	0.9

Table 2.6.6Assessment of Trip (%)

Source: HAIDEP-HIS, 2005

General measures such as control of air pollution, promotion of people's understanding, strict control of traffic and improvement of walking condition are highly supported by household population of AQ (see Figure 2.6.13). On the contrary, only one-third of households of AQ agree control measures for private vehicles such as motorcycles and cars.



Figure 2.6.13 Supported/ Agreed Transport Measures (%)

Source: HAIDEP-HIS, 2005

8) Policy Intervention in Transport

The Decision 70/BXD/KT- QH of the Minister of Construction on Approval of the Preservation, Improvement and Development Plan of the AQ clearly stated that the network of roads and streets of the AQ is among its historical values that still remain until now. The Decision also indicated that the street network and its structure cannot be changed, with construction of new roads as well as widening and narrowing not allowed.

Under the Decision 45 of the Hanoi's People Committee on Promulgating "Temporary Regulation on Construction Management, Preservation and Improvement of Hanoi Ancient Quarter" in 1999, some regulations on transport are mentioned as follows:

- (i) Maintaining the road network in the AQ based on present cross-section and building setback
- (ii) Organizing public transport on boundary streets
- (iii) Allocation of public car parks at Hang Dau, Bat Dan garden, Cho Gao, Cua Dong
- (iv) Local streets where parking is prohibited: Hang Chieu Hang Ma, Bat Dan Hang Bo- Hang Bac- Hang Mam, Cha Ca - Hang Can- Luong Van Can
- (v) Streets for pedestrians: Hang Dao, Hang Ngang, Hang Duong, Dong Xuan
- (vi) Streets for pedestrians, motorcycles and other vehicles are the rest of streets in Ancient Quarter
- (vii) Service vehicles such as fire trucks, garbage trucks, ambulances are allowed to enter

pedestrian road.

(viii) Bicycles and motorcycles can park on the sidewalk but have to obey the rules of city people's committee.

Main purpose of this Decision is to preserve the AQ, therefore overall principle on transport planning is to maintain the road network. As for traffic, because both traffic demand of persons and commodities is continuously increasing, together with increasing parking demand for cars and motorcycles, the AQ thus is put in a critical situation when road-space is controlled. In this circumstance, traffic solutions should be targeted toward management and control for the best utilization of road space, together with utilizing underground spaces to accommodate increasing traffic demands.

2.7 Cultural Values

1) Policy Intervention in Culture

Before implementing the "Law of Cultural Heritage" (2001) and the Decision of The Minister of Culture-Information Ministry about "listing Hanoi Ancient Quarter as historical monument" (2004), there are at least two documents mentioning the reservation and reconstruction of Hanoi Ancient Quarter, namely: Decree No. QD 70/QD-BXD dated 30 March of 1995 of the Minister of Construction Ministry about "Approval of the Project of Hanoi Ancient Quarter Protection, Reconstruction and Development" and the decision of Hanoi People Committee about the implementation of "Temporary Regulation on Construction Management, Reservation and Reconstruction of Hanoi Ancient Quarter" (on 4th June, 1999).

There were some regulations aimed at preserving the AQ before the "Cultural Heritage Law" was enforced in 2001. The Ministry of Construction promulgated the Decision QĐ 70/QĐ-BXD, dated 30th March 1995, that identifies the scale of preserving the AQ; Hanoi People's Committee promulgated "Temporary Regulations of Managing the Construction, Preservation and Beautification of Hanoi Ancient Quarter", which proposed rather concrete regulations in term of planning and architecture.

Based on statistics, almost all of the houses reconstructed or improved after June 1999 violated the regulations. After the enforcement of the "Cultural Heritage Law," the situation of breaking the regulations in construction did not decrease, and thus raises a number of questions in terms of the effect of legal system and the capacity of executive institutions. Because a legal basis is lacking, the monument had not been ranked. And since there was no Law of Cultural Heritage, management activities met many difficulties. In addition, it is too ambiguous and general in many regulations of Hanoi People Committee. These regulations can be understood differently. It is the fact that the control and dealing with the situation is not close, or powerless. As an investigation, the effectiveness of this decision is very limited.

2) Types of Cultural Values

Cultural values consist of both tangible and intangible values (see Table 2.7.1). Historical values are the origin to create both architectural values and intangible cultural values. Though some new cultures are created in the AQ at present period, the traditional values are rooted in its history of development as well as religious and cultural life in the AQ.

Tangible values are visible things such as communal houses, temples, pagodas, and shrines. These are the core elements to form originality of the AQ. Intangible cultural values are rooted in its lifestyle and activities. However, in reality, there is no clear distinction. Folk verses and idioms are verbal culture and are invisible, but the book of collected folk verses and idioms are visible and a material thing. Belief, rites, worship are amorphous and take place visibly at church, communal house, temples or shrines.

Therefore, intangible culture should rely on tangible, material things to be able to disseminate and pass on to the next generation.

Historical value	Along with Royal Citadel, the AQ is the existing vestige of ancient Thang Long imperial city which brings national pride and historic sense of uprightness. Up to now, the AQ still keeps its role of a big trading center, one of the values of history.
Tangible Value	Creating an architectural complex Citadel City with Eastern Asian style. Chessboard form of street lines, small and tubular layout, human scale, ancient houses and quiet atmosphere in the inside courtyard, religious buildings, cozy townscape, etc. are considered the very specific features of the AQ. These are tangible and both collective physical environment and individual architectures are values.
Intangible cultural value	Represented in the way of organizing living space, way of life, traditional festivals, folk-verses, legends, belief, spirit, working and trading style, etc. In addition, the way of organizing the whole AQ's atmosphere such as social organizations, occupational guilds, handicrafts and its skills, institution of culture and belief, elegant way of living, literature traditions, etc. These have been taken over in livelihood from generation to generation.

Table 2.7.1Types of Cultural Values

Source: HAIDEP Study Team

3) Tangible Values

(1) General

Tangible values are composed of individual physical elements such as (i) religious buildings, (ii) ancient houses, (iii) traditional handicrafts, and (iv) collective physical environment such as street network, townscape, etc. These values need to be preserved and revitalized since physical elements can protect intangible values in a visible manner.

(2) Religious Buildings

The places of worship are the oldest maintained buildings in the AQ; they incorporate the many skills of the craft villages, their culture, tradition and building techniques that are collected in the AQ. At present, there are 96 religious sites, including 53 communal houses, 31 temples, 7 pagodas, 3 shrines, and 2 churches (see Table 2.7.3 and Figure 2.7.1). A total of 90% of which have been encroached and transgressed leading to the degradation and deformation that make the cultural, religious and spiritual elements lost by time. Some have already changed usage from worship to public purpose such as kindergarten, etc.

Communal house ("Dinh")	 Situated in the center of the village, along the main road. The place of worship of the guardian spirit, who brought with him the skill of craftsmanship to the village. The place for meetings, festivals and celebrations. Can be found in China and Cambodia.
Temple ("Den")	 Situated in the edge of village Dedicated to the local or a national hero or a God
Pagoda ("Chua")	 Situated outside the village and human settlement, because the pagoda will always remain the same while the village is changing The place to worship Buddha

 Table 2.7.2
 Types of Religious Buildings

Source: "Hanoi, an ancient city in transition", Helena Hallman, 1999





Commune	No	Name	Address
	1	Communal house Thanh Ha	10 Ngõ Gạch
	2	Communal house Phương Trung	18 Đồng Xuân
	3	Communal house Phúc Lâm	2 Gầm Cầu
	4	Communal house Đồng Xuân	83 Hàng Giấy
	5	Communal house Nguyên Khiết Hạ	56 Trần Nhật Duật
ĐỒNG XUÂN	6	Communal house - Pagoda Nghĩa Lập	32 Hàng Đậu
	7	Temple - Shine Nghĩa Lập	32 Hàng Đậu
	8	Pagoda Huyền Thiên	54 Hàng Khoai
	9	Temple Bà Móc	27 Nguyễn Thiệp
	10	Temple Hội Thống	4 Thanh Hà
	11	Shine Cổ Lương	11 Ô Quan Chưởng
	12	Thánh đường Hồi giáo	12 Hàng Lược
	13	Communal house Phủ Từ	19 Hàng Lược
	14	Communal house Ngũ Giáp	54 Hàng Cót
HÁNG MÃ	15	Temple Tam Phủ	52 Hàng Cót
	16	Communal house An Phú	17 Hàng Rươi
	17	Pagoda Vĩnh Trù	59 Hàng Lược
	18	Pagoda Pháp Bảo Tạng	44 Hàng Cót
	-	Temple Bạch Mã	76 Hàng Buồm
	20	Temple Quan Đế	28 Hàng Buồm
	21	Temple Duc Quan	22 Hàng Buồm
		Temple Tử Dương	8 Hàng Buồm
		Communal house Phương Communal house	20 Nguyễn Siêu
		Temple Cổ Lương	28 Nguyễn Siêu
		Communal house Đông Thái	6 Đông Thái
		Temple Hương Nghĩa	13B Đào Duy Từ
HÀNG BUỒM		Temple Hương Tượng	64 Mã Mây
		Temple Hương Bài	90 Trần Nhật Duật
		Communal house Ưu Nghĩa	2A Nguyễn Hữu Huân
		Communal house Hàng Giầy	16 ngõ Hài Tượng
		Shine Sầm Công	26 Lương Ngọc Quyến
		Communal house Phúc Lộc	6 Lương Ngọc Quyến
		Temple Nội Miếu	30 Hàng Giầy
		Communal house Phất Lộc	46 Phất Lộc
		Temple Tiên Hạ	48 Phất Lộc
		Communal house Đai Lợi	50 Gia Ngư
		Communal house Trung Yên (Ngũ Hầu)	10 Trung Yên
		Temple Ngũ Hầu	29 Hàng Bè
		Communal house Thọ Nam	22 Hàng Thùng
		Communal house Nhiễm Thượng	64 Cầu Gỗ
HÀNG BẠC		Temple Nhiễm Hạ	1 Hàng Bạc
HANO ĐẠC		Temple Dũng Thọ	24 Hàng Bạc
			42 Hàng Bạc
		Temple Kim Ngân	
		Communal house Trường Thị	50 Hàng Bạc
		Communal house Dũng Hãn	54 Hàng Bạc
	-	Temple Hương Thượng	114 Hàng Bạc
HÀNG ĐÀO		Temple Đồng Thuận	11 Hàng Cá
		Communal house Đồng Thuận	27 Hàng Cá
	-	Communal house Đồng Môn	8 Hàng Cân
		Temple Xuân Yên	44 Hàng Cân
		Temple Xuân Yên	6 Lương Văn Can
		Communal house Đồng Lạc	38 Hàng Đào
		Communal house Hàng Đào	47-49 Hàng Đào
		Communal house Hoa Lộc Thị	90A Hàng Đào
	55	Communal house Diên Hưng	5 Hàng Ngang
	56	Communal house Vĩnh Hạnh	19B Hàng Đường

Table 2.7.3List of Religious Sites

	57 Pagoda Cầu Đông	38B Hàng Đường
	58 Communal house Đức Môn	38B Hàng Đường
	59 Communal house Lò Rèn	1 Lò Rèn
	60 Communal house Đông Thành	7 Hàng Vải
HÀNG BỒ	61 Communal house Tân Khai	44 Hàng Vải
HANG BU	62 Pagoda Thái Cam	16A Hàng Gà
	63 Temple Nhân Nội	84 Hàng Bồ
	64 Communal house Nhân Nội	33 Bát Đàn
	65 Communal house Yên Thái	8 Ngõ Tạm Thương
	66 Communal house Tú Communal house Thị	2A Yên Thái
	67 Communal house Phúc Hậu	2 Hàng Bông
	68 Communal house Hà Vĩ	11 Hàng Hòm
	69 Communal house Cổ Vũ Đông	85 Hàng Gai
	70 Temple Tố Tịch	1 Tố Tịch
HÀNG GAI	71 Communal house Hàng Quạt	4 Hàng Quạt
	72 Temple Thuận Mỹ (Temple Dâu)	64 Hàng Quạt
	73 Communal house Thuận Mỹ	74 Hàng Quạt
	74 Communal house Hàng Thiếc	2 Hàng Nón
	75 Shine Hai Cô	42 Hàng Nón
	76 Communal house Yên Nội	44 Hàng Nón
	77 Communal house Đông Hà	46 Hàng Gai
	78 Temple Tam Khánh	66 Hàng Bông
	79 Communal house Lương Ngọc	68 Hàng Bông
	80 Communal house Kim Hội	95 Hàng Bông
HÀNG BÔNG	81 Communal house-Temple Thiên Tiên	120 Hàng Bông
	82 Temple Vọng Tiên	120B Hàng Bông
	83 Communal house Đông Mỹ	127 Hàng Bông
	84 Church đạo Tin Lành	2 Ngõ Trạm
	85 Temple Hoả Thần	30 Hàng Điếu
CỬA ĐÔNG	86 Pagoda Kim Cổ	73 Đường Thành
CUADONG	87 Communal house Yên Nội	33 Hà Trung
	88 Communal house Vũ Du	42 Hàng Da
	89 Temple Ngọc Sơn	Giữa hồ Hoàn Kiếm
	90 Temple Bà Kiệu	59 Đinh Tiên Hoàng
	91 Communal house Lò Rèn	32 Lò Sũ
LÝ THÁI TỔ	92 Communal house-Temple Trang Lâu	77 Nguyễn Hữu Huân
LI INALIO	93 Communal house Mỹ Lộc	45 Nguyễn Hữu Huân
	94 Temple Cây Xanh (Cây Si)	158 Trần Quang Khải
	95 Communal house Cổ Tân	166 Trần Quang Khải
	96 Pagoda Phúc Long	168 Trần Quang Khải

No	Address	Place and Background
1	26 phố Đồng Xuân	Publishing office of Vietnam Socialist Party during 1936-1939
2	9 Hàng Giấy	Communicating office of Vietnam's Central Socialist Party
3	Market Đồng Xuân	Be the site of the battle dated 14/2/1947 of the Capital City's Regiment
4	2-4 Hàng Rươi	Communicating office of Vietnam's Central Socialist Party before 1945
5	5 Hàng Lược	Office of Đời Nay newspaper (1936 - 1940)
6	105 Phùng Hưng	Revolutionary office during 1936 - 1940
7	74 Hàng Bạc	Tố Như (Chuông Vàng) theater where the Capital City's Regiment and the Suicide Troop were founded
8	86 Hàng Bạc	Commanding office of the Capital City's Regiment in the early time of the revolution
9	37 Cầu Gỗ	Revolutionary office before 1945
10	16 Cầu Gỗ	Revolutionary office during 1930 - 1931
11	48 Hàng Ngang	Hồ Chí Minh wrote the Independent Declaration
12	42 Hàng Thiếc	Revolutionary office since 1930
13	15 Hàng Nón	Representative Meeting of northern workers dated 28/7/1929 to found the Labour Union
14	20 Ngõ Trạm	Thăng Long private school, a place launched the program to found Indo- China Democracy Front in Hanoi
15	6A Đường Thành	Office of People's Friends newspaper in 1937
16	11 Nguyễn Quang Bích	Office of World newspaper in 1939
17	28 Nguyễn Văn Tố	Office of Letravail newspaper in 1936 - 1937
18	38 Hàng Da	The Indo-China meeting in the North took place in 1936
19	78-80-82 Hàng Điều	Battlefield in 1946

Table 2.7.4List of Revolutionary Relics

Source: HAIDEP Study Team

Table 2.7.5List of Other Public Sites

No	Name	Address	Description
1	Gate Ô Quan Chưởng	Phố Ô Quan Chưởng	Ranked in 1994
2	Market Đồng Xuân	Commune Đồng Xuân	Revolutionary relic
3	Market Hàng Da	Commune Cửa Đông	
4	Market Hàng Bè	Commune Hàng Bạc	
5	Club-house Quảng Đông	22 Hàng Buồm	Now is a kindergarten
6	Office of Hoa liên Association	19 Hnàg Buồm	Now is the office of the Association of Arts and Literatures of Hanoi
7	Club-house Phúc Kiến	40 Lãn Ông	Now is a kindergarten
8	School Cúc Hiên		A reputable school in XIXth century
9	Trường Phương Communal house	20 Nguyễn Siêu	The school of Nguyễn Văn Siêu, in XIXth century
10	School Đông Kinh Nghĩa Thục	10 Hàng Đào	The school for patriotic confucian scholars at the beginning of XXth century
11	Private School Thăng Long	20 Ngõ Trạm	A revolutionary relic
12	Theater Chuông Vàng	74 Hàng Bạc	Also called Tố Như theater the founding place of the Capital City's Regiment and the Suicide Troop
13	Theater Kim Môn	88 Hàng Buồm	Now is the City's Cultural House
14	Theater Kim Phụng	11 Tạ Hiện	Now is a Gallery
	Thăng Long Water Puppet Theater		
16	Theater Hồng Hà	26 Đường Thành	
	Bắc Đô Cinema	Hàng Giấy	Now is a Gallery
	Đại Đồng Cinema	Hàng Cót	
19	Long Biên Cinema	Hàng Chiếu	

No	Address	Place and Description
1	1 Hàng Cót	Nhất Ly Goat meat restaurant
2	14 Chả Cá	Most famoust restaurant of fried fish in Hanoi
3	42-46 Hàng Đồng	Shop selling high-quality bronze wares
4	95 Hàng Bông	Phố coffee
5	93 Hàng Buồm	Place keeping manuscripts, statues and paintings of many artists and writers
6	40 Nguyễn Hữu Huân	Tranh coffee
7	9 Hàng Bông	Shop selling traditional food
8	47 Bát Đàn	Thắng Xuân <i>Pho</i>
9	48 Hàng Đồng	Phở Cồ Chiêu (Cồ Việt)
10	1 Hàng Quạt	Hói Coffee
11	7 Hàng Gai	Giảng Coffee
12	3 Hàng Mành	Bún chả Đắc Xồm (Noodles and grilled meat)
13	66 Hàng Gai	Selling souvernirs and traditional textiles
14	47 Hàng Gai	Triệu – Selling souvernirs and traditional textiles
15	36 Hàng Gai	Thuần - Selling souvernirs and traditional textiles
16	Lương Văn Can	Đông Trạch, Đức Trạch (originated from Trạch Xá)
17	Cầu Gỗ	Mỹ Vinh, Mỹ Hào, Tân Vinh (originated from Trạch Xá)
19	Hàng Gai, Hàng Trống	Lê Minh - Selling souvenirs and traditional textiles
20	Hàng Gai	Khai Xin - Selling souvenirs and traditional textiles
21	45 Hàng Gai	Gallery
22	1 Đinh Lễ	Gallery

Table 2.7.6List of New Cultural Sites

Source: HAIDEP Study Team

In the AQ, there are many communal houses, temples, worshiping deities, national heroes, cultural famous man (Trieu Quang Phuc, Tran Quoc Tuan, Nguyen Trung Ngan, Tran Lu, etc.) and trade founders (silver, forge trade founders, etc.). Communal house is the place to worship founders or spirits of Viet villages which formerly did farming and fishing. Pagodas used to be the place to worship Buddha; however, pagodas in the AQ are always other additional altars worshiping Mother God (primitive indigenous belief) and Tran saint (Tran Hung Dao). Temples were formally used for worshiping divines (Taoism), yet temples in Hanoi AQ have additional altars worshiping Buddha and Mother God. When the French colonials occupied Hanoi, the Catholic Church, Protestant Church (at Ngo Tram alley) and Muslim mosque (Hang Luoc) were also built and the Hanoians accepted all these new religious denominations.

Since most of the people of the AQ are migrants, they only adopted the general religions such as the Religion of Mother Goddesses, Buddhism, Taoism, and the Custom of worshipping Tran Deity while accepting incompletely the native beliefs like the custom of worshipping profession founders and the deities who are related to the local legends, which explains why there are a number of Dinh and temple in the AQ to be occupied and destroyed, even Bach Ma Temple (70 Hang Buom), a very famous temple in Hanoi.

(1) Ancient Houses

Buildings which have architectural and historical values have long been seen as very important in the tangible heritage stock of the AQ. At present, more than 1,000 traditional houses are listed as ancient houses which need to be preserved. But in reality, because of the low level of awareness on their cultural values as well as lack of financial and technical measures for preservation, many ancient houses have already been renovated or reconstructed (see Figure 2.7.2).

In this pilot project, criteria were proposed to evaluate these ancient houses (see Table 2.7.7). Eligible ancient houses are categorized into typical styles based on the construction age. Under the temporary regulation in 1998, 850 houses were identified while there were no clear criteria and definition of ancient houses. In this pilot project, the expert team surveyed the condition of these identified houses using the criteria listed in Table 2.7.8. As a result, the ancient houses with good condition are 127; 577 houses have been modified and 146 houses have been completely renovated.

Table 2.7.7	Criteria for Evaluation of Ancient Houses
-------------	---

Cultural and historical values	 Typical values of a nation's culture or a region in many aspects and recorded in history through generations The way of life such as the way to select house styles or decoration of houses as well as interior installation
Values of age	 Buildings aged more than 100 years are eligible for ranking as ancient Many architectural layers have been stocked through history of the AQ Most of ancient houses in the AQ now have been inherited from 19th century
Artistic values of buildings	 Art values of architecture are expressed in space composition and proportion or components of a house Art values of sculpture decoration of buildings
Artistic values of space composition	 The value of space composition of interior and exterior of architectural buildings The value of partial space composition or urban space composition as a whole
Role and function	Role and function of the building

Style	Built year	Height	Façade	Structure	Living space	Example
Traditional	Before 1900	average height 2.6m	floor, sloping roof with traditional brick roof tile	Wood frame sculptured and carved for decoration, doors made from wood plates that were put together. Brick walls, two brick garbles, clay hand-made tiled roof sloping towards the frontage.	old and the hygiene condition is very bad.	47 Hang Bac
Colonial	1900 – 1954	average height 3.6m	columns, pane was	Brick wall support. Beams floor covered by wood plates. Thatch lime ceiling, clay tiled roof or prefabricated tiled roof.	Living space larger than traditional style	57A Hang Bo
Purely pragmatic	1954 - 1975			Brick only or with concrete or steel	Small, dark, and inconvenient	HUNGLONG HUNGLONG 24 Hang Dao
Modern		or more	European style with mortar cover and decorated balconies,	Reinforced concrete with wall panes inserted. Aluminum frame and glass pane doors.	Good. Many houses are used as mini hotels.	67 Hang Dao





Source: HAIDEP Study Team

(2) Traditional Handicrafts

The AQ has had close linkages with traditional handicrafts. Each street or guild's name indicates the occupations or the products that are being sold. Considering traditional handicrafts individually, the appearance and development of trade and handicraft streets in the inner city and the suburb had their different laws. Normally, trade and commune streets were the sites where all representation of other areas was focused. Handicrafts in Thang Long, former name of Hanoi, were sourced from the following: (i) existing handicrafts in rural hamlets and villages; (ii) due to historical events, craftsmen from other

areas flocked to Thang Long Capital and founded trade communes and (iii) craftsmen from other areas took their excellent occupations to Thang Long and sold their products here. Thus, traditional handicrafts in Thang Long were plentiful and diversified which displays exquisite talents in the Capital.

Due to the rapid economic development and especially due to globalization, features of handicrafts in the AQ essentially changed. Previously, when the population of Hanoi was not as crowded as it is today and the economy has not yet developed strongly, the handicrafts production and transaction were concentrated in some streets in AQ. At present, however, many traditional handicrafts are replaced by other new products, with some traditional products no longer existing due to their negative influences in present life. However, it is important to control the manufacturing of new products so that the specific characteristics of the AQ will not be totally lost.

In the past, the "36 Streets" focused on manufacturing and providing handicraft products to meet the daily life demands of the king and mandarins as well as people in surrounding areas. Nowadays, the AQ is not only the source of commodity products for residents but also a popular tourist destination, with tourists basically coming here to go on a sightseeing tour and to do some shopping.

There are only some handicraft streets that still have strong development (see Figure 2.8.2): Hang Bac, Lan Ong, Hang Ma, and Hang Dong. Other handicraft streets, however, are experiencing difficulty in development and are at risk of vanishing (i.e. To Tich, Hang Chieu, Hang Da). Some handicrafts become more and more commercialized and handicraft streets in turn become diversified. The following business streets seem to have a strong vitality and are expanding and have high potential: Hang Gai, Hang Dao, Hang Can, Hang Buom, Cau Go, Gia Ngu, Thuoc Bac, Hang Ngang, Hang Quat, Ha Trung. The two handicraft production streets of Hang Thiec and Lo Ren have existed but there are environmental problems that need to be addressed. The other streets are business streets and have mixed activities with the high density of shops.

The maintenance of activities relating to the production and trade of some traditional arts and crafts is important for the sustainable development of AQ in the future. These activities bring back two advantages for AQ: the first advantage is that these activities will help maintain some traditional and cultural values; the second one is the economic efficiency. The economic efficiency is considered on the side of positive impacts that commercialize arts and crafts products. In addition, it is also considered on activities that are suitable to AQ environment like tourism and services. Another factor of economic efficiency is that the arts and crafts manufactured in relevant trade villages can be made through the development of arts and crafts.





Source: HAIDEP Study Team



Figure 2.7.4 Traditional Handicraft Streets

Source: HAIDEP Study Team

4) Intangible Values

(1) General

Intangible culture is the spiritual product which holds historical, cultural and scientific values which are preserved and taken over by memories, oral transmission, trade handing down, performance and other forms of preservation and transmission. There are various expression forms of intangible culture: oral language, script, oral literature, folklore performance, way of living, life style, festival, beliefs, trade and craft secret, knowledge on nature, knowledge on society and social management, knowledge on traditional medicine and pharmacy, food ways, aesthetic sense represented through traditional costume, and other traditional knowledge, etc.

As a result of Photovoice survey and interviews and focus group discussion with experts, intangible values of the AQ are identified as follows:

- (i) Commercial cultural space: trading activities, crowdedness, specialization of streets, knowledge of handicrafts and trading
- (ii) Diversity and stylishness in serving dishes: techniques and experiences in processing food, habits and behavior in eating and drinking
- (iii) Knowledge on natural environment: green space, preservation of landscape
- (iv) Knowledge on folklore culture and arts: traditional singing and dancing, ancient beauty
- (v) Knowledge on social management and behavior: sharing a narrow living space and facilities, commercial regulations in each house number
- (vi) Awareness of origin (family, clan, original village): spiritual and emotional attachment to hometown, family tie, education to children

- (vii) Lifestyle and ethic standards: custom of Tet, respect to comrades, elegant hobbies
- (viii)Rural characteristics: rural scene in daily life, peddled wares
- (ix) Trust in beliefs and religions: spiritual place, seeking for peace in belief and religion, integration of different belief, custom of praying for luck and wealth
- (x) People keeping intangible cultural heritage





Source: All of photos were shot by local residents by Photovoice Survey to identify intangible values.

(2) Commercial Activities

All the streets in the AQ have joined in the production and trading of different goods. The AQ was regarded as a big market. Specific goods are sold in certain street lines. Buyers can find the goods they need in the street line which is named after the specific good.

The AQ is the place where the essence in production and running business of the North converges. Traditional knowledge and production expertise were handed down from original craft villages. Relationship with fellow traders has been established for a long time and maintained steadily. Fellow traders have private convention with each other to ensure benefit for both sides. Skills are acquired from previous generations through handing down trade and forged through time.

(3) Religious Activities

Residents come from different localities and have different religions and beliefs. The AQ is a melting pot for various religious beliefs and architecture constructions. Many festivals take place here, especially during Lunar New Year days. Most of the festivals represent community's religions, consciousness and tradition of remembering source when drinking water.

"Ca Tru" is one of the most prominent feature of this type of performing art and is always attached with literature. The words for Ca tru melodies are often created by writers and poets. "Hat van" is one of the folk performing art relating to Mother God belief – a primitive belief that is popular in the country. Hat van is so popular in all localities in the North. The AQ is a melting pot for these many religious and belief constructions with diversified festivals so hat van strongly developed. Lion Dance is one traditional play that is like a performance and a sport at the same time; it relates to the belief of praying for rain for agricultural farmers. This performance is often held on the festival occasions at communal houses, temples or in Mid Autumn.



Figure 2.7.6 Traditional Lion Dance in the Past and at Present

Source: above left, relevant publication, right, HAIDEP Study Team

(4) Living Activities

Hanoi sound is considered the most standardized in syllable and vocabulary. Hanoians are known for elegant, amiable way of speaking, and rarely speak in high voice or is short-tempered. In addition, Hanoians are always polite in dressing. Food culture in the AQ is prestigious and many citizens and rural people gather to buy special foods and confectionaries especially for New Year's Day. Courteous hobbies such as flower and bonsai ornament, raising birds, collecting antique represents graceful lifestyle in the AQ. A courtyard in each house is always regarded as a miniature nature space;. a space for relaxation of people. Hanoians are fond of planting bonsai trees and other varied flowers. In the past, on the occasion of Tet, Hanoians often played with narcissus. This type of flower is considered as a symbol of the nobleness. Annually a flower contest is held in the AQ.

5) Issues to Preserve Cultural Values

(1) Degraded and Improper Use of Historical and Cultural Sites and Vanishing Activities

Because of lack of understanding and concerns for respect and values, many historical and cultural sites have been degraded. Some of these sites are occupied by immigrants for residential and commercial purposes. While many residents and citizens as well as tourists visit to pray there, preservation and maintenance issues have been ignored. For example, Quan De Temple at No. 28 Hang Buom Street was constructed by the Chinese to worship Quan Van Truong, a Chinese general during the Han dynasty in the reign of Three Kings in 2nd – 3rd Century (see Figure 2.7.7). After the Chinese had gone back to their country, the Vietnamese people no longer worshiped this character. Thus, the temples are not anymore being preserved and restored and are slowly becoming ruined.

"Ca tru" completely disappeared and Hàng Giấy Street became a general business street. There were many of art troupes in the AQ. After 1954, there were at least two art troupes that performed frequently: Chuông Vàng Troupe and Kim Phụng Troupe. The plays such as Phương Hoa, Tống Trân - Cúc Hoa, Phạm Tải - Ngọc Hoa, etc. have left on people's heart a lot of constant impression. Despite the pressure of the market economy, these art troupes did not disband. However, the playhouses are now converted for other business purposes. For example, in Hàng Buom commune, there were 3 playhouses that are now used for other purposes. Quang Lạc Playhouse in 8 Ta Hien, formerly of Kim Phụng Cai Luong (Reformed Theatre) Troupe, then was handed over to the Hanoi Theatre to be under its management. At present, this house is managed by the Ministry of Culture and Information and usually sublet to a private company to trade furniture, hand-made goods and fine arts. There are 10 households living in the upper floors (see Figure 2.7.8).





Figure 2.7.8 Loss of Cultural Function of Quang Lac Theater



Source: HAIDEP Study Team

(2) Fading Values and Competitiveness of Traditional Businesses

The remarkable characteristic of producing and trading activities of the AQ in the past is its specialized characteristic. Nowadays, there are a lot of changes in the trading activities in the AQ, and consequently, their specialized characteristics have faded away. Along with the socio-economic development, many of traditional careers have disappeared such as Hang Trong drawing, carving board printing and bookbinding in Hang Gai, fabric dyeing in Hang Đao, etc.. However, new business forms and careers are developing such us real estate (e.g. office for renting, etc.), tours operation for tourists, office stationery, etc. A number of handicrafts such as carving and encrusting, drawing, fan making, and woodcarving printing, etc. are to be out of business. In a modern business environment, especially when tourism becomes a key in economy, these careers could absolutely find their market.

While wholesale function by individual business households is one of the characteristics of the AQ, these functions have been changed because of the change in market demands and cost competitiveness-oriented trading. Social linkages rooted in trading have been lost. Apart from inter-provincial relations, international relations are more and more broadening. Aside from the traditional market (Chinese market), the people here have

new fellow traders from other countries. These relations especially develop in the field of tourism, high-quality garments, watch, foreign wine, handicrafts, and fine arts.

The wave of immigration has resulted in the alteration of social parameters. A street or an alley is no longer the settlement of several family lines who did the same profession and came from some certain home villages, but is now the residence of many of family lines coming from various villages. The people of the AQ now do not share the same concerns in producing-trading activities as well as closed relations of profession. Each person, within their producing and trading activities, has one's own fellow traders and respects their relations. Besides, a large number of people of the AQ work in the State offices or companies (which do not belong to family or family line) so their relations are multi-aspects, and they are at the same time members of various social organizations. As a matter of course, each citizen must bear the correction of laws and institutions when living in a jurisdictional society.