

Newcastle
University



Constructing Spatial Capital

Household Adaptation Strategies in Home-Based Enterprises
in Yogyakarta



Constructing Spatial Capital

**Household Adaptation Strategies in Home-Based Enterprises
in Yogyakarta**

A Thesis Submitted for the Degree of Doctor of Philosophy

Agam Marsoyo

School of Architecture, Planning and Landscape
Faculty of Humanities and Social Sciences
University of Newcastle upon Tyne

April 2012

Constructing Spatial Capital

Household Adaptation Strategies in Home-Based Enterprises in Yogyakarta

Abstract

Home-Based Enterprises (HBEs), as part of the informal sector, have been studied over the last three decades from economic, social, urban planning, housing policy, and environmental impacts perspectives, among others. But to date, their spatial implications have not been thoroughly explored. In urban areas, many households deploy all their potential resources, such as human, social, financial and physical assets, to generate income from a home business as part of household survival strategies. For those who live in large dwellings, the issue of business activity in the domestic area might not lead to conflict between home and work, between reproduction and production. However, generally low-income households who engage in HBE activities live in small dwellings, and thus there is a premium on space. This study therefore explores various adaptation strategies undertaken by households with HBEs associated with their use of space. It is focused on *kampung* of Yogyakarta City in Indonesia.

By taking a qualitative approach and using a multi-method strategy, the study investigates selected dwellings with HBEs in Kampung Prawirodirjan, Yogyakarta, where one in three dwellings has a home business. The study draws on synchronic and diachronic approaches that not only observe processes of adaptation but also document the use of space over time. This offers a thorough assessment of the strategies used by households to respond to the co-existence of domestic and business activities within the same dwelling, including their motivations and reasons for their decisions. The analysis of strategies is based on Berry's (1980) adaptation theory in terms of exploring how households arrange interior space, make more space, and manage activities and movements.

Although this study is highly context-specific, it offers a range of insights into how urban households accumulate capital as part of their survival strategy and to overcome poverty. Furthermore, it shows how households who conduct a home business construct spatial capital not only to make a living but also to achieve a better and more harmonious home environment.

Acknowledgements

Praise be to Allah, Lord of the Worlds, by His will the completion of this thesis is made possible; and may His blessing and peace be upon His prophet Muhammad. The PhD research presented a unique set of challenges in my academic life and also enabled me to work with a number of people to whom I am eternally grateful. In doing this PhD research, I received assistance, guidance and supervisory direction without which the successful journey through to the prestigious PhD degree would have been more challenging if not impossible.

I would like to place on record my profuse gratitude to my principal supervisor Dr Peter Kellett. His consistent guidance, advice and suggestions during the life-span of the research and the writing up of this thesis stood me in good stead for completion of the PhD programme. In addition to the excellent supervisory relationship which I enjoyed, he also provided generous pastoral care to me particularly at the very trying period when I was sick, taking me to the Newcastle General Hospital. I am deeply grateful to him.

My appreciation also goes to Pak Bambang who worked with me during the fieldwork in Kampung Prawirodirjan. The twenty-one operators of HBE who were not only willing but also accepted that I take pictures, conduct interviews, and observation their spaces and activities over time in their houses as part of the substantive fieldwork for study are deserving of my undiluted appreciation. I am deeply grateful to them.

I would like to express my gratitude to Newcastle University for providing the scholarships at the beginning of the research and the Ministry of National Education of Indonesia for providing the scholarships that enabled me to complete the PhD research successfully. My unreserved appreciation also goes to colleagues in the Department of Architecture and Planning, Gadjah Mada University, who always volunteered support and suggestions. In addition, also want to thank research assistants: Sinta Hermawati, Eric, Genius Triwahyuni, Hikmatul Watsiqoh, Anggit Kusmartiwi, Erika Pradana, Devi Margaretha, Kurnia Sandya, Isti Hidayati, Tri Aji Prabandaru and Ayutia Nurwita for assisting during the task of data collection phase of this dissertation. Also deserving of thankful mention is Dr Elizabeth Brooks as proof-reader the whole of this thesis. I am deeply grateful to her.

Finally, I am deeply indebted to my beloved wife, Dewanti, my lovely twin sons: Alifan Cahyana - Alifan Cahyadi; and my lovely son Bagas Alqadri for their love, patience and prayers. They have always given me support and inspiration that kept me working through the PhD sojourn to its final and successful completion. The depth of my gratitude to them is beyond the power of words.

-Agam Marsoyo, April 2012-

A thesis dedicated to:

My beloved wife:

D e w a n t i

My lovely sons:

Alifan Cahyana & Alifan Cahyadi

Bagas Alqadri

Table of Contents

Abstract	i
Acknowledgements	ii
Dedication	iii
Table of Contents	iv
List of Tables	x
List of Figures	xii

Chapter 1 Reconciling Two Worlds in Small House

1.1 The Argument for Inquiry	3
1.1.1 Voices from the <i>Kampung</i>	3
1.1.2 From Home-domain to Home-business	5
1.1.3 House Space as a Resource	7
1.1.4 How should HBE be Understood?	7
1.2 Research Questions and Objectives	8
1.2.1 Research Questions	8
1.2.2 Research Objectives	9
1.3 Contribution to Theory and Practice	9
1.4 The Construction of the Study	10
1.4.1 Research Location	10
1.4.2 Methodology	11
1.4.3 The Structure of the Document	12

Chapter 2 Theories and Literature Review

2.1 Introduction	17
2.2 Definitions and Classifications	18
2.2.1 Definition: <i>Home, House, and Housing</i>	18
2.2.2 Definitions and Basic Characteristics of an HBE	20
2.2.3 Place and Space: <i>Problems of Definition and Conceptualisation</i>	24
2.2.4 Distinction between Density and Crowding	25
2.2.5 Adaptation, Coping, and Adjustment	26

2.3 Historical Perspectives on HBE	27
2.3.1 The Industrial Revolution to the Present Day: <i>the Historical Perspective</i>	27
2.3.2 Think Solutions not Problems	30
2.3.3 Three Decades of HBE	32
2.4 HBE in Six Perspectives	34
2.4.1 Economic Perspective	35
2.4.2 Social Perspective	37
2.4.3 Urban Planning and Management Perspective	38
2.4.4 Housing Policy Perspective	39
2.4.5 Environmental Effects Perspective	40
2.4.6 Spatial Implications Perspective	41
2.5 Asset Accumulation and Sustainable Urban Livelihoods	44
2.5.1 Coping, Survival, and Livelihood Strategies	44
2.5.2 Sustainable Livelihood in Urban Context: <i>the Role of HBE</i>	46
2.5.3 Access to Capital Assets: <i>Assets Accumulation</i>	48
2.6 The Production Space and Adaptation Behaviour	52
2.6.1 Perspective on Space: <i>a Central Theme</i>	52
2.6.2 Human Behaviour and the Home Environment	54
2.6.3 Adaptation Strategies	56
2.6.4 Adaptation and Privacy Regulation	59
2.6.5 Spatial Organisation	62
2.6.6 System of Activities and Settings	64
2.7 The Direction of the Study	67

Chapter 3

Methodology and Research Methods

3.1 Research Methodology	72
3.1.1 Paradigm: Positivistic or Naturalistic?	72
3.1.2 Quantitative and Qualitative Research: <i>Mixed Method Approaches</i>	74
3.1.3 The Case Study as a Comprehensive Research Strategy	75
3.2 Scope and Research Location	77
3.3 Research Methods	78
3.3.1 The Temporal Aspect of the Study	78
3.3.2 Observation of Space	81
3.3.3 Observation of Activities and Movements	85
3.3.4 The Interview	91
3.3.5 Focus Group Discussion (FGD)	93
3.3.6 The Census	95
3.3.7 The Questionnaire	96
3.3.8 Documentary Resources as Secondary Data	97

3.4 Analysis and Interpretation Methods	98
3.4.1 Analysis as an Iterative Process	98
3.4.2 Analysing and Interpreting Qualitative Data	99
3.5 Reflection and Positionality on the Research Process	100
3.6 Conclusion	103

Chapter 4

Kampung Prawirodirjan: Research Setting

4.1 The Physical and Social Dimension of <i>Kampung</i>: Introduction	106
4.2 Yogyakarta City in the Indonesian Context	108
4.2.1 Indonesia: <i>Unity in Diversity and Problems</i>	108
4.2.2 Yogyakarta Special Regional Province: <i>Centre of Javanese Culture</i>	111
4.2.3 Yogyakarta City: <i>A Traditional City with Traditional Economic Activities</i>	113
a. The History and Morphology of the City	113
b. Geography and Demography	117
4.3 Kampung Prawirodirjan as Research Setting	120
4.3.1 <i>Kampung</i> at the City Centre but in the Marginal Area: <i>an Overview</i>	121
4.3.2 Kampung Prawirodirjan: <i>a Profile</i>	122
a. Physical Profile	122
b. Population and Activities Profile	127
c. Social Profile	131
4.4 Conclusion	134

Chapter 5

Capital Accumulation in Home Based Enterprise

5.1 Introduction: <i>From Home-Domain to Home-Business</i>	137
5.2 Reasons for Operating an HBE Business	138
5.2.1 Economic Factors	139
5.2.2 Having Relevant Skills	140
5.2.3 Having Space in the House	141
5.2.4 Inherited Business	142
5.2.5 Having Similar Businesses	143
5.2.6 Land and Housing Tenure	144
5.2.7 Transport Cost Reduction	144

5.3 Characteristics of HBE	145
5.3.1 Economic Characteristics	145
a. Income and Expenditure Profile	146
b. Catchment Area of HBE	150
c. The Customers	152
d. The Source of Capital	153
5.3.2 Social Characteristics	155
a. Gender Issues	155
b. Workers	158
c. Business Start-ups and Composition	160
d. Working Day	161
5.3.3 Place and Space Characteristics	163
a. House and Plot Size	164
b. Rooms	164
c. House Construction and Infrastructure	167
d. Housing Quality	169
e. Housing Tenure	171
5.4 Market Mechanisms and Symbiotic Relationships	173
5.5 HBE Core Characteristics as an Aspect of Capital Accumulation	174
5.5.1 Business Activities as a Livelihood: <i>unique business</i>	174
5.5.2 Family as Human and Social Capital	177
5.5.3 Home: <i>Availability of Space</i>	179
5.6 Conclusion	181

Chapter 6

Household's Adaptation Strategies in the Use of Space

6.1. Introduction	186
6.2. Adaptation Strategies by Arranging Interior Space	187
6.2.1. Horizontal Arrangement of Furniture as an Enclosed Space	188
6.2.2. Shared Furniture both for Domestic and Working Activities	191
6.2.3. Moving Domestic Furniture to Create a Larger Working Space	193
6.2.4. Vertical Placement of Furniture to Optimise Space	194
6.2.5. Minimal Arrangement of Interior Space	196
6.2.6. Partitioning Space	199
a. Existing Partition	199
b. Permanent New Partition	202
c. Non-Permanent New Partition	202
<i>c.1. Solid Partitions</i>	203
<i>c.2. Transparent Partitions</i>	204
<i>c.3. Moveable Partitions</i>	205

6.3. Adaptation Strategies by Making More Space	206
6.3.1. Horizontal Housing Extension	207
a. Adjacent Space	207
b. Separate Space	210
6.3.2 Vertical Housing Extension	211
a. Construction of the First Floor	212
b. Mezzanine	216
6.3.3 Encroachment on Public Space	218
a. Permanent Encroachment on Public Space	218
b. Temporary Encroachment on Public Space	221
6.4. Adaptation Strategies by Managing Activities and Movements	226
6.4.1. Different Activities in the Same Space at Different Time	227
6.4.2. Activities Follow Sunlight and Shade	230
6.4.3. Sitting and Waiting in the Guest Room: <i>Strategic Position</i>	233
6.4.4. Blocking and Marking the Space	237
6.4.5. Facilitating Social Interaction	241
6.4.6. Shifting the Essence of Home	243
6.5. Conclusion: <i>Three Adaptation Strategies</i>	245

Chapter 7

Conclusion: Constructing Spatial Capital

7.1 Introduction	251
7.2 Lessons Learned from HBEs in Urban <i>Kampung</i>	251
7.2.1 Positive Issues	251
a. Poverty Alleviation	252
b. Housing Improvement	253
c. Increasing Invisible Workforce	255
d. Freedom of Business Activities	255
e. Local Service of Neighbourhoods	256
7.2.2 Negative Issues	257
a. Infrastructure and Housing Conditions	257
b. Crowding	258
c. Reducing Privacy	260
d. Business Location: <i>Choices and Constraints</i>	262
7.3 Spatial Capital: <i>Reflecting on the Research Objectives</i>	263
7.3.1 HBEs as Sustainable Urban Livelihoods	264
7.3.2 Accommodating Two Functions through Two Patterns	268
7.3.3 From Single Function to Dual Functions	270

7.4 Implications of Findings and Further Research	271
7.4.1 Implication for the Urban Livelihoods Concept	271
7.4.2 Implication for Berry's Theory	272
7.4.3 Towards Future Housing Design and Policy	273
7.4.4 Suggestions for Further Research	275
7.5 Concluding Thoughts	275
References	277

Appendices

Appendix 1: Annotated Plan of Space Use: Case No.2 and No.7	296
Appendix 2: Notes of Interview (in Bahasa Indonesia): Case No.13	298
Appendix 3: Field Notes (in Bahasa Indonesia): Case No.2	299
Appendix 4: Field Notes (in English): Case No.4 and 20	300
Appendix 5: Transcript of FGD with Operators (Extract)	302
Appendix 6: Transcript of FGD with Local Government Staff (Extract)	304
Appendix 7: Questionnaire Sheet (in Bahasa Indonesia)	305
Appendix 8: Questionnaire Sheet (in English)	311

List of Tables

Chapter 2

Table 2.1: Five typologies of Assets	49
--	----

Chapter 3

Table 3.1: Temporal aspect of field visits	79
Table 3.2: Details of the 21 HBE cases	81

Chapter 4

Table 4.1: Urban and rural population growth in Indonesia, 1990-2025.....	109
Table 4.2: Occupation of the Yogyakarta City population, 2008	120
Table 4.3: Highest level of education in Kampung Prawirodirjan.....	128
Table 4.4: Resident occupations in Kampung Prawirodirjan	128
Table 4.5: Variation of HBE based on the three types in Kampung Prawirodirjan....	130

Chapter 5

Table 5.1: Business operation reasons by type of HBE	138
Table 5.2: HBE income and non-HBE Income	147
Table 5.3: Characteristics of income and expenditure by type of HBE	147
Table 5.4: Comparison between total household income in Yogyakarta and Surabaya	149
Table 5.5: Comparison between HBE income and non-HBE income	149
Table 5.6: Comparison between HBE income, household income and Regional Minimum Wage by type of HBE	150
Table 5.7: Catchment area of customers by type of HBE	151
Table 5.8: Catchment area of HBE customers for different HBE income groups	152
Table 5.9: Comparison between HBE income in Surabaya and in Yogyakarta by mainly local customers or non-local customers	152
Table 5.10: The number of customers based on catchment area by type of HBE	153
Table 5.11: Source of initial capital by type of HBE	153
Table 5.12: Relationship between HBE and household income, business start-up, length of stay in the kampung and source of initial capital	154
Table 5.13: Gender of workers and operator by type of HBE	156
Table 5.14: Distribution of number of workers in HBEs by gender	156
Table 5.15: Percentage of workers from outside the household by type of HBE	158

Table 5.16: Distribution of number of workers from outside the household in HBEs by type	159
Table 5.17: Comparison of income and expenditure between HBEs with smaller and larger workforce	159
Table 5.18: Length of time running the HBE and length of stay in <i>kampung</i>	161
Table 5.19: Working day by type of HBE	162
Table 5.20: House and plot size by type of HBE	164
Table 5.21: Business space and domestic space by type of HBE	165
Table 5.22: Business space per worker and operator by type of HBE	165
Table 5.23: Habitable space by type of HBE	167
Table 5.24: House construction and infrastructure by housing tenure	168
Table 5.25: Alteration of the dwelling by housing construction	168
Table 5.26: Housing quality	170
Table 5.27: Housing quality by type of HBE	171
Table 5.28: Housing tenure by type of HBE	172
Table 5.29: Alteration of the dwelling by housing tenure	172

List of Figures

Chapter 1

Figure 1.1: Research Location: Kampung Prawirodirjan	11
--	----

Chapter 2

Figure 2.1: The core of HBE	22
Figure 2.2: The assets pentagon of urban livelihood	50
Figure 2.3: The home as a transactional unity	55
Figure 2.4: Eclectic model theoretical perspectives on coping and adaptation	58
Figure 2.5: 'Dismantling' the concept of culture	64
Figure 2.6: 'Dismantling' activities	65

Chapter 3

Figure 3.1: An example of the case notes made for the spatial observations - Case No.2.....	84
Figure 3.2: An example of the case notes made for the spatial observations - Case No.5.....	85
Figure 3.3: Portrait of a place	86
Figure 3.4: An example of observation of activities and movements from 6 am until 10 am – Case No. 2	88
Figure 3.5: An example of observation of activities and movements from 10 am until 2 pm – Case No. 2	89
Figure 3.6: An example of observation of activities and movements from 2 pm until 8 pm – Case No. 2	90
Figure 3.7: Focus Group Discussions	94
Figure 3.8: Distribution of dwelling with an HBE in Kampung Prawirodirjan	96
Figure 3.9: Analysis as an iterative process	99

Chapter 4

Figure 4.1: Population growth in Indonesia, 1990-2025	109
Figure 4.2: Yogyakarta Special Regional Province with its five regencies	112
Figure 4.3: Examples of artisan industries in Yogyakarta Province	113
Figure 4.4: The 'Spirit Line' from Krapyak Monument through to Merapi Mountain	115
Figure 4.5: The development of Yogyakarta City from 1756 to 1920	116

Figure 4.6: The built-up area around the city centre of Yogyakarta City	117
Figure 4.7: Yogyakarta City, showing its 14 sub-districts (<i>kecamatan</i>)	118
Figure 4.8: Population in Yogyakarta City 1999 – 2008	119
Figure 4.9: The position of Kampung Prawirodirjan in the city centre	122
Figure 4.10: The existing land use in Kampung Prawirodirjan	124
Figure 4.11: An example of public toilets in the <i>kampung</i>	125
Figure 4.12: The width of roads and alleys in Kampung Prawirodirjan	126
Figure 4.13: Examples of HBEs in Kampung Prawirodirjan	129
Figure 4.14: The outdoor communal meeting places in a front-yard or alley	131

Chapter 5

Figure 5.1: The process of cooking meatballs performed by men	157
Figure 5.2: Four examples of HBE in Yogyakarta <i>Kampung</i>	175
Figure 5.3: Four examples of female operators in HBEs.....	177
Figure 5.4: An example of two cases of HBE using a small space	179
Figure 5.5: An example of two cases of HBE use large space	179
Figure 5.6: An example of two cases of HBE using the public space	180

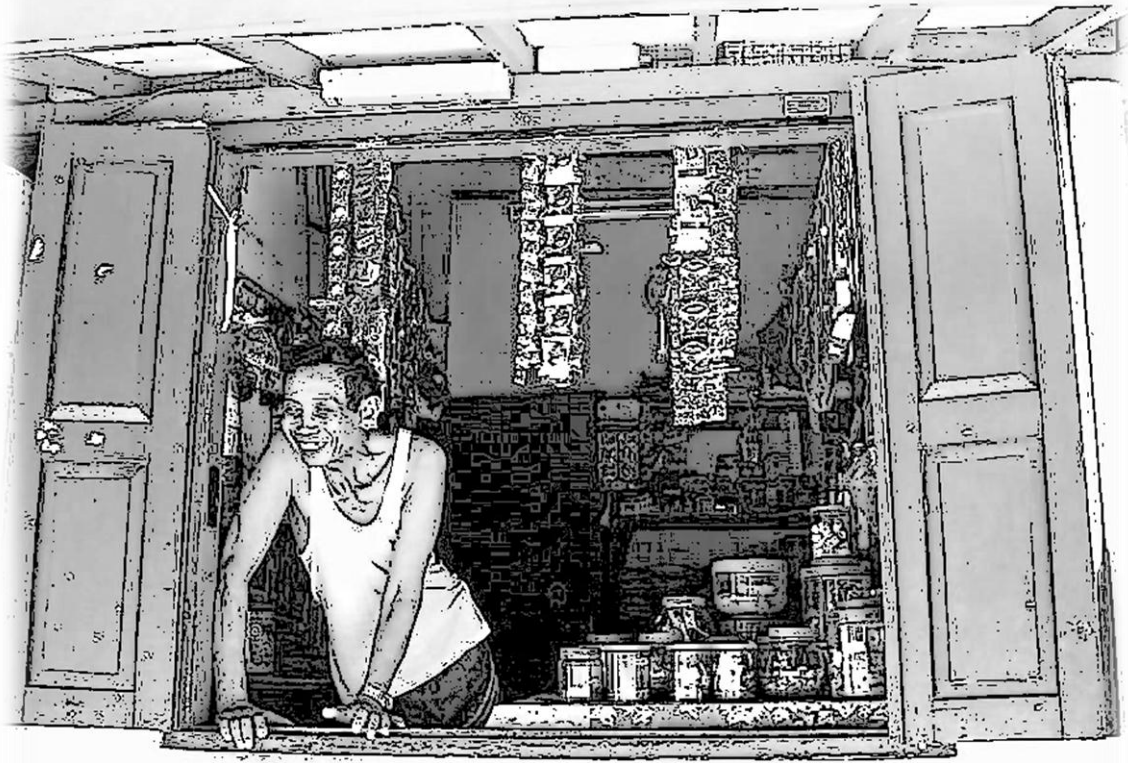
Chapter 6

Figure 6.1: An example of horizontal arrangement of furniture - Case No.16.....	189
Figure 6.2: An example of horizontal arrangement of furniture -- Case No.18	191
Figure 6.3: An example of shared furniture in the beauty salon - Case No.17	192
Figure 6.4: Moving the guest chairs onto the veranda - Case No.13	194
Figure 6.5: Vertical placement of furniture - Case Nos. 2, 4, 8, and 15.....	195
Figure 6.6: An example of minimal interior space arrangement - Case No.7	198
Figure 6.7: Variations of partitioning space in HBEs.....	199
Figure 6.8: An example of partitioning the space with the existing wall-Case No.1..	200
Figure 6.9: An example of partitioning the space with the existing wall-Case No.6..	201
Figure 6.10: An example of a new partition – Case No.12	202
Figure 6.11: An example of plywood as a non-permanent solid partition-Case No.19...	203
Figure 6.12: An example of a transparent partition – Case No.15.....	204
Figure 6.13: An example of a movable partition – Case No.21	205
Figure 6.14: Adaptation strategies by making more space conducted by the households of HBE	207
Figure 6.15: An example of adjacent space in front of the main house-Case No.3	208
Figure 6.16: An example of adjacent space in the side yard and at the front of the main house – Case No.8.....	209
Figure 6.17: An example of separate space – Case No.12	211
Figure 6.18: An example of vertical housing extension (under-construction) – Case No.4	213
Figure 6.19: Process of developing of the first floor as a vertical housing extension – Case No.8.....	214
Figure 6.20: An example of a vertical housing extension – Case No.2	215

Figure 6.21: An example of a mezzanine for a worker's sleeping space-Case No.5...	217
Figure 6.22: Two examples of permanent encroachment into public space	219
Figure 6.23: Three examples of the process of encroachment into public space	220
Figure 6.24: An example of a temporary encroachment into public space-Case No.12 .	222
Figure 6.25: An example of a temporary encroachment into public space-Case No.4 ...	222
Figure 6.26: An example of a temporary encroachment into public space-Case No.6....	224
Figure 6.27: An example of a temporary encroachment into public space for an 'arisan' meeting - Case No.1	225
Figure 6.28: An example of different activities taking place in the same space at different times - Case No.20	228
Figure 6.29: An example of different activities taking place in the same space at different time – Case No.4.....	229
Figure 6.30: An example of the activities following the shade–Case No.4.....	231
Figure 6.31: An example of the activities that follow the sunlight – Case No.6	232
Figure 6.32: An example of a strategic position – Case No.1	234
Figure 6.33: Two examples of a strategic position – Case No.2 and No.15.....	235
Figure 6.34: The central position of the guest room in the spatial organisation in the <i>kampung</i> house	236
Figure 6.35: Blocking space with invisible barrier	237
Figure 6.36: Blocking space by an operator – Case No.14	238
Figure 6.37: The movement of a neighbour as customer, passing through the kitchen – Case No.1	239
Figure 6.38: Examples of blocking and marking the space with half-door and removing shoes and sandals – Case No. 15 and No. 16	240
Figure 6.39: Two examples of an HBE as a place for facilitating social interaction...	242
Figure 6.40: Examples of 'portrait of place' made by the movements of actors.....	245

Chapter 7

Figure 7.1: Two cases of HBE indicating housing improvement	254
Figure 7.2: Two examples of dirty walls in dwelling with HBE	258
Figure 7.3: Two examples of HBE which sell inflammable goods.....	258
Figure 7.4: Crowding in HBEs	259
Figure 7.5: Soft intrusion in HBEs	261
Figure 7.6: Hard intrusion in HBEs	261
Figure 7.7: Two examples of the same type of HBE showing their proximity of location.....	262
Figure 7.8: Relationship between the core aspect triangle of HBE and the assets pentagon of urban livelihood	267
Figure 7.9: The concept of intensive and extensive use of space in HBEs	268



1

Chapter 1

Reconciling Two Worlds in Small House

1.1 The Argument for Inquiry	3
1.1.1 Voices from the <i>Kampung</i>	3
1.1.2 From Home-domain to Home-business	5
1.1.3 House Space as a Resource	7
1.1.4 How should HBE be Understood?	7
1.2 Research Questions and Objectives	8
1.2.1 Research Questions	8
1.2.2 Research Objectives	9
1.3 Contribution to Theory and Practice	9
1.4 The Construction of the Study	10
1.4.1 Research Location	10
1.4.2 Methodology	11
1.4.3 The Structure of the Document	12

Chapter 1

Reconciling Two Worlds in Small House

1.1 The Argument for Inquiry

1.1.1 Voices from the *Kampung*

I really wanted a house not for business. I want my house like a normal house like everyone else, so if there is any guest or arisan¹ at my house, I could use my house so my house looks clean although small. But how? Hmm [...] Actually, ten years ago, my house was still clean because I just cook at home and then sold to individual customers in this kampung. But now, I'm old, so I sell vegetable dishes at home. But you know... Mas², I wanted the house so clean. This is my opinion. I do not know another opinion.

(Bu Sum, 54 years old, *Nasi-kucing*³ seller, Focus Group Discussion, 20 October 2001)

Actually I feel shy, because my house is small and for business activities also. I think the house is just for the family's daily activities, watching television, eating together with the family, and for the rest of the day and night. But, you know that I do not have a regular job while I have to support my children and my wife. So, we produce these frames and small drawing tables. But I have a plan to create an upper floor for the bedroom, so in the future the ground floor is for working activities.

(Pak Pramono, 37 years old, producer of small tables and picture frames, interviews, 8 June 2003)

The quotes above indicate that the house is considered to be a place for domestic activities. Households conduct business activities at home as means of generating a livelihood, but it seems that they choose home as their workplace largely out of necessity. The phenomenon of the house as a place for the business activities conducted by many low income households is

-
- 1 Arisan is common term in urban *kampung* for a monthly (sometimes weekly) social gathering of group members of the neighbourhood, who chip in money to be won in turns through a lucky draw. Each member of the group deposits a fixed amount of money into a pot, then a name is drawn and that winner takes home the cash. After having won, the winner's name is removed from the pot until each member has won and the cycle is complete.
 - 2 Mas (javanese) is a polite term of address for men (in this case the researcher). For women, the equivalent term is Mbak. Bu is an abbreviation of Ibu, meaning Mrs. (a title of respect to a married woman). Another title is Pak, an abbreviation of Bapak, meaning Mr.
 - 3 Nasi kucing is a combination of rice and vegetable dishes, served together but in a small portion.

found in many urban settlements in developing countries, including numerous *kampung* in Indonesia. The phenomenon is widely referred to as **Home-Based Enterprises (HBEs)**. Many scholars have observed that the house may not only be a place for domestic activities but can also function as a location for income generation, through business activity (Tipple, 2004; Gough *et al.*, 2003; Kellett and Tipple, 2003; Mahmud, 2003; Gough and Kellett, 2001; Kellett and Bishop, 2000; Sinai, 1998). Nevertheless, the voices highlighted in the quotes above reflect two sides of occupants' needs and desires. On the one hand they need money to live, and on the other hand there is the desire to live in houses that are clean and private. Although the physical boundary of privacy does not necessarily coincide with the wall of the dwelling, it could be articulated in the difference between downstairs and upstairs.

The phenomenon of HBEs is also found among many low income households in the *kampung* of Yogyakarta, but in general the space within the house is small, which either directly or indirectly implies a disruption in domestic activities. This means that people need to adjust the conditions of the home environment to changes caused by the existence of the supplementary activities. This adjustment is called adaptation, and refers to the actions, processes, or outcomes in the system aimed at coping with changing conditions. Berry (1980) formulates three adaptation strategies for coping with changing environmental conditions: adjustment, reaction, or withdrawal. It is assumed that household members must adapt (to) the use of space, and thus, this study will highlight the variations in their adaptation strategies, which are influenced by many factors including their motivations and decisions

The study of strategies for the adaptation of space usage by households has not been much elaborated upon by scholars concerned with HBE. Although there are some early studies of this issue by Bulos and Chaker (1993), Kellett and Bishop (2000) and Tipple and Kellett (2003), it still needs to be explored further and in greater detail. Bulos and Chaker, for example, have examined the spatial configuration of six cases of HBE in the UK. They point out that most HBE operators attempt to achieve a high level of physical and social segregation, while others would prefer spatial arrangements that maintain social relationships with others. This is somewhat different from the analysis of Kellett and Bishop (2000). They emphasise the central issues concerning the social nature of space in the case of HBE and how the link between space and time is regulated by the operator. The conclusion is that households are managing the complex lines and boundaries between reproductive and productive activities by continuously negotiating and re-negotiating relationships and boundaries between themselves. Tipple and Kellett (2003) further elaborate on the spatial

implications of HBE, especially in very tight spaces. They analyse the configuration space, sharing space and separation, and extending and improving space. They conclude that HBE activities that operate in smaller spaces have considerable consequences for the use of domestic space.

1.1.2 From Home-domain to Home-business

The home is that spatially localised, temporally defined, significant and autonomous physical frame and conceptual system for the ordering, transformation and interpretation of the physical and abstract aspects of domestic daily life at several simultaneous spatio-temporal scales, normally activated by the connection to a person or community such as a nuclear family.

(Benjamin, 1995: 299)

Home evokes a wide range of divergent images and concepts which reflect its multidimensional nature. The meanings and uses of home, [...] are not only complex and elusive, but they vary from person to person, between social groups in the same society, across cultures and during the course of time. [...] A housing unit is a human artefact which defines and delimits space for the members of a household. It provides shelter and protection for domestic activities. [...] One purpose of the design of each dwelling unit is to distinguish between public and private domains. These spatial relations express the administrative, cultural judicial and socio-political rights of the residents, visitor, neighbours and strangers.

(Lawrence, 1993a: 73)

The two quotations above delineate two important points that need to be observed about home. The first is that home is a place that provides protection for domestic activities; and the second is that home physically distinguishes the public and private spheres, expressed in various forms. The statement about home as a place for domestic activities is one important point that underlies the reason for conducting this research. I believe that home as a place for domestic activity has a universal nature. This is motivated and reinforced by statements from many scholars who have attempted to understand the home in different societies. Both Western and non-Western societies have a similar conception of the home as the domestic arena (see, for example, Saunders and Williams, 1988; Hareven, 1991; Wiryomartono, 1998; Cooper-Marcus, 1995; Rybczynski, 1988; Budihardjo, 1998; Wise, 2000). Furthermore, Rybczynski (1988: 75) emphasises that “[...] domesticity is to describe a set of felt emotions, not a single attribute. Domesticity has to do with family, intimacy, and a devotion to the home.” In addition, Kellett and Moore (2003: 127) pointed out that “home is difficult to define as it has

many attributes and levels of meaning [...] at one level it is concerned with the domestic spaces and activities of everyday life." Family, intimacy, domestic spaces, and the activities everyday of life reflect key settings for social reproduction. They imply the transmission of resource control from one generation to the next, so that the role of mothers in particular, either directly or indirectly, is very important. This is because they maintain primary responsibility for the smooth running of domestic activities and for the reproduction of domestic order. In this regard, we nevertheless need to bear in mind that it is not the monopoly of the women, or in other words, that domestic activity at home remains heavily gendered.

In many parts of the world, including Yogyakarta in Indonesia, home is not only a place for social reproduction but also a place for production. Business activity at home varies not only in terms of the scale of the business from an economic standpoint, but also varies in terms of the type and size of domestic space dedicated to it. With regard to the implications of such a use of space, it should be noted that the house is a private area (King, 2004; Lawrence, 1990; Morley, 2000; Tognoli, 1987). Thus, the existence of productive activities in the home implies a shift in the meaning of home. This is also reinforced by Ahrentzen (1997: 79) who argues that *"the myth of the privatised home is belied by the fact that the residence has always been and continues to be a space of reproduction and production."* This means that there are broader implications where the home is not only a private sphere but has shifted into a 'private-public sphere'. The consequence of this shift is that the household requires an act of re-configuring spatial boundaries between domestic and business activities, as well as rearranging the conceptual boundaries between production and reproduction. Furthermore, Felstead and Jewson remind us that:

people who work from home or in the same grounds and buildings as home are less likely to experience the full impact of the conjunction of the social relations of production and reproduction in their lives (2000: 20).

Thus, on the one hand, the house as a production area may generate income, but on the other hand, an effect of crowding may arise (both of people and merchandise) and a reduction in privacy. This is one effect of the shift from the home-domain to the home-business. For this reason, this study emphasises the exploration of the variation of adaptation strategies used by households to anticipate the conflicts that occur between households and others, between domestic and business activities.

1.1.3 House Space as a Resource

Focusing on the relationship between asset accumulation and income poverty, [...] households make crucial choices in managing complex asset portfolios at different stages of their life cycles. Housing is the first-priority asset, and while it does not necessarily get households out of poverty, adequate housing is generally a necessary precondition for the accumulation of other assets.

(Moser and Felton, 2007: 41)

The quotation above is the conclusion of a paper in which the authors outline their belief that the house is an important resource for urban households. This is reaffirmed by Moser (2007b: 6), who has been conducting research for over 30 years in Guayaquil, and states that "*housing is clearly of great importance to poor families*", as it is used for both reproductive and productive purposes in addition to shelter. Similarly, de Soto (2000) argued for the role and potential of urban housing as an economic asset, noting its ability to provide this complementary role without reducing its functions as a dwelling. HBE activities are conducted by households who use the existing home as base, without considerations regarding the size, type, tenure, performance and condition of the house. It has already been mentioned above that HBE activity at home to generate income forms part of households' survival strategies. Therefore, the house is a resource additional to the household's human, financial, and social resources, and is a tangible asset (Chambers, 1995); at issue is the household's strategy for retaining 'access to' and 'control over' their assets. Furthermore, it should be investigated how households that run businesses at home in the *kampung* use their assets both in their daily lives and as a survival strategy.

1.1.4 How should HBE be Understood?

There has been more than 30 years of research about HBEs conducted by many researchers from different disciplines, at various research sites, with different research foci, and various research methods. However, the 'voice from the *kampung*' and an explanation of the shifting paradigm of home from 'private to public-private'; and from 'reproduction to reproduction-production', implies that the business activities carried on within a small house may have implications for its spatial arrangement and the actions required by household members. This is confirmed also by a review of discussions of the home space as a resource for the urban poor. Therefore, it is clear that there is a need for a comprehensive understanding of the change in configuration of space usage from a single function into dual functions; from the

use of space for domestic activities only into a mixture of activities both for domestic and business purposes. It is also clear that the HBE transforms the essence of the home and the further implication is a change to the behaviour of household members, due to the reduction in privacy.

To cope with privacy reduction or to reduce the interference that might arise or to want a house to look neat and clean, household members must perform necessary actions as a process of adaptation. The question is how households adapt to a dual function in their homes, where the reduction of privacy and comfort as well as the emergence of crowding has clearly occurred. Humans are able to adapt both behaviourally and physiologically to various environments, not only the spaces in their homes but also the surrounding areas. How to understand these phenomena? This becomes a major question for the researcher and to the point of departure for our investigation. Since 1992 my observations about HBEs have indicated that there were not only many variations in the types of business but also variations in many other respects, for example, a variation of the use of space, labour, operating time, or in the size of the home. The wide range of these variations also generates a wide range of household strategies for anticipating or responding to the negative impact of business activities at home, especially for those who have a small house. For this reason, various strategies of households in terms of adapting to the mixed use of space need to be studied.

1.2 Research Questions and Objectives

1.2.1 Research Questions

Based on the above arguments, the main research question is **what are the adaptation strategies undertaken by households who carry out business activities at home in addressing the mixed use of space?** These strategies are not only for resolving conflicts about spaces and activities that occur as an impact of running a business at home, but also how they harmonise the dual use of space for both domestic and business activities over time. This means treating space as a resource to be exploited by households for maximum benefit, in particular to be able to generate income for daily life and to improve their quality of life, which is also supported by other resources such as their own financial, human and social capital. The main question is explored through detailed research sub questions, which in principle consist of the two main parts of the research objectives.

1.2.2 Research Objectives

Two research objectives followed by detailed research questions can be formulated as follows:

Research Objective 1: To examine the relationship between the characteristics of HBEs and other assets in capital accumulation within the urban livelihoods concept.

Detailed Research Questions 1:

- a. What are the main reasons for the households to do business at home, rather than in other places apart from home?
- b. What are the economic, social and physical (place and space) characteristics of the HBE?
- c. How do households engage with market mechanisms and symbiotic relationships in the context of HBE in the *kampung*?
- d. What is the relationship between the core of HBE and the components of capital accumulation?

Research Objective 2: To explore adaptation strategies by households, in both physical and behavioural aspects, in order to anticipate or respond to the impact of business activities at home.

Detailed Research Questions 2:

- a. What strategies do households who have business activities in the home use to adapt their physical environment?
- b. How do the activities and movements of the operator of the HBE reflect their household's adaptation strategies in terms of behaviour geared at dealing with the presence of the business in the house?
- c. Which behaviours of operators and other actors can provide more understanding about the phenomenon of HBE?

1.3 Contribution to Theory and Practice

This research concerns the subject of HBE, with particular attention to the spatial aspects of running an HBE in a small-sized house. The small size of houses used for two different activities has implications for the process of adaptation adopted by households to reduce the disruption caused by business activities and to harmonise the use of space between different household members. Thus, it is hoped that insights that can inform theory will emerge from this study. Moser (2009) uses the livelihoods lens to argue that the holism of livelihoods

theory yields a better understanding of the lives of the poor. The sustainable livelihoods approach is a theory proposing that people exploit a range of capital assets as capital accumulation to achieve their livelihood objectives, with the ultimate aims of surviving and getting out of poverty. Four of the five capital assets are usually used by those who live in urban areas, that is, financial, human, social, and physical. Housing is the most important component of physical capital. Because space is an important aspect of housing, this thesis aims to contribute to enriching theory by exploring the use of space. The study will argue that space should be regarded a capital asset – that is, spatial capital.

A further contribution this study intends to make is directed towards housing design and housing policies, especially for low-income communities in the urban *kampung* in Indonesia. Over the course of several decades, the Government of Indonesia has implemented housing policies which tend to focus on the provision of housing more than effecting improvements to existing housing in urban areas. Nevertheless, the government has taken some steps, in terms of implementing the KIP (*Kampung* Improvement Programme), to help the poor who live in *kampung* in terms of a basic degree of housing infrastructure. This programme tends to use a top-down approach that does not include the participation of the community. At the same time, housing improvement through community participation is emphasised by the government. Therefore, this study seeks to fill the gap in supporting the inclusion of policy on housing improvement in urban *kampung* through HBEs. The intended contribution to the housing design has two directions: first, it will be for students of housing design or architecture in general; and second, for PERUMNAS (the National Housing Corporation) and private institutions/agencies who build public housing for low income people. Although this research is not directly oriented to the practice domain, the research findings will nevertheless be relevant to housing design and housing improvement, particularly in helping to formulate appropriate goals.

1.4 The Construction of the Study

1.4.1 Research Location

Households who run HBE activities are found in many urban settlements of developing countries including Kampung Prawirodirjan (Figure 1.1). This *kampung* is an old settlement in the city of Yogyakarta, located in the city centre, and is one of the city's higher density settlements, in terms of population and buildings. In addition, one out of three houses in the

settlement runs a business or HBE; however, the dimensions of houses here are generally small, and each is inhabited by numerous residents, who are mostly poor. Accordingly, this *kampung* was selected as the research location.

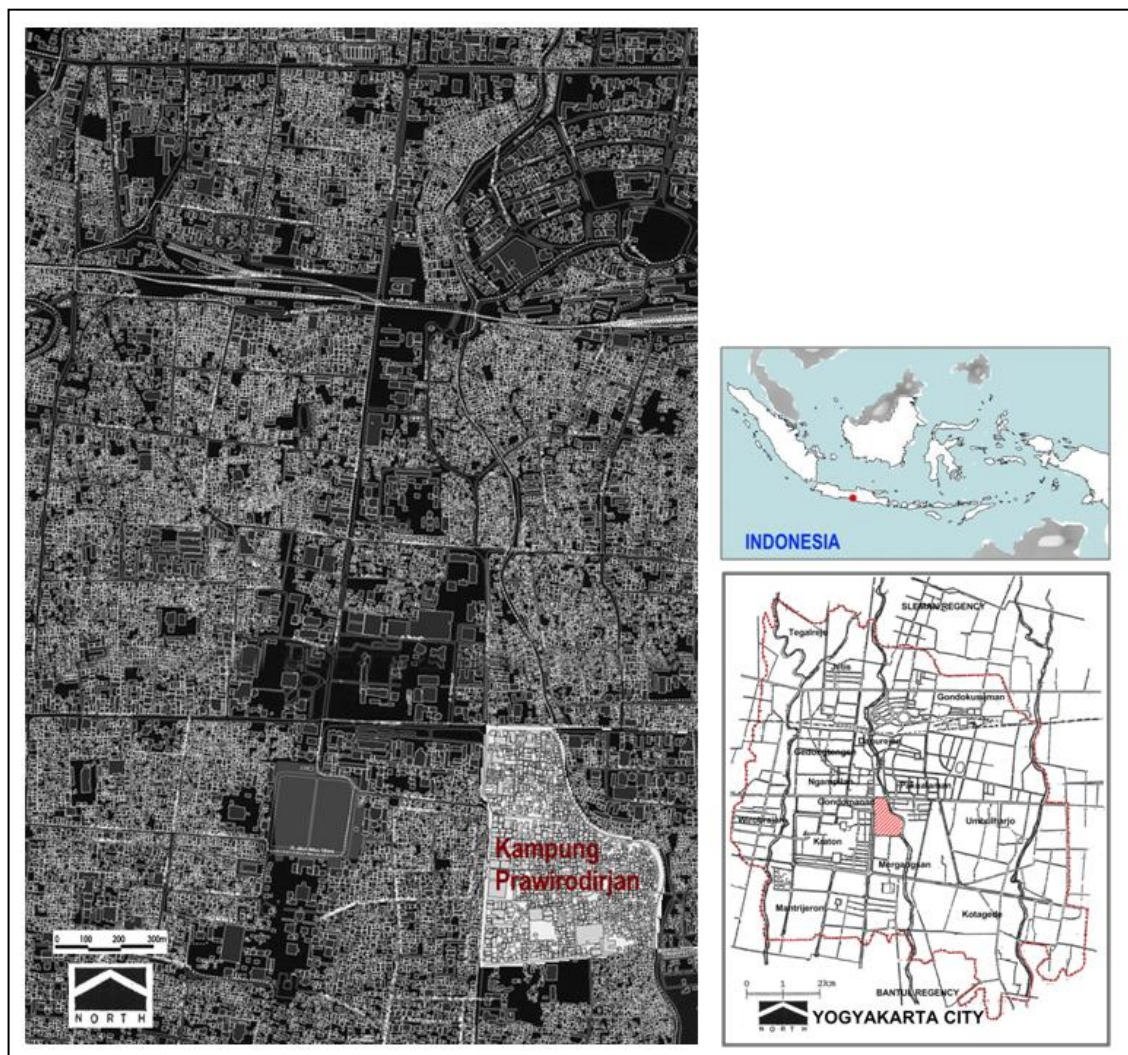


Figure 1.1: Research location: Kampung Prawirodirjan

1.4.2 Methodology

This study builds on earlier work with a quantitative methodology carried out for my master's thesis on HBE (Marsoyo, 1992). For the purpose of exploring households' mixed use of space, this study has utilised a qualitative approach and a multi-method strategy. Based on case selection criteria that focus on critical cases, extreme cases, typical cases, and varied cases (Patton, 1987) and employing a purposive sampling technique, 21 cases were identified for detailed analysis. The main analysis of this study is based on Berry's adaptation theory

(1980) and examines the arrangement of interior space, making more space, and managing activities and movements. This analysis was supported by qualitative data collection using observation and interview techniques. Two observation techniques have been adopted, that is, the observation of space and the observation of activities and movements (Farbstein and Kantrowitz, 1978; Sommer and Sommer, 1997; Zeisel, 2006). To investigate the phenomenon of space both synchronic and diachronic approaches were used in the analysis of space adaptation strategies. The synchronic approach emphasises viewing the phenomenon of space at a single point in time through physical observations using photographs and detailed plans of dwellings with HBEs. The diachronic approach, by contrast, captures many phenomena concerning the activities and movements of various actors over time. In addition, Focus Group Discussion (FGD), semi-structured interviews, questionnaire surveys, and secondary data were also collected to support the analysis.

1.4.3 The Structure of the Document

This thesis is organised into seven chapters. Following this introductory chapter, the second chapter (**Theories and Literature Review**) examines the literature on five core issues. The first section explores the definitions of several terms that will be used in the study such as: home, house and housing; density and crowding; definition and basic characteristics of HBE; place and space; and adaptation, coping and adjustment. The next section gives a historical perspective on HBEs, with an emphasis on three decades of research on this subject. The third section elaborates six aspects of HBEs (economic, social, planning and urban management, housing policy, environmental impact, and spatial implications). The following two sections are related to the context of this research. The first regards asset accumulation and sustainable urban livelihoods, and the content of this review relates to the analysis of the relationship between the characteristics of HBE and capital accumulation. The second concerns the space of production and adaptation behaviour, which is an important issue for review because it relates to the main analysis of this study. Spaces, activities and adaptation strategies are three important issues in this section. This chapter concludes by outlining the direction of the study.

The third chapter (**Methodology and Research Design**) explains the reasons for adopting a qualitative research approach for this study. The chapter begins with an explanation of research methodology which is then followed by an exploration of the scope of the research and its location. The next section describes the research methods, emphasising the way in

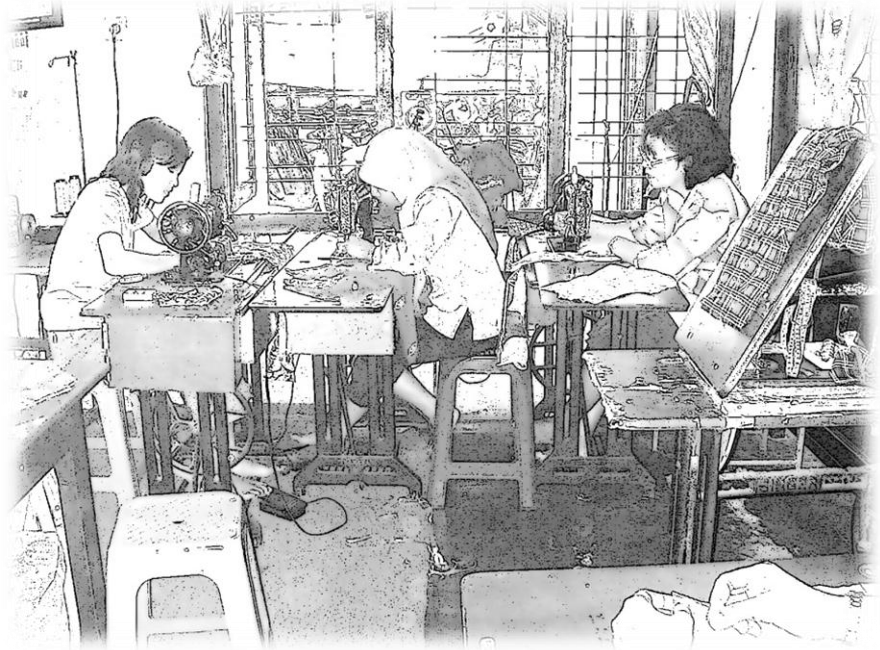
which the qualitative method is supported by the quantitative method in the study design. Thus, the approach to carrying out observations of space, movement and activities, as well as the interview method are first described, followed by an account of other methods used such as Focus Group Discussion (FGD), the census, the questionnaire, and analysis of documentary resources. After describing the research methods, the next part presents the analysis and interpretation methods used, describing the reason for adopting an iterative analysis process and the importance of interpreting the qualitative data collected. This is then followed by reflection on the research process and the researcher's positionality, which explores the researcher's views on what is being researched and explains the positioning of researcher with regard to the subject of the research.

Chapter four (**Kampung Prawirodirjan: Research Setting**) is mainly about Kampung Prawirodirjan within its context as part of Yogyakarta City, Indonesia, and it also discusses the situation of Kampung Prawirodirjan as the research setting. In this case, the *kampung* as a research setting refers to many phenomena, events, activities, or physical objects that are interconnected with each other to form a related system. Moreover, prior to drawing its conclusions, it describes the physical aspects, population, activities, and social profile of the settlement, in order to offer further insight into the nature of the Kampung Prawirodirjan.

The relationship between the characteristics of HBE and the important components of capital accumulation is discussed in Chapter 5: **Capital Accumulation in Home-Based Enterprise**. This chapter elaborates the first research objective. After the introductory section, the seven reasons for doing business in the home outlined by households are discussed, and the most frequent reasons given are highlighted. The next section concerns the characteristics of HBEs, which are grouped under three headings, that is, economic, social, and place and space characteristics. The purpose of describing these characteristics is to understand the phenomena of HBE within the *kampung*, which will eventually be linked to the issue of household assets. Before conducting an analysis of the relationship between the characteristics of HBEs and the components of capital accumulation, there is a section discussing the market mechanisms and symbiotic relationships that it had not been possible to explain in section on the characteristics of the HBE. The next section, forming an important part of this chapter, analyses the relationship between the characteristics of HBEs gathered under the three core headings and the components of capital accumulation.

Chapter 6 (**Household Adaptation Strategies in the Use of Space**) presents the main analysis section of the study and responds to the second research question. This analysis adopts the adaptation strategies theory of Berry (1980) and its three kinds of strategy: adaptation by adjustment, by reaction, and by withdrawal. In addition, by using two methods of observation, namely, the observation of space and the observation of activities and movements, this chapter conveys three main issues concerning adaptation strategy. The first main section describes the strategy of adaptation by adjustment, through arranging the interior space, based on the method of observation of space. Moving on to the adaptation strategy by reaction, also based on the spatial observations, the subsequent analysis shows how reactive adaptation strategies make more space, explaining not only housing extensions but also encroachments on public space. Prior to drawing its conclusions, the next section contains an analysis of adaptation strategies based on the observation of activities and movements. This section is important because it pinpoints new findings, such as a shift in the essence of the home caused by business activities. The conclusion of this chapter is that basically that there are three adaptation strategies undertaken by households in anticipating the existence of a business at home. These are the strategies of adaptation by: sharing, extending, and shifting.

The final chapter (**Constructing Spatial Capital**), presenting the conclusion and recommendations, does not merely summarise the study but also discusses the interrelationships between the themes identified, particularly from Chapters 5 and 6. This chapter contains three main sections: (a) the lessons to be learned from home businesses, (b) the essence of the findings, packaged in a reflection on the research objectives, and (c) the implications of the findings for theory and housing design and policy; followed by proposals for further research. This chapter concludes with some final reflections on the study by the researcher.



2

Chapter 2

Theories and Literature Review

2.1 Introduction	17
2.2 Definitions and Classifications	18
2.2.1 Definition: <i>Home, House, and Housing</i>	18
2.2.2 Definitions and Basic Characteristics of an HBE	20
2.2.3 Place and Space: <i>Problems of Definition and Conceptualisation</i>	24
2.2.4 Distinction between Density and Crowding	25
2.2.5 Adaptation, Coping, and Adjustment	26
2.3 Historical Perspectives on HBE	27
2.3.1 The Industrial Revolution to the Present Day: <i>the Historical Perspective</i>	27
2.3.2 Think Solutions not Problems	30
2.3.3 Three Decades of HBE	32
2.4 HBE in Six Perspectives	34
2.4.1 Economic Perspective	35
2.4.2 Social Perspective	37
2.4.3 Urban Planning and Management Perspective	38
2.4.4 Housing Policy Perspective	39
2.4.5 Environmental Effects Perspective	40
2.4.6 Spatial Implications Perspective	41
2.5 Asset Accumulation and Sustainable Urban Livelihoods	44
2.5.1 Coping, Survival, and Livelihood Strategies	44
2.5.2 Sustainable Livelihood in Urban Context: <i>the Role of HBE</i>	46
2.5.3 Access to Capital Assets: <i>Assets Accumulation</i>	48
2.6 The Production Space and Adaptation Behaviour	52
2.6.1 Perspective on Space: <i>a Central Theme</i>	52
2.6.2 Human Behaviour and the Home Environment	54
2.6.3 Adaptation Strategies	56
2.6.4 Adaptation and Privacy Regulation	59
2.6.5 Spatial Organisation	62
2.6.6 System of Activities and Settings.....	64
2.7 The Direction of the Study	67

Chapter 2

Theories and Literature Review

2.1 Introduction

Understanding and interpreting previous research is an important part of any research study because it fills existing gaps, extends prior research, reduces the duplication of research efforts, and supports the formulation of research problems. The use of theory and literature also stimulates a consideration of research approaches. This study employs an approach to mixed methods research with priority emphasis on qualitative analysis and supported by quantitative analysis (explained in Chapter 3). In qualitative research, the literature review helps to substantiate the research problems. However, existing literature, although it may furnish the basic assumptions of the research, cannot be used to prove a theory (Creswell, 2003). In addition, Ambert *et al.* argue that “*qualitative researchers may prefer not to be committed in advance to developing the theoretical implications of their work in any particular direction; they believe this should flow from the emergent data*” (1995: 884). Therefore, the main goal of literature review is to understand and clarify the domain and the subject of the research, and to delimit the boundaries of the theoretical framework. Nevertheless, these authors also stated that “*the emerging conceptual and theoretical framework must be clearly stated and linked to the existing empirical literature and, when appropriate, to existing theories*” (Ambert *et al.*, 1995: 884).

Before formulating the direction of the study, this chapter sets out to explain the necessary definitions and classifications relating to several terms used in the study analysis. This will be followed by an explanation of the history of HBE and continued with an examination of HBE in greater detail, through six perspectives that have been the subject of discussions by numerous scholars. These two sections aim to expand the understanding of the research topic. The subsequent two sections are related to the context of this research, focusing on asset accumulation and sustainable urban livelihoods; as well as on the production of space and adaptation behaviour.

2.2 Definitions and Classifications

Definition and classifications are two aspects that need to be reviewed in this section with the intention of *"rais[ing] awareness of the use of words in order to avoid sloppy and avoidable misuse, equivocal meaning and misinterpretation"* (Hart, 1998: 120). This section will serially explain the meaning of 'home, homes, and housing', and then will explore the idea of HBE as the subject of this study. Afterwards, it will explain the differences between 'places and spaces', and its relationship with the analysis of this study. The definition of 'adaptation, coping and adjustment' should also be elaborated and clearly related to the adaptation strategies that are utilised in this study.

2.2.1 Definition: *Home, House, and Housing*

The definition of home is not the same as the definition of house, and it also differs from the term housing. In various discussions in the literature, the home is often identified with the house, for instance Rapoport notes that the terms 'home' and 'house' are often used interchangeably (Rapoport, 1969, 1985, 1995). Even Lawrence (1995) indicates that there has been a lack of consensus amongst authors in the use of terminology including 'home', 'housing' and 'dwelling'. Therefore, these different terms will be discussed and compared to each other through the following subsection in order to improve their clarity.

Many researchers and authors have presented various definitions of the concept of home. Four decades ago, Allsopp (1974: 37) for example, argued that *"a home is a place in which to eat and sleep and have one's belongings with some degree of privacy."* A more complex concept revealed by Hayward (quoted in Case, 1996) embraces home as a physical structure, home as a territory, home as a locus in space, home as self and self-identity, and home as a social and cultural unit. In the case of home as self and self-identity, Cooper-Marcus (1995) frames a similar concept, but in terms of the house: 'house as a symbol of the self'. Based on the above reviews, they still conceive of the home in terms of a physical object, as a space or place, and do not distinguish between 'home' and 'house'. To clarify the distinction, Dovey (1985: 34) adduces the notion that *"a house is an object, a part of the environment; home is best conceived of as a kind of relationship between people and their environment."* Similarly, Stea (1995: 182) saw the *"house as a physical artefact and home as place identity and social construct."* This assertion was echoed in Rykwert. He states that *"house means shelter, and implies edges, walls, doors and roofs. Home does not require any building, even if a house always does"* (Rykwert, 1991: 54). More clearly, Gifford (2002: 236) argues that *"a house is a physical structure. Home*

is the rich set of evolving cultural, demographic, and psychological meanings we attach to that physical structure.” He even elaborates that home has six dimensions: haven, order, identity, connectedness, warmth, and physical suitability. Hence, it is clear that the definition of house is more focused on physical concepts, while home tends to imply non-physical qualities, whether cultural, social, psychological, or emotional.

Housing is often also interpreted by many authors as a ‘house’ or ‘houses’, even sometimes a ‘home’ (Lawrence, 1995, 1993b, 1987b; Clapham, 2005; Lane, 2007). Indeed, housing can be defined as a collection of residences in the form of houses to accommodate residents. However, ‘housing’ is a term that generally denotes economic values, the values of use, aesthetic values, or also demand and supply, for example housing economics, housing stock, housing market (demand and supply), and housing design. With regard to the latter, it has been expressed by Clapham (2005: 135-136) that:

house design is an important influence on the meanings that households attach to their houses. The appearance and layout of houses carry symbolic messages about the life lived within, both to household members and to visitors. These messages are related to wider social constructions of family life, gender roles and lifestyles.

On the other hand, Arias (1993: 1) argued that *“use gives meaning to housing, and at the same time meaning guides how housing is used. How housing is used and what it means to those who reside in it.”* Therefore, how housing is defined will be highly dependent on its users. However, Tipple *et al.* (1994: 429) pointed out that *“it is unfortunate that some of the most important concepts in housing are expressed in the English language in words which, when used in common speech, are all so closely interlinked that their precise meaning is easy to confuse.”* Turner offers a clear definition about housing as a noun or as a verb.

In English the word “housing” can be used as a noun or as a verb. When used as a noun, housing describes a commodity or product. The verb “to house” describes the process or activity of housing. While the idea of housing as a collective noun is obviously associated with housing activities, the word itself does not generally indicate this fact. On the other hand, the activity of housing is difficult to conceive without including the houses promoted, built, or used (Turner, 1972: 151).

A similar view of housing as a verb is expressed by Laquian (1983). He defines that housing is not for home life alone; it is also a place of production, a market place, an entertainment centre, financial institution and retreat. Rapoport states in more detail that *“housing has been approached as a product, as a commodity, as a process, as a place, as territory, as private domain, as a ‘behaviour setting’, or as the response to a set of purely functional requirements”* (Rapoport in Francescato, 1993: 37). As a result, ‘house’ and ‘housing’ can, indeed, hold the

same meaning, only the 'house' is singular and 'housing' is plural. In this case, both are interpreted as a physical residence, although this is sometimes still confused with the term 'home'. Meanwhile, 'home' is interpreted in the sense of occupation, intimacy and emotions.

A problem arises when the terms of house or home are applied in the Javanese terminology. Many terms are related to the house or home, for example Wiryomartono, who states regarding home and relationship with culture and daily life.

The Javanese experience gives us the idea of Kerasan and Pomah for the sense of home. The idea of Kerasan derives from 'Rasa' [...] the 'Rasa' in Javanese culture plays a very important role in the aspects of culture and daily life. 'Rasa' is well associated with the appreciation of aesthetic experience and social life [...]. 'Pomah' is the sign of being at home in the sense of having a mutual relationship with the place (1998: 8).

Thus *Pomah* is closer to home rather than house, while the house in Javanese is known as *Omah* or *Griyo*; although the *Omah* or *Griyo* term does not have exactly the same sense as the word house in English. The words *Omah* and *Griyo* have the same meaning denoting the physical context, but are used differently in the language. For example, the word *Griyo* refers to a higher level meaning, while the word *Omah* is used for a lower level one (Prijetomo, 1999). Furthermore, Prijetomo states that *Omah* or *Griyo* are defined as a residential building which is used for household activities, although he also explains that the definition could be more complex. In fact, it becomes complex when it is associated with Javanese social life.

2.2.2 Definitions and Basic Characteristics of an HBE

Family, work, and dwelling are the basic characteristics of an HBE. It is emphasised by Strassmann (1987: 122) that a "*home-based enterprise is not just a small business in a small structure but also a family operation in a dwelling.*" In addition, in urban economics, HBE is categorised as part of the informal sector (Peattie, 1980; Lipton, 1980; Sethuraman, 1985; Strassmann, 1986; Gilbert, 1988; Amin, 1991; Tipple, 1993, 2005b). Strassmann mentions not only the small business aspect of an HBE; he also indicates that it is at the core of the informal sector.

The HBE core of the informal sector not only has ease of entry, small scale, labour intensity, and unregulated competitiveness. Its strength lies in the ease of shifting labour, funds, equipment, materials, and space from making one product or service to another, from the market to the family and to dwelling expansion itself (Strassmann, 1986: 486).

This was confirmed also by a study performed by Tipple (2005b) in Cochabamba, New Delhi, Surabaya and Pretoria which states that *"HBEs are an accepted component in the informal sector in rapidly developing cities"* (p.611) and *"HBEs conform to many of the known characteristics of the informal sector"* (p.627). Therefore, HBE is obviously a part of the informal sector because the family deploys the available existing resources to operate the enterprise in the dwelling. In addition, Lipton (1980) argues that home businesses represent a unique sector that can counterbalance the power of the formal sector, since these businesses have such good survival rates.

Although most HBEs are small-scale enterprises operated only by family members, others may be on a larger scale in terms of space and special equipment and conducted by workers external to the family (Gough and Kellett, 2001; Onyebueke, 2001). The central point is that all such businesses are carried out in the dwelling unit and surrounding spaces. In addition, Lipton (1980) has stressed that HBEs are qualitatively different from other informal economic activity and are at the core of the informal sector due to two traits: the dwelling and the family. This is because the enterprise activity is centred on and also towards family. He called this a *'family mode of production'*, having three characteristics:

First, the family controls (usually by ownership, sometimes by hire) most of the land and capital to which its labour is applied. Second, most of the family's land, capital and labour are used in the family enterprise. Third, most of the labour applied to the enterprise is provided by the family (Lipton, 1980: 190-191).

Lipton (1980) describes HBE as *'extended fungibility'*, by which he means that the capacity of family deploys the available resources in both reproductive and productive activity; both domestic and business activity. Fungibility is the availability of resources that can be treated as cash funds and are converted swiftly, conveniently and without loss to maximise benefit. It should be underlined from Lipton's statement about HBE that *"now, fungibility extends beyond resource shifts among production activities. The impact of changes in resource availability can be transferred among family members; among seasons or parts of the life-cycle; and among uses of the home-cum-workspace"* (1980: 191). This generally means that an HBE provides benefits for the family. Lipton also stressed that the *'extended fungibility'* in the dwelling, as physical capital, can enhance production, consumption, or reproduction of family capacity. Thus, there are three components in HBE, which is business activity, family and space/house, and are the core characteristics of HBE (Figure 2.1).

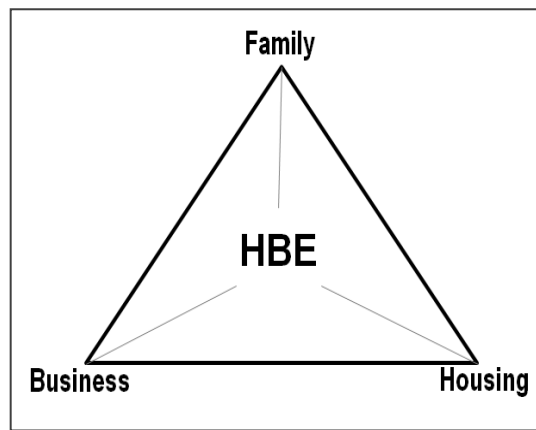


Figure 2.1: The core of HBE

The HBE as a family business is included in the urban economy sector (Friedmann and Sullivan, 1974). Friedmann and Sullivan divide the urban labour market into three major employment sectors, that is, individuals, families, and the corporate enterprise sector. They argue that the family enterprise sector is made up of workers in small trade and service establishments, domestic servants, and small industrial workshops that have fewer than five or even ten workers and a low capital/labour ratio. This family enterprise sector is at a higher level than the individual enterprise sector, which is called the '*street economy*'.

Lipton (1980) argues that an enterprise based on the family mode of production can call upon a range of resources that are able to be converted quickly and easily and without loss from one to the next (it is 'extended fungibility'). Such changes can be made with minimal cost. For example, space in the dwelling can be used for a variety of activities that are subject to change throughout the day as well as seasonally. Amin (1991) has noted six ways of categorising enterprises into groups:

- a. By enterprise type/industry type: trade, manufacture, services, construction, and transport;
- b. By location, in terms of the rural-urban divide ;
- c. By location, in terms of the spaces within a city: Central Business District (CBD), Inner City, Suburban area;
- d. By the place of business: Business Location Enterprises (BLEs) and Home-Based Enterprises (HBEs);
- e. By size of labour force: 1 worker, 1 to 4 workers, 5 to 9 workers;
- f. By development potential.

Amin's categories have shown that the HBE is the inverse of the Business Location Enterprise, for example, as in street-trading (*pedagang kaki lima*), where public spaces like pavements, roads or parks are used by street traders. According to this categorisation, street trading is usually or sometimes far from home and is not included under the HBE category, although in

practice, it can sometimes be difficult to differentiate between street trading and an HBE, because home businesses are sometimes conducted in alleys on a temporary basis. However, Tipple (2005b) makes a more precise distinction between HBE and non-HBE based on components such as making food and selling food on the street. He formulated this distinction as follows: "*a home-based enterprise is, quite simply, one which occurs in or very close to the home rather than in a commercial or industrial building or area*" (p.613).

According to the explanation above, the HBE can be seen from two points-of-view, the micro and the macro. From the macro point of view, HBE partakes of two categories, namely, the informal sector in the urban economy and urban housing. From the micro point of view it combines three aspects: business, family and space. Beyond these, of course, the definition of an HBE is rather complicated, debatable, and impossible to state as single formula. This is because of it encompasses a very broad range of activities, from simple through to complex.

Indeed, HBE is described in various terms according to different authors' points of view, although it basically has a similar meaning. For example, Ahrentzen (1991: 3) proposes a term '*hybrid-housing*' which is "*to accommodate those increasing number of individuals and households who live and work under the same roof.*" However, this term has not been particularly popular. Edwards and Field-Hendrey (2002: 170) mention '*home-based work*' to emphasise employment as they clarify "*home-based work differs from other employment because the work site is the home itself.*" Another term is '*home-based income generation*' due to an emphasis on the additional income produced for the family (Gough and Kellett, 2001). '*Home-located production*' is a term generally preferred by Felstead and Jewson (2000), although sometimes they express it in other terms such as '*home-located producers*', '*home-located employers*', or '*home-located wage labourers*'; depending on the substance of the discussion. They also call it '*homeworking*'. In this they resemble other scholars, for example Moore (2006), Louw and de Vries (2002), Green *et al.* (2000) who suggest the term '*homeworking*', which, rather than reflecting an aspect of the informal sector, emphasises the characteristic of working at home. In addition, Louw and de Vries distinguish three types of '*homeworking*' based on the location of the workspace relative to the domestic space:

(1) work conducted at home; (2) work conducted from home (the house as the home base for work); (3) work conducted in the same grounds and buildings as home (not in the house but within the domestic living area) (2002: 19).

Considering the above discussion and for the purposes of this research, I use a term '*home-based enterprise*', indicating a practice within the informal sector. Furthermore, an HBE can

be defined as a small-scale, shared, economic activity in the dwelling and in its surrounding space, which is managed by family members who lived in the house, where the workers are the family members, or other labourers, or both.

2.2.3 Place and Space: *Problems of Definition and Conceptualisation*

There are three important elements in HBE: these are space, place, and family, as expressed by Strassmann (1986). On this basis, it is necessary to elaborate the meanings of place and space, especially in relation to space-usage. Place and space are often regarded as synonymous. These twin terms have provided a significant contribution to building knowledge in geography, anthropology, architecture, and other disciplines. However there are many differences between the two terms. Hertzberger (2000: 23) points out that “*the distinction between space and place is clearer than one might suppose from the way these two words are used.*” The concept of place is to meet people’s physical, social and cultural needs. This statement is based on the views of a number of writers who have hypothesized that place is based on a combination of three aspects: (1) the physical environment setting, (2) the people who undertake activities in that place bound by social and cultural factors, and (3) the activities themselves (Relph, 1976; Canter, 1977; Stedman, 2002; Smaldone *et al.*, 2005). However, Norberg-Schulz (1971: 25) states that “*a place is usually related to several directions by a system of paths; these often form a ‘star’ around the centre.*” In this regard, a place is viewed additionally as a position rather than just an area.

On the other hand, regarding the term ‘space’, Munitz (1957) points out that it denotes area or extension. He states that “*space is originally seen as setting a reference for indicating the position where objects are situated and as a medium through which the object perhaps can move*” (p.106). Thus, the properties of space are to facilitate movement. In addition, Norberg-Schulz (1971:14) stresses “*space as an existential dimension, as a relation between man and his environment.*” Because of the relationship between people and the environment, and the interaction between them, he concludes that: “*space is really understood as a dimension of human existence, rather than as a dimension of thought or perception.*” It is also stressed by Rapoport (1977: 12) that “*space is more than three-dimensional physical space. At different times and in different contexts one is, in effect, dealing with different ‘kinds’ of space and their congruence is an important design issue.*” However, from an architectural view point, Hertzberger (2000) argues that space is something shaped by the surrounding physical objects and where, at a minimum, there is light with which to see the objects inside. Finally,

summarizing all the above arguments, place can be defined as a location or as a point, while space is an area bounded by physical objects.

2.2.4 Distinction between Density and Crowding

There are two terms that come up in housing and urban planning as well as in environmental psychology which are particularly important to understand in the context of this study: they are 'density' and 'crowding'. These terms become important when two different activities take place in a particular space in a small dwelling, for example in HBE activities. These terms are sometimes confusing, so the meaning becomes unclear, because many authors have used the two terms interchangeably rather than distinguishing between densities and crowding. Altman presumes density in association with:

the physical ideas of number of people per unit space. [...] the unit of space is not always the same but covers the range from the people per acre of land, people per census tract, people per room in homes, dwelling unit per acre of land, and the like. (1975: 149).

However, Rapoport (1977) argues that density is associated with the experience of many people in a space, because it is related to the information received by the people who have a perception of density. For example, based on Rapoport's argument, the characteristics of high perceived density are: "*tight and intricate spaces, large building height to space, many signs, many lights and high artificial light levels, many people visible, most man-made, high noise levels, many cars and high traffic density*" (Rapoport, 1977: 12). Considering two different views above, the concept of density and crowding are still debatable.

The distinction between the density and crowding has been explained by Stokols (in Altman, 1975: 149-150) that limits "*density to a strictly physical meaning - the number of people per unit of space. Crowding, on the other hand, is a psychological concept, with an experiential, motivational base.*" For housing and urban planning purposes, density assessment is usually based on the number of dwellings and the number of habitable rooms per area for accommodation, as well as the number of people per area for a large area. For example, the sum of population per hectare/acre is defined as population density (Jensen, 1966; Chan *et al.*, 2002). However, many authors (e.g. Altman, 1975; Bell *et al.*, 2001) distinguish spatial density from social density, but Altman (1975: 153) clarifies that "*spatial density involves comparisons of same-size groups in different-size spaces - for example, a six-person group in a large versus a small room. Social density involves constant-size space but different numbers of*

people – for example six versus twelve-person groups in the same-size room” (1975: 153). Despite their different attributes, they both still have a physical meaning.

Proshansky *et al.* argue that:

crowding is not simply a matter of the density of persons in a given space. For the crowded person, at least, the experience of 'being crowded' depends also to some degree on the people crowding him, the activity going on, and his previous experience involving numbers of people in similar situations (1976: 9).

Similarly, Bechtel (1997) defines crowding as a different experience of people in a particular space from one situation to another. Thus, crowding can be influenced by several factors and not just by physical characteristics alone. He listed several factors such as: culture, prior experience, and motivation. For example, cultural factors in a particular location may lead to toleration of higher densities than at other locations; but all locations are equally affected by crowding in the context of their own culture. In addition, Bechtel (1997: 205) states that “*the tolerance for crowding varies according to early exposure*” and motivation.

2.2.5 Adaptation, Coping, and Adjustment

The three terms of adaptation, coping, and adjustment are often confusing in their use, because they share considerable similarities. These terms are usually used in psychiatry, anthropology, biology, architecture and environmental psychology (see Alland, 1975; Lazarus and Folkman, 1984; Howard, 1984; Heerwagen and Orians, 1986; Priemus, 1986; Bennett, 1993; Smithers and Smit, 1997; Snyder, 1999; Douglas, 2002; Heywood, 2005; Hutcheon, 2006). One of the causes of adaptation or coping or adjustment is reacting to stress, because stress is a reaction to demands deriving from some kinds of need. Howard (1984: 11) states that “*people under much stress usually make some sort of adjustment to the circumstance which affects how much stress will later be faced.*” In this case, the term adjustment is used to describe the stress reaction. Based on Bell *et al.* (2001: 111), “*adjustment refers to changing the stimulus itself*”; while “*adaptation refers to changing the response to the stimulus.*” In addition, Bennett (1993: 49) argues that “*adaptation is a term that refers to change in modes of behaviour designed to manage or improve the lot of the individual.*” For example, adaptation to a hot temperature is done in stages by people, as they gain familiarity with the unaccustomed heat. By contrast, people will make adjustments to the hot temperature by wearing lighter clothing or turning on the air conditioning.

Coping, according to Howard (1984), is an active effort to do something about the sources of stress or to reduce the symptoms of stress. Adaptation is to follow the pattern of stressors without making real efforts to reduce them. However, Bell *et al.* (2001) state that if the coping responses are inadequate to deal with constant stress, it will eventually come to have a weaker impact, and the stress reactions themselves will be increasingly weakened. If that happens then this process, psychologically, is called adaptation. Hutcheon (2006: xv) also strengthened this idea with the statement that: “*adaptation is not only a formal entity; it is also a process.*” Thus, it can be concluded that adaptation is the final stage of coping strategies, although adaptation itself is still a process of achieving a new balance between people and their environment or circumstances. Adaptation and coping put the emphasis on changing in response to the stimulus in different ways, rather than changing the stimulus itself, while with adjustment, the onus is more on changing the stimulus. However, Piaget gives the term a more reciprocal meaning, describing “*adaptation as equilibrium between assimilation and accommodation*” (Piaget in Norberg-Schulz, 1971: 11). Assimilation refers to the action of the organism on surrounding objects, and accommodation to the opposite state. Thus, this study uses the term adaptation to reflect both changes in human behaviour and to the environment, because the changes are not once-and-for-all, but still proceed continuously, with the simultaneous conduct of assimilation and accommodation.

2.3 Historical perspectives on HBE

This section explains the history of the subject area, as described by Hart (1998: 173), who notes that investigation of history is needed “*in order to provide the story of how the topic was defined, established and developed.*” The three parts within this chapter section describe: (1) the long history of HBE; (2) the discussion of problems and solutions; and (3) the developments in research on HBE over three decades.

2.3.1 The Industrial Revolution to the Present Day: *the Historical Perspective*

In the era of the Industrial Revolution, Britain was “*marked by the move from home-based to factory-based manufacture*” (Tipple, 1993: 521). In addition, Pearson argues that “*the terms 'homeworker' or 'home-based worker' cover a wide range of activities, though the former has tended to be used in Western countries where homework is contrasted with the transition to factory production after the Industrial Revolution*” (2004: 138). The Industrial Revolution,

which began in England between the late 18th century and early 19th century, introduced major change across various sectors, especially technology, and had a profound effect on socioeconomic and cultural conditions, in that much human labour was replaced by mechanical power. This event also affected the practices of urban planning that emerged to define the separation between domestic space, work space and recreational areas. For example, Patrick Geddes in 1890 introduced the concept of 'Place-Work-Folk' which emphasizes the separation of domestic, commercial and industrial uses (Ratcliffe, 1992). Ebenezer Howard in 1898 introduced the concept of the Garden City, which was basically a combination of urban and rural life. Then Le Corbusier articulated the three relational aspects of living, working and recreational areas, which he called the radio-concentric city of exchanges (Strassmann, 1987). In the 1920s, the *Congres Internationaux d'Architecture Moderne* (CIAM) declared that there should be a separation between the place of residence and the place of work (Louw and de Vries, 2002). They reasoned with regard to people's environmental conditions that after the Industrial Revolution, the human environment needed to be improved.

Hareven notes "*the conception of the home in contemporary society as a private retreat from the outside world, [while] in preindustrial society the family conducted its work and public affairs inside the household*" (1991: 256). Indeed, at the beginning of the Industrial Revolution, there were many small-scale enterprise activities but limitations on travel, so that it was convenient for small-enterprise owners to live next to their place of business in order to supervise its activities. These conditions have several drawbacks, such as crowding, smoke and noise, polluted rivers and waterways (Wyatt, 2009). As a result, there were strong reasons to think about better environmental planning at that time. Conversely, the characteristics of cities in Indonesia in the colonial period, especially in Java, derived from a mixture of various settlement systems (Marcussen in Nas, 2003). Nas explains that the system "*consisted of a 'native quarter', which was made up of the kraton and the kampung, a 'Chinese quarter' with its shop-houses, and a 'western quarter', which comprised the fort and the colonial quarter*" (2003:5).

During its development, the effect of a high level of urbanisation in Indonesia resulted in the *kampung* becoming more dominant and filling in the urban structure with a range of land uses (Ford, 1993). On the other hand, urban planning did not function properly, so there were no strict regulations about the separation of land use, especially in urban settlements, as there were in developed countries after the Industrial Revolution. Correspondingly, Kellett and Tipple (2000) stated that working at the home was the norm in pre-industrial societies,

and continued to predominate in developing countries until recently. This suggests that business activity at home is still acceptable. This is confirmed by Brown and Lloyd-Jones (2002) to the effect that "*at the neighbourhood level, land uses and the organisation of space can have a significant effect on livelihood opportunities for the poor.*" Because the planning regime is quite flexible, single-use neighbourhoods may change over time to accommodate the HBE. The interesting part of this discussion indicates that period before the Industrial Revolution was an 'embryo period of HBE'.

The above statement also implies that HBE is still a great source of hope for the residents of urban settlements who are in low income groups, especially in Indonesia and developing countries in general. The phenomenon of HBE in developing countries makes it a topic of interest for numerous research studies. For example HBE in Bolivia was studied by Tipple (2004); in Bangladesh it was studied by Mahmud (2003) and Ghafur (2002); in Colombia it was studied by Peattie (1980), Gough (1996), and Gough and Kellett (2001); in Ghana it was studied by Sinai (1998, 2002) and Gough *et al.* (2003); in India by Bhatt (1989) and Tipple (2004); in Indonesia by Kellett and Bishop (2000) and Tipple (2004); in Nigeria it was studied by Onyebueke (2001); in Peru it was studied by Strassmann (1985); in South Africa it was studied by Tipple (2004) and Gough *et al.* (2003); in Thailand it was studied by Karanasuta (1987); and there have been many other such studies. Special papers presented at '*the CARDO International Conference on Housing, Work and Development: The Role of Home-Based Enterprises in 2000*', such as that by Bose (2000) explained about the situation in India; de Silva and Jayasinghe (2000) talked about HBEs in Sri Lanka; and Manandhar (2000) discussed Nepal.

The description above has shown that many studies on HBE were set in developing countries. However, there are also researchers who are interested in investigating home-business in developed countries. These include Ahrentzen (1991, 1997), Bulos and Chaker (1993), and Felstead *et al.* (2001, 2002). The term given by Ahrentzen (1991) to the home as a workplace is 'hybrid housing'. Whereas Felstead and Jewson (2000) establish that some developed countries also have business activities in the home which are termed 'homeworking', for example in the United States, Canada, Australia, New Zealand, Britain, and Japan. It is also observed by Louw and de Vries that "*the separation of functions between living and working was losing its authority as a planning doctrine. More and more, urban design pursued mixed use, instead of mono-functional development*" (2002: 17). Statements by Clapham, founded on strong evidence, assert that "*the separation of home and work started with the Industrial*

Revolution; [...] the trend is being reversed, with up to a quarter of people in Britain now working from home for at least some of the time” (2005: 144). Ultimately, this section concludes that business activity in the house prior to the Industrial Revolution can be regarded as the embryo of today’s home-based business. It seems this type of business activity has occurred and continues to flourish in many developing and some developed countries.

2.3.2. Think Solutions not Problems

HBE, as part of the informal sector, develops rapidly because the formal sector does not provide adequate opportunity in terms of economic activity for disadvantaged people. The informal sector is seen as one important alternative in solving the problem of labour and poverty. HBE, on the one hand, appears to contribute problems, in the form of several environmental hazards, such as crowding, noise, pollution, and also long working time, unsatisfactory work space conditions and exploitation of child labour. On the other hand, HBE is considered to have certain advantages in providing solutions to various problems in developing countries, such as alleviating poverty and reducing urban unemployment. The explanation below gives a brief description of how its attributes and impacts are perceived.

Some policymakers are critical of HBE activity bearing in mind the dangers of hazardous waste that it might produce. However the results of a study conducted by Tipple (2005a) revealed that very few HBEs generate hazardous waste, and operators are aware of the issue, so they take steps to mitigate it. Most of them are producing a type of waste that is similar to domestic waste, although in greater quantities. Tipple (2006) also analyses working hours and work intensity in four cities. The result of his analysis is that most of the operators of HBE work between 9 to 13 hours, six or seven days per week. This is quite similar to the findings of an analysis of working hours in the city of Yogyakarta carried out by Marsoyo (1992: 53), who established that *“the mean of working time of home-based enterprise is 11 hours per day”* and a majority of seven days per week. From the perspective of time, this looks like labour exploitation (for example, according to ILO standards, which recommend six work days of eight hours each per week), but it is important to realise that the household work at home while caring for children, preparing meals for the family, and socialising with neighbours. This means that their time is not only spent on working for their business.

With regard to the issue of child labour, De Silva and Jayasinghe (2000) and Tipple (2006) highlight that this can be a feature of HBEs in developing countries. However, it is generally not considered to be a serious problem. They suggest that children are usually only asked to assist parents who run a retail business at home and they certainly do not need to be rewarded. Tipple's study in four cities in developing countries indicates that "*children may be called on to 'mind the shop' if a parent or adult family member has to go out or do something in the house*" (Tipple, 2006: 175). However, De Silva and Jayasinghe (2000) warned that the considerable numbers of children who labour for the home-business have not been recorded accurately. Besides the issue of child labour, the condition of the work space is another issue.

The condition of the work space of HBEs in many places shows ugly, crowded, and reduced areas for domestic activities. Tipple explains that:

the small amount of space used for the HBE has a major impact on domestic space. The presence of HBEs reduces net domestic space per person to only 1.3 square metres from 2.0 square metres for those without HBEs (2005b: 626).

This implies a decrease in domestic space, but this is recognised by the operators of HBE. The most important fact is the existence of danger in the workplace, for example with businesses repairing electronic equipment, where wiring may be unsafe and unprotected, as indicated by Tipple (2006). However, based on his study in Cochabamba, New Delhi, Surabaya, and Pretoria, he states that "*the fieldworkers came across no examples of people having suffered serious accidents through operating an HBE*" (p.175). Furthermore, he also indicates that "*HBE work, at the very least, has the potential to be 'decent work'*" (p.176). Below are the characteristics of decent work (ILO, quoted by Tipple, 2006):

- (a) There should be sufficient work for all to have full access to income-earning opportunities;
- (b) It generates an adequate income;
- (c) Worker's rights are protected in it;
- (d) It is productive, not just existing as 'work for work's sake';
- (e) It provides adequate social protection.

This implies that there should be no reason to reject the existence of HBE and it is not necessarily a problem but should rather be viewed in terms of its potential for solving various problems in developing countries.

The above discussion has pointed out several problems generated by HBE. Nevertheless, many scholars look to HBEs from the solution aspect. Kigochie (2001) and Fanning (1981) emphasise that the HBE is a place outside the formal and modern sector where jobs can be created. Because it creates jobs, the HBE is seen as a kind of activity generating income (Sinai,

1998, 2002; Rowe *et al.*, 1999; Kellett and Tipple, 2000; Gough *et al.*, 2003). Rowe *et al.* even stress that “*home based work can be considered a form of community development for its potential as an alternative or supplemental income source for residents and for its economic multiplier effect on a community and region*” (1999:66).

In addition to the positive effect of additional income, the profits of home-based business activities can be used to finance housing construction (Gough and Kellett, 2001). Furthermore, several studies conducted by Moser (1998, 2007b, 2009) suggest that the aggregated assets/capital, such as physical, human, social, and finance capital, which are owned by the household which operates the home-based business, can reduce the poverty rates in urban areas. As a result, HBE is currently one of the key issues in poverty alleviation. HBE is also a place of economic activity that can help the recovery process in a monetary crisis (Turner, 1999). In times of crisis, there are many employment terminations for factory workers because the factory collapses or the sector reduces the workforce (Firman, 1999). So the only simple alternative to getting a new job is starting up a business in the house, generally a business that does not require high skills, such as a small shop or *warung*. Ultimately, it can be concluded that the description section above has given us a general impression of the important role of HBE in urban communities; in other words rather than highlighting its problems, seeing how it provides solutions for a better life.

2.3.3 Three Decades of HBE

The concept of urban economic dualism in developing countries has been around for a long time and is focused on production systems. This concept has implications for employment, income-generation, development and equity. The concept of economic dualism was introduced by Geertz in 1963 who contrasted the ‘bazaar economy’ with the ‘firm centred economy’; and by McGee in 1971 who coined the idea of ‘peasant’ versus ‘capitalist production’ (Rogerson, 1985). However, better-known than the above terms is the concept of the informal sector. It was introduced by Hart (1973) who distinguished the formal and the informal sector, and was then adopted by the International Labour Office in order to support detailed study of the Kenyan economy. Since then, intensive discussions have been conducted on the informal sector. Starting in the decade of the 1980s, HBE became the subject of discussion by researchers, who claimed that HBE was part of the informal sector (e.g. Lipton, 1980; Strassmann, 1985, 1986, 1987; Gilbert, 1988; Tipple, 2005b). Thus, it can be inferred that research concerning HBE has now existed for three decades.

The first decade has occurred in the 1980s and can be considered the '**introductory phase**'. This phase emphasises that HBE is part of the informal sector and also that it is growing in developing countries. In addition, this phase focused discussion on employment and wages (Strassmann, 1985; Bhatt, 1989); even Gilbert (1988) emphasised the constraints, potentials and policy options of HBE. Simultaneously, a discussion of home working in developed countries, especially in the UK, was stimulated by Hakim (1987).

The 1990s was the second decade for HBE research, representing a period that can be seen as the '**elaboration phase**'. It was characterised by many researchers explaining and elaborating the various factors concerning HBE, for example from the shelter point of view, place and space, income factor, or contributing to the urban economy (Marsoyo, 1992; Tipple, 1993; Gough, 1996; Sheehan, 1996; Sinai, 1998; Rowe *et al.*, 1999). In addition, Marsoyo (1992) and Tipple (1993) analysed the advantages of HBE. One of the advantages is the additional income it generates, even representing the main source of income for some households which do not have members with a primary formal job, meaning that economic activities in the house can contribute to the household economy of the disadvantaged. In addition, households with such income may set it aside expressly to improve their housing conditions. In fact, the existence of some types of HBE, especially stalls, as a provider of daily needs in local communities, can reduce the number of trips and also reduce transport costs. However, Tipple (1993) also describes two kinds of disadvantage that arise as follows: "*the first group of disadvantages arise primarily from the conditions of isolation and lack of visibility in which the workers carry out their tasks*" (p.531); and "*the second group of disadvantages concern the effect on the residential environment, which may be measured in monetary terms through dwelling values*" (p.532). Additionally, Marsoyo (1992) observed that economic activity in the house may cause a deterioration in households' privacy and general tidiness.

Finally, many studies in the decade of the 2000s have reflected an '**exploration phase**'. In this period, many researchers have made a more detailed and meticulous examination of HBEs with varied topics including women and gender perspectives, housing consolidation, squatter rehabilitation, urban planning, and pollution. The topic of women and gender perspectives, for example, was explored by Domenico (2008), Mahmud (2003), Edwards and Field-Hendrey (2002), and Ghafur (2002). In particular, Domenico (2008) and Ghafur (2002) investigate the involvement of female and male workers in HBE activities, not only to share the workload but also to exert complementary efforts, enabling them to increase their income

for survival on a daily basis. In this decade also appear interesting discussions about housing consolidation (Gough and Kellett, 2001), settlement upgrading and squatter rehabilitation (Tipple, 2004; Kigochie, 2001), urban planning (Muraya, 2006), and the spatial implications of HBEs (Tipple and Kellett, 2003; Bishop and Kellett, 2000). The last topic has not yet attracted sufficient attention from researchers: in particular more attention should be paid to the arrangement of space in the home.

Recently, Tipple (2005a, 2006) has provided a more comprehensive and deep analysis of the employment and work conditions, as well as the pollution issues, associated with HBEs. It was found that some HBEs show poor work conditions and contribute environmental pollution. However, those conditions are usually acceptable in environmental capacity terms and are no reason for discrediting them. In addition, Tipple (2005b: 627) also strengthens other earlier assertions that "*HBEs conform to many of the known characteristics of the informal sector.*"

The surprise in the decade of the 2000s has been the emergence of more consideration of HBEs in developed countries, by comparison with the previous decade (Felstead and Jewson, 2000; Green *et al.*, 2000; Louw and de Vries, 2002; Felstead *et al.*, 2001; Domenico, 2008). Ultimately, at the beginning of the third and most recent decade of HBE research, a conference on 'Housing, Work and Development: The Role of Home-Based Enterprises' carried out by CARDO Newcastle University-UK contributed much to understanding the future role of HBEs although there still identifying many problems and constraints.

2.4 HBE in Six Perspectives

After discussing HBE from a historical perspective, this section will describe the research topic through a number of views derived from similar topics of discussion raised by previous authors and researchers, although there may be some differences between their views or even controversies. This section is accordingly grouped into six perspectives: economic, social, urban planning and management, housing policy, environmental effects, and spatial implications.

2.4.1 Economic Perspective

Some scholars consider the phenomenon of HBE viewed from the perspective of income (e.g. Strassmann, 1986, 1987; Tipple, 1993, 2005b; Raj and Mitra, 1990; Gough, 1996; Sinai, 1998; Rowe *et al.*, 1999; Kellett and Tipple, 2000). This is because income is identified as the main basis for the survival of poor urban households. In addition, HBE is considered to be a form of domestic economic activity, due to its potential as a source of income for households and for its economic multiplier effect on families and communities. Furthermore, home-based economic activity will eventually contribute significantly to the urban economy. Various studies show that household income generated by economic activity at home varies depending on the place, conditions, time, and type of activity. For example, according to a study conducted by Sinai (1998) in Kumasi, Ghana, some households use the dwelling to get and to increase total household income, although the evidence obtained indicates that the income earned is lower than would be the case in the formal sector. This is also evident from the study in Bogota, Mexico City, and Valencia by Gilbert which concluded that:

the average contribution was only between two-fifths and one-third of the head of household's income from his or her main job. If the earnings of other members of the family are included, it is clear that the contribution from home enterprise is quite low (1988: 25).

However, he argues that although the contribution to total income is low, it is nevertheless very significant as a survival strategy for households.

Strassmann (1987) indicates that in Lusaka, Zambia, a quarter of homes have been used as HBEs, increasing household income by 10.7% over those without HBEs. In addition, using a comparison between four cities, Tipple (2005b) showed that the percentage of income from HBE was found to be 74% in Cochabamba, 58% in New Delhi, 60% in Surabaya, and 70% in Pretoria. Then he adds that “*in all the case studies, between one-third and one-half of households are supported with income solely from the HBE*” (p.623). Based on each sample and all the cases together, the total income of households with HBEs is shown to be higher than those without an HBE. For his part, Ghafur (2000) found that half of the total monthly household income in Bangladesh was derived from HBE activities. The cases above indicate that HBE income contributes significantly to the livelihood of many households in developing countries. Therefore, in this respect HBE income may be called an ‘income supplementation strategy’ for disadvantaged urban households.

In relation to HBE as urban livelihoods, the optimal use of the house needs to be appreciated, because it provides economic opportunities for the urban household in accordance with their needs and possibilities. Income earned from home-based activities is not only used for daily necessities but also for other purposes related to the environment. For instance, Gough and Kellett (2001) argue that there is a close relationship between income levels, dwelling consolidation rates and household profiles, in which the three components are mutually supportive. Furthermore, they conclude that:

Home-based enterprises demonstrate the close symbiotic relationship between housing and work, and the fundamental economic role of the dwelling. Such economic activities provide income which enables housing improvement and consolidation to take place and the dwellings themselves improve opportunities for income generation, employment prospects and productivity (Gough and Kellett, 2001: 244).

Kellett and Tipple (2000) argue that the home as a workplace is used not only as an economic activity but also as means of social interaction. In addition, they interpret and conclude that “such work provides the fundamental sustenance without which the household would perish. The home thereby becomes not merely a container of human life but an essential shelter for those life-sustaining activities” (Kellett and Tipple, 2000: 212-213). Rowe *et al.* (1999: 75) also argues that “by any reasonable measure of output, earnings, or employment, home-based work can be a significant contributor to rural and urban economies.” It is clear from the above description that a sustainable household livelihood becomes important and the role of HBE cannot be separated from the process of economic activity itself. In this context, it is not only households who benefit from this, but there is an influence on the larger environment; at the local, urban, and national levels. Finally, as part of the informal sector, HBE plays an important role in the national economy. For example, Kannan and Papola recall:

the importance of the informal economy's contribution to national output, it is of crucial significance that the productivity of its enterprises be high enough for them to compete with larger domestic and international enterprises, particularly in today's context of globalization (2007: 321-322).

Additionally, Majale states more precisely that:

in many cities, [...] informal settlements are also the principal location of informal sector enterprises, including [...] home-based enterprises (HBEs). They consequently make a significant contribution to employment creation, local economic development, the urban economy and national growth (2008: 271).

2.4.2 Social Perspective

HBE activity has a role not only through providing an additional or primary household income, but also as a source of employment for families, especially mothers. In addition, HBEs have an external role as a service to the social community. Concerning employment for the family, a critical review of HBE regarding the 'family mode of production' has been proposed by Lipton (1980). He explained that the extension of fungibility through production activities in the domestic sphere is called 'extended fungibility', which basically means the availability of resources at home is managed and controlled by the family for both reproduction and production activities. In terms of reproduction, the home is a family place to reside in, and a focus for a variety of domestic activities such as eating, sleeping, and rearing and educating children. On the other hand, production activity in the home for income generation is a 'family mode of production', that is used, controlled, and run by the family.

In many developing countries, HBEs taking the form of retail shops that serve local needs are controlled or run by women. Bose (2000) indicates that women from low income groups can easily become home-workers for a number reasons: the availability of space and time at home, women's roles as mothers and wives, and their social relations with the surrounding neighbours. For example, 93% of HBEs in Bangladesh are female-run (Ghafur, 2002), while Gough *et al.*, (2003) report a figure for South Africa of 73%, and for Suriname of 70% (Verrest and Post, 2007). A high percentage of women, especially mothers, carry out an enterprise in the house, because it is thought that "*women were innately best suited to take care of the private family and household, women were also best suited to be the caretakers or mothers of the community-as-household*" (Robertson in Spencer-Wood, 2007: 164) and women are seen to be more flexible in combining activities of reproduction and production. For instance, mothers are considered able to use their time to observe the business's various ongoing activities, while also preparing and cooking food for their family or feeding up their children. Edwards and Field-Hendrey (2002: 171) also note their capacity for "*caring for elderly relatives while running a small business at home.*" In addition, the absorption of women as workers who work at home can increase the total workforce in urban areas; however, the methods of collecting data for official statistics need to be adjusted due to business activities undertaken by women at home being classified within the informal sector. "*Informal-sector enterprises tend to be 'invisible', not having licences or formal contracts, unregulated and uncounted by official statistics*" (Tipple, 2005b: 621) and women who work at home also tend to be kept from public discussion by development planners and labour statisticians (Boris and Prügl, 1996).

Another important aspect of HBEs is their role in the social community. Kellett and Bishop (2006: 65) argue that *“income generation activities are embedded within social networks and in many cases traditional collaborative cultural values directly reinforce economic production.”* So there is a reciprocal relationship between home-based economic activities and the consolidation of social networks that can play many roles simultaneously. For example, in HBEs providing daily necessities, the neighbours as buyers are not only buying but also creating social relationships, both with other buyers and the operator. In addition, this activity is important for HBE operators because they can identify what goods are desired by their neighbours and the neighbours as customers can order goods from the operator in preparation for future needs. The above description clarifies that in terms of social perspectives, HBEs play an important role for households, especially for women or mothers who not only function as domestic actors in the home but are also able to combine this with a role in production activities. In addition, HBEs also play an important role in the surrounding community.

2.4.3 Urban Planning and Management Perspective

Research on urban planning and management in developing countries still pays little attention to HBEs, although HBEs contribute to the urban economy through providing livelihoods for low-income groups who are considered as problematic. It is recognized that HBEs still face many obstacles (Rowe *et al.*, 1999), especially in relation to urban planning that does not fully comply with urban planning standards, building codes, or zoning plans. Tipple (2005a) explained that in order to regulate the use of a residence as a business activity, governments in many countries use mechanisms with 'top-down' planning controls. He also stated that urban planning is changing and becoming more related to promotional activities, in terms of seeking additional governance gains which are concerned with the physical environment. This is also supported by Pal (2008) who explores 'planning from the bottom-up' in which ordinary citizens engaged in the informal sector have participated in the planning process. Previously, Amin (1991) and Dixon-Fyle (2000) suggested integrating the urban informal sector, including HBEs, in the urban planning process. They argued that accommodating these activities can lead to better management of the urban economy and urban environment. Thus, on the one hand, HBEs are recognised as an alternative source of urban employment through livelihood strategies (Rakodi and Lloyd-Jones, 2002; Tipple, 2005a). On the other hand, the urban planning paradigm as a development control

mechanism is gradually transformed into a more participatory process involving ordinary citizens (Werna, 2001; Majale, 2008).

Along with the development of the urban planning system and in accordance with the conditions in developing countries, the real setting of the HBE needs to be included, because it provides a positive role as a local service facility. It is also emphasised by Kellett (2000a) that HBEs are not only for income generation, but also have a role as a local service facility within a neighbourhood. An example of this might be a *warung* which sells daily necessities to neighbours or other buyers, such as candy, rice, sugar, cigarettes, toothpaste and soap. The role of HBEs as local service facilities suggests that HBEs need to be supported and accommodated in the urban plan. Muraya (2006: 141) argues that “*urban planning, availability of land for development, [...] are crucial in enhancing the performance of small-scale enterprises*” including HBEs. In addition, “*the nature of the ongoing management of residential areas by all arms of the state is crucial in supporting and regulating HBEs in as proactive a manner as possible*” (Gough *et al.*, 2003: 275). Ultimately, Muraya (2006) and Majale (2008) argue that urban planning, development and management should support citizen participation in promoting employment creation. It is clear that HBEs have a necessary role in urban communities and urban employment support, so they need to be one of the priorities for the urban planning and management process.

2.4.4 Housing Policy Perspective

Housing is one of the basic human needs. Everyone needs a place to live, regardless of their age, gender, occupation, race, income, and physical or mental capacities. Because housing needs are important for the general public, an effective housing policy is important. Housing policy varies across different countries, depending on their characteristics, for example, their population, physical conditions, economic conditions, social and cultural aspects, and the political views of the governing authority (Balchin and Rhoden, 2002). Doling (2002) compares housing policy in Western and Asian countries. In Western countries, some countries have adopted comprehensive or institutional housing policies, and others have adopted social ones. In the former, the government is responsible for meeting housing needs through market mechanisms and housing is seen as a productive sector of the economy. In the latter, the government intervenes only on behalf of those whose needs are not met by the market. Furthermore, Doling (2002) explained that most Asian countries show both approaches, at the national level using a comprehensive orientation, but in certain cases also

providing a limited subsidy directly to those living with sub-standard housing conditions. In the cities of Asian developing countries, millions of people in low income groups live in informal settlements with sub-standard housing conditions.

Peattie (1979: 1019) states that *“housing is also, for low-income people in developing countries, not merely part of the consumption package but of productive capital.”* Housing as productive capital not only increases the options of residents beyond simple survival in urban areas and in terms of possible livelihoods, but also provides many benefits for those who live in sub-standard conditions. Housing as productive capital comes to the fore in the case of HBEs. Some expressions of these matters are reflected in researchers’ findings that the benefits of HBEs go beyond income generation and employment (Laquian, 1983; Kellett and Bishop, 2000; Kellett and Tipple, 2000), and the consolidation of housing (Tipple, 1993; Kellett and Tipple, 2000; Gough and Kellett, 2001), but can also contribute to upgrading and rehabilitating slums (Kigochie, 2001; Tipple, 2004). Therefore, at the minimum there are three benefits that can be considered in housing policy as follows: first, HBE can be an asset in improving living standards; second, by improving living standards people in low income groups can also gradually improve housing conditions, in a way that has been referred to as housing consolidation; and third, their subsequent effects are able to improve the wider environment, such as through settlement upgrading and rehabilitation.

2.4.5 Environmental Effects Perspective

Some researchers argue that the informal sector, including HBEs, is assumed to be a problem for the environment (Perera and Amin, 1996; Frijns and Van Vliet, 1999; Blackman, 2000; Tipple, 2005a). Frijns and Van Vliet (1999) argue that when compared with large-scale industries, small-scale industries are not a major contributor of waste in the environment. Nevertheless, they indicate that the activities of small scale industries located in or near residential settlements have a great environmental impact. They claim that small-scale industries *“[cause] local pollution and nuisance from the release of smoke, foul smells, and toxic contaminants to the air, soil, surface and groundwater, such as chrome from tanneries and oil from car garages”* (Frijns and Van Vliet, 1999: 970). However, Perera and Amin (1996) suggest that the negative impacts (pollution) on the environment of informal sector activities, including HBEs, are minimal. Moreover, Omuta (1986) argued that environmental impacts are not an inherent attribute of the informal sector, but are a manifestation of an

unresponsive physical planning system. Particularly with respect to HBEs, Tipple (2005a: 296) emphasises that HBEs also have little impact on environmental pollution.

Most HBEs are fairly benign in their environmental effects; they do not pollute sufficiently for environmental considerations to be used as an excuse to harass them or to continue the negative attitude to their operation existing in many regulatory systems.

In fact, the domestic activities of the household such as cooking, sweeping, vacuum cleaning, painting, and redecorating can cause the release and spread of indoor pollutants at home. Those impacts will be worse if the household is occupied in motor servicing, small restaurant, or craft production. However, Tipple (2005a: 285) states that “*cooking, which is common among the HBEs, generates smoke and fumes and increases the use of fossil and other fuels within the home.*” However he argues that only a small portion of HBEs in his study areas (Cochabamba, New Delhi, Surabaya and Pretoria) actually produced dangerous fumes and waste (see also in Tipple *et al*, 2001). Similarly to Tipple’s study, Perera and Amin (1996) found that the effects of the pollution created by the HBEs in the neighbourhood can be seen as relatively mild compared to what is contributed by other informal sectors. Although it is believed that HBEs provide only a small contribution to environmental pollution, there nevertheless remains a need for policies and rules that can be implemented properly for environmental improvement (Frijns and Van Vliet, 1999; Blackman, 2000; Tipple, 2005a). It is affirmed by Blackman (2000) that pollution created by informal small enterprises, especially HBEs, is very difficult to control for a number of reasons, including that they are numerous, small, diverse, and geographically dispersed.

2.4.6 Spatial Implications Perspective

The configuration of space, spatial organisation, territoriality, and boundaries are a several aspects related to the spatial implications of HBEs. For example, Bishop and Kellett argue that:

the line and boundaries between reproductive and productive activities are managed through a complex, culturally-embedded mechanism in which individuals, households and groups are continuously negotiating and re-negotiating the relations and boundaries between themselves (2000: 54).

In addition, Kent (1991) states that spatial boundaries, both conceptual and physical, are continuously changed and varied, differing from one culture to the other. It is revealed that the boundaries of the area for business and domestic use are largely determined by culture. Rapoport (1990b, 2005) explains that culture as an influence on the built environment, in this

case the spatial boundaries, can be addressed through activities and system activities. Thus, it is necessary to apply attention to the activities and the activity systems of HBEs. Moreover, it is necessary to understand the spatial implications of the elements of the simplest and most concrete of the environmental components represented by fixed and semi-fixed elements (Rapoport, 2005).

The line and boundaries between domestic and business areas are also determined by the development of business activities. For example, in terms of the separation of domestic and business areas, Tipple and Kellett (2003) state that in a small dwelling, where the domestic space is reduced, the expansion of business space generates a negative effect on the amount of space per person and the number of people per room. In addition, the separation between business and domestic activities is distinguished by ideas of cleanliness and dirtiness. The idea of a separation between the clean and the dirty equates to the distinction between the sacred and the profane in particular cultures. For example, a study of HBEs conducted by Bishop and Kellett (2000) observed the custom of removing footwear at the threshold to show the boundaries between the dirt of the outdoors and the cleanliness of the indoor area for Muslim households in Surabaya. In other cases, not only is there a boundary between the outdoors and indoors, but there is also a subtle shift in boundaries as they argue that “*shoes tend to be taken off, if worn at all, at the edge of a vinyl flooring, which only starts 'one room deep', demarcating a subtle shift between working and living*” (Bishop and Kellett, 2000: 49).

Spatial boundaries that are used to distinguish between domestic and business areas include walls, doors, and furniture (fixed and semi-fixed elements). For example, “*a shop or workshop may have a separate entrance to that of the private parts of the house*” (Bishop and Kellett, 2000: 50). Allan (1989) discusses how the concept of boundary is usually expressed in spatial terms, and there is less discussion of a satisfactory model applying to social relations. In addition, the boundary between the two activities of HBE is sometimes unclear, because it is not possible to recognise the difference between the guests and customers, for instance a living room/guest room (domestic space) may also be used for business space, so that the physical boundaries become blurred. Another form of separation of activities can be discussed in terms of house extensions, both horizontal and vertical, that are used for either domestic or business activities (Tipple, 1996, 2000; Bishop and Kellett, 2000; Sueca, 2003). However, these authors did not go into great detail about house extension, in particular in relation to the activities of HBEs. Bulos and Chaker by contrast attempt a rather detailed description of the use of space in HBEs in UK. They state that:

The number of physical factors which can be controlled and altered by homeworkers are multiple: the design, organisation and furnishing of workspaces, restricting or facilitating access to 'dedicated' workspace by the opening or closing of doors and windows, constructing screens and other barriers to the 'outside'. Although more difficult to specify and identify but no less numerous are the non physical aspects of control which range from the timetabling of work activities to subtle (or less subtle) interpersonal negotiated rules about what kind of interruptions are acceptable, when and by whom (1993: 72).

Furthermore, they formulate two models of strategy: first, seeking a physical and social separation of business and domestic space in the house; second, attempting a new configuration in terms of space used. It appears that there are many specific strategies in the use of space within the home, especially with regard to the HBE's spatial implications. They conclude that the implications of business in the house vary, in that there are some HBE operators who attempt to achieve a high level of physical and social separation, while the rest prefer to organize the space and everything inside the house in order to achieve better integration. Finally, the above discussion suggests that research on spatial implications in the case of HBE still requires further exploration. Bishop and Kellett (2000: 47) also argue that *"the idea of boundary [is] therefore recognised to be a vital but complex, multi-dimensional concept requiring sensitive field methods in order to be explored adequately."* Thus, Kellett and Tipple (2000) have revealed the need for more comprehensive studies that examine the negotiation of resource allocation, particularly space, time, and labour, with a mutual influence between the business and domestic areas.

The six perspectives on HBEs above have each been carefully examined. Perspectives on economic, social, housing policy and environmental effects have been discussed by scholars, who find that basically, HBEs have a positive impact not only on the household's income and more generally, on the households which operate the family business, but also on wider society, especially with regard to improving the living environment. HBEs are still not addressed from an urban planning and management perspective although they have an important role for the urban poor. This may be due to the difficulty of clearly situating the informal sector within the urban economic sector, a topic with regard to which urban planning debate continues to the present day. Similarly, perspectives on the spatial implications of HBEs need to be elaborated more in depth, particularly the strategies conducted by households regarding the use of space for business and domestic activities. For this reason, this study attempts to discuss HBEs in the context of asset accumulation and urban livelihoods, especially for the poor in the urban *kampung*. In a more detailed context, this study attempts to explore adaptation strategies undertaken by households regarding the

use of space. Therefore, the following section will examine the existing literature and theories concerning these two contexts: first, asset accumulation and sustainable urban livelihoods; and second, the production of space and adaptation behaviour.

2.5 Asset Accumulation and Sustainable Urban Livelihoods

The relationship between livelihood strategies, coping strategies, survival strategies, and capital assets for various socio-economic levels and in different types of area has recently become an important issue. This is due to attempts to address various issues, such as vulnerability and poverty. In urban areas, there is a tendency to associate informal sector activities including HBEs with vulnerability and poverty, although, this is not necessarily the case. For example, the workers in this sector could be considered on a low income, but it cannot be assumed that, for example, their total income is necessarily lower than formal sector wages, thus this sector cannot automatically be interpreted as being in a vulnerable condition. Conversely, there are indications that this sector has a role in alleviating poverty (Dhemba, 1999; Kar and Marjit, 2009) and vulnerability.

The next section will discuss three strategies related to poverty and vulnerability. The discussion will then move on to sustainable livelihoods in an urban context relating to employment, the informal sector in general and HBEs in particular. The discussion will conclude by considering capital accumulation, as a way for the urban poor to escape poverty.

2.5.1 Coping, Survival, and Livelihood Strategies

Many studies describe coping, survival, and livelihood strategies that are associated with migration, financial crisis, poverty, and vulnerability (e.g. Maldonado, 1995; Setiawan, 1999; Orr and Mwale, 2001; Kuo, 2001; Rakodi and Lloyd-Jones, 2002; Siddiqui and Pandey, 2003; Frayne, 2004; Verrest, 2007). The use of 'strategy' refers to a form of behaviour designed by selecting the many options available to achieve a particular goal. In this case it is to reduce poverty and vulnerability. The latest analysis is related to climate change, but poverty and vulnerability is a topic that is often and widely discussed. Moser (1996: 2) defines 'vulnerability' as:

[...] insecurity of the well-being of individuals, households, or communities in the face of a changing environment. Environmental changes threatening welfare can be ecological, economic, social, or political, and they can take the form of sudden shocks, long-term trends, or seasonal cycles.

In addition, vulnerability is generally viewed from two facets: (1) an external aspect of shocks, seasonality, and critical trends, and (2) an internal aspect of recovery capacity, caused by lack of ability and means to cope with these (Chambers, 1991; Moser, 1998). These mean that poverty is also about being vulnerable to crisis, stress and shocks, and having little capacity to recover quickly from these, because poverty means a lack of complete access to the resources needed to satisfy basic needs. Poverty and vulnerability are often used synonymously but are actually different. All poor people are vulnerable but not all vulnerable people are poor. Vulnerability can be seen as a dynamic concept that recognises and captures change; while, by contrast, poverty is seen as a static concept. The consequence is that vulnerability is more complex than poverty (Moser, 1998). The definition of poverty from the perspective of conventional economics uses income or consumption as a main indicator which is complemented by various other social indicators such as life expectancy, infant mortality, nutrition, the proportion of the household budget spent on food, literacy, school enrolment rates, access to health clinics or drinking water (Wratten, 1995; Rakodi, 1995). However, poverty is not solely calculated on the basis of income or consumption but can also be seen through the perceptions of the poor themselves. Rakodi (1999: 315-316) suggests the need for research on the perception and definition of poverty used by the poor, and she states:

first, that poverty is not defined solely in terms of income but encompasses deprivation and insecurity; secondly, that any attempt to place monetary values on these aspects of personal, household and social deprivation involves so many arbitrary assumptions that they are likely to be meaningless; and thirdly, that those defined as poor in consumption terms may not capture all deprived and vulnerable households and individuals.

To deal with poverty and vulnerability, households adopt coping strategies, survival strategies, and livelihood strategies. However, the distinction between coping and survival strategies is not always clear-cut, either theoretically or practically. For example, in the context of economic uncertainty, the individuals or households can develop either coping strategies or survival strategies to ensure better living standards. Davies (1996: 35) defines coping strategies as “a short-term response to an immediate and habitual decline in access to food.” Coping strategies become survival strategies when individuals or households continue to use up their food stocks, which leads to depletion, requiring them to switch to a survival strategy to meet basic needs over long periods of time/long-term. Therefore, survival

strategies are used by individuals or households to respond to shock in the long-term. In spite of this, “*the most vulnerable households are those which can neither rely on wage income nor diversify their livelihood strategies*” (Rakodi, 1995: 422).

The concept of livelihoods has been developed in the context of poverty alleviation in the rural areas of developing countries (Bernstein *et al.*, 1992; Ellis and Freeman, 2004; Titus and Burgers, 2009). The first elaborated definition of the concept of livelihoods, by Chambers and Conway, was as follows:

a livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term (Chambers and Conway, 1991: 6).

By contrast, Carney defines 'a livelihood' with a little difference in terms of assets, as follows:

[...] the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is considered to be sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Carney quoted by Rakodi, 1999: 316).

Accordingly, a livelihood is a set of capabilities, assets, and activities that provide a means for people to meet basic needs and support their well-being. Therefore, 'livelihood strategies' include 'coping strategies' designed to respond to shocks in the short term and 'survival strategies' designed to improve circumstances in the long term (Davies, 1996; UNDP, 1999). Thus, livelihood strategies can be said to encompass two other strategies. Moreover, concerning coping, survival, or livelihood strategies, Moser argues that:

[...] the actual 'strategy'—whether it is termed livelihood, coping, or survival—can best be identified as the means by which social actors transform endowed into accumulated assets. This process is determined by individual as well as collective agency. In some contexts the lack of returns on individual assets and capabilities has resulted in initiatives that focus on group-based, collective agency. Asset accumulation strategies are tailored to the different types of assets (2007:94).

2.5.2 Sustainable Livelihood in Urban Context: *the Role of HBE*

Recently, scholars in quest of solutions to reduce poverty and vulnerability in the world, have paid much attention to urban livelihood strategies (e.g. Rakodi and Lloyd-Jones, 2002; McIlwaine and Moser, 2003; Moser, 2007a, 2009). They have also been a focus for

institutions, such as DFID, CARE, SIDA, UNDP, and ILO. The concept of livelihood is used in urban areas with characteristics of urban poverty. Meikle (2002) argues that poverty in urban areas is more complex than in rural areas. Urban life is very complex and not easily characterised as compared with rural life, so an urban livelihood is also more complex. This is because urban households depend on their labour for income. Urban people are more dependent on cash income to buy basic necessities and they may lack access to water and energy resources such as those available in rural areas. Thus, poor urban households use livelihood strategies as an opportunity to alleviate their poverty and improve their well-being.

Based on the two definitions of livelihood, it can be clarified that 'sustainable livelihoods' focus on the use of the capabilities, assets and activities to be able to resist stress and shocks in both the present and the future through enhancing capabilities and assets. Hence in urban areas, Rakodi (1995: 414) explains that:

households seek to mobilise resources and opportunities and to combine these into a livelihood strategy which is a mix of labour market involvement, savings, borrowing and investment, productive and reproductive activities, income, labour and asset pooling and social networking.

In addition, Chamber (1995) explains that low-income households generate a sustainable livelihood through the utilisation of tangible and intangible assets as a form of reducing poverty, risk, vulnerability and insecurity. Therefore, a sustainable livelihood in urban areas is understood not only in terms of income earned, but also includes more extensive activities, such as gaining and maintaining access to resources and opportunities, negotiating social relations within the household associated with productive and reproductive activities, and managing social networks.

Specifically with regard to productive and reproductive activities, many households in urban areas run an alternative business, for example, an HBE, because space in the house is an asset for them. The use of this asset is one that distinguishes the urban livelihood from a rural livelihood. Moser (1998), who focuses on urban livelihoods, also indicates that in terms of productive activities, housing is often used for livelihood activities by the low income group households. Using the framework of asset accumulation and following five families from Guayaquil over time, Moser (2009) demonstrates an understanding of the strategies of poor urban households in accumulating, balancing, and managing a portfolio of assets in a changing social, economic and political structure at various scales. Thus, the capital assets used by low-income urban households are improved at the aggregate level as a dynamic tool

for significantly reducing poverty and improving wellbeing. Furthermore, Rakodi and Lloyd-Jones explain that urban households assemble a mix of assets that are different from those of rural households. In addition, they state that:

conceptualising land as natural capital is less appropriate in urban areas, partly because of the dependence of urban households on externally provided infrastructure and partly because contributors have been able to stand back from sectoral points of view (2002: 295).

Kellett and Tipple (2000, 2002), Kellett *et al.* (2000), Gough and Kellett (2001), Ghafur (1999, 2002), Mahmud (2003) and Gough *et al.* (2003) contributed the idea of urban livelihood based on HBE cases. They analysed the production and reproduction of dwelling space and emphasised that configuration changes in the dwelling space not only as a place of reproduction but also as a place of production, so that it becomes a source of livelihood in urban areas and has a positive impact on disadvantaged urban households helping them to escape poverty and vulnerability. The relationship between HBEs and urban livelihood is also demonstrated by Verrest (2007), based on a study in Paramaribo and Port of Spain. She concludes that there is a relationship between HBEs and household vulnerability, livelihood opportunities and institutional organisations. In addition, assets, vulnerability and household strategies are mediated by how institutional organisations determine their role in livelihoods. Obviously 'sustainable livelihood' in urban areas, based on a concept of household production that uses a variety of capabilities and assets, is a better way to survive and build a decent living in the present and future. This is shown clearly from the analysis of home-based business or HBE cases.

2.5.3 Access to Capital Assets: *Assets Accumulation*

Access to capital assets is the key to the sustainable livelihood model, which means how poor households' access to capital assets can be acquired, developed, improved and transferred across generations for a better life. The terms 'capital' and 'asset' are often used interchangeably in the literature to refer to resources that are commonly used including natural, physical, human, financial, and social resources, all of which form the basis of livelihood strategies. Not only are capital assets owned by households who use them in their livelihood strategies but these households also have '*access to*' and '*control over*' their assets (Farrington *et al.*, 2002). In this regard, Moser reveals that access to an asset is a process of the 'assets accumulation' and it is important in development issues, especially in terms of poverty reduction where "*the state's role is much more limited, and the process of acquiring*

and consolidating assets is not only lengthy but also primarily achieved from the ‘bottom up’ by individuals, households, and communities themselves” (2007a: 3). Furthermore, she explains that asset accumulation is a dynamic process which changes substantially over time due to the need to distinguish between different generations of the asset accumulation strategy and also require a reassessment of the continuously-acquired assets.

Table 2.1: Five typologies of assets

Chamber	UNDP	OXFAM, DFID	CARE	Moser
Tangible: (stores, resources)	Human	Human	Human	Labour
Intangible: - <i>claims for material, moral or practical support</i> - <i>opportunity to access resources</i>	Social	Social	Social	Economic and social infrastructure
	Economic	Economic	Economic	Housing
	Physical	Physical		Household relations
	Natural	Natural		Social capital
	Political			

Source: Farrington et al. (2002: 17)

Farrington et al. (2002) assemble five typologies of assets by scholars and organisations, but these types are meant to apply in both rural and urban areas (Table 2.1). There are similarities and differences in terms of the way of categorising assets in the five typologies. It can be seen from the table that human, social, and economic (financial) assets are three types of capital asset which are often used. Other categories of asset are also important to include, such as the physical, natural, and political types. Chambers (1995) uses a different asset category from the others that represents a way of looking at the difference between ‘access to’ and ‘control over’ resources. For example, tangible assets are physical assets (e.g. housing, gold) of a kind where it is possible to have ‘access to’ and ‘control over’ these assets; while it is not possible to have direct control over intangible assets such as moral and practical support, or social capital. Similarly, Moser (1998) initially used the term tangible-intangible assets to distinguish tangible assets such as labour, human capital and housing, from intangible assets such as household and social relations. In later work, however, she often uses the five assets (human, social, economic/financial, physical, and natural) in relation to assets accumulation,

in order to explore the activity and the capability of urban households to escape poverty. Farrington *et al.* (2002) observe that access to assets is dependent on household needs. This means households will choose and use assets which might be required for their livelihood strategy. Similarly, Moser and Felton (2007: 41) emphasise asset accumulation in urban households where

households make crucial choices in managing complex asset portfolios at different stages of their life cycles. Housing is the first-priority asset, and while it does not necessarily get households out of poverty, adequate housing is generally a necessary precondition for the accumulation of other assets.

In other words, the assets used by households cannot be assumed to all have the same value. In this sense, it is necessary to distinguish which assets have a high value and are the principal type of asset to be used, for example housing, and which assets have a supporting role, for example social relationships.

For the purpose of this study, the categorisation of assets will be restricted to that proposed by DFID, informed by the categories in Moser's asset accumulation framework (Figure 2.2).

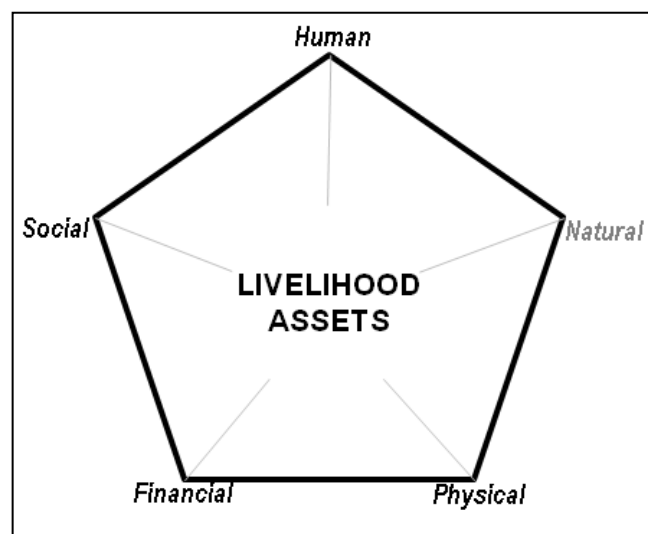


Figure 2.2: The assets pentagon of urban livelihood

This consists of five assets used and described as follows. The explanation below is a summary of DFID (2001), Farrington *et al.* (2002) and Moser (2007a):

- a. **Human Capital.** Human capital includes skills, education, knowledge, and health. At the household level, human capital is the amount and quality of labour available and varies

depending on skills, education, knowledge and health, with adequate nutrition. Access to employment and to earnings is highly dependent on the quality of the human capital itself.

- b. **Social Capital.** Social capital is an asset consisting of the network of mutual support that exists within and between households, families and communities, containing the rules, norms, obligations, reciprocity and trust embedded in the social relations, social structures and institutional arrangements of society. With regard to household livelihoods, it is developed through networks and linkages between members of the community either vertically (patron/client) or horizontally (between individuals with shared interests), membership of informal and formal associations, and trust relationships, reciprocity and exchanges. Development of social capital becomes more important in urban than in rural areas especially for poor urban households.
- c. **Economic/Financial Capital.** Economic capital consists of the financial resources used to achieve livelihood goals. These financial resources include the availability of stock and flow of money contributing to consumption and production. The availability of stock for urban households may be savings that can be tangible, and includes cash, bank deposits, jewellery, or livestock in urban areas. Regular inflows of money include pensions or other transfers and remittances from the State.
- d. **Physical Capital.** Physical capital includes the basic infrastructure and productive resources needed to support livelihoods. Basic infrastructure is housing, while the productive resources are the tools and equipment that people use to function more productively. Payne (2002) and Rakodi (1999) also argue that the shelter is the main physical asset for the poor people in urban areas.
- e. **Natural Capital.** Natural capital includes environmental assets such as land, minerals, atmosphere, and water. Natural resources are generally less used in the livelihood strategies of the urban poor (Rakodi, 1999). Plots of land, vacant land, and open space in urban areas are not mainly regarded in terms of natural capital but as physical capital. However, according to Payne (2002: 151), a natural asset of the land is its quality, while *“location becomes more important in urban areas, as households seek sites with good access to livelihood opportunities, public services and amenities.”*

The case of HBEs as subjects of this study which have the opportunity to access assets, reflects the above discussion, in that they are carried out within dwellings and plots (physical asset), performed by the operators as a labour (human asset), financed by the family as the initial capital (financial asset), and trusted by customers as well as neighbours and entering into reciprocal relationships (social asset). Some researchers on HBE have attempted to explain access to assets although only partially, as in the example of Gough *et al.* (2003), who emphasise the plots and space around the dwellings and a small amount of initial capital as the physical and financial assets used by poor households in Accra and Pretoria. Tipple and Kellett (2003) explain the spatial configuration of dwellings and plots used by urban households in India and Indonesia. Mahmud (2003) describes how women as labour (human asset) play a significant role in the generation of income for their households in poor urban areas in Dhaka. Kellett and Bishop (2006) show how both social capital and economic capital are created and accumulated by urban households in Surabaya. Derived from the empirical evidence, they also show that

although social linkages and mutual co-operation are changing, they remain strong. This is manifest in a range of situations, and is certainly very marked when respondents were questioned about possible problems related to the operation of HBEs in a dense urban setting (Kellett and Bishop, 2006: 61).

Furthermore, Verrest (2007: 114) uses Moser's framework of asset accumulation in her study in the Caribbean, to analyse "*the impact of country, neighbourhood, household and individual characteristics on asset portfolios, livelihood activities and levels of vulnerability*" of HBE activities. One purpose of this study is to examine the activity HBEs in Yogyakarta using four assets (physical, financial, human and social capital) that are packaged in asset accumulation to complement previous studies above that add insight into the activities of HBE in poverty alleviation and vulnerability.

2.6 The Production Space and Adaptation Behaviour

2.6.1 Perspective on Space: a Central Theme

Space is a central theme in architecture and the home environment in everyday life because of its function as a physical shelter for a variety of human activities. Space is also the means for various users to express their culture and lifestyle. In this regard, home environments not only include a physical dwelling, but all of the circumstances, actions and relations in the

space where it stands. This includes neighbourhood spaces and the provision of social services. From the variety of human experience in the space, we can understand how people use and negotiate the space. In addition to space as a central theme in this research, it is also a 'resource' that can be exploited, not only for consumption but also for production. Thus, space as a central theme and as a resource (physical asset/capital) is influenced by the notion of space not only for reproduction but also for production in the home environment. Lefebvre (1991: 32) stressed that "*social space also contains specific representations of this double or triple interaction between the social relations of production and reproduction.*" He proposed three concepts of space: spatial practices, representations of space, and representational space.

Spatial practice, which embraces production and reproduction, and the particular locations and spatial sets characteristic of each social formation [...] representations of space, which are tied to the relations of production and to the 'order' [...] representational spaces, embodying complex symbolisms (Lefebvre, 1991: 33).

Merrifield comments that:

Lefebvre [...] assumes a much more active understanding of space. For him, space isn't just a passive surface for reproductive activity. Of course, spaces do permit commodity transactions and the reproduction of labour-power to all take place (2000:172).

In addition, based on the concept of representations of space, Merrifield (2000: 174) also notes that "*Lefebvre believes this space to be the space of capital*" because it has a substantial role and influence in the production of space. This means that the everyday reality of space has complex implications. There are patterns of interaction that connect between varieties of activities, where economic relations should also be taken into account, as somehow ensuring that the relationships between various activities can be realised. This requires continuous observation over a period of time. Accordingly, in terms of HBE, Kellett and Tipple argue that:

many studies of housing concentrate on the dwelling as a place of shelter for the household, as a unit of accommodation and as a key setting for social reproduction. However, in many parts of the world the dwelling is also a place of production (2000: 203).

When situating the house as a place of production, the focus is on the dual function of space. This makes for a space that is more fluid and dynamic, rather than fixed and static, as is found in the private sphere.

The following section discusses space as a resource for households who run HBE to generate income that is vitally important to their survival. The house is, basically, a domestic space

where household members seek safety, comfort, and intimacy, in line with their expectations. Space as a resource that can generate income implies a transformation of the single function space into a dual function space (reproduction and production). For users, space also has implications for the household economy, while it can also create potential conflicts, especially for the larger size of household who inhabit a small dwelling. Thus, a discussion will also be developed on human behaviour, especially the various strategies used by households in adapting their use of space, with the aim of satisfying requirements for both environmental and social harmony.

2.6.2 Human Behaviour and the Home Environment

The relationship between people and the environment is bidirectional. This means that human beings are affected by the environment and the environment is also influenced by humans, and ultimately each affects the other. Even Rapoport (2005) called this a two way interaction mechanism. The concept of the relationship between the environment and behaviour "*reflects progression towards a more integrative perspective, complex, and dynamic in the transactions between people and their everyday setting*" (Clitheroe *et al.*, 1998: 104). Therefore, the relationship is dominated by a 'transactional theory' which is a rejection of the 'physical environment determinism' which holds that all human behaviour is influenced by the environment (Faqih, 2005; Bechtel and Churchman, 2002). Concerning the relationship between human behaviour and the home environment, Werner *et al.* explain that the relationship is based on transactional theory and proposes two basic assumptions: first,

[...] people and their environments are an integral and inseparable unit, they cannot be defined separately, and indeed are mutually defining. Second, temporal qualities are intrinsic to people-environment relationships, so that homes are conceived of as a dynamic confluence of people, places, and psychological processes (1985:2).

They also propose 'the home as a transactional unity', as a holistic entity that consists of three main aspects: people/psychological processes, environmental properties, and temporal qualities (Figure 2.3).

The figure shows a transactional relationship between people/psychological processes (an individual, a group, or family relation), environment (social or physical), and time (linear or cyclical dimensions) on many levels and scales, where all three components are connected by dashed lines. The outer circle of the figure implies the form of "*transactional processes in home at the level of action and at the level of meaning; they can be events, activities, meanings,*

evaluations, or any other psychological process" (Werner *et al.*, 1985: 2). The inner circle describes three general processes that link between people and homes which are: (1) social rules and social relationships, (2) affordances; and (3) appropriation, attachment, and identity. Social rules and relationships cover a broad range of interpersonal dynamic processes, including social and cultural norms and rules, affective, emotional, and evaluative bonds, and cultural rituals and practices. Social rules explain the appropriate and expected behaviour in the setting at any given time, thus providing meaning to the setting, its human occupants, and their behaviour. The times and places for entering, entertaining, eating, and sleeping as well as a broad range of other behavioural or symbolic practices, indicate the social norms and roles in all communities about how the home should be used. These norms and rules are also reflected in the design and configuration of residences, the type and location of furniture and objects and the like. The term affordance is about how "*objects and environments are perceived according to the meanings, actions, and behaviours they imply, rather than according to their specific physical characteristics*" (Gibson cited by Werner *et al.*, 1985: 4). The notion of 'appropriation, attachment, and identity' explains how people invest places with meaning and act in such a way that expresses their bond and relationship with a place.

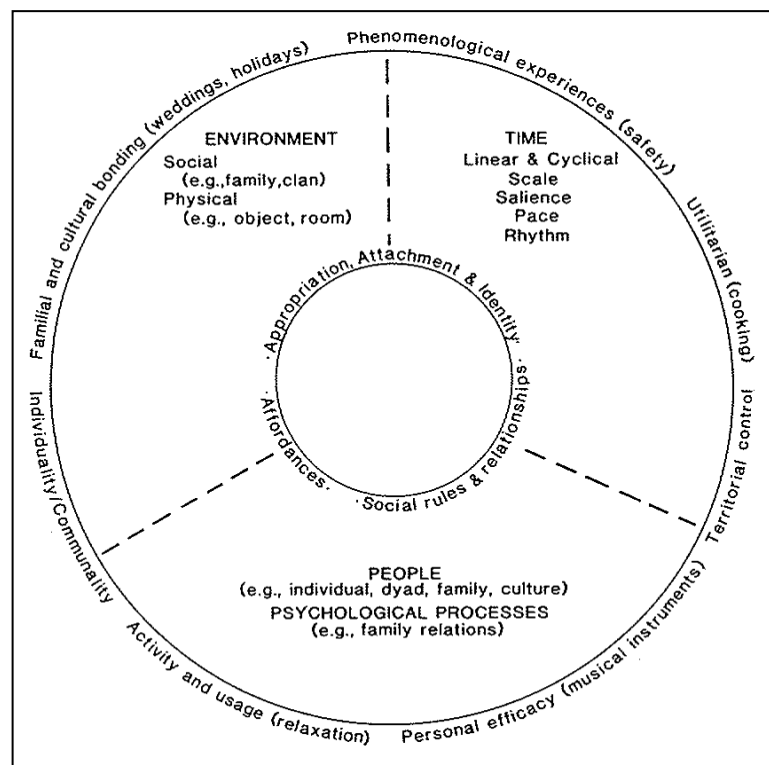


Figure 2.3: The home as a transactional unity
 Source: Werner *et al.* (1985: 2)

To provide a strategy for doing research from the transactional perspective in terms of human behaviour and the home environment, Werner *et al.* (2002: 203) are still using the basic assumptions noted earlier, but also make two more assumptions. Therefore, three basic assumptions are:

First is holism, or the view that phenomena should be studied as holistic unities composed simultaneously of people, psychological processes, the physical environment, and temporal qualities. Second is the idea that time and temporal qualities are integral to phenomena, not separate 'markers' of events. Third is a unique philosophy of science that includes a search for formal causes in events (2002: 203).

Based on two of these assumptions (holism and 'formal cause' in events) and on one illustration (new urbanism and front porches) used to demonstrate the transactional world view, they conclude that studying a single setting - the front porch - and its functions for different purposes and diverse groups of participants, can provide an understanding of the use of the home by the user. Therefore, this transactional approach can also be considered suitable to investigate the case of HBE, nevertheless noting the need to shift emphasis from people or:

individuals as only consumers, from 'user perceptions and evaluations' and 'consumer behaviours' to the relations of production and consumption and the social relations within which (un)sustainable ways of living and the environment are produced and reproduced (Uzzell and Rätzl, 2009: 349).

Thus, the following section looks at how people interact with their environment by using the tool of adaptation strategies in dealing with the reproduction and production of space.

2.6.3 Adaptation Strategies

In numerous fields of social science, adaptation is considered as a response to the risks relating to the interaction with environmental change, particularly changes in the physical environment such as in dwellings, urban areas, the state, or the world. Humans basically face the same adaptive challenges as all organisms, but humans are more varied because of different cultural influences. Human adaptation depends on cultural adaptation. Cultural adaptation is built up incrementally over long time spans and is complex (Alland, 1975). Implicit or explicit in all of the definitions of adaptation is a force causing change. Moore *et al.* (1984: 35) argue that "*the concept of change and adaptation are critical concept in the field, both change in human expectations and adaptation of the environment to human changes.*"

Changes in activity in the house, from what was originally a single activity (domestic) into double activities (domestic and business) in the case of HBEs have a tendency, directly or indirectly, to change the way the space is configured by household members to achieve a new harmony. Harmony in this case is the result of the adaptation process taking place between human behaviour and the environment so as to obviate interference or dissonance in a system. To achieve harmony, certain adaptation strategies are required.

As noted earlier, Piaget defines 'adaptation' as an equilibrium between 'assimilation' and 'accommodation'. He describes:

assimilation [as] referring to the action of the organism on surrounding objects, and accommodation to the opposite state. Thus the organism, rather than submitting passively to the environment, modifies it by imposing on it a certain structure of its own (Piaget cited by Norberg-Schulz, 1971: 10-11).

Lazarus and Folkman (1984) place more emphasis on coping strategies than on adaptation strategies. They suggest that two such strategies are: (a) 'Direct action' by seeking information, the act of escaping physically, or attempting to stop the stressor; (b) 'palliative' by using psychological defence mechanisms such as meditating, smoking, drinking alcohol. Somewhat differently, Bell *et al.* (2001: 121) argue that "*the coping strategy is a function of individual and situational factors and may consist of flight, physical or verbal attack, or some sort of compromise.*" However, they remind us that a coping strategy used by a human is not necessarily successful. When a coping strategy is considered successful it will lead to a stage of adaptation which in turn effects a new harmony and tolerance to the existing circumstances. Conversely, when it is not successful then the harmony will be disturbed (Figure 2.4).

The descriptions of coping strategies so far have placed the emphasis on general applications, while Berry (1980) has given greater focus to adaptation to habitat. He proposes a model with three basic elements of ecology, culture, and behaviour. Bearing in mind harmonious coexistence between the three elements, he also proposed three adaptation strategies, which are:

1. **Adaptation by adjustment**, meaning action to reduce conflicts, with self-adjusting behaviour that results in harmony between the environment and individuals.
2. **Adaptation by reaction**, meaning to reject or to resist environmental action by making physical changes to the environment in order to increase the harmony between individuals and their physical environment.

3. **Adaptation by withdrawal**, meaning to migrate or moving to another place because it does not fit with culture and behaviour, with the aim of obtain a more appropriate and harmonious accommodation.

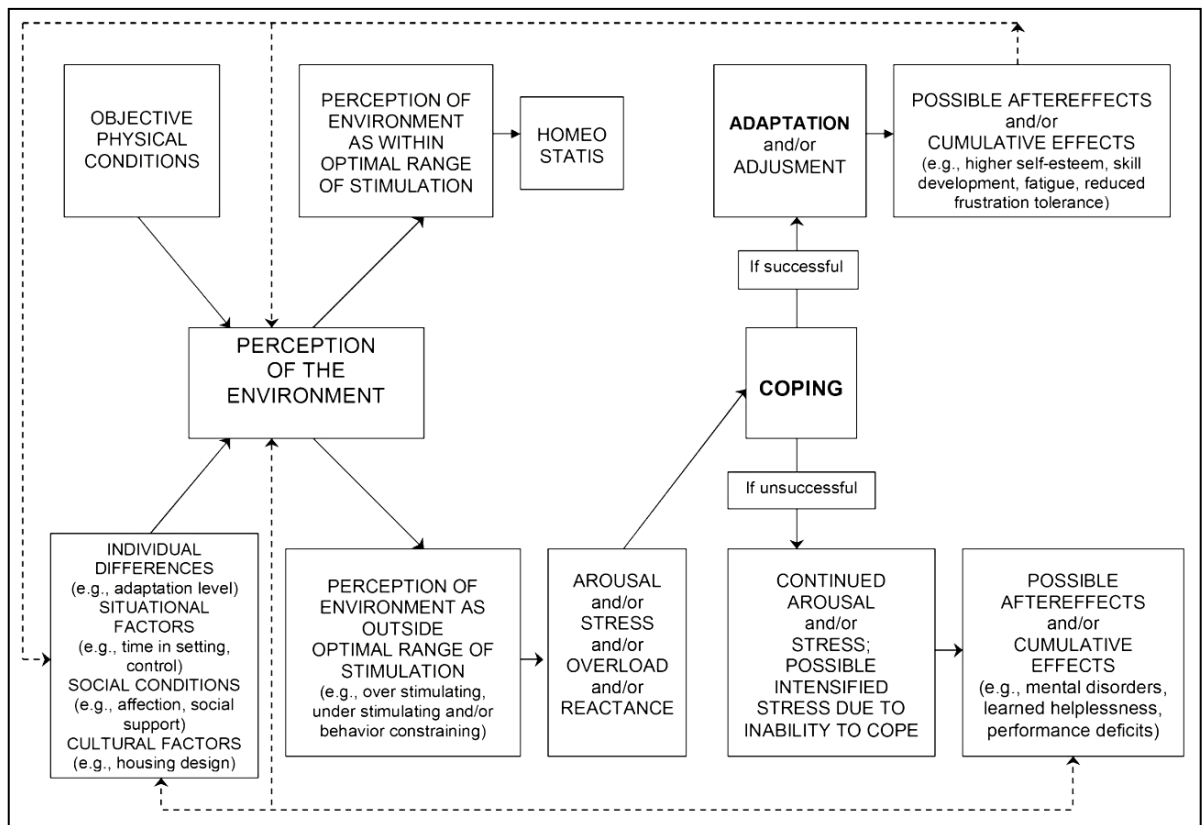


Figure 2.4: Eclectic model theoretical perspectives on coping and adaptation

Source: Bell et al. (2001: 132-133)

This discussion has already raised the idea that business activity at home using a domestic space implies both positive and negative impacts. In terms of negative impacts, such as conflicts of interest arising from space use by household members, household adaptation strategies will be required to achieve a new balance in the form of harmony. With regard to the process towards achieving harmony, this requires exploration and analysis of both the space and the activities used, which will take place in this study using Berry's tripartite model of adaptation to habitat.

2.6.4 Adaptation and Privacy Regulation

Privacy is associated with adaptation because the discomfort or dissatisfaction arising from interference with the privacy of a person or group evokes specific adaptation strategies. Gifford (2002: 211) states that “*privacy [is] manifested in [...] behaviour, preferences, values, needs and expectations [...] Privacy is closely related to territoriality ... and personal space.*” In addition, “*privacy preferences, expectations, needs, and satisfaction are influenced by personal characteristics, the social situation, the physical setting, and the culture*” (p.219). Therefore, discussion of adaptation and privacy regulation involves two aspects: privacy regulation and human territoriality-personal space.

The study of privacy from a variety of experimental and theoretical perspectives has been reviewed by Newell (1995). She claims that the notion of privacy is highly variable and difficult to appraise coherently. As an example, definitions from various literatures frame privacy as control of personal space, a central regulatory process, personal control over personal information, or an instrument for achieving individual goals of self-realisation. Newell also classifies privacy as an interactive condition of person and environment with: (a) the primary focus on the person, (b) the primary focus on the environment; and (c) a balanced interactional focus.

Scholars have mostly adopted the third classification, and privacy as defined by Altman is often quoted. Altman (1975: 18) defines privacy as a “*selective control of access to the self or to one’s group.*” This notion has two important themes based on ‘access to the self’ which is the information about oneself or to social interaction with oneself and information or interaction relating to a group. “*Selective control means that people (individual or groups), attempt to regulate their interaction and exchange with others or with aspects of the environment*” (Altman and Chemers, 1986: 77). Privacy does not mean eliminating oneself from the presence of others or involve controlling the amount of contact with other people (Pedersen, 1997). However, avoiding an undesirable level of crowding in the environment is a basic privacy need (Altman, 1975; Kupritz, 1998). In crowded situations, Altman offers two mechanisms which are as follows: (a) a control mechanism which is usually expressed physically to determine the territories for the self, (b) an avoidance mechanism which is usually socially expressed, such as time scheduling or avoiding other people (Altman, 1975). Furthermore, certain mechanisms for negotiating the boundaries to establish which areas are private or public, depend on the use and control of space, architecture boundaries, and

signals (Altman, 1977). Gifford (2002) stated that privacy and territory are connected on an equal basis.

A residence is a relatively private space (Gifford, 2002) and allows for intimacy (Bachelard in King, 2004). In addition, King (2004: 42) underlines that *“in order to be intimate we need privacy, but, in this case, private does not mean solitary.”* The most common physical mechanism used by residents to manage privacy in the residence is the presence of walls and doors (Gifford, 2002) and privacy is also often achieved by using curtains (Carlisle in Amole, 2005). Similarly, Altman states that windows, curtains, doors, fences, and signs are used to protect people from unwanted intrusion (Hill and Schwartz, quoted by Altman, 1975; Kellett, 1995). In the case of the ‘closed’ and the ‘opened’ in residences, with relation to privacy mechanisms, Serfaty-Garzon (1985: 73) stresses that:

the dwelling is essentially what ensures secrecy and visibility: secrecy in closing doors and windows, secrecy in chests and shut closets, secrecy in putting the outside world at a distance; visibility in hospitality and shared meals and in conflicts and contradictory claims.

Thus, many mechanisms are used by residents to indicate that an area in the residence has privacy or not. These mechanisms have characteristics unique to each individual or group.

The above description presents the privacy associated with the boundaries and territories. Human territoriality relates to people's evaluations of experiences and settings in the built environment. In human territoriality, several mechanisms are used to close or open the self to social contacts. Altman states that territorial behaviour is one of the mechanisms. He defines:

Territorial behaviour is a self/other boundary-regulation mechanism that involves personalisation of or marking of a place or object and communication that it is ‘owned’ by a person or group. Personalisation and ownership are designed to regulate social interaction and to help satisfy various social and physical motives. Defence responses may sometimes occur when territorial boundaries are violated (Altman, 1975: 107).

This definition implies the marking of a place and personalisation, so that there is a relationship between territory and personal space. The marking of a place means showing one's territorial intentions by placing an object or substance in the space, whereas personalisation means marking to indicate a person's identity. Altman and Chemers (1986) state that territorial behaviour is the mechanism which individuals use to establish and regulate social contacts through territorial markers. It is an attempt not only to control the activities of others, but also their access to certain areas. This includes controlling who should

enter, to do something, and take care of the site. *"People mark, differentiate, and separate places to varying degrees. Some cultures have rigid boundaries, while others are more fluid"* (Farbstein and Kantrowitz, 1978: 70). Hence territoriality allows one to effectively control social interaction and have a clearly delineated space, as well as resistance to intrusion by others. Similarly, Brown (1987) explains that territory involves personalisation, control, marking and defence of physical space in which the existence of users is supported and confirmed by the physical setting. He also states that territoriality allows regulated use and occupancy of space and increases the expression of personal or group identity.

The physical setting, in the form of the allocation of space within a room, the shape or size of the room, and the arrangement of furniture, is the way people control the territory (Gifford, 2002). The mechanisms of where furniture is set can affect the potential for social interaction and can be a barrier in a physical territory (Sommer, quoted by Evans and McCoy, 1998). Therefore, the ability and the purpose of controlling resources over time are closely related to territorial behaviour. This involves the control and use of space, use of resources in that space, and access to space and resources within a certain time period. However, Sebba and Churchman (1986) make the criticism that both territorial behaviour and 'territory' itself are not clearly defined, for example in Altman's typology of territory. Altman (1975) describes three types of area (primary, secondary, and public) that include the level of privacy, and relate to individuals' feelings of involvement with and control over a place. Primary territories are strictly private and are claimed exclusively by one individual or group. Secondary territories are semi-public and are temporarily opened up to other people. Primary territories are the space used by an individual or group with the highest level (compared to the other two territories) in terms of control, ownership, property, regulatory power, and time period of use. Problems arise when determining the primary territory, and whether this is the home or some part of it. Sebba and Churchman (1986: 9) argue that *"the home [is] the sole area of control for the individual"* and *"the home gives a feeling of security to its owners."* These characteristics indicate that home is the primary territory because occupants have substantial control in terms of their power to regulate its use, and also to decide the time period of use (Altman, 1975; Sebba and Churchman, 1983; Werner et al., 2002); however, the bedroom is the primary territory in terms of the arrangement of rooms in the house because this territory is psychologically very important for users (Altman, 1975; Altman and Chemers, 1986; Gifford, 2002). This difference in view is due to oversimplifications of the understanding of territory which is a term usually used in the animal world. Brower clarifies that:

territorial behaviour in man is far more varied, less consistent, and less predictable than it is in animals. [...] human behaviour is modified by cultural training to such an extent that territorial forms may be used to achieve purely symbolic purposes (1980: 180).

Rapoport (1990a: 171) stresses that the physical territory has a 'meaning' and importance to the users when there is movement and mobility, particularly their latent aspects; and "*meaning' depends on some knowledge of the context and the culture, its rules and schemata.*" It is clear from both the preceding perspectives that territorial behaviour and physical territory are affected by culture. Ideas of privacy and territories that are influenced by the culture influence the organisation of space in the human environment.

2.6.5 Spatial Organisation

Spatial organisation is the configuration of space to reflect spatial relationships which in the end forms a pattern. To examine spatial organisation through the nature of the configuration of space with an approach that is more mathematical and graphical than intuitive, Hillier and Hanson (2003) develop a means of analysing spatial configuration called the 'Space Syntax'. In the abstract definition of a building, the space syntax theory can be stated as follows:

[...] a certain ordering of categories, to which is added a certain system of controls, the two conjointly constructing an interface between the inhabitants of the social knowledge embedded in the categories and the visitors whose relations with them are controlled by the building (Hillier and Hanson, 2003: 147).

Therefore, the configuration of any building is conceptualised as a relationship between all interior and exterior (external surroundings) space. However, it is not focused on size or shape. One of the advantages of space syntax is its ability to describe and compare various types of buildings by projecting the configuration of space so that it can be seen in terms of its connectivity, integration, control and depth, based on a visual symbol of human activities. However, this method tends to be highly codified, deterministic, and mechanistic, which only emphasises the symbol as a description of the historical and social context (Lawrence, 1987). In addition, this method places too much emphasis on graphical representations of the relationship between the spaces rather than on human behaviour in the environment, as noted by Lawrence, who stated that "*the mere act of transforming the two dimensional representation of a building from a traditional scale drawing to a graph does not yield any information about psychological, social, cultural, or temporal issues*" (1990: 75).

By contrast, McCoy describes spatial organisation which is more complex as follows: *“the organisation of space determines the level of enclosure, adjacencies, proxemics, and territoriality”* (McCoy, 2002). He adds that the organisation provides the control and privacy, adaptability, and flexibility needed. This means that the spatial organisation depends on human behaviour, the perceived needs of humans, and depends on the ability of humans to adapt to environmental situations. According to Rapoport (1980: 11), *“space organisation is the way in which these separations occur and is central in understanding, analysing, and comparing built environment.”* In addition, Rapoport (1994: 183) states that spatial organisation is part of a rule system where *“in each culture there are unwritten rules about what is done and not done.”* Such unwritten rules are indicated by public domains, interactional domains, and a body domain. Each domain has characteristic physical elements that can be used in different cases, allocated and distributed differently. Besides this, there are also four rules of occupancy: free occupancy, society occupancy, community occupancy, and personal occupancy. Rules generally reflect values, norms, life-styles, and socio-cultural factors. Furthermore, *“the interrelation between rules and spatial use and organisation, and one which also relates to ethological⁴ concepts [...] is the concept of privacy”* (Rapoport, 1994: 184).

Concerning ‘proxemics’ in spatial organisation, Lawson (2001) articulates this in terms of spatial roles: non-verbal communication, non-reciprocal relationships, ‘sociofugal’ and ‘sociopetal’ space, and movable and fixed furniture. Human behaviour when sitting, moving and shifting, although not directly communicated, nevertheless has meaning. This is called non-verbal communication. Meanwhile, non-reciprocal relationship emphasizes the relationship that does not cause disturbances with each other, for example by way of seating arrangement. *“Sociopetal space is that which tends to draw people together, and sociofugal space is that which tends to throw them apart, just as centrifugal force throws objects away from the centre of a spinning axis”* (Lawson, 2001: 141). Clearly this is related to ‘human relative position’ in spatial arrangements. Thus, Lawson (2001: 133) argues that *“both distance and actual arrangement in space come together in what is now known as proxemics.”* Rapoport (1982) proposes three elements, namely fixed-features, semi-fixed features, and non-fixed features, in terms of non-verbal communication and environmental meaning,

4 An ethological concept is the concept deriving from the study of animals, in this case, the territorial behaviour of animals, applied to human behaviour. According to Rapoport (1994: 180), this concept in human behaviour consists of five elements including home range, core areas, territory, jurisdiction, and personal distance.

where 'proxemics' are part of the non-fixed feature element. Human bodily positions and postures, hand and arm gestures, facial expression and eye contact are included in the non-fixed feature elements which are related to the inhabitants of the setting. In addition, these three elements together work to make the spatial organisation become more meaningful.

Rapoport (1982: 124) states that "*spatial organisation at small scales can communicate meanings at the level of semi-fixed elements*", specifically to describe the case of dwellings. Semi-fixed feature elements concern the setting and type of furniture, curtains and other furnishings, advertising signs, and window displays in stores. Based on the description above, it is clear that spatial organisation is not a configuration between spaces devoid of meaning, but rather contains rich information about the reciprocal relationship between spaces and human behaviour, as well as carrying many meanings for that relationship. The three elements discussed above are also related to the following system of settings below.

2.6.6 System of Activities and Settings

To understand the use of space, it is necessary to know the nature of the system of activity and the system of settings. The concept of system of activities and settings has been introduced by Rapoport (1990b) to describe the relationship between people and the built environment mediated by culture. However, culture as a concept is still too broad to be discussed in association with the built environment, and therefore the level of analysis needs to be refined (Figure 2.5). Culture leads to a particular world view which reflects ideals and can have many incarnations; but the idea of the world view is also still difficult to use.

Values are one aspect of world views and, while easier to identify and to analyse, are still rather too complex, at this stage, to link directly to built-environments. [...] Values result in particular life-styles – the ways in which people characteristically make choices about how to behave, what roles to play, and how to allocate resources (Rapoport, 1990a: 10).

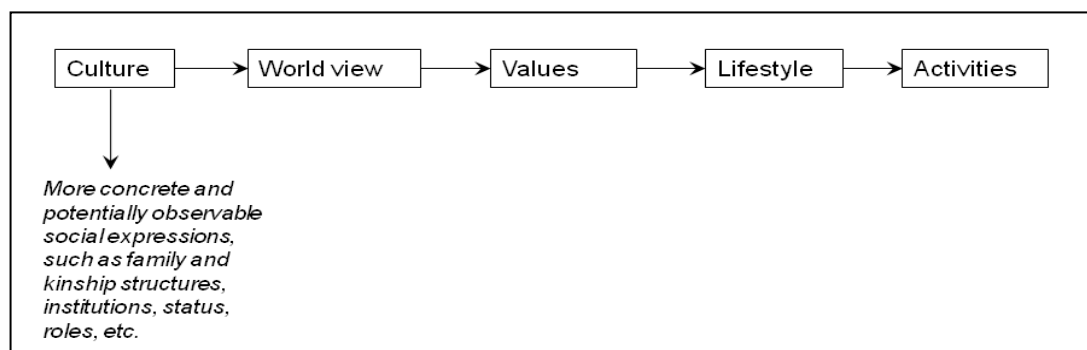


Figure 2.5: 'Dismantling' the concept of culture

Source: Rapoport (1990b: 10)

Thus, activities and activity systems are more specific than life-style and may be useful as an entry point to discuss how the built environment is influenced by culture. These activities can be divided into four components: (1) the activity itself; (2) how it is carried out; (3) how it is associated with other activities to form systems of activity, (4) the meaning of the activity (Rapoport, 2005, 1990b). Rapoport explains that the process leading from ‘the activity itself’ to ‘the meaning of the activities’ is an illustration of the transition from the instrumental or the manifest to the latent aspects of an activity (or function) that varies depending on the culture (Figure 2.6). An example is cooking, which distinguishes between humans and non-humans, and processes raw ingredients into cooked food. The particular manifestation of this process reflects a lifestyle that ultimately reflects a particular culture and ranges from the instrumental/manifest aspects of the activities to their latent aspects, implying a variation in the container or space which might be suitable for the activity across different cultures.

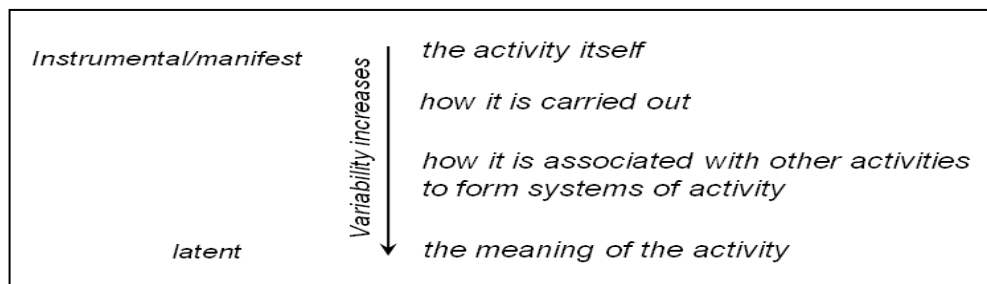


Figure 2.6: ‘Dismantling’ activities

Source: Rapoport (2005: 41)

The variability (Figure 2.6) involves the specifics of an activity system, in that there are a series of questions relating to the activities, for example: who does what, where, when, including or excluding whom (and why). Thus, observing environmental behaviour plays an important role in working out the cultural specifics. Zeisel (2006) formulates elements to observe activities that include who (actor), is doing what (act), with whom (significant others), in what relationship (relationships), in what context (socio-cultural context), and where (physical setting).

The system of settings is one of the four components of the conceptualisation of the environment (Rapoport, 2005). Each component is mutually supportive, complementary, not conflicting or contradictory; and there is a component of the most abstract, most complex,

and there is also the most concrete and simplest. The four components of the environment are, according to Rapoport:

- (a) *The organisation of space, time, meaning, and communication,*
- (b) *A system of settings,*
- (c) *The cultural landscape,*
- (d) *Consisting of fixed, semi-fixed, and non-fixed elements* (2005: 24)

He argues that the most fundamental and abstract formulation is the organisation of space, time, meaning, and communication. The most concrete and simplest is composed of fixed, semi-fixed, and non-fixed elements. He explains in more detail as follows:

The environment [...] is expressed physically as cultural landscapes at various scales, from the region, through townscape to the housescape. Cultural landscapes consist of systems of settings, within which systems of activities take place. [...] the activity systems are made up of fixed and semi-fixed elements, and both are created and occupied by non-fixed elements (mainly people) (Rapoport, 2005: 24).

Therefore, the system of settings, such as the built environment, actually consists of fixed-feature elements such as buildings, ceilings, walls, floors, columns; and semi-fixed feature elements such as furniture, partitions, and curtains. Both elements are created and influenced by non-permanent (non-fixed) elements, mainly people and their activities. Furthermore, Rapoport (1990b: 12) states that “*the central point is that activity systems are inevitably organized in space and time*” and “*activity systems take place in the systems of settings*”. Accordingly, the system of activities occurs in the system of settings that includes space and time involvement. The activities are continuously changing, depending on the situation, and other related activities that have implications for changes to the system of settings. As a result, a space may contain many settings and may configure a different setting from time to time. “*The same space can also become different settings at different times*” (Rapoport, 2005: 28). To understand human behaviour in the built environment, he also noted the need for examination of the meaning of activities in activity systems and within a system of settings. Ahrentzen (1997: 77) states that “*objects and spaces have cultural, social, and personal meanings.*” Meaning also differs among activities, even among activity groups and the meaning of activities and settings of the past will be different from the present.

Domestic and business activities in the case of HBE occur in a system of settings that exist in space and time. In the context of the environment, especially in terms of the built environment or precisely in terms of the dwelling, such activity occurs in a concrete component that consists of fixed, semi-fixed, and non-fixed elements. Moreover, the adaptation behaviour of households where two activities co-occur in a certain space in the dwelling, involves fixed and semi-fixed elements. The presence of others in these activities, in

particular for business activities, is a very important aspect. It is emphasised by Rapoport (2005: 32) that:

[...] settings guide behaviour not only, or even principally, through the fixed-feature elements of architecture but through semi-fixed elements that provide essential cues. Other people present, and their activities and behaviours, are also very important cues, often used when the fixed and semi-fixed elements are not noticed or not understood.

Concerning domestic and non-domestic activities, Rapoport explains that “*both in domestic and nondomestic situations, semi fixed-feature elements tend to be used much – and are much more under the control of users; hence they tend to be used to communicate meanings*” (1982:92). The user creates and possesses, defines, and modifies the settings through manipulating the semi-fixed elements. So the same space (in terms of fixed features) can turn into different settings by changing the semi-fixed features for various uses. For example, according to a study of HBE in Surabaya, Kellett and Bishop (2000) reported that the same space as it is used at different times for different activities. In other words, the dwelling is effectively a workshop during the day and the same space is used for domestic activities at night.

2.7 The Direction of the Study

It has already been stated in the introduction of this chapter that one of the functions of writing a literature review in qualitative research is to clarify research problems and to understand the important aspects of the subject area as the basis for the development of the study’s theoretical framework (see Creswell, 2003 and Ambert *et al.*, 1995). In addition, the literature review also helps to understand the relationship between the body of knowledge in a certain area, in this case HBE, and the research problems. When this wider context is understood, the research can aim to fill the gaps and fit into the existing body of knowledge. Furthermore, the framework provided by the literature review supplies guidelines and direction in establishing the importance of the research.

This chapter has reviewed a range of different literatures pertaining to the subject area, particularly literatures on HBE, from three approaches. **Firstly**, HBE is viewed as part of the informal sector. This perspective became available three decades ago (e.g. Lipton, 1980; Strassmann, 1985; Gilbert, 1988) and was discussed again by Tipple (2005b) with more detail about how HBE fits into the informal sector and how many of the characteristics of HBE

reflect the informal sector. **Secondly**, HBE has been traced through history, finding that the phenomenon of HBE was the norm in pre-industrial societies and it is still dominant in developing countries. There are differences in terms of the reason for the occurrence of the phenomenon: whereas in the pre-industrial era its prevalence was mainly due to communities' limited mobility, in the present its prevalence is based on a number of factors, one of which is poverty. **Thirdly**, HBE can be approached from six perspectives, based on the specific topics through which it has been addressed by scholars. The six perspectives consist of economic, social, urban planning and management, housing policy, environmental effects, and spatial implications. There is less attention paid by scholars to exploring the use of space in HBEs, based on the implications of the different domestic and business activities carried out at home.

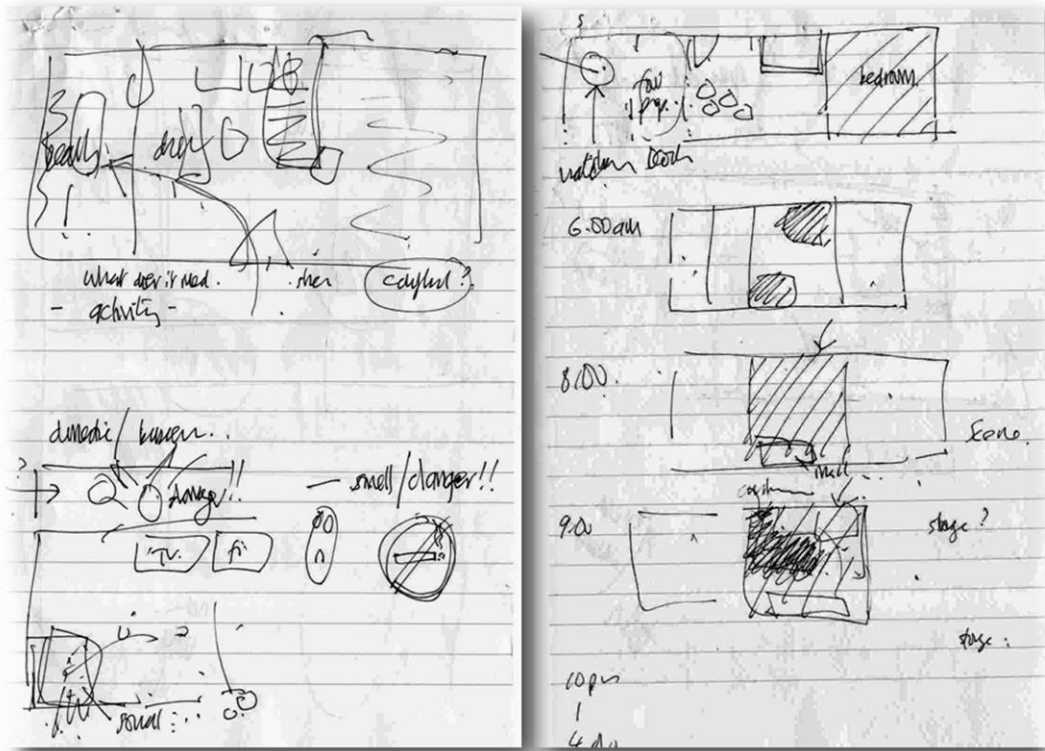
The second issue from the above discussion implies the need for understanding how urban households attempt to get out of poverty. How do urban households use various combinations of assets for that purpose? In the case of HBE in urban areas, the dwelling is a valuable asset for most households and can be exploited by them to the fullest degree. HBE activity mostly uses household assets, but the nature of these assets is still only partially analysed by researchers. It therefore requires a more comprehensive analysis involving the assets owned by urban households including physical, human, financial, and social capital/assets. Asset accumulation and livelihood strategies have been discussed. The question then arises as to how the accumulation of assets works best for HBE.

The third issue of the above discussion also implies that a more in-depth analysis of the implications of HBEs is required, especially concerning the interrelations of people, space and time within them. An example of how the three things are interrelated includes that people in the dimension of space are not static but dynamic as a consequence of the time dimension, so this needs consideration through observations over time. In this regard, Kellett and Tipple (2000: 211) expect that *"during times of change, we can expect to learn from the process of re-negotiation and observe how potential conflicts and demands are resolved."* How do they manage the configuration of space, how do they adapt the house that contains two distinct activities, namely economic and domestic activities; and how do they continuously manage these two activities? Some questions have not been discussed by previous researchers. While the relevant literature in the subject area has been discussed in this chapter, it appears that there is a need for more precise information. By highlighting a home business through longer

periods of fieldwork, the attention is directed towards understanding the behaviour of people in a physical environment where two different activities take place.

The review of the subject areas above has shaped the direction of the study as follows. **First**, it will require a comprehensive analysis which explores how HBE activity uses a variety of resources owned by urban households. How important, how intense and how strong are the variety of existing assets for supporting the activities of HBE, particularly in anticipating the uncertain conditions in urban areas? Vulnerability and poverty are two dimensions that are often addressed as a problem in urban areas. Thus, HBEs and these two dimensions need to be analysed in greater depth. **Second**, to understand the behaviour of people in a physical environment with regard to a variety of questions requires a long observation, with the approach of diachronic analysis supported by spatial and photographic data. This diachronic-synchronic view of behaviour will enable us to understand the problems, constraints, and opportunities more realistically. Focusing on commonalities and differences, as well as possibilities for coexistence, this study should learn many facets of the life process that occurs in HBEs in developing countries. In particular, through a diachronic and synchronic examination of the existing characteristics, regarding how space is organised, and matters related to distinctive social cultures between neighbours, this research should analyse the understanding of the interrelations between labour, space and time in a more dynamic and three-dimensional way. **Third**, to generate a more comprehensive and holistic understanding, this research needs to adopt an exploratory approach. Such methods have been used by previous researchers investigating spatial implications and space use dimensions. This study also uses an exploratory approach in order to generate new findings in different areas, particularly with regard to the inhabitant's adaptation to the space when there are two activities taking place in the house. The analysis in this study is directed towards using qualitative data, and in particular, a combination of photography and spatial data, especially in tracking the movement of activities through time.

Finally, adaptation theory, which is part of environmental psychology, is a basic foundation for understanding how residents manage two activities within a house. This research will identify the three essential components of the resident-house relationship: people, space and time. Thus, conclusions about the inhabitant's preferences and the prospects of HBE can be realistically drawn. The following chapter explains how this exploration will be conducted using a qualitative research method.



* Two sketches created by Dr Peter Kellett for explaining observation method of both space and activities of HBEs to the researcher when he visited Yogyakarta in 2005.

3

Chapter 3 Methodology and Research Methods

3.1 Research Methodology	72
3.1.1 Paradigm: Positivistic or Naturalistic?	72
3.1.2 Quantitative and Qualitative Research: <i>Mixed Method Approaches</i>	74
3.1.3 The Case Study as a Comprehensive Research Strategy	75
3.2 Scope and Research Location	77
3.3 Research Methods	78
3.3.1 The Temporal Aspect of the Study	78
3.3.2 Observation of Space	81
3.3.3 Observation of Activities and Movements	85
3.3.4 The Interview	91
3.3.5 Focus Group Discussion (FGD)	93
3.3.6 The Census	95
3.3.7 The Questionnaire	96
3.3.8 Documentary Resources as Secondary Data	97
3.4 Analysis and Interpretation Methods	98
3.4.1 Analysis as an Iterative Process	98
3.4.2 Analysing and Interpreting Qualitative Data	99
3.5 Reflection and Positionality on the Research Process	100
3.6 Conclusion	103

Chapter 3

Methodology and Research Methods

3.1 Research Methodology

The methodology and the research methods are two different things. The methodology is the broad theoretical and philosophical framework into which these procedural rules fit, while the methods are the technical or procedural rules to pursue for obtaining objective and reliable knowledge (Brewer, 2000).

3.1.1 Paradigm: Positivistic or Naturalistic?

In research methodology, a paradigm refers to a set of beliefs that accompany the method. A paradigm, as discussed by Dane (1990) is used to describe groups of related theories. It is also the distillation or essence of our beliefs about the natural world and actions within it. In addition to reference point and point of view, a paradigm also serves as a control for the researcher's activities. Moreover, the paradigm is a worldview, a general perspective, and a way of solving real-world complexity. Thus, "*paradigms are deeply embedded in the socialization of adherents and practitioners: paradigms tell them what is important, legitimate, and reasonable*" (Patton cited by Lincoln and Guba, 1985: 15). Other theorists such as Bogdan and Biklen (1982) and Lincoln and Guba (1985) regarded this kind of systematic set of beliefs, together with the accompanying methods, concepts, or prepositions, as a paradigm. Dane went into further detail (1990: 24), saying that "*a paradigm is a logical system that encompasses theories, concepts, models, procedures, and techniques.*" Hence, a paradigm is a set of beliefs to guide research activities.

Historically, a paradigm can fall between the two poles of positivistic and naturalistic approaches (Bogdan and Taylor, 1975). However, Guba and Lincoln (1981) developed other terms, such as the scientific paradigm and the naturalistic inquiry paradigm. In social science, the positivistic paradigm looks for facts and causal factors relating to social phenomena and is usually described as rationalistic, because this quality is characteristic of the research itself (Black and Champion, 1976). On the contrary, the naturalistic paradigm seeks to understand

social phenomena within a complex reality and holistically, in their natural setting. It seems almost impossible for the researcher to combine the two paradigms within a single research study, because these paradigms are incompatible. Each paradigm has certain advantages and limitations. In recent years, there has been a shift from the positivistic to the naturalistic paradigm. The shift away from positivism has three reasons: (a) the observation problem as a major element in research methods; (b) the rigidity of the relationship between theory and evidence, and (c) the purpose of the development of knowledge (Guba, 1990). The positivistic paradigm usually uses the deductive method and quantitative data for its analysis model, although it is possible to use it for both quantitative and qualitative analysis. By contrast, the naturalistic paradigm always uses an inductive method and qualitative data for its analysis model.

The naturalistic paradigm has been chosen for this study, particularly in the light of the study's rationale and its main research questions. First, the rationale of this study is the need to know the adaptation strategies of the household with regard to mixed-space use in an HBE. Adaptation relates to behavioural systems and external environments, as pointed out by Alland (1975), and the system of behaviour refers to people and activities. Rapoport (1990) observed that activities are influenced by culture. Activities within the scope of culture do not just imply propositional knowledge but also involve tacit knowledge, which is almost impossible to obtain through the rationalist, scientific approach, because this approach is only able to explain propositional knowledge (Guba and Lincoln, 1981). Our understanding of households' strategies in adapting space for mixed uses cannot be complete without knowing how people feel with regard to the space itself. We need to know how they use space and for what they use it, including how they expand their space and why. Only a naturalistic paradigm can empower the researcher to understand the household's activities and its action-reaction dynamics.

Secondly, the discussion broaches various complex behavioural phenomena, which will be associated with various domains such as the space domain, the economic and social domains; and how they interact with various other domains, especially the mixed space use in HBE. Viewed in the light of the complexity of the discussion, HBE cannot be seen as a single entity, but rather involves many entities and realities. This study also involves many realities and entities. To understand their activities and interactions, the researcher engages directly with many actors who deal with HBE in the field, especially regarding mixed-space use, in order to obtain data directly from the field and respond in a direct manner to the context. These

activities are compatible with a naturalistic paradigm, which combines the assumptions of the researcher and respondents or informants or actors who are dealing with mixed-space use in HBEs. Ultimately, therefore, this study can be characterized as exploratory, inductive, and as emphasising process rather than product. In addition, no hypothesis is stated in advance, there are no setting variables, and no restrictions on the final findings.

3.1.2 Quantitative and Qualitative Research: *Mixed Method Approaches*

Many authors have addressed the issue of differentiating between quantitative and qualitative research (e.g. Guba and Lincoln, 1981; Denzin and Lincoln, 1994; Brannen, 1995; Creswell, 2003; Leedy and Ormrod, 2005). Based on Guba and Lincoln (1981) quantitative and qualitative are terms that apply only to the techniques used in the research itself, or more precisely its methods. However, Denzin and Lincoln (1994) and Brannen (1995) have stressed using the research process, the analytical model, and the data collection method to distinguish between quantitative and qualitative approaches. The quantitative usually uses a quantification model and analyses the relationship between variables. It seeks to construct variables from the theory and data collected by questionnaire using the random sampling method. That is where it differs from qualitative research, which is usually focused on a process of activities and realities. Due to its focus on the process of activities and realities, it uses in-depth interviews, direct observation and participatory data collection, conducted through purposive sampling methods.

This study basically adopted an approach to mixed methods research with priority emphasis on qualitative analysis and supported by quantitative analysis. Mixed methods research encompasses a range of approaches in which qualitative and quantitative tools are combined, either sequentially or in tandem. In addition, the two are usually integrated throughout the process of research (Creswell, 2003). Thus, this study has used a mostly qualitative approach with some quantitative support. The strengths of this approach have been summarised by Maxwell (1996: 17-20) and are in accordance with the core of this research regarding adaptation strategies. There are five strengths of qualitative research according to Maxwell: (1) the meaning; (2) the particular context; (3) unanticipated phenomena and influences; (4) the process; and (5) causal explanations. This research not only captures existing physical objects but also records and describes the movements of behaviour, to show how the household interprets the use of space, and how these meanings affect respondent behaviour. This study emphasises the context of households' adaptation strategies, making a dual use of

space between domestic and business space. To do this, the main analysis of this study focuses only on a small number of individual cases which are expected to provide answers to the research question. Meanwhile, to further analysis of the complexities and varied phenomena of HBE, this study also uses a variety of support data and information, such as focus group discussion and questionnaire survey. In addition, the individual cases can allow new phenomena, which have not been anticipated, to emerge in the field, affecting the study's understanding of the context. This permits the enrichment of the findings and ultimately provides a better basis for interpreting the use of space in HBE. We know that humans use their space at home for the domestic activities of everyday life, but how do they use a space in which a business activity also takes place? How do they achieve adaptation strategies to effect harmonization between the different uses of space as well as strategies to reduce interference? This requires an understanding of various phenomena and of the reaction processes of the actors, particularly the households. Ultimately, these findings are anticipated to reveal the role of households in managing space in the presence of HBE and how they realise adaptation strategies.

3.1.3 The Case Study as a Comprehensive Research Strategy

Yin (2003: 14) states that "*the case study as a research strategy comprises an all-encompassing method – covering the logic of design, data collection techniques, and specific approaches to data analysis*", but Yin, furthermore, noted that the case study is not only a data collection approach but also a comprehensive research strategy. Therefore, the case study is initially determined by the 'why' and 'how' of the research questions; the researcher has no control regarding behavioural events, and focuses on contemporary events (Yin, 2003a). He then adds two elements distinguishing between the empirical inquiry as the scope of a case study (the real life context and the fact that the boundaries between the phenomenon of interest and its context are not clear); and the case study inquiry itself, which is the whole set of data collecting and data analysing strategies. It is also stressed by Stake (1994: 236) that qualitative case study inquiry "*dominates with strong naturalistic, holistic, cultural, phenomenological interests.*" This comprehensive research strategy also corresponds with the naturalistic paradigm, in aiming to understand complex phenomena studied in their natural condition and as holistically as possible.

Based on the explanation above, especially in terms of its technical definition, the case study as a comprehensive research strategy was used in this study. The reasons are as follows:

- a. The research questions concern the 'why' and 'how': (1) why people engage in an HBE, and the many reasons for establishing HBEs, which may be influenced by economic, social and cultural aspects of the community aspects or other external aspects; and (2) how they adapt their space to a mixed use, which concerns adaptation strategies used by households or operators relating to space and activities, including issues of interference between activities.
- b. Adaptation strategies used by the household relating to space are influenced by many factors. These factors are not only the furniture and objects around the space but also the activities that take place, including the relationship between households and others actors such as customers, suppliers, and neighbours. This means the use of the case study as a research strategy is appropriate due to the many factors that influence the behavioural activities within adaptation strategies.
- c. Adaptation by definition implies a process; hence a longitudinal perspective is helpful. But this does not mean focusing solely on historical data, because what is seen in the cases, particularly regarding the use of space, is the result of a long and continuous process of adaptation. However, Stake (1995) suggests that the cases are bounded by time and activity, and researcher collects detailed information using a variety of data collection procedures over a sustained period of time.
- d. This study is about the real life context where "*context indicates not only simply an empirical environment given beforehand in which some action is to be understood*" (Schwandt, 2001: 37). Moreover, Zeisel (2006: 211) also states that the "*cultural context also influences how people interpret and react to behavioural relationships.*" This means that adaptation is part of a cultural context which is a correlation between people and environments. "*Individuals are behaviourally adapted to their cultural and physical habitat*" (Berry, 1980: 100). In other words, the case study approach can help to understand the real situation of mixed-use of space by HBE households and their adaptation strategies.
- e. To understand the relationship between people and the environment in terms of adaptation requires comprehensive and holistic data collection and analysis. For example:

observing behaviour in physical settings generates data about people's activities and the relationships needed to sustain them, about regularities of behaviour; about expected uses, new uses, and misuses of a place; and about behavioural opportunities and constraints that environments provide (Zeisel, 2006: 191).

In order to obtain comprehensive and holistic data collection and analysis, it would also be flexible enough to incorporate different kinds of techniques such as surveys, analysis of

documents and records, interviews, and various data and analysis techniques to be employed at the same time (Yin, 2003; Stake, 2003). This is the last requirement of the case study as a strategy.

3.2 Scope and Research Location

This study is designed to focus on the relationship between humans and their environment, in particular the study of household strategies for adapting the use of space in HBEs, as an object of research in specific geographical areas. Concerning these specific areas, it is very difficult to understand when a qualitative researcher with real objects in the field is not familiar with, or even not accepted by, the people at the research location, because research must be located in a particular area in order to understand how “*people act[...] in the natural courses of their daily lives [...] to learn firsthand about how they live, how they talk and behave, and what captivates and distresses them*” (Emerson, 1983: 1). This is also a way to empathise with and understand the subjective meanings of the people and space being studied. The term ‘fieldwork’ refers to all those activities in the selected location, including watching, listening, conversing, recording, drawing, and interpreting.

Kampung Prawirodirjan has been selected as the research location for three reasons:

- a. This *kampung* is an old and high-density settlement, located in the city centre. There are high levels of HBE activity: one in three houses has a home-business, which, based on the evidence from the census result, means 229 HBEs (2003) and 248 HBEs (2006) within the total 741 housing units. The profile of this *kampung* will be explained in more detail in Chapter 4.
- b. HBEs at Kampung Prawirodirjan are not static in quantitative terms but increase every year, based on the increase in the number of HBE from 188 units (1992) to 248 units (2006). The growth rate of HBE in this *kampung* is about 2.25% per year (1992-2006). This means that there is a dynamic business life in this *kampung* and that, increasingly, households use the space at home for business.
- c. Familiarity with the informants in the research location is important. I have been familiar with this *kampung* and its communities since 1992 when collecting data for my Master’s thesis (Marsoyo, 1992). I know some of the community leaders and a key informant (Pak Bambang) was a friend who at one time worked in the same office as I did. These connections made it easier for me to collect data in accordance with the research questions. Thus, this *kampung* is a rational choice for the research location.

3.3 Research Methods

3.3.1 The Temporal Aspect of the Study

One of the many advantages of being a part-time student is having a longer period of time over which to visit the field or research objects. This is also consistent with an inductive qualitative-naturalistic research method, which uses an iterative process in the analysis technique because the relationship with the respondents or informants or actors needs time to develop. According to the early stages of the research proposal, this study used a method that focuses on adaptation in mixed-space use, which characterises the adaptation mechanism of interaction between households and the home environment. Additionally, the dimension of time is an inherent factor in the process of adaptation. In connection with the study of housing, in particular to clarify the dwelling process and activities, Kellett (2000b, 2010) also emphasises that the best approach is to become a temporary member in the neighbourhood and live with a household for a period of time. Hence, to gain a better understanding about phenomena concerning adaptations to the way space is used; phenomena concerning the relationship between people, space, and time; and moreover the phenomena of human behaviour interacting with the environment, I became a temporarily member of the neighbourhood and stayed with a household who have extra room that can be rented out.

Table 3.1 below provides an explanation of the temporal aspect of this study, dating from the researcher's registration as a postgraduate student, giving details of the fieldwork and data collection. The Table describes the sequence of the data collection process from 2001 to 2006. However, that Table illustrates only the formal activities taking place over time, but in reality the researcher continued to freely conduct informal observations over time that could yield significant results, for example, a short visit in a particular case to gain further confirmation of the themes found.

Table 3.1: Temporal aspect of field visits

Year	Month	Research Activities	Number of Participants/ cases/units	Purpose
2001	August	Interview (<i>First Round</i>)	6 participants	to understand the complexity of HBE's nature from households/operators.
	September	Semi-structured Interview	16 participants	to clarify and more fully define HBE from expert opinion.
	20 October	Focus Group Discussion 1	8 participants	to clarify and more fully define HBE from the views of households/operators.
	31 October	Focus Group Discussion 2	5 participants	to clarify the phenomenon of HBE and to more fully define it from the views of local government officials.
2003	23 May - 27 June	Observation of Space and Interviews 1	21 cases of HBE	to explore the process of adaptation strategies applied by households to their space.
	8 -12 September	Census 1	229 units of HBE	to calculate the total number of HBEs in <i>kampung</i> (note: total dwellings= 741 units)
2004	04-24 October	Observation of Space and Interviews 2	21 cases of HBE	to explore the process of adaptation strategies applied by households to their space in different year.
2005	23 March – 31 April	Observation of Activities and Interviews	21 cases of HBE	to explore the process of adaptation strategies applied by households and by other actors to their activities.
2006	4-10 September	Census 2	248 units of HBE	to recalculate the number of HBEs (note: total dwellings = 741 units)
	16 -30 September	Questionnaire survey	248 units of HBE	to understand the general socio-economic and physical aspects of HBEs.

However, the long duration of the study was also due to several interruptions. The first interruption was due the theft of a personal laptop, which had been used to store some important data from the field and to write up the study. Other interruptions were caused by natural disasters, where the researcher had to help victims of the disaster (tsunami in Aceh in 2004, earthquake in Yogyakarta in 2006). Fortunately, during this time of interruption, my PhD supervisor visited me several times for guidance, discussions and field visits. These visits were to encourage me to stay on the right track in this study.

The next sections will provide explanations of the methods used, starting from the method used for the main analysis of household adaptation strategies and then to other methods used for other analysis. Thus, the explanation starts with the observation of space and the observation of activities, and is then followed by interviews and other methods. However, before the explanation of the observation method, it is first necessary to provide a description of the 21 cases of HBEs.

The cases chosen for observation in this study were selected using a purposive sampling technique. This technique is more appropriate than other techniques because in qualitative research, the sample is not intended to be representative, but rather to answer the research questions, which in this case concerned household adaptation strategies in the use of HBE space. Good case selection is emphasised by Dooley (2002: 337), who states that "*a good case is generally taken from real life and includes the following components: setting, individuals involved, the events, the problems, and the conflicts.*" In addition, Patton (1987) argues that the selection of cases should be focused on critical cases, extreme cases, typical cases, and varied cases. Thus, the selection of cases in this study was determined by such considerations.

In order to select appropriate cases, the researcher adopted the snowball approach strategy, which "*is an approach for locating information-rich key informants or critical cases*" (Patton, 2002: 237). The basic strategy of snowballing involves first identifying the relevant characteristics of cases that fit with the purpose of research, interviewing and observing, then switching to other cases that are suggested by this case, which may be similar or different, but are chosen for their likely ability to answer the research question. Therefore, I observed some cases in accordance with the specified criteria and discussed them with Pak Bambang, the key informant. The results of the discussion led me to conclude that the *Warung Kelontong* (daily needs stall) belonging to Bu Ariyanti should be the first case. It was with this case that I made my first observations and photographic record and carried out my first interviews. The first observation was focused on the physical objects in the house and the layout of the rooms, especially with regard to understanding the composition of the space used for business and domestic activities. Combining together all the data collected in the first case made it possible to construct a set of provisional themes. After this, I set out to identify the second case. Based on information from Bu Ariyanti and Pak Bambang, the *warung sayuran* (fresh vegetable stall) belonging to Bu Muhadi was selected as the second case. The same as with the first case, the data and information from the second case was explored to establish the provisional themes. The same procedure was followed in the

subsequent cases until I felt that no case that could add a further important contribution to answering the research question. Ultimately, I identified 21 cases, which consisted of 14 retail, 6 production, and 1 service type of HBE. The second round of observations, regarding activities and movements, was also carried out on those cases. The details of the 21 cases are presented in Table 3.2.

Table 3.2: Details of the 21 HBE cases

Case	Name of household	Business activity	Type of HBE	House Size (m ²)	Plot Size (m ²)
1	Bu Ariyanti	selling 'everyday needs' goods	Retail	59.50	59.50
2	Bu Muhadi	selling fresh vegetables	Retail	45.00	45.00
3	Bu Dina	selling 'everyday needs' goods	Retail	82.50	112.50
4	Pak Pramono	producing small tables and picture frames	Production	12.50	12.50
5	Pak Warindi	producing noodle dishes	Production	76.50	119.00
6	Pak Sofyan	producing screen printed t-shirts	Production	93.75	93.75
7	Bu Ence	producing corn flour crackers	Production	76.50	76.50
8	Pak Warno	producing meat-balls and selling fresh fruits	Production	112.00	228.00
9	Bu Sriyono	selling snacks and crackers	Retail	18.50	20.70
10	Bu Yudosasmito	selling fresh vegetables	Retail	29.75	35.75
11	Bu Tri	selling 'everyday needs' goods	Retail	17.50	17.50
12	Bu Dariman	selling fresh vegetables	Retail	63.00	94.50
13	Bu Sri	making fashion garments	Production	86.50	136.75
14	Bu Sugiarti/ Pak Bagyo	selling 'everyday needs' goods	Retail	52.50	52.50
15	Pak Warisman	selling 'everyday needs' goods	Retail	42.50	45.00
16	Bu Sugiarsih	selling 'everyday needs' goods	Retail	61.75	61.75
17	Bu Watik	beauty salon services	Service	75.00	75.00
18	Bu Rohayah	selling 'everyday needs' goods and fish	Retail	41.00	41.00
19	Bu Rubi	selling fresh vegetables	Retail	42.25	48.75
20	Bu Joko	selling daily food	Retail	12.50	12.50
21	Bu Sunarti	selling 'everyday needs' goods	Retail	56.00	56.00

Note: the case serial numbers are for easy cross-reference to the analysis in Chapters 5 and 6.

3.3.2 Observation of Space

It is assumed that household's strategies for adapting to mixed use of space in the HBE are very diverse. Many styles and behaviours are associated with it. The mechanism of the relationship between people and their environment cannot be solely apprehended through numerical evidence, but also requires illumination through observations. Thus, as Groat and Wang (2002: 25) state, "*qualitative research depends on nonnumerical evidence, whether*

verbal (oral or written) ... or artifactual (objects, buildings, or urban areas)." As a result, it was decided that this study should adopt the observational method, which is the best way of collecting data to understand that mechanism and is also essential for capturing the salient facts. Based on the analysis of four key texts, I have identified two kinds of observation method concerning behaviour, the organisation of the physical space and the organisation of activities:

- a. The physical milieu and standing patterns of behaviour (Barker and Wright, 1978);
- b. Systems of settings and systems of activities (Rapoport, 1990);
- c. The place-centred maps and individual-centred maps (Sommer and Sommer, 1997);
- d. Observing physical traces and observing environmental behaviour (Zeisel, 2006).

Based on the distinction articulated by these and other authors, this study used two kinds of observation, that is, the observation of space and the observation of activities and movements. The first part described in this section, followed by the second part, which is described in Section 3.3.3.

The observation of space means observing and documenting physical objects in the house and its surroundings, including furniture and goods, as well as tracing the appearance of space use. This observation can reveal how the householders like to organise their home environment, how they arrange their furniture, how it is used by family members, and generally how the environment is organised to meet the needs of households. That means that this method aims to explore the process of the adaptation strategies used by households in terms of objects. It is also useful for gaining an understanding of physical, social, economic, and cultural contexts in the use of space and a general understanding of the relationships among and between spaces, households, contexts, norms, ideas, and events. Ultimately, it aims to understand how households use space in the case of HBE.

During the observation phase, no significant problems were encountered, because households with HBEs accepted the presence of the researcher and his two assistants, who were architecture students at the Gadjah Mada University in Yogyakarta. The role of the researcher, as a research instrument, is observing what needs to be observed in relation to the use of space in HBE. While carrying out the observations, the researcher also conducted interviews with the household head or other individuals who were involved in the activities, simultaneously interpreting important themes in accordance with the purpose of research. As Zeisel (2006: 211) said, "*an observer must try to understand the situational rules being applied by participant to interpret the meaning they attribute to even a simple observation.*" The first

assistant's role was to draw a sketch of the position of furniture and other objects. The second assistant took photographs, as requested by the researcher. These assistants were both female, and as most of the informants were also women, they did not arouse suspicion when entering private rooms, in particular to draw sketches of furniture and take pictures. Prior to this, there had been a process of requesting permission from the household for the research to take place, which included permission to interview and take pictures of the dwelling, along with the physical objects within it.⁵

A problem was encountered in observing private spaces, such as sleeping spaces or bedrooms. If the bedroom door was closed and the households did not open this door, it signified that we should not observe the bedroom as private space. However, the most important process in this study was actually the physical objects in the domestic space as a whole, and their relationship with the physical objects in the business space, rather than a focus on the private space. A further problem that arose with the interviews at the time of observation relating the use of space was informants' poor memory for earlier ways of using the space, meaning that it was not easy to describe or to draw the position of previous arrangements of the furniture. This information is important to understand how space and activities have changed over time, as an example of the use of space before and after conducting business activities within the home, as well as the activities and movements of actors from morning until evening.

The observations were carried out twice in 2003 and 2004 for the 21 cases HBE, in order to compare the findings across these two time-points, and especially to cross-check themes that have been identified previously. These two visits also strengthen the validity of the findings. Generally, few changes were found with regard to the placement of furniture and other objects. The changes related mainly to the addition of new furniture. Field notes were also taken during the fieldwork but written shortly after making the observations for practical reasons. According to the suggestion of Spradley, quoted by Silverman (2005: 176) it is desirable that:

5 Concerning issues of social research ethics, especially research on community and housing, before starting the interview with the informants and taking photographs of the case, I formally requested permission to record their voices and take photographs of their home interiors. In addition I also told them that interviews would be translated and the images might be published to support this research as an illustration. Where the informant was not comfortable with voice recordings, interviews were instead noted by hand.

observers keep four separate sets of notes: 1. short notes made at the time; 2. expanded notes made as soon as possible after each field session; 3. a field work journal to record problems and ideas that arise during each stage of fieldwork; 4. a provisional running record of analysis and interpretation.

Bahasa Indonesia was used as the language in writing field notes. Figure 3.1 and 3.2 show examples of two casenotes concerning the results of the spatial observation. All the results of the observations for each case included the house plan, including furniture, photographs, and field notes, taped onto A1 paper for ease of analysis (see Appendix 1).

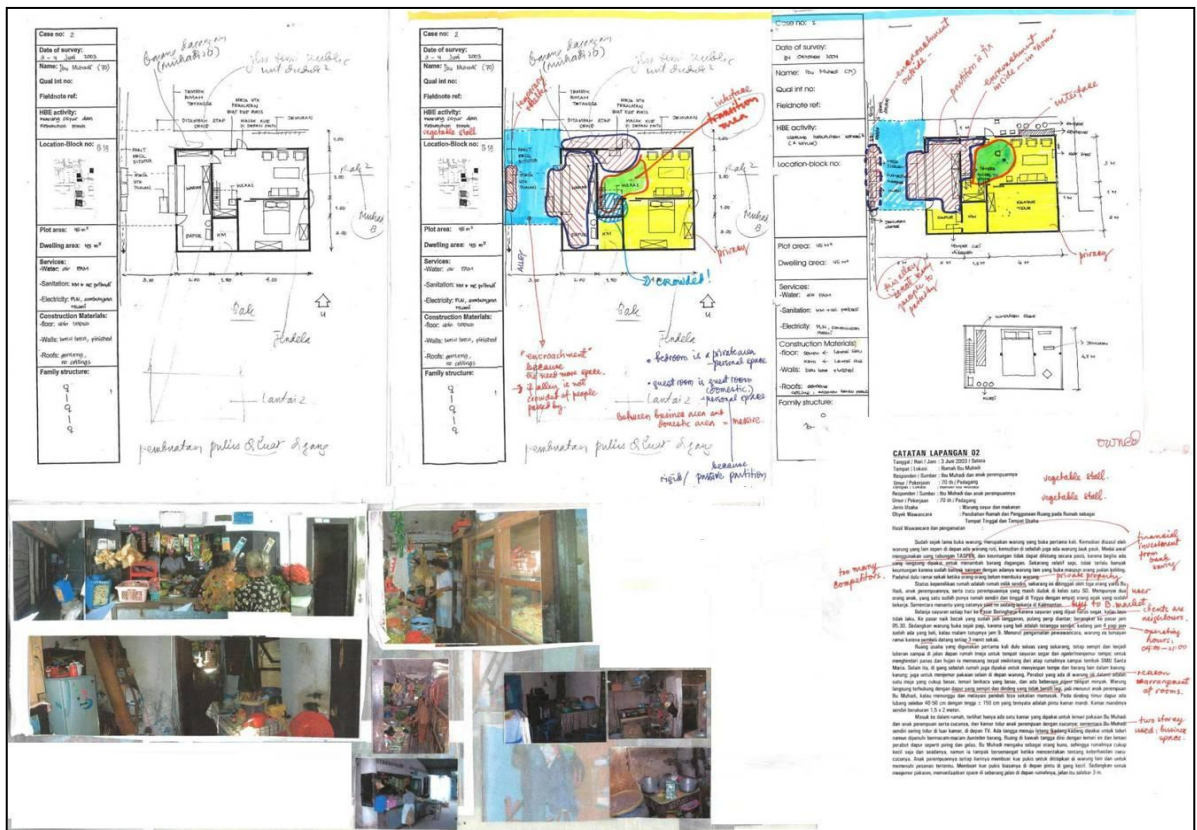


Figure 3.1: An example of the case notes made for the spatial observations - Case No.2

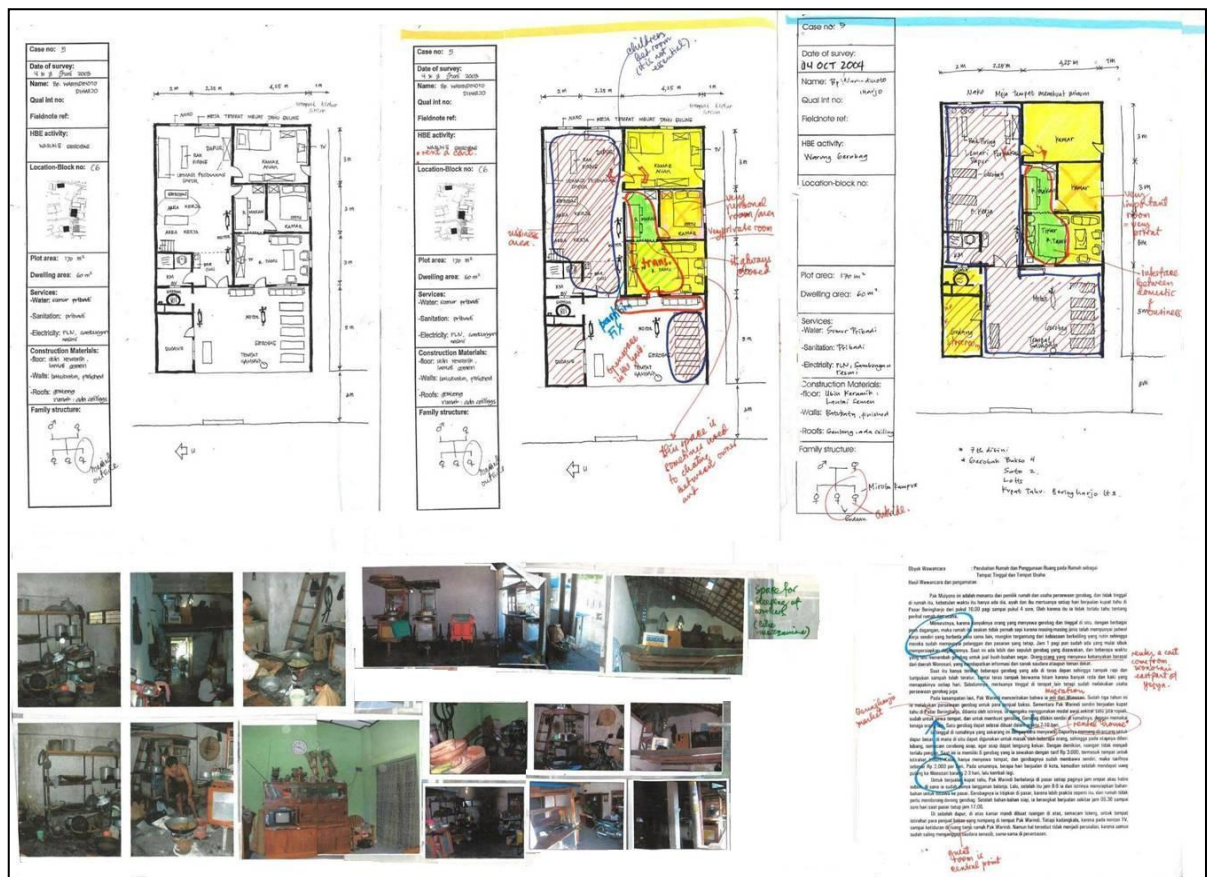


Figure 3.2: An example of the case notes made for the spatial observations - Case No.5

3.3.3 Observation of Activities and Movements

The movements of people (and things) all over the world and at all scales are, after all, full of meaning. They are also products and producers of power
(Cresswell, 2006: 2)

Observation of activities and movements concerns how people actually distribute themselves in a particular area because “*movement is one variable which may be influenced by the form and content of any kind of space*” (Proshansky *et al.*, 1976: 352). In addition, this kind of observation is a very powerful way of apprehending the relationship between the patterns of people’s movement behaviour in a particular space within a certain period of time. It is based on Zeisel’s statement that:

observing behaviour in physical settings generates data about people's activities and the relationships needed to sustain them; about regularities of behaviour; about expected uses; new uses, and misuses of a place; and about behavioural opportunities and constraints that environments provide (Zeisel, 2006: 191).

This is also reinforced by Lawson (2001), who notes that this observation may predict movements in order to identify pattern. Therefore, this method is appropriate for this study's research question, which concerns households' strategies in adapting to the mixed use of space in HBE.

To investigate the households' and actors' relationships to the process of adapting (to) space, we adopted "the tracking method" proposed by Proshansky where "*the investigators could track and record the movement of subjects through the space by drawing a line on the plan corresponding to the movement of the subject in the actual space*" (Proshansky et al., 1976: 353). Similarly, Farbstein and Kantrowitz (1978: 133-136) disclose a technique they call the "portrait of a place" (Figure 3.3), although this technique indicates a very simple concept of the experience and interpretation of space, because it records the situation at one time point only. Accordingly, Sommer and Sommer (1997) extended this technique, so that the observation can be performed on a continuous or periodic basis, where "*periodic observations involve observing the same individual at intervals throughout the day*" (p.66). With a comprehensive and longitudinal method proposed, this study ultimately decided to use periodic observation to identify movement patterns more easily.

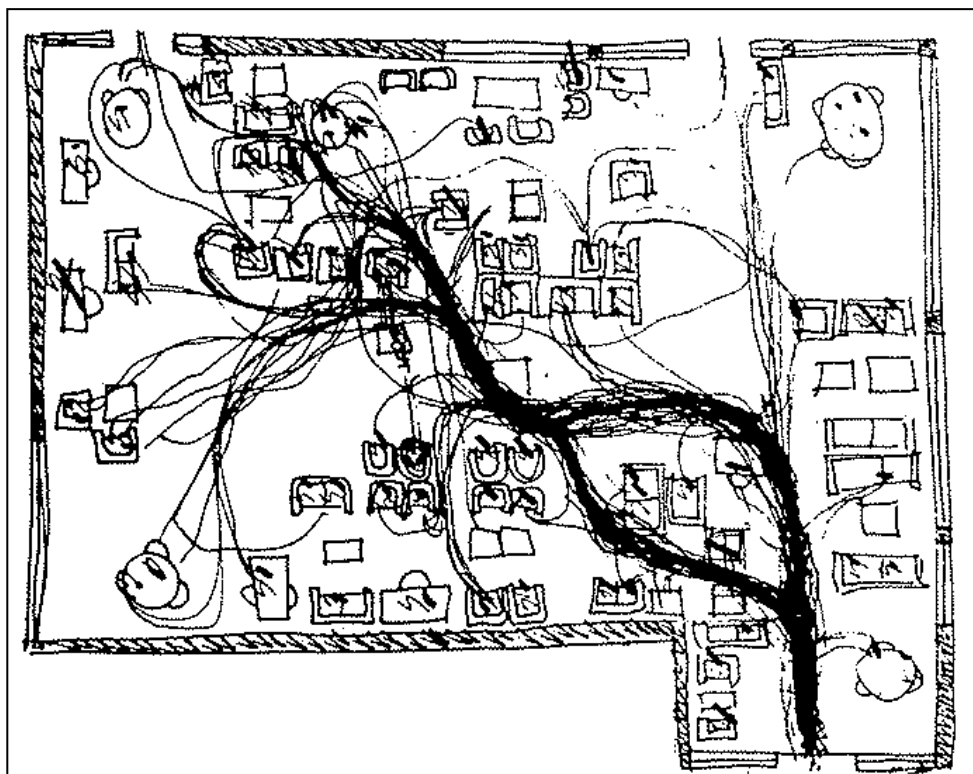


Figure 3.3: Portrait of a place

Source: Farbstein and Kantrowitz (1978: 133-136)

Before observing the activities in the field, there is a need to prepare a worksheet in the form of house plans that are categorized by time-point (in this case per hour). Because the study sought to conduct continuous observations of space and movement, the house layout plan, including its furniture and objects, was prepared in advance. Furthermore, this method was introduced a year after the second physical observation, and undertaken with the help of the two research assistants, from approximately 6 am until 10 pm. The reason for choosing this period for the observations was of the assumption that this would be the prime time for mixing domestic and business activities in the house, with the activities occurring before and after this time being of a largely domestic nature. The observation of the activities was carried out for the 21 cases. The task of the two assistants was to record the movement of actors in the physical setting at hourly intervals, through drawings on the prepared sheets of the house-plans, while the researcher carefully observed what happened in the activity that occurred, in terms of both movement and non-movement, as well as carrying out intermittent interviews with the household or adult persons who were present at the time of observation at the site, all of which were written up in the field notes.

With regard to the actors who were observed and whose actions were recorded through the worksheet drawings, there was no difficulty in identifying them, whether they were the owners, operators, suppliers, buyers, new buyers, neighbours or relatives of the owner, because the researcher had already become familiar with the case milieu. These observations were time-consuming and exhausting, but all this activity was undertaken with a relaxed but still rigorous and serious demeanour, sometimes sitting on the veranda, or in the business-space, or in the guest-room, or sometimes also at a little distance from the case, in order to not affect the authenticity of the actors' behaviour. This observation was not able to record the movement of people in the private space areas, such as when the children of the owner come home from school, whether they were lying-down or changing clothes or other activities in the bedroom. But this does not reduce the quality of the observation, because it was more focused on the relationship of human activities to a mixed use of space, between domestic and business activities. An example of a 'portrait of place', from Case No.2, based on the observation of activities and movements from 6 am until 8 pm on a particular day, can be seen in Figures 3.4, 3.5, and 3.6.

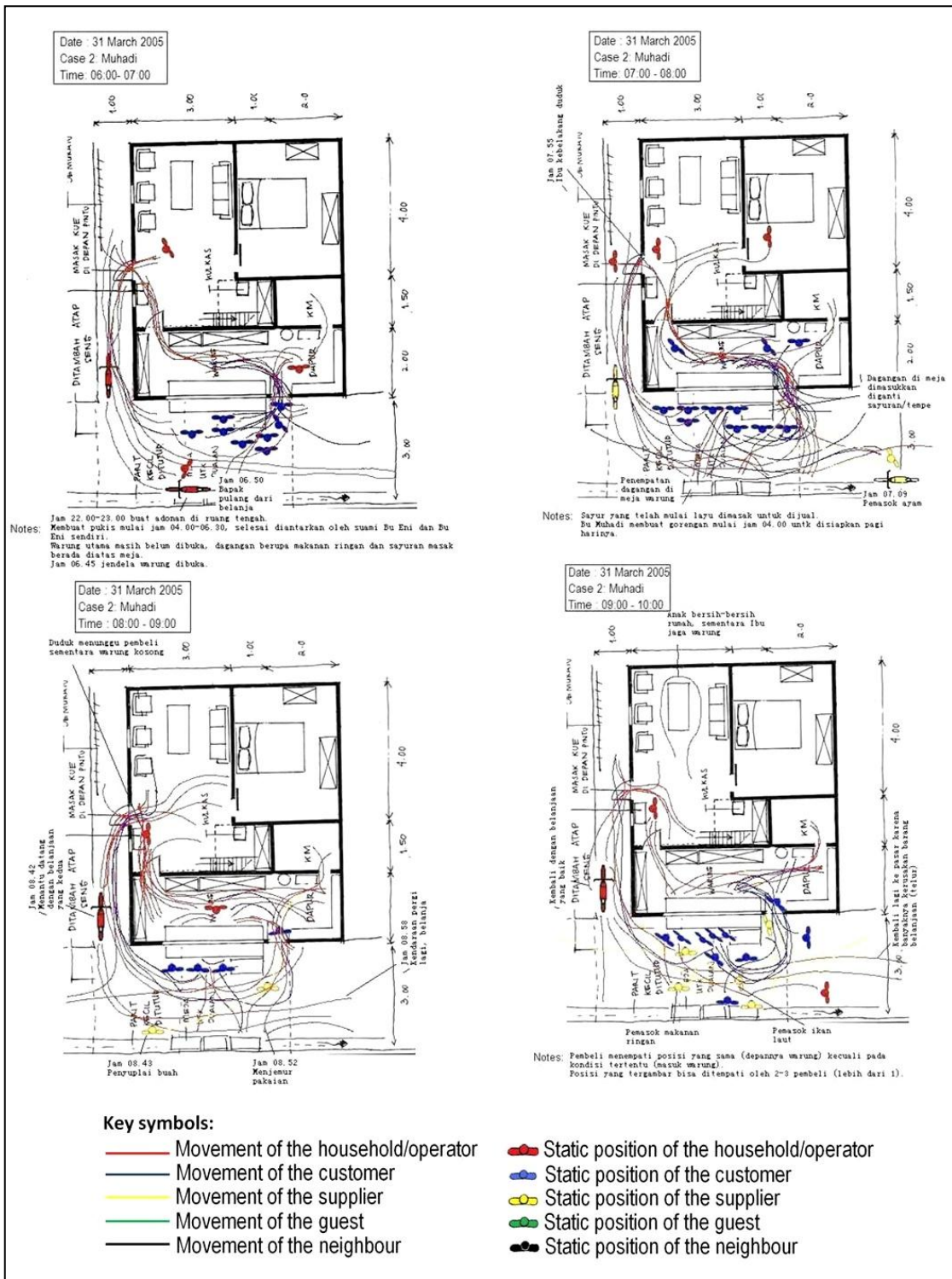


Figure 3.4: An example of observation of activities and movements from 6 am until 10 am - Case No.2



Figure 3.5: An example of the observation of activities and movements from 10 am until 2 pm - Case No.2



Figure 3.6: An example of the observation of activities and movements from 2 pm until 8 pm - Case No.2

3.3.4 The Interview

The purpose of the interview is to capture the complexity of information from the informant's point of view in detail and depth, with the assumption that the perspective of informants is meaningful for this study, especially with regard to the research questions. In addition, the interview data provides a cross-check on the validity of the observation results, because this research utilised observation as the main data collection method, especially concerning the use of space in HBE. Maxwell (1996), Patton (2002), and Yin (2003) also noted that using a variety of methods, in terms of collecting information from a diverse range of individuals and settings, will increase the validity of the findings. Moreover in this study, the exploration of the relationship between people and the environment is not only based on physical attributes but also has many human aspects (Groat and Wang, 2002). With regard to such matters, the aim is *“to find out in-depth how people define a concrete situation, what they consider important about it, what effects they intended their actions to have in the situation, and how they feel about it”* (Zeisel, 2006: 227). Moreover, Patton (2002: 348) suggests that *“the fundamental principle of qualitative interviewing is to provide a framework within which respondents can express their own understandings in their own terms.”*

Informant diversity is important, thus various people have acted as sources of information in this study, including community leaders, neighbours, customers, suppliers, local government staff, and in particular, households who have firsthand knowledge about a case, most importantly, household strategies for adapting the space to mixed uses in HBE. In this context, the researcher is in a position to learn or study about how people use a particular space and the informants serve as guides or facilitators. The number of informants required depends on the type of data sought. In practice, this study was conducted with three types of interview approach, as outlined below.

Firstly, the first-round of interviews was conducted with six informants who lived in households that operated HBEs, in order to understand the complex nature of HBEs, which is one of our research questions. The identification of six informants by purposive sampling, based on that research question, in the first-round of interviews, was the initial activity of the fieldwork (pilot study). There was no difficulty in selecting the informants especially in the *kampung*. I was fortunate in that the first key informant, as well being a personal friend, is one of the informal community leaders. Named Pak Bambang, he has a beauty salon (HBE) in this *kampung*. Pak Bambang is an informant who is a rich resource for the pilot study, as he

knows so much about HBE in this *kampung*. He was able to act as a liaison between the researcher and the other informants, but after the initial introductions, he stepped back to allow the researcher to obtain more in-depth information.

Secondly, the main interviews with main household head in the 21 cases were undertaken in order to explore the process of their adaptation strategy on their physical/space and activities (see Appendices: 2, 3, 4). In addition, to capture information about the adaptation process undertaken by households, interviews were also conducted with other individuals who have specific knowledge of this, for example the neighbours living adjacent to the case, its customers, and suppliers. Both the first-round of interviews and the main interviews described here were conducted through an open-ended conversation with the informants. They were carried out as informally as possible, so that informants could freely describe their stories and memories.

Thirdly, semi-structured interviews were also conducted with a fairly open framework which allow for focused, conversational, two-way communication to clarify and more fully define HBE. These were carried out with 16 individuals with some expertise in the phenomena of HBE. The experts were an urban planner, architectural designer, government officials, lecturers, and staff of non-governmental organisations (NGOs). The formalised and limited set questions in this interview were related to housing and urban planning, disturbance law, the regulation of HBE, and finally focused on the separation between business and domestic space. These interviews were conducted with a flexible technique, with a focus on the topics at hand but without constraining the respondents to a particular format in order to find themes.

As mentioned above, almost all the interviews were conducted using the informal conversation method, in order to achieve “*flexibility, spontaneity, and responsiveness to individual differences and situational change*” (Patton, 2002: 343). In addition, the researcher was not limited to a set time or frequency of interviews and thus they sometimes sat chatting for hours with the informants, while eating and drinking in the *warung*. The process of interview could be suspended for a few days when the informants became bored or had other things they needed to do, and the conversation could be picked up again at a later date. In some circumstances, the informants might have imperfect recall. If they were being asked to remember things that happened weeks, months, or years ago, it was unlikely that they would remember very much about what had happened; for example, when I asked about the

previous layout of furniture before the house was re-arranged as a business space. This is part of the disadvantage of the interview method of obtaining information. In addition, during the experience in the field, using a digital audio recorder is very useful but in some specific cases, informants felt uncomfortable when recorded, although I always asked for their permission to use recording equipment. In certain cases, the recorder was not used at the time of the interview, but was replaced by hand-noting the discussion. The written record, it became clear, is inevitably limited compared to a recording. The recorded interviews were converted into transcripts.

Finally, the semi-structured interview used Bahasa Indonesia because it is more formal, while for the first-round of interviews and the main interviews, Javanese was used. Using Javanese language is more informal and easier for interviewees, although there are several gradations of meaning that can be conveyed, but the researcher felt that there was no difficulty in understanding what interviewees said during interviews in the field. However, all transcripts were in the Bahasa Indonesia language, and only extracts and quotations were translated into English, in line with the requirements of the analysis, due to time and budget constraints. Overall, in an interview, it should be underlined that *“the quality of the information obtained during an interview is largely dependent on the interviewer”* (Patton, 2002: 341).

3.3.5 Focus Group Discussion (FGD)

The purpose of focus group discussion (FGD) or focus group interview is to gain information about a particular topic or issue with a small group of people (Bryman, 2008, Krueger and Casey, 2000). Moreover, this method is *“to better understand how people feel or think on an issue...”* (Krueger and Casey, 2000: 4). The researcher listens not only for the content of focus group discussions, but for the emotions and tensions of the participants as well. Focus groups are therefore considered to be naturalistic (Krueger and Casey, 2000) because they do not examine the variables of a theory but identify units of information in order to find themes, as outlined by Creswell (1998), who considered that the researcher must use special techniques to find the themes of spoken language. Participants are selected and invited based on their relationship with the topic or issue. The group typically consists of 4 to 10 people of similar backgrounds or characteristics who participate in the interview for one or two hours. One of the advantages of FGD, compared with the interview, is that each participant can discuss with each other, and agree or disagree with the opinion of other participants, and the researcher only records what they discuss (rather than themselves participating in the discussion).

This study employed two types of FGD, with the specific purpose of clarifying and more fully defining HBE. This was done on 20 October 2001, with eight participants who were operators running a home-business. The first discussion was made possible through the assistance of Pak Bambang, the key informant in this study described above, and the FGD was conducted at his home. The key topic regarding the group discussion was why the group members conduct an HBE in this *kampung*. This was followed by other questions, such as its advantages and disadvantages, competition with other people, and how to develop the business. This resulted in a very close and warm meeting between the researchers and participants even though there was light rain. The conversations were largely in Javanese and were recorded. The second FGD, with five participants, took place after dinner on the 31 October 2001 in a restaurant. These were all local government officials, whose work related to the subject of public works, planning and development. The important experience of this meeting is that researcher was familiar with the participants, so the process of discussion appeared to be warm and enthusiastic. The key topic for this discussion was the participants' opinions and policies about HBEs in the *kampung* of Yogyakarta City. For this FGD with the staff of local government, Bahasa Indonesia was used as the national language, giving a tone of formality. A digital tape recorder was used to record the conversation, supported by notes to mark details of the more important statements. The activities of both FGDs can be seen in Figure 3.7 and the list of key topics can be seen in Appendices: 5 and 6.

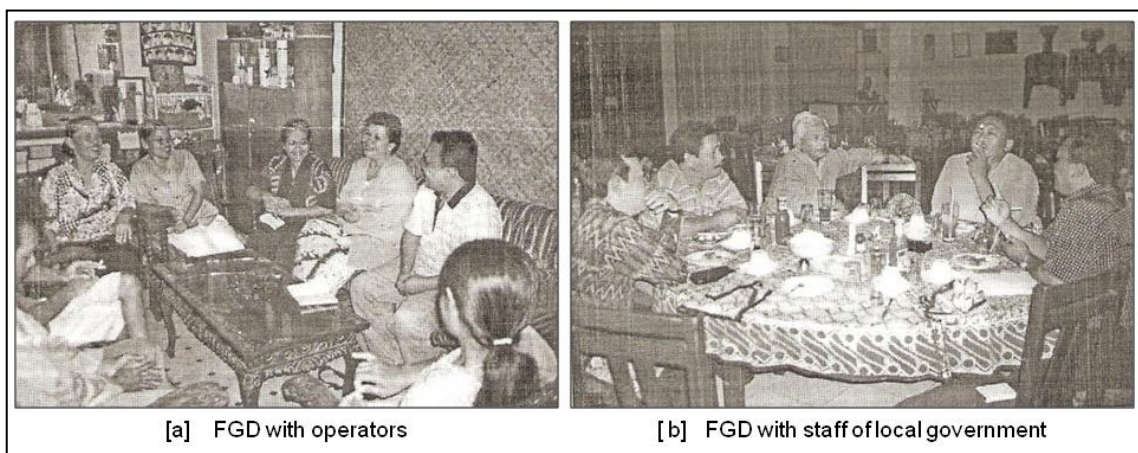


Figure 3.7: Focus Group Discussions

3.3.6 The Census

Bryman (2008: 169) explains that a “*census is the enumeration of an entire population.*” The purpose of collecting data with a census is to obtain accurate information regarding the whole population, which can then provide a useful basis for building a representative sample for a survey questionnaire (as will be explained in more detail in Section 3.3.7). The census was done because there is no relevant secondary data from local government regarding how many HBEs exist in certain areas, including in this *kampung*. HBE per unit of population in the *kampung* is a ‘fixed and immovable object’ that can be perceived, so there is no constraint on collecting data regarding the HBE per population unit by using the census method.

The census method was performed through a simple procedure, which is that in the *kampung*, any HBES are plotted on a map along with photographs and then cross-checked with informal community leaders. Because there were not many units of HBE per population in the location, which had a relatively small area, these activities were carried out by the researcher and two surveyors in five days. However, several problems emerged during the survey. Firstly, a business could have more than one activity, for instance selling fresh vegetables and making picture frames (two types of HBE: selling and producing); secondly, photographing the business in the house cannot be done easily when it does not look like there are business activities from outside of the house or there is no sign of business activity, such as an announcement sign on the wall or door. For the first problem, it was decided that even where there is more than one businesses activity, it is calculated as part of a single unit of HBE if it is in the same house, while for the second problem it was decided to consider such houses as being without a business (non-HBE), although the households might actually be running a business inside the house without advertising signs. However, the researcher needed accurate data about the total number of HBE units, so after all the units were plotted on the map, he asked the community leaders (*ketua RT*), in order to cross-check if there existed houses that were running businesses, where the business was not visible from the outside. Table 3.1 above has shown that the census was conducted twice in order to calculate the growth in the number of HBEs in the *kampung* from year to year. In 2003 the census found 229 units of HBE and by 2006 this had increased to 248 units of the total 741 housing units. Figure 3.8 shows the distribution of HBEs in the *kampung*.

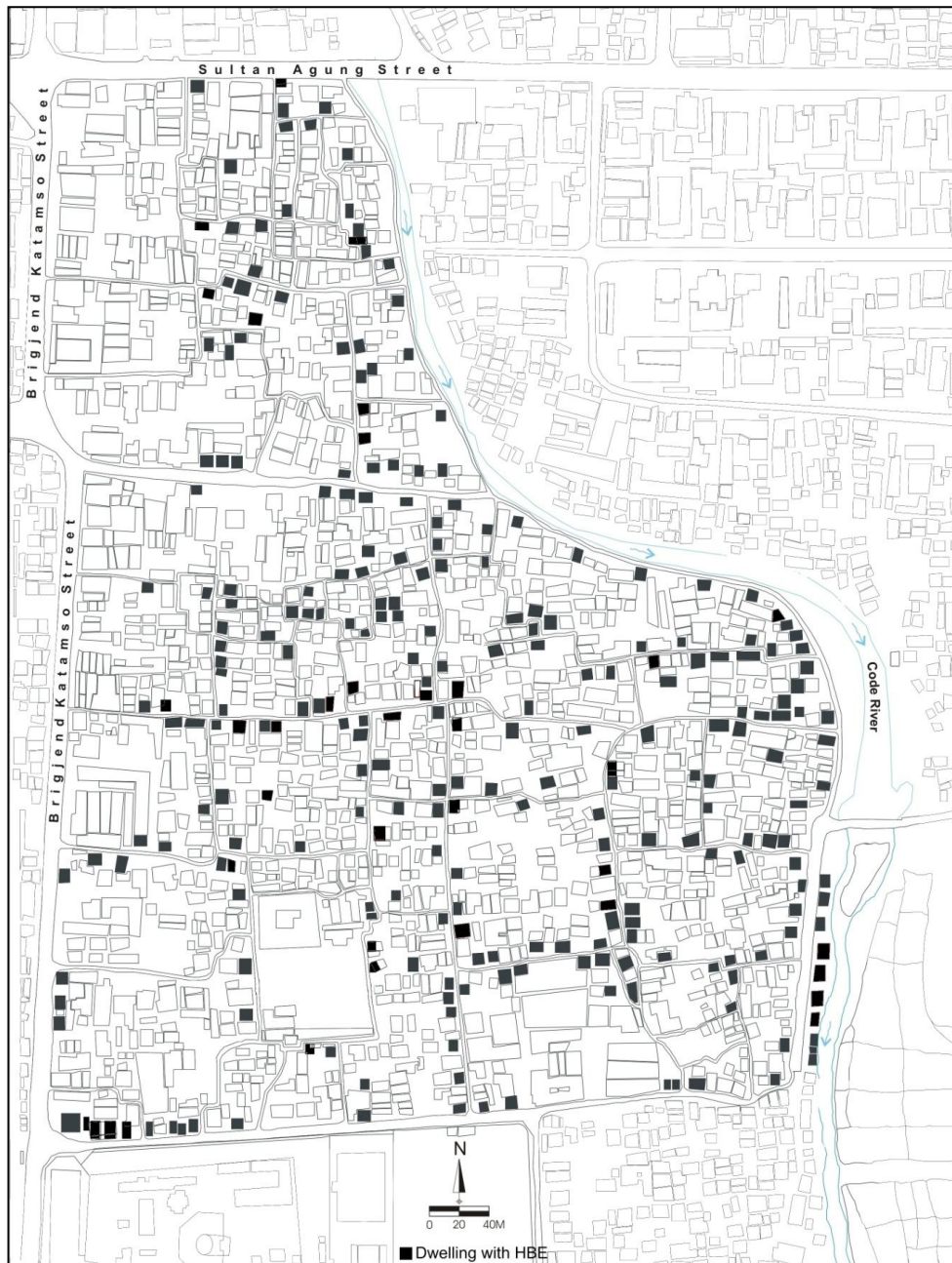


Figure 3.8: Distribution of dwellings with an HBE in Kampung Prawirodirjan
 Source: Census survey, 2006

3.3.7 The Questionnaire

This study also employed a survey questionnaire, as a supplementary data collection method, with the main purpose of understanding the general socio-economic and physical aspects of HBEs. Thus the questions on the questionnaire sheets were mainly requests for empirical information rather than opinions. An example of the empirical categories in this study, these included: house size, plot size, number of bedrooms, house status, land status, number of

occupants, the amount of labour, the duration of HBE, home business income on average per month, and home business expenditure on average per month. The 'opinions' solicited in the questionnaire included the reasons for establishing HBEs, responding to neighbours' complaints, responding to the needs of the organization, responding to intrusion, responding to crowding, and future expectations. The questionnaire is presented in Appendices: 7 and 8.

The questionnaire survey was conducted for the total HBE population in Kampung Prawirodirjan (248 units) at a point when the researcher had sufficient time, in September 2006. The researcher and his two assistants directly asked to speak with a household head or an adult member who knew, in particular, about the business run from their home. The Bahasa Indonesia was used in the questionnaire, and Javanese was sometimes used in administering the questionnaire. The data were analysed using the SPSS programme to provide descriptive information in the form of tables or graphs.

3.3.8 Documentary Resources as Secondary Data

Secondary data is existing information that has been gathered for some particular purpose outside that of the research process. Secondary data is normally obtained from a national level, province level, from local government, NGOs, consultants, research centres, as well as diverse other sources (for example: student research reports). These data can be obtained either in the form of hardcopy or softcopy, and can be obtained from the web. Government documents and official statistics are actually a good starting place for gathering secondary data; however the quality of the documents will vary depending on their purpose, and sometimes may not be appropriate for this study, for example employment data often do not take into account the number of people involved in the informal sector or leave unrecorded some activities, including women's seasonal labour or child labour. However, all secondary data collected in the form of figures and maps were found useful for this study, primarily to help in understanding conditions from a macro to micro level, especially the profile of research location. Another problem is that government data are sometimes not up to date and thus might not reflect current conditions. Ultimately, secondary data complement but do not replace, primary data. Thus, primary data collection should be a starting place for research, especially qualitative research on behaviour.

Many documents used in this study were available in numerous variant forms. Data collected from government offices included statistical yearbooks, socio-economic characteristics,

trends for selected socio-economic indicators, urban spatial plans, the Atlas, and aerial photographs. Data collected from non-government organisations, consultants, or private agencies included the 'Real Demand Study' and a feasibility study for rental housing. Documents collected from research centres included a study of the provision of housing needs, and the final report by students about housing and the *kampung*. All such documents were selected because they supply information relevant to this study's line of inquiry.

3.4 Analysis and Interpretation Methods

3.4.1 Analysis as an Iterative Process

Qualitative data analysis is an iterative, rather than linear, process because each particular stage in the analysis can be related back to previous data or can combine new data and thus can identify new findings. We know that qualitative research produces a great deal of data, but in forms that are not easy to process or summarize, while the positivistic approach relies on a predetermined number of variables which are then tested in the field and analysed using statistical tools. Thus, by contrast, the latter appears more linear than iterative. This study employed observations of space, observations of activity and movement, and interviews as the primary method of data collection, so that the study's qualitative data mainly consists of words and observations. When other data is integrated, analysis and interpretation are required to make sense of the results. To do this requires creativity, discipline and a systematic approach.

Developing an overall and comprehensive description of the phenomenon under study is an initial step in qualitative analysis. The process depends on the research questions and other resources. The necessary steps are categorising or classifying, connections, as well as corroborating, and producing the account (Dey, 1993). He also pointed out that while the steps succeed one another in a logical sequence, this does not constitute a linear representation or spiral process but is actually an iterative process (Figure 3.9).

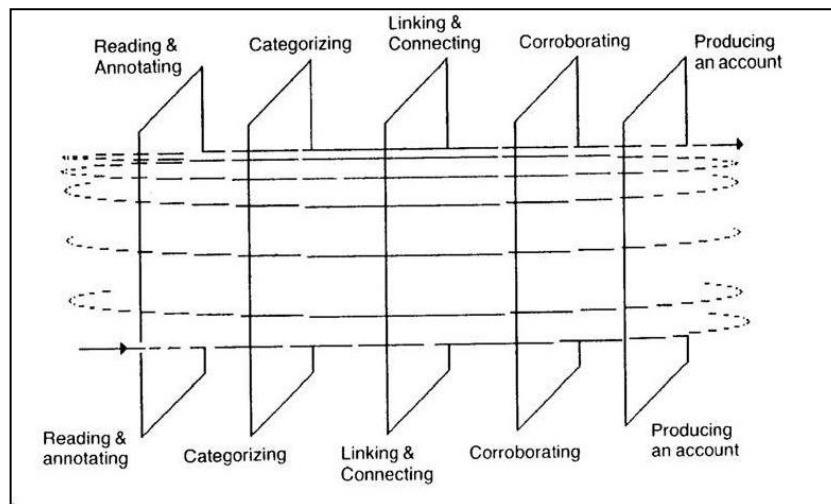


Figure 3.9: Analysis as an iterative process

Source: Dey (1993: 265)

3.4.2 Analysing and Interpreting Qualitative Data

As mentioned earlier in this chapter, this study adheres to the paradigm of naturalistic, qualitative research, and the case study as a comprehensive research strategy. On that basis, the researcher in this study process requires a deep understanding of the relationship between humans and the environment, especially the adaptation of households to domestic and business space in the home. Because this study uses a case study as research strategy, the primary analysis tends to follow certain prescribed rules relating to that method (although not rigidly). However, identifying the stage of analysis in qualitative research is not easy, as expressed by Yin (2003: 99), who reflected that *“analysing case study evidence is especially difficult because the strategies and techniques have not been well defined.”* Gall *et al.* (cited by Dooley, 2002) noted that two popular types of analysis used in case study research are structural analysis and reflective analysis.

Structural analysis is the process of examination undertaken to identify the patterns inherent in events or phenomena, while reflective analysis is the process of analysis that relies on the intuition of the researcher rather than on the technical procedures of an explicit category classification system. This study chose structural analysis because it is broadly continuous with the form of analysis used in other qualitative research where in, general, the suggested analysis strategy concerns organising data, describing, classifying, connecting, and identifying important themes. Yin (2003: 109), for example, proposes three strategies that rely on *“theoretical propositions, setting up a framework based on rival explanations, and developing case descriptions.”* To do this, he recommends the use of five techniques of analysis: pattern

matching, explanation building, time-series analysis, logic models, and cross-case synthesis. In addition to following these rules of case study analysis, data analysis in this study also absorbs other rules of analysis; for instance, those deriving from evaluation research (see Patton, 1987). Because this study was related to evaluation, thus that the combination of analytic rules it supplies will be supportive and, ultimately, will be very useful for interpretation. Besides, this study interpreted about space, so it also used diachronic and synchronic - dimension of analysis. "*A diachronic analysis can be understood as representing a longitudinal perspective, while a synchronic analysis can be conceived as a cross-sectional analysis*" (Zube and Moore, 1991: 32).

From the description above and from a variety of considerations related to these research questions, analysis and interpretation was conducted with reference to the opinions of Yin and Patton. Thus, the initial analysis carried out sought to identify dominant patterns in the cases that relate to the theoretical propositions, then by inductive and logical means, attempted to formulate rival explanations that might result in different findings, findings beyond the theoretical propositions, that may be specific or unique, and to find new themes from evidence that make an authentic contribution to the development of knowledge. Therefore, the approach of applying a holistic and comprehensive method of analysis with a valid interpretation, supported by accurate data and information, is expected to shed light on HBEs and reveal truths about their nature.

3.5 Reflection and Positionality on the Research Process

Doing qualitative research in the field of housing is a challenge for me as a researcher, as previously, I had used a mainly positivist approach with quantitative methods.⁶ This approach was supported by my position as a lecturer in statistics on human settlements courses. For me, this study represented the advantage of gaining experience with the two approaches, not only to complete a doctoral dissertation but also to teach my students in the future. To understand the reality being studied, quantitative researchers usually collect and analyse large amounts of numerical data, whether primary or secondary, with a variety of different measurement variables that create a distance between the researchers and the researched. In contrast, qualitative researchers must conduct field work in order to be closer

⁶ The researcher has conducted 12 studies using quantitative methods, including a Master's dissertation in human settlement development (Marsoyo, 1992).

to their informants and the topic under study. Kellett (2010: 4) argues that 'living in the field' is a way to "*see and experience the world through the eyes of others*" and thus is an approach to be used by qualitative researchers. Therefore, to understand how households use and adapt to a dual use of space for business and domestic activities in the case of HBE, this study predominantly used the qualitative methods of interviewing informants and observing activities and HBE spaces in the *kampung*, supported by quantitative methods.

This research concerns HBEs in Yogyakarta. As a junior lecturer when following the Master's programme, I became interested in studying HBEs as part of the informal sector, because these kinds of business are mostly run by households who live in *kampung* in Indonesia. Therefore, the topic of my Master's dissertation concerned HBE from a quantitative research approach. I felt that the research was more about the analysis of existing facts about place, space and socio-economic characteristics, and did not explain more about how the phenomenon of how space in HBE was formed, how the configuration of business and domestic space was created by households, and so on. My curiosity as a lecturer in architecture and housing focused on the process through which households adapted (to) the two activities (business and domestic) within the dwelling. In this process of adaptive behaviour, the space must be examined as part of the human environment. As a result, in the section on recommendations, I wrote "*behavioural study regarding home-based enterprise is useful to examine human environment in existing home-based enterprise. Behavioural studies are required to understand the complexity of home-based enterprise's nature and required time-series data*" (Marsoyo, 1992: 95). Since that time, few authors have given attention to exploring space in HBE in a way that pertains to the subject of this study. Among those who have are the following: Bulos and Chaker (1993), Bishop and Kellett (2000), Ghafur (2002), and Kellett and Tipple (2003). Hence, this study both complements existing research and has also provided me with the opportunity to carry out further reflection on this subject of interest.

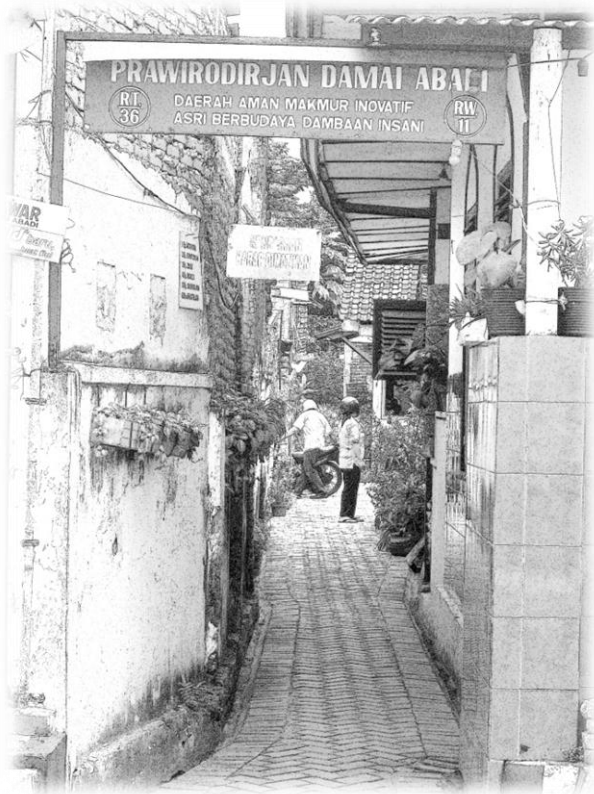
With regard to studies about housing, Kellett (2000) believes that in order to learn more clearly about dwelling processes and activities, the ideal approach is take up residence as a temporary member of a household. Accordingly, I temporarily lived in the *kampung* (although not every night) by renting a room in one of HBEs for eight months in the first year and five months in the second year, in order to become more familiar with the *kampung* community as well as the HBE households. I slept in the rented room because I have a family home in the same city. Basically, I have no problem living in an urban *kampung* because my

family of origin lived in an urban *kampung*, although with a slightly different character. There were three factors that made it easier for me to stay and to collect data at Kampung Prawirodirjan. Firstly, some households, particularly those with an HBE, had known me since 1992 when I conducted a survey for my Masters dissertation. In addition, I had gradually come to visit them for several purposes, such as buying the food products they produce or getting a haircut at the 'Salon Wati' where I am a customer. Secondly, I am a Javanese who also lives in Yogyakarta, thus being ethnically and culturally similar to them, I am not identified as a 'stranger'. In addition, as a lecturer and researcher at the state university I am regarded as a teacher (*'guru'*) for them. Thus, in this case the researcher's role is closer to that of an 'insider' rather than an 'outsider', which affords a variety of advantages, especially in terms of ease of accessing the required information, including being able to undertake more detailed observations of space. Finally, I am fortunate in having a personal friend who was willing to act as the study's first key informant, namely Pak Bambang, formerly employed as an administrator in my office, who lives in this *kampung*. Since he is a community leader and has a home-business 'beauty salon', he was able to introduce me to other community leaders, as well as to several households who operate HBEs, which facilitated the study's access to the necessary information. Therefore, I felt both safe and acceptable as a temporary resident in this *kampung*. In addition, as a lecturer of state university, I did not have significant problems in accessing local government staff to participate in the Focus Group Discussion, nor in interviewing the head of the sub-district/*kecamatan*.

In this research process, I always tried to get closer to the household-heads, housewives, and other family members, with the intention of understanding their motivations and decision-making relating to the use of space and their business activities. I also attempted to get close to customers and suppliers of the home-business activities, with the intention of understanding what they might be doing at the time of field visits or their daily activities, but at the same time influencing the process of my own reflections about how much to trust them. As a researcher, I recognised that using the observation of space and of their movements and activities for a day, followed by interviewing them directly about the cases, would be an appropriate method to gain a trustworthy picture of their activities and use of space in their dwellings. It was possible to learn how households decide on the configuration space and allocation of resources, the psychological values (e.g. privacy) attached to a particular space, and the business activities related to a public space.

3.6 Conclusion

The main concern of this study is with the use of space by households in the home business. Having to use their space for the dual functions of domestic and business activities in the house, households adapt (to) it in order to achieve harmony among the family members. To analyse the use of space and the behaviour of the households and HBEs studied, a qualitative approach was required. The quantitative method was also utilised in order to explain the reasons households run their business from home and the characteristics of HBEs. Thus, mixed method approaches have been adopted for this study, using mostly qualitative methods with some quantitative support. Accordingly, the greater part of the data collection was based on the observation of space, the observation of people's activities and movements, and interviews with actors who know about home business; supplementary to this were a quantitative census and survey questionnaire. In the next chapter, I will discuss the research setting in the Kampung Prawirodirjan where this study took place. The aim is to present a detailed understanding of the context, as many HBEs operate in this *kampung*. It will also provide an overview of the physical, population, and social profile of Kampung Prawirodirjan along with a portrait of the activities that take place there.



4

Chapter 4

Kampung Prawirodirjan: Research Setting

4.1 The Physical and Social Dimension of <i>Kampung: Introduction</i>	106
4.2 Yogyakarta City in the Indonesian Context	108
4.2.1 Indonesia: <i>Unity in Diversity and Problems</i>	108
4.2.2 Yogyakarta Special Regional Province: <i>Centre of Javanese Culture</i>	111
4.2.3 Yogyakarta City: <i>A Traditional City with Traditional Economic Activities</i>	113
a. The History and Morphology of the City	113
b. Geography and Demography	117
4.3 Kampung Prawirodirjan as Research Setting	120
4.3.1 <i>Kampung</i> at the City Centre but in the Marginal Area: <i>an Overview</i>	121
4.3.2 Kampung Prawirodirjan: <i>a Profile</i>	122
a. Physical Profile	122
b. Population and Activities Profile	127
c. Social Profile	131
4.4 Conclusion	134

Chapter 4

Kampung Prawirodirjan: Research Setting

4.1 The Physical and Social Dimension of *Kampung*: Introduction

The word '*kampung*' was originally derived from the Malay word meaning "compound" (Sullivan, 1986). Literally, it means 'village', but the meaning has developed over the centuries. So, in Java Island, the word '*kampung*' generally refers to a residential area within a city. It is an important location for housing the urban population that is not only for native residents but also for migrants from rural or the surrounding areas. Two-thirds of the Indonesian urban population lives in these areas. Patton and Leksono (1988) argue that *kampung* located in the urban centre are usually overcrowded and are poorer than those located in the urban periphery. *Kampung* overcrowding is expressed by the position of the houses, which are very close, so that to access a house it is necessary to pass through a narrow alley between the walls of other houses. Indeed, there are still many old *kampung* which accommodate their populations without a decent standard of facilities, so that the residential areas are unhealthy and unfit for habitation. However, some *kampung* have received government assistance for improvements, for example, through the *Kampung* Improvement Programme (KIP). In addition, many new residential urban developments in Indonesia no longer reflect the traditional low-grade image of the *kampung*.

Kampung should not be seen from the physical side only, but also from the social point of view. In terms of the social dimension, Guinness (1986) and Sullivan (1986) mention the word '*rukun*' in the daily life of the *kampung* community, which implies the existence of social harmony. It means that all parties respect one another and coexist with mutual tolerance. Guinness (1986: 131) states that "*rukun*' refers not only to achieving a state of communal health, but also to the process of sharing through collective action." Accordingly, a person or family who live in the *kampung* should pursue harmony in their social life because it is an important dimension of the urban *kampung* community. For example, residents participate in undertaking road improvements as a form of *gotong-royong*⁷ or patrol around the *kampung*

⁷ The concept of *gotong royong* is rooted in rural Javanese culture, but it has been applied in urban areas as well. It refers to the principle of mutual help among neighbours in a community.

at night, which is specifically for adult men. In addition, the harmony of *kampung* life is demonstrated by treating all people with tolerance and respect, in accordance with awareness of mutual expectations and the conscious effort to avoid conflicts with one another (Mulder, 1994). Based on a study in Surabaya, Kellett and Bishop demonstrate:

how social harmony is [...] maintained and excesses limited through mechanisms which redistribute material surplus and opportunity. [...] This demonstrates the continuing strength of social relations and the close interdependence with economic exchanges, all of which have a strong spatial component (2006: 61).

The relationship between social relations, space, and business activities are very close and strong, thus providing an opportunity for households in the *kampung* to generate income. In addition, this indicates how family business activities are embedded in social networks and traditional values in a way that directly strengthens the culture of economic production.

The above description is a starting point for understanding the context in which the *kampung* have both physical and social, including economic, dimensions. For example, numerous HBEs are conducted in urban *kampung*, with a variety of benefits relating to the physical and social life of the *kampung*. Conversely, HBEs also contribute to *kampung* communities through the provision of local services. For households, HBEs provide a solution to poverty through generating income that is supported by the social harmony of the *kampung*. The goal of this chapter is to illustrate the general physical, geographic, historical, cultural and social phenomena of the research settings. Therefore the research setting as a context is an important part of the research itself. Lawrence-Lightfoot *et al.* noted that:

[...] context becomes the framework, the reference point, the map, the ecological sphere; it is used to place people and action in time and space and as a resource for understanding what they say and do. The context is rich in clues for interpreting the experience of the actors in the setting (Cited in Patton, 2002: 63).

Before describing the Kampung Prawirodirjan as a research setting, I will first explain the Indonesian context, which includes the country's unity in diversity and its problems. I will then outline Yogyakarta Province as a centre of Javanese culture, and following this introduction will go on to explain the city of Yogyakarta. Explaining the nature of Kampung Prawirodirjan not only includes why this *kampung* has been chosen as a research setting, but also describes its physical profile, including its pattern and physical setting, its population and activities profile, and its social profile. The specific aim of this chapter is to give the reader a broad picture of the research setting or context.

4.2 Yogyakarta City in the Indonesian Context

4.2.1 Indonesia: *Unity in Diversity and Problems*

Indonesia is one of the largest archipelagos in the world, consisting of 17,480 islands including the five large islands of: Sumatera, Java, Kalimantan, Sulawesi, and Papua. It has a diversity of cultures, ethnic groups, and local languages that are nevertheless united together. There are about 300 ethnic groups in Indonesia and the majority are ethnic Javanese (Drakeley, 2005). *Bahasa Indonesia*, which was proclaimed as the national language in 1928, is one approach to unifying the countries various languages. Indonesia is located between two continents, Asia and Australia, and situated on the equator. The total land area is 1.9 million km² and the total sea area is 7.9 million km², including an exclusive economic zone, stretching between the Indian and the Pacific Oceans. This territorial extension means that Indonesia is 3.9 times bigger than the UK and 1.8 times bigger than Japan.

Indonesia has the world's fourth largest population after China, India and the United States, amounting to a total of 237,556,363 people in 2010, with an annual population growth rate of 1.6% between 1980-2010, although in the period 1990-2010 growth decreased to 1.4% per year (BPS, 2010b). This increasing population has been unevenly distributed regionally. Java Island is the densest area, hosting 57.5% of the total population live on land that represents only 6.8% of Indonesia's total landmass. This indicates that there is inequality in the distribution of the population in Indonesia. Therefore, a few years ago the government imposed a transmigration programme, transporting people from Java and Bali to the less populated islands.

Demographic conditions in Indonesia are characterized by rapid urban population growth and a simultaneous decline in rural growth rates, as well as rural-urban migration. Based on calculations by Bappenas *et al.* (2010) population projections to 2025 derived from previous data are shown in Table 4.1 and Figure 4.1. It can be seen from these that the urban population is expected to continue to increase and that by the year 2025 the urban population will constitute about 67.7% of the total population.

Table 4.1: Urban and rural population growth in Indonesia, 1990-2025

Year	Total Population	Urban Population		Rural Population	
		Number	%	Number	%
1990	179,243,375	55,432,788	30.93	123,810,587	69.07
1995	194,800,106	71,656,845	36.78	123,143,261	63.22
2000	209,535,490	87,577,148	41.80	121,958,342	58.20
2005	219,852,052	106,379,728	48.39	113,472,324	51.61
2010	234,181,679	126,894,185	54.19	107,287,494	45.81
2015	241,623,293	140,971,669	58.34	100,651,624	41.66
2020	259,721,909	165,805,449	63.84	93,916,460	36.16
2025	270,538,410	183,058,409	67.66	87,480,001	32.34

Source: Bappenas et al. (2008)

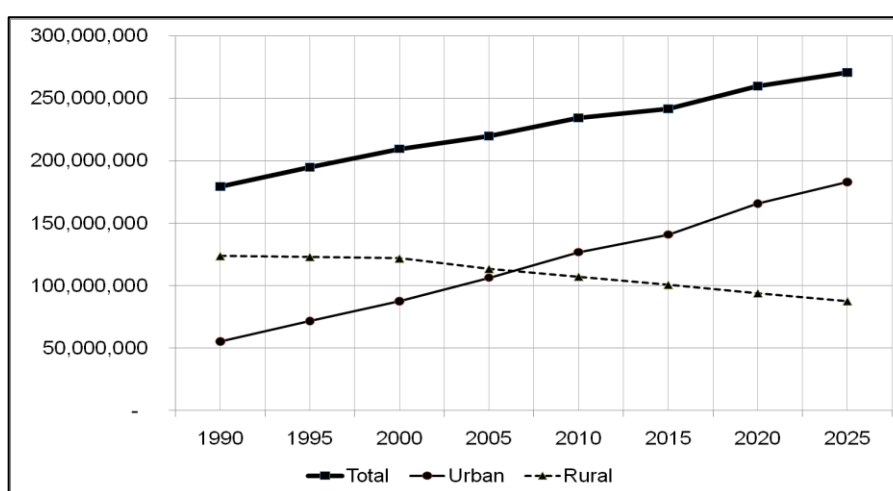


Figure 4.1: Population growth in Indonesia, 1990-2025

The fast growth of the urban population is caused by several factors such as: (a) the natural growth of the urban area population, (b) the migration of population from rural areas to urban areas, and (c) the extension of existing urban areas due to rapid developments in the urban fringe area around metropolises and large cities, which formed uncontrolled conurbations. The percentage of urban population around the time of writing (2010) Indonesia was projected to have reached 54.2%. This percentage is relatively high, especially in provinces on Java Island, which were projected to reach about 70% (Bappenas *et al.*, 2008). This is because many metropolitan cities are located on Java Island: Jakarta, Bandung, Surabaya, and Semarang. It should be noted that Yogyakarta City, as the capital of Yogyakarta Province, is still classified as a secondary city because its population remains under one million. Unfortunately, these figures were also followed by an increase in the number of people below the poverty line, especially during the periodic economic crises. The urban

population under the poverty line increased significantly from approximately 9.6 million (13.6%) of the total population in 1996 to 17.6 million (21.9%) of the total population in 1998 (BPS, 1998). Accordingly, the percentage of urban informal sector workers rose significantly during the crisis. This can be gauged from the rise in the number of informal sector workers in 1997 to 62.8% of the total workforce (Bank Indonesia, 2003), compared with the 1980 estimate of 52% of the total workforce (Sethuraman, 1985). In fact, the number of informal sector employees continued to show an increase, rising to 68% by 2000 (Bank Indonesia, 2003).

Periodic economic crises have also contributed to poverty, such as the crisis which began in mid-1997, which devastated the Indonesian economy. Firman (2002: 231) stated that *“the Indonesian economic crisis has been an extremely complex process. It has involved not only economic factors, but also political crisis connected to bad governance involving corruption, collusion and nepotism.”* As a result of the crisis, poverty levels increased substantially, especially in urban areas, with Java Island suffering the most. Despite the policy of liberalization and supervision imposed in the late 1980s, the nation was ill-prepared to address the monetary crisis of 1997-98, which saw GDP declining by 13% and inflation increasing to almost 16% in 1998 (Kartasasmita, 1998). This meant that unemployment tended to increase while the level of purchasing power had a tendency to decrease. Simultaneously, a dramatic transformation was taking place in the political sector. In other words, the crisis was also influenced by the political nuances of an undemocratic government, which resulted in slowing down the resolution of the monetary crisis. Along with unstable governments, several natural disasters occurred in a short time period, including flood, drought, volcanic eruption, earthquake, and tsunami, for example the tsunami in Aceh on 26 December 2004 and the earthquake in Yogyakarta on 27 May 2006.

In 1999, the government of Indonesia conducted its first parliamentary elections, which were followed by direct presidential elections, which the electorate hoped would end the multi-level crisis. Recently, especially in 2008, macro economic development showed a Gross Domestic Product (GDP) of 4,954,028.9 billion rupiahs, representing a 14-fold increase in comparison to the 1999 GDP. The highest proportion of GDP is presented by the manufacturing industries sector which represents 27.9% of total GDP (BPS, 2010a). This indicates that manufacturing industries are an important sector in national economic growth and provide a considerable amount of employment to the population. This condition is also supported by Indonesia's access to natural resources, especially petroleum and natural gas,

Indonesia being, for example, the world's largest exporter of liquefied natural gas. In addition, the number of people under poverty line in 2008 has decreased to 15.4% (BPS, 2010a), although this percentage is still relatively high.

The conclusion is that although Indonesia has abundant natural resources and has an immense population, in common with other developing countries, it also has many problems. An example of these is the persistence of poverty and the lack of employment opportunities. Lack of opportunities can translate into mass unemployment. Nevertheless, individuals and households have found many ways to escape poverty and avoid unemployment. One of these ways is to work in the informal sector, including in HBE. The impact of these national issues is also reflected at the provincial, municipal and local levels. Each will be explained in sequence, starting from the Yogyakarta Province, moving on to Yogyakarta City, and ending with Kampung Prawirodirjan, by providing an account of the physical conditions and activities of its inhabitants which are directly or indirectly related to national issues.

4.2.2 Yogyakarta Special Regional Province: *Centre of Javanese Culture*

Yogyakarta Special Regional Province, one of the six provinces in Java Island, is one of the smallest provinces in Indonesia and is widely known as a centre of Javanese culture as well as a centre of learning⁸. According to Surjomihardjo (2008) and Suryo (2004) the existence of Yogyakarta has a long history as a centre of Javanese culture. The initial growth of Yogyakarta started in 1756 AD when Sultan Hamengku Buwono-I wrested his territory from the Surakarta Kingdom. Prior to this, in 1715, after Ganti Treaty the Mataram Kingdom had been divided into two parts: Kasunanan Surakarta and Kasultanan Yogyakarta. After independence, the kingdom of the Yogyakarta Sultanate (Kasultanan Yogyakarta) was the first to join the Republic of Indonesia, and thus this region became a special province, now known as the Yogyakarta Special Regional Province. This status makes it different from other provinces in Indonesia, for example the sultan of Yogyakarta is always the governor of Yogyakarta Province.

⁸ This is shown by its many universities (10 state universities and 117 private universities/institutes), with 223,624 students coming from all regions in Indonesia and abroad (BPS Yogyakarta Province, 2009).

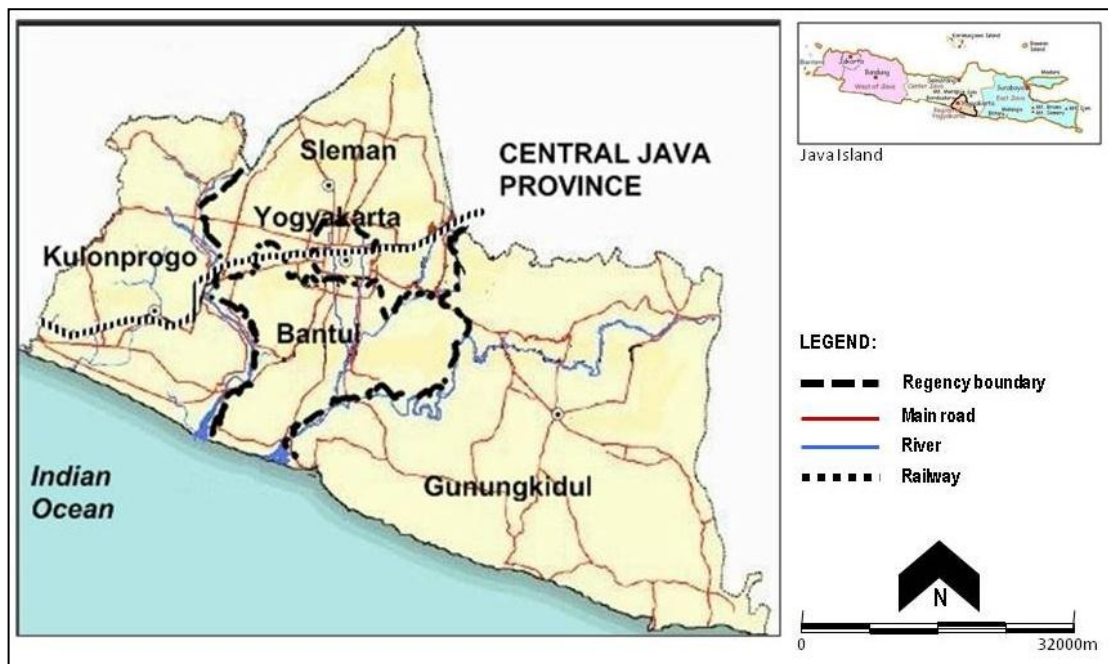


Figure 4.2: Yogyakarta Special Regional Province with its five regencies

This region is located in the middle of Java Island and bordered on the north by the Central Java Province and on the south, with its dramatic landscape of volcanoes and rice paddies, by the ocean. In year of 2010, the territory of the province is roughly about 3,186 km² and its population is about 3,452,390 people or 1,083 persons per km² (BPS, 2010b). It is subdivided into five regencies, namely Sleman, Bantul, Kulonprogo, Gunungkidul and Yogyakarta City, as shown in Figure 4.2. Generally, the language used is Javanese which also indicates the domination of ethnic Javanese in this Province. This region is a second tourist destination after Bali, because it has a diversity of attractions, for example: Yogyakarta Palace, Prambanan Hindu Temple, Boko Temple, and Parangtritis beach. In addition, artisan industries are spread across the region including silver craft, earthenware and ceramics (Figure 4.3). Singarimbun states that:

Yogyakarta and surrounding areas provide many interesting tourist [attractions], an enchanting culture, cheap and tasty food, polite and friendly people, and a variety of souvenirs that are unique, interesting and cheap (2003: 42).



Figure 4.3 Examples of artisan industries in Yogyakarta Province

Source: Jogjatrip.com

In conclusion, since the era of empire, then from the pre-independence period up to the present day, the Javanese kings have resided in this region, and thus this area's heritage is greatly appreciated as having a long history and culture continuously maintained. Thus the region's history and cultural heritage is a tourist attraction for both local and international visitors. The local people's simplicity of lifestyle and their loyalty in carrying out the traditional religious and cultural rituals add value of this region as a tourist destination. Because of the high volume of tourists visiting, many individuals with craft skills deploy them in home craft-industries. Likewise, people with other abilities work in the food industry, run food stalls, or photocopy services, the latter required because many students come to this area to study at the universities.

4.2.3 Yogyakarta City: A Traditional City with Traditional Economic Activities

a. The History and Morphology of the City

The *Kraton* or palace, which was built in 1756, formed the embryo of Yogyakarta city (Surjomihardjo, 2008) and for this reason the city is known as a traditional city. The initial

formation of the city was characterized by a strong fortress palace, with an '*alun-alun*' (plaza) at its entrance facade. The palace was formed by a cluster of buildings surrounded by the residential quarters of the Prince and Princess. Khairuddin (1995) stated that the main structure of the city was shaped by the 'spirit line' of the Krapyak Monument (in the southern area), with the palace and square court at the centre, the main street of Malioboro on which the Tugu Monument stands, and the connecting lines with the location of the Merapi Mountain in the north.

Historically, the palace of the first king (Sultan Hamengku Buwono-I) was in Ambar Ketawang which is located 4 kilometres to the east of the city centre. Then in 1756 the seat of the royal family moved to the palace where it is now located. This location formed the embryo of Yogyakarta City's development. This began after 1756, when many people were living within the area enclosed by the defensive wall built around the palace. The wall is known as '*Benteng Kraton*' (fortress of the palace). Subsequent to this, the development of residential areas began to take place around the palace and beyond, filling the area between two rivers (Code and Winongo rivers) northwards towards the Tugu Monument and also spreading southwards up to the Krapyak Monument. In the built-up area, there is a path that connects the two monuments, which forms an imaginary link between the sea at its southern terminus and the mountain at its northern endpoint. This axis has come to be referred to as the 'spirit line' (Figure 4.4). The city's development was also influenced by the establishment of Beringhardjo's traditional market near to the northern part of the Sultan's palace in Wono Pabringan (1758). Chinese settlements formed a cluster along the main road leading to the '*alun-alun*' (the square court/plaza) north of the palace in the Gandekan area, and this development was followed by constructions instigated by the Dutch in the Loji-Kecil area and the building of the '*Vredenburg*' fort (1765). After that, building instigated by the Arabs took place in the Sayidan area and around the mosque; this area is called Kauman (Surjomihardjo, 2008; YUDP, 1991).

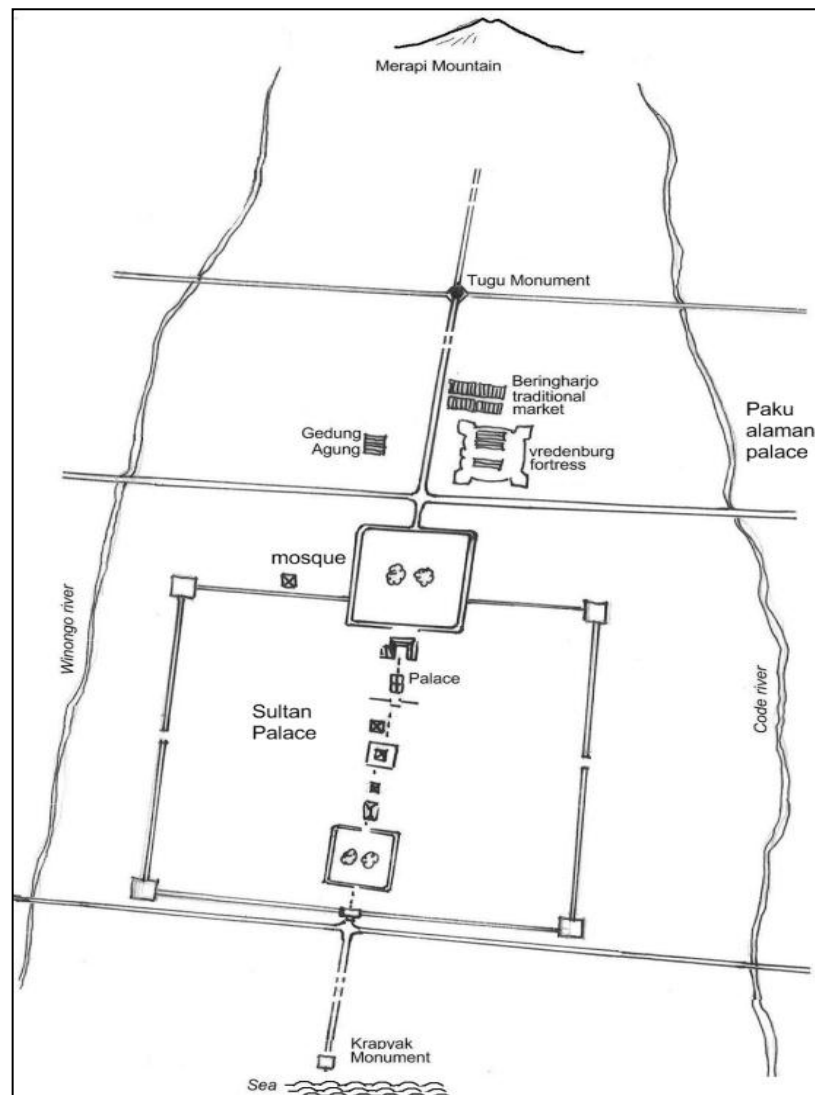


Figure 4.4: The 'Spirit Line' from the Krapyak Monument through to Merapi Mountain

In addition, YUDP (1991) explains that some developments took place independent of any consideration of the morphology of the city, such as the construction of Pakualaman's Palace fort (in 1813) in the Notokusuman area, which was located on the eastern side of the Code river; the development of the Lempuyangan Station in 1872 and the Tugu Station in 1887, opening up rail transport to isolated towns. The next stage of development, the Chinese settled in the area of Kranggan (near the Tugu monument) and then spread to the north, near the train station, for example in Malioboro, Dagen, Pajeksan, Gandekan and Gondokusuman; while the Dutch settlement areas also expanded into Bintaran, Jetis, and Kotabaru or *Nieuwe Wijk* in 1920 (Utomo, 2007). These developments can be seen in Figure 4.5.

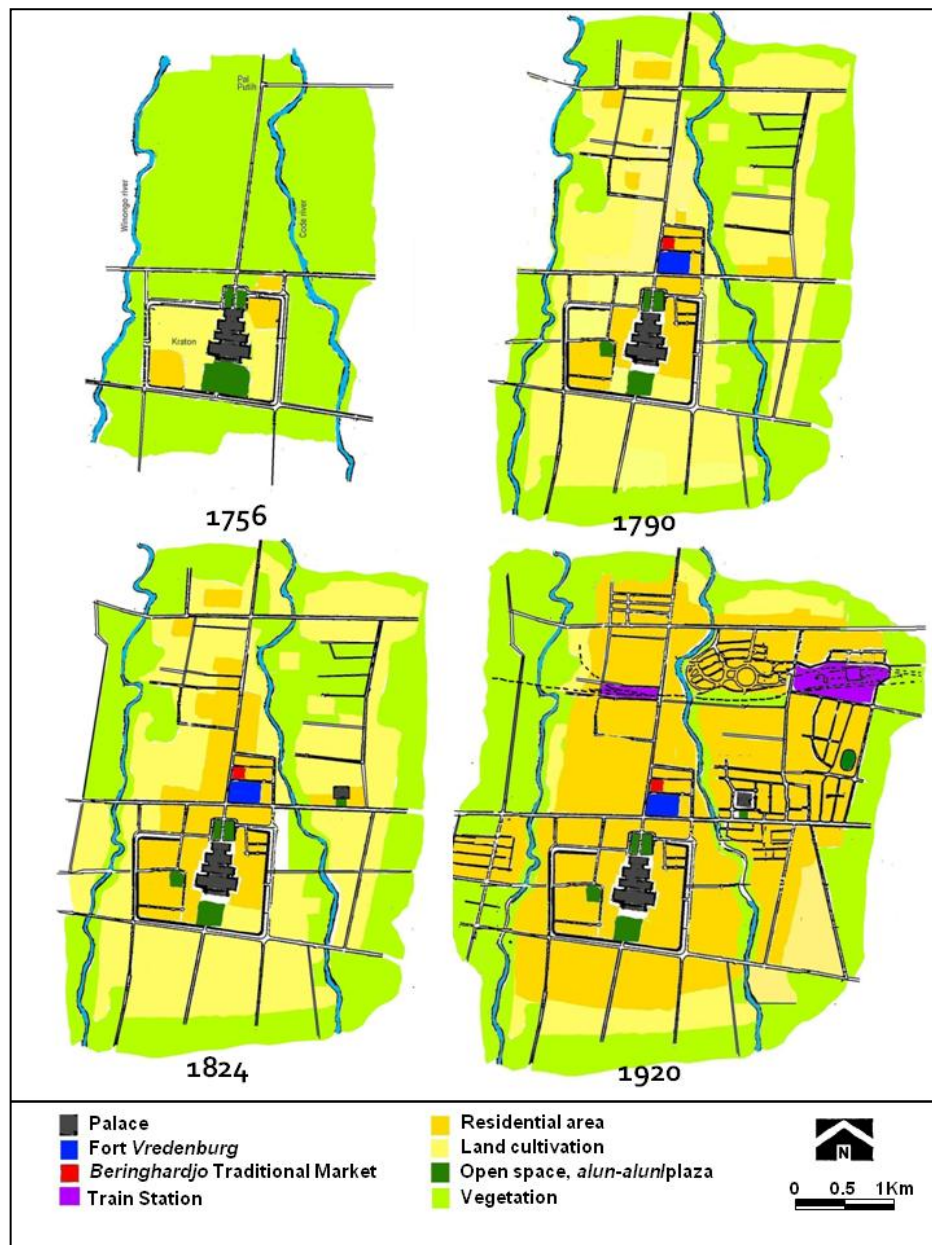


Figure 4.5: The development of Yogyakarta City from 1756 to 1920
 Sources: YUDP (1991); Khudori, (2002); Utomo (2007)

Other local people inhabited the area called the *kampung*. Further development of the *kampung* spread along the riverbanks and behind the business district along the main roads, such as the Prawirodirjan and the Purwokinanti (Figure 4.6). Yogyakarta's later development was addressed by various city plans, such as: Prince Mangkubumi's Plan (1755), Karsten's Plan (1936), Putuhena's Plan (1947), Purbodiningrat's Plan (1953), the Preliminary Study for Yogyakarta Master Plan (1971), and the Yogyakarta Master Plan 1985-2005, although none of these plans was realised (Winarso, 1988). Currently, the government of Yogyakarta City use the 2008 *Rencana Umum Tata Ruang Kota* (General Urban Spatial Plan).

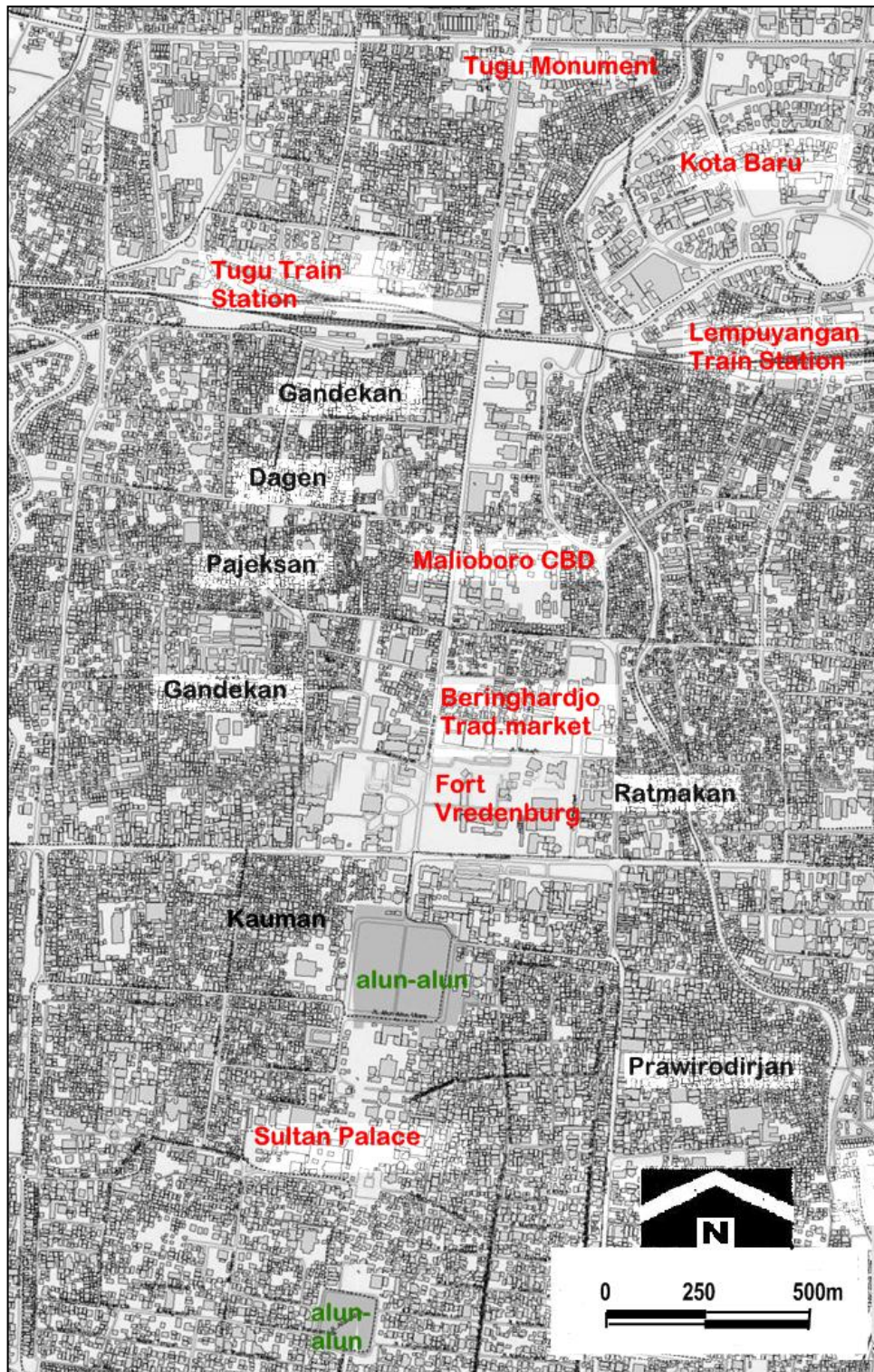


Figure 4.6: The built-up area around the city centre of Yogyakarta City
Source of map: Karmamantul (2005).

2. Geography and Demography

The borders of Yogyakarta city's administrative territory are: (a) north; Depok and Mlati subdistricts in the Sleman Regency, (b) east; Banguntapan subdistrict in the Bantul Regency,

(c) south; Sewon and Banguntapan subdistricts in the Bantul Regency, and (d) west; Kasihan subdistrict in the Bantul Regency (Figure 4.7). Administratively, Yogyakarta City is comprised of 14 sub-districts (*Kecamatan*), and 45 sub sub-districts (*Kelurahan*) with 614 blocks (*Rukun Wilayah*) and 2,532 neighbourhoods (*Rukun Tetangga*).

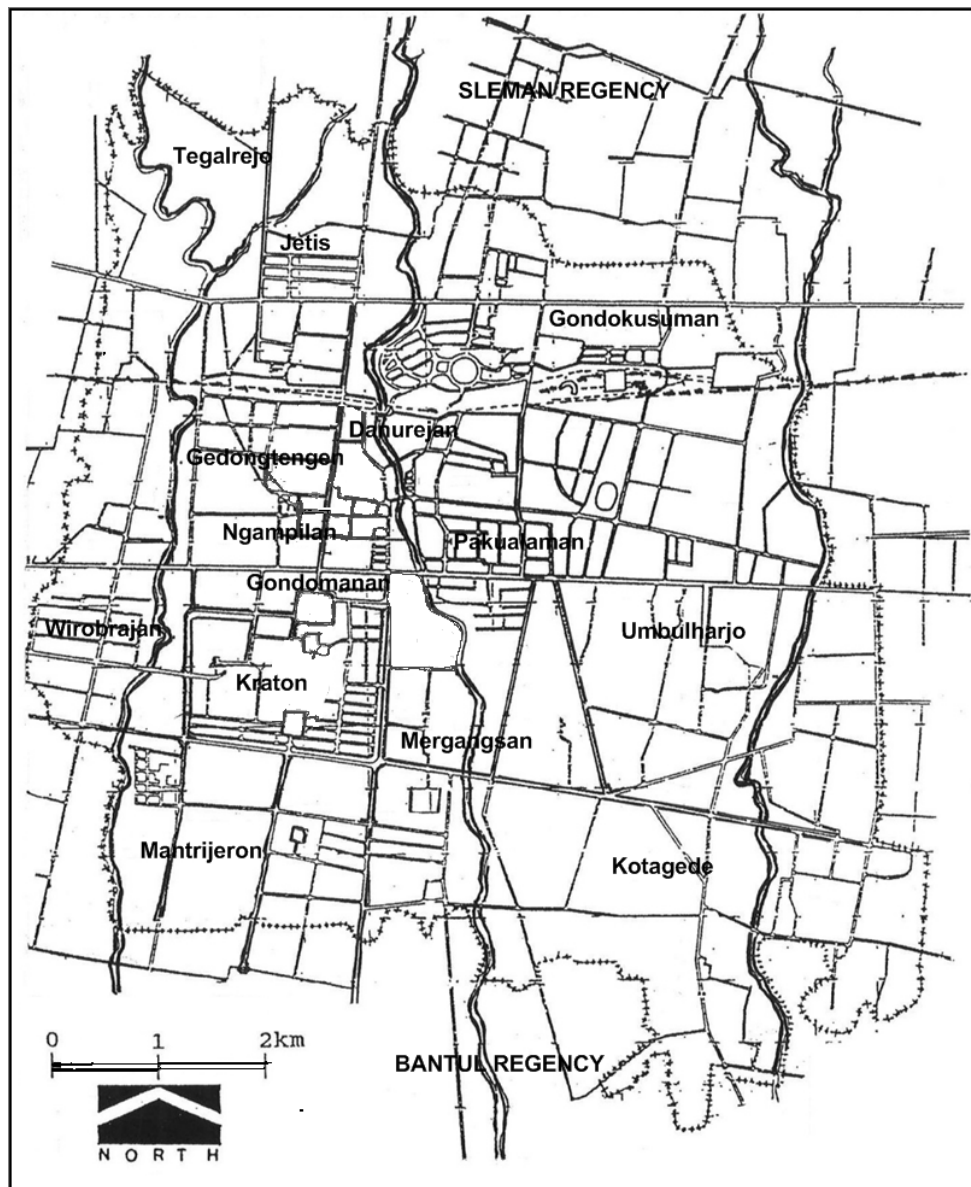


Figure 4.7: Yogyakarta City, showing its 14 sub-districts (*kecamatan*)

At present, Yogyakarta covers an area of 3,256 ha. (32.6 km²), and it is crossed by the Winongo, Code and Gajahwong rivers. The city has a hot climate with an average daily temperature ranging between 26° and 28°C and has between 1,300 and 2,500 mm of rainfall per year. The average humidity is 74%. There are only two seasons annually, the wet/rainy

and dry seasons (Humid Tropical Monsoon Climate). The monsoon character of the climate is reflected in a dry season that normally lasts from September to January and a wet season prevailing from February to August (Bappeda Kota Yogyakarta, 2007; YUDP, 1991).

Based on BPS Kota Yogyakarta (2009), the total population of Yogyakarta City is 526,917 people (2008) with a density of 16.212 people per km² and an average growth rate of 0.8% per year (from the base year of 1999) (Figure 4.8). The main economic activities are in the tertiary sector such as trade and hotels, services, tourism, restaurants and transportation. Table 4.2 indicates employment in the trade sector accounts for the largest proportion of the city population. Unfortunately, the table does not show figures for the informal sector although this sector contributes to the urban economy. This is because the definition and measurement of the informal sector are not included in the criteria for government statistical data collection. Criteria for data collection on *Sakernas* (The Indonesian National Labour Force Survey) were based on ILO criteria that do not reflect the characteristics of the informal sector (BPS, 2008). However, in reality the majority of informal business consists of small traders run their business in informal ways.

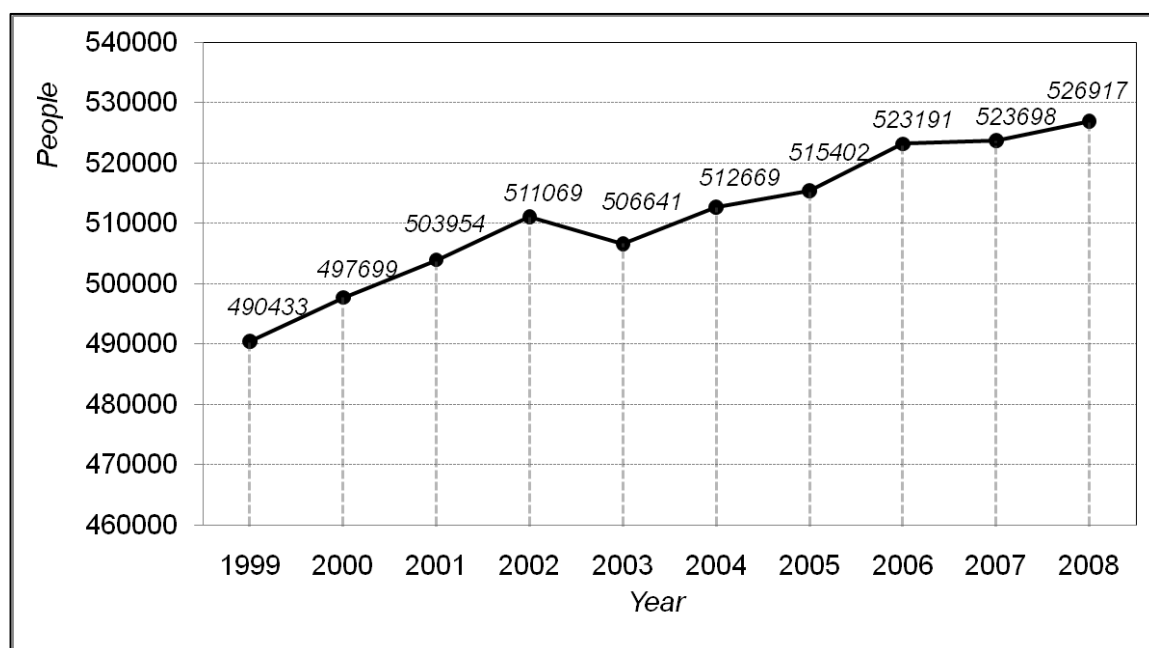


Figure 4.8: Population in Yogyakarta City, 1999-2008

Source: BPS Kota Yogyakarta (2009)

Table 4.2: Occupation of the Yogyakarta City population, 2008

Type of Occupation	Total	Percentage
Trader	50472	33.85
Labourer	38240	25.65
Civil Servant	21832	14.64
Pensioner	14427	9.68
Transportation	10519	7.05
Home-Industry	8325	5.58
Military	4132	2.77
Mid-High Industry	1162	0.78
Total	149109	100

Source: BPS Kota Yogyakarta (2009)

Yogyakarta is also a tourist destination. Hence there are many traditional craft workshops and producers of goods such as batik painting, arts and silverware in this city. Batik painting is very popular and is exhibited in galleries throughout the city. Silverware is also a speciality of the Kotagede District in Yogyakarta, which produces highly elaborate work. The artisans usually occupy only a small amount of space in the house to create their products, but they require a large amount of space to prepare the raw material to be processed and to keep prepared material.

A sporadic type of HBE in the *kampung* of Yogyakarta is the beauty salon. Generally, these businesses have skilled operators, but some are unskilled. Their main clients are usually their neighbours, although some of them visit the business from other *kampung*. Most of these businesses occupy more or less 4 square metres of the house space and they usually use the guest room for their business space. Some of these businesses also rent out traditional wedding outfits and national costumes. The several examples above are usually easy to find in Yogyakarta's *kampung*, especially *warung* and other such home-businesses. Patton and Leksono (1988) indicate that the *kampung* is a type of settlement where people live closely together, at low cost and near to their workplaces. It is also stated by Benjamin *et al.* (1985: 95) that "*the kampung is a mixed-use area, even if it is primarily residential; small factories, workshops, stores and restaurants abound.*"

4.3 Kampung Prawirodirjan as Research Setting

To understand the physical environment and activities of residents who interact and relate to one another in a *kampung* as a setting is an important basis for understanding what is

happening in the neighbourhood. This is directly related to focus of this research on home-businesses in the *kampung*. An overview will therefore be given to explain the history of the *kampung*, its position viewed from the macro level, especially in relation to activities in the city centre, and, in brief, the condition of the *kampung*. The depiction of the setting will also describe the physical environment, population, activities, and social environment in more detail.

4.3.1 *Kampung* at the City Centre but in the Marginal Area: an Overview

Kampung Prawirodirjan is one of the old informal settlements which formed after the completion of the palace fort settlement. According to a conversation with the older residents of this *kampung* and the Subdistrict Head (*kelurahan*) of Prawirodirjan (in May 2005), the name of this *kampung* was taken from Ndalem⁹ Prawirodirjan. This Ndalem, which following renovation is now used as educational facilities for SMA Santa Maria, was inhabited by Adipati (Duke) Prawirodirjo, who lived and died in this *kampung*. The *kampung* is located in the city centre, near the large traditional market Beringhardjo, and near the Central Business District (CBD), in particular the Malioboro Area (Figure 4.9). In spite of its city centre location, this *kampung*'s proximity to the Code River, with the area near the river called 'girli/pinggir-kali' or 'ledok' (the riverside), has negative connotations as a so-called marginal area. This connotation arises because the area around the river is usually dirty and the houses around it are not well served by public utilities, especially water supply and sewerage networks. That is why it is said that the *kampung* is simultaneously located in the city centre and in marginal areas.

The *kampung* broadly consists of several terraces, running down from the west to the east area towards the Code River. However, the *Wong kampung*¹⁰ is divided into two parts based on the characteristics of the area's topography. The western area is a relatively flat area called the '*Prawirodirjan Nduwuran*', while the eastern area is on an escarpment called the '*Prawirodirjan Ledok*'. The *Prawirodirjan Nduwuran* is dominated by large-scale buildings of which the majority are used for trade purposes, because it is located near the main road. *Prawirodirjan Nduwuran* has only four *Rukun Wilayah* (blocks) compared to six *Rukun Wilayah* in *Prawirodirjan Ledok*, the latter being inhabited by the majority of the population, who live in the denser settlements. Therefore, the land-use is a mixture where most of the land is for housing. Interestingly, these areas host many HBES, particularly of the trade and

9 'Ndalem' is a term used to denote the mansion where a prince or princess lives.

10 *Wong kampung* means the people who live in this *kampung* or other *kampung*s nearby.

service types. Indeed, a survey in 2003 and 2006 showed that one in three dwellings have a home-business.

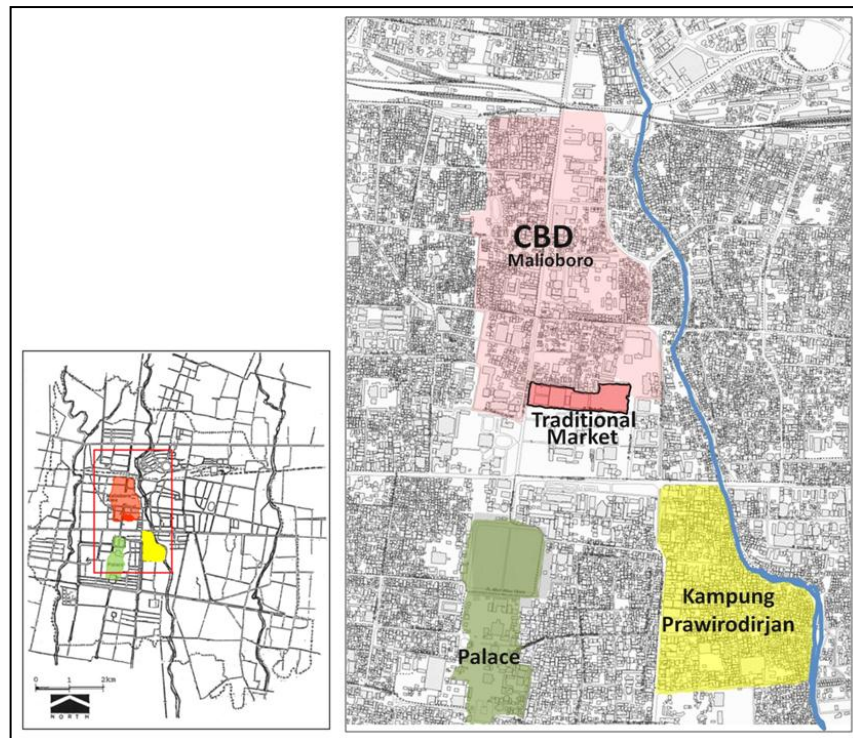


Figure 4.9: The position of Kampung Prawirodirjan in the city centre

4.3.2 Kampung Prawirodirjan: *a Profile*

This section will explain the physical characteristics, population, activities, and social profile of the *kampung*. The physical profile includes the geography of the area, land use, and physical facilities, including the alleys in the *kampung*. The population and activities profile covers the total population and its growth rate, education level, and main occupations. The qualities of *rukun*, *gotongroyong*, *musyawarah*, and tolerance, as the values of traditional *kampung* communities, will be explained under the social profile.

a. Physical Profile

Kampung Prawirodirjan is bounded by a river and main roads and encompasses approximately 0.3 km². As mentioned above, the majority of the land use is for housing (approximately 80% of land) while the remaining use of land is for varied purposes, for instance shops and an electronic shopping mall, a neighbourhood market, mosques, the

Chinese temple, schools, a police station and a leather factory. The shops, including the shopping mall, dominate land use near the main road in the western area of this *kampung*. HBEs of various types are spread across the study area. There was even a row of HBE with the same business type found in one of the alleys. However, there are also some HBEs located in the middle of the residential block (Figure 4.10).

The *kampung* contains 741 individual housing units which can be categorized into three types of construction: permanent (76%), semi-permanent (23%), and temporary (1%). Permanent structures are constructed entirely of brick. Semi-permanent structures are a mixture of materials including hardwood/bamboo and brick. Temporary structures are constructed almost entirely of bamboo. These range in size from 16 to 300 m², with the average size being approximately 60 m². According to the survey conducted by Junaidi (2004) many of these houses are occupied by extended families and several houses are occupied by nuclear families. In addition, the net housing density reached 58 units per ha. in 2003. This figure is higher than the average housing density standard, that is 40 units per ha. (Public Work Department, 1987). With this high density, to access a particular house it is necessary to pass through narrow alleys, even in some cases to get past groups of people crowding the alley. However, these narrow alleys have an important role in the formation of interactions between residents of this *kampung* and have a positive impact on the households who have a business there. For example *Warung Kelontong* is not only a place for selling goods for everyday needs, but is also a place for neighbours to gather together, just to make conversation.

Based on my survey conducted in 2006, 248 units of HBE existed in the *kampung*. The way space is used for business in residential spaces also varies. This variation depends on the situation of the residence and the nature of its business activities. The use of space will be discussed in detail in Chapter 6. In this chapter, giving a general overview, the use of space is grouped into five types, as follows:

1. The workspace for all business functions is located within the dwelling unit, generally at the front or side, depending on the availability of space and ease of access for customers;
2. Workspace for all business functions is located outside the dwelling unit, either adjacent or at a small distance, but still within the side or front yards;
3. Workspace for production is located in the backyard.
4. Workspace for both retail trading and production is located in the dwelling unit, in the yard, and in public space.
5. Workspace for all business functions is located on the ground floor of the dwelling unit, with the first floor kept for domestic activities.

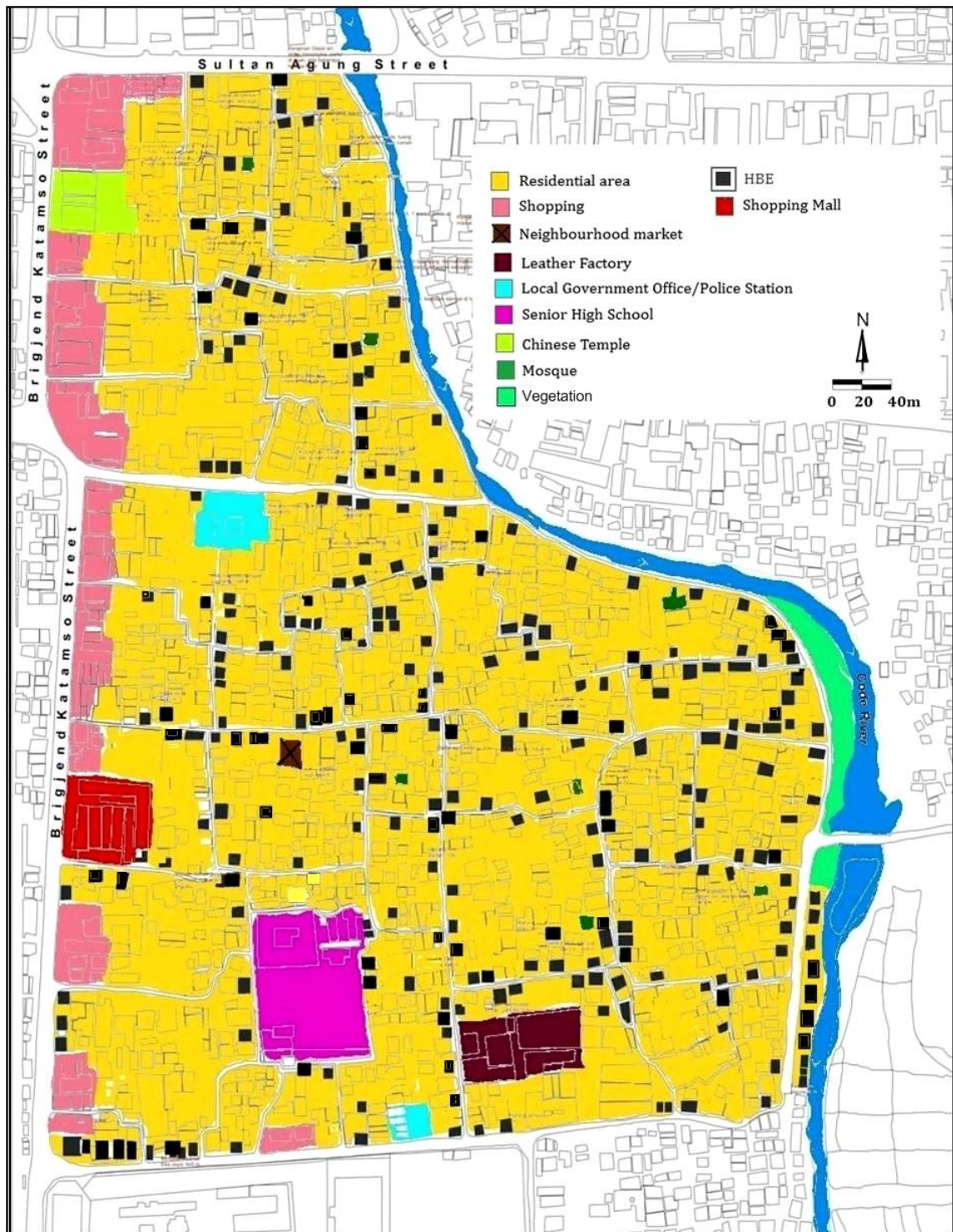


Figure 4.10: The existing land use in Kampung Prawirodirjan
Source: Fieldwork, 2006

Beside the use of land for housing, a small percentage of land (approximately 2%) is allocated to public facilities, such as mosques, kindergartens, a neighbourhood market, and community meeting halls, and neighbourhood's offices. These facilities are usually provided under the

traditional participatory community development scheme known as the *gotongroyong* tradition. All members of the community contribute, either in cash, in kind or through their own labour, to build the facilities. This is generally performed as a complement to the annual subsidy given by the local government to communities at the *kelurahan* level. It is also important to note that in the *Prawirodirjan Ledok* many public toilets were noted, some of them developed by the local government (Figure 4.11). This is because most of the houses in these areas do not have their own private toilet facilities. The area around the public toilet is usually used for washing clothes together by those who do not have their own wells. This area is also used for social interaction among community members.



Figure 4.11: An example of public toilets in the *kampung*
Source: *Fieldwork*, 2006

The alley pattern within this *kampung* forms a loose grid system. Physically, it consists of primary alleys (3 m), secondary (2 m), and tertiary alleys (1 m -1.5 m), as illustrated in Figure 4.12, although these alleys may not have the same width all along their length. Primary alleys stretch from the east to the middle of the area, followed by secondary and tertiary alleys to the north and south or towards the river. They also stretch alongside the river, especially in the southern part of this *kampung*. Concerning tertiary alleys, people often refer to these as '*jalan tikus*' (mouse path) because they are so narrowly restricted by the house walls. Thus, cars cannot access these alleys and must be parked on wider streets, except at the junctions of roads and alleys that are wide enough for passing cars. However, motorcycles are permitted in the area, especially on the primary alleys, but are not supposed to be driven on the secondary and tertiary alleys. The problem that arises in this *kampung* due to its narrow alleys is that when accidental fires break out in the central area, the fire-brigade is not able to reach them. Similarly, ambulances and hearses are unable to access these alleys, and they are difficult to evacuate in the case of accident or disaster.

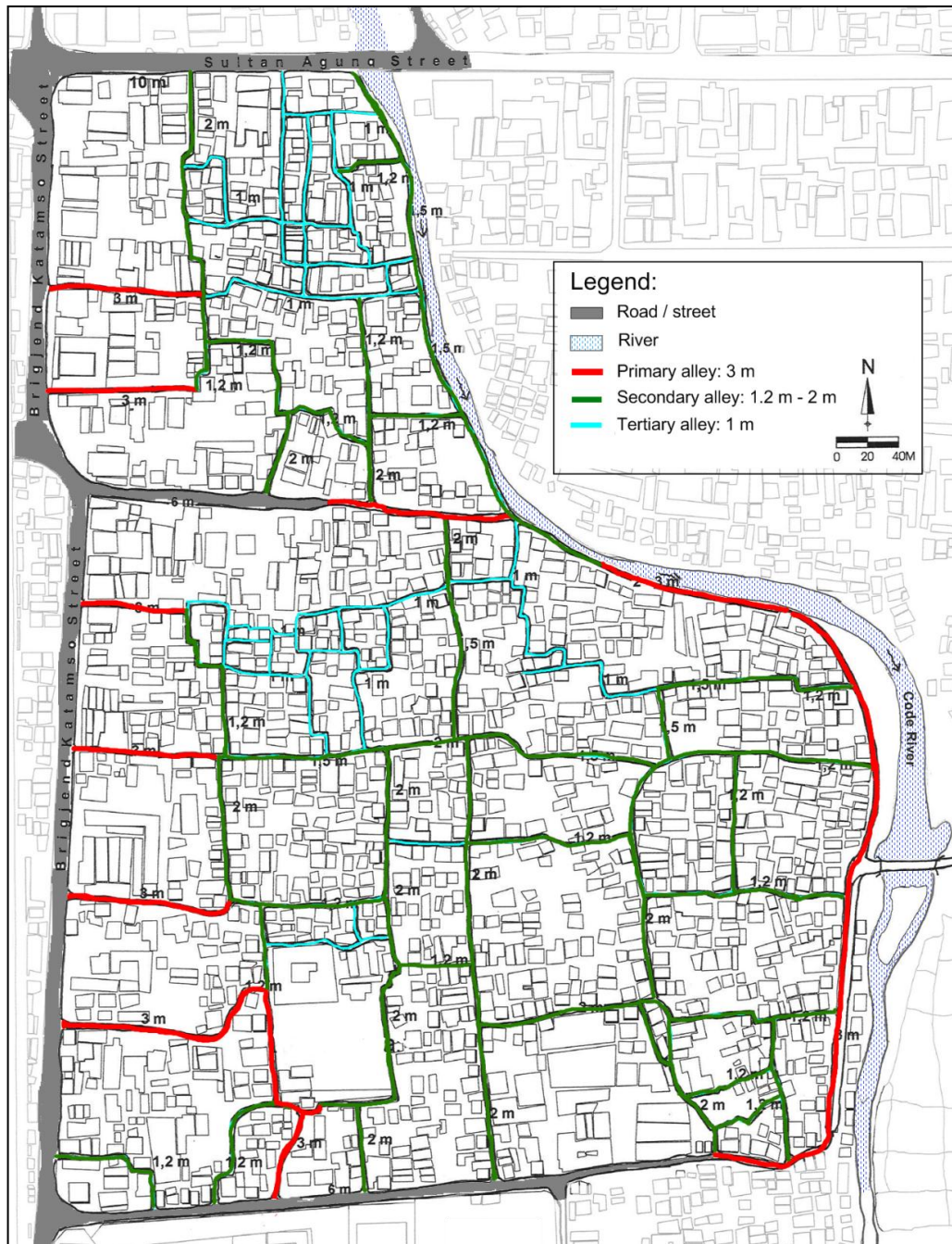


Figure 4.12: The width of roads and alleys in Kampung Prawirodirjan
 Source: Fieldwork, 2006

Some houses are not served by public alleys and in these cases residents will use the yard around their house to get access to and leave their dwelling, despite having to pass through others' yards to do so, although there are no physical boundaries such as fences to impede them in this. The yard is sometimes used not only for residents' access, but is also used for hanging clothes out to dry, and for the business activities of surrounding neighbours who

have HBEs. This indicates that the yards' owners share their space for the benefit of surrounding neighbours who need it, and it also shows the yard owners' tolerance towards the surrounding community. In addition, the space outside the house in the *kampung* can also be identified as a social space. For example, in the morning, late afternoon, or evening it is used as a place to sit and chat by the members of the surrounding community. Similarly, the alleys in front of the home business, especially where there is a stall/*warung*, are also used as a place to sit and chat by customers, neighbours and operators. It should also be noted that the alleys are controlled and maintained by the community members themselves. Therefore, if the alleys are damaged, then people improve them by way of mutual cooperation (*gotongroyong*). Improvement of the alleys is usually performed by men, while women voluntarily provide the food and beverages. The cost of improving the alleys, in terms, for example, of buying cement or sand, is also obtained from voluntary donations by the surrounding communities.

b. Population and Activities Profile

The total population of this *kampung* in 2004 was 9,364 persons, with an average growth rate from 1998 until 2004 of 0.6% per year (Junaidi, 2004). Population density is relatively high, that is 31,005 persons per km², despite the low growth rate. In the same year, the population density in the *kampung* was higher than in Yogyakarta City, that is 14,885 persons per km². The average household size is 4.0 persons per household. The majority of the population (72.91%) is of working-age (ages 20 to 64 years) and thus the dependency ratio is 37.15. This number is higher than the ratio for the city of Yogyakarta, which is 33.28. This means that there are many individuals, especially children and the elderly, who become 'dependent' on others to support their daily life.

Table 4.3 shows that the majority of the residents in this *kampung* are senior high school and college/university graduates (82.8%). Thus it can be said that the *kampung* residents have a good educational level. The occupations of the *kampung* residents are mainly in the informal sector (49.4%), followed by private and public formal sectors (see Table 4.4), based on a survey conducted by Junaedi (2004). He divides the main occupations into four categories: formal public sector, formal private sector, informal sector, and retired (usually on a government pension). It should be noted that the formal private sector include large shop owners, private bank staff, shopkeepers, and taxi drivers. Meanwhile, *kampung* residents who are not included in the category of formal private or formal public sector are categorized under the informal sector, for example street vendors, recycling activities, rickshaw drivers,

and HBE operators. The above account suggests that the *kampung's* working age population is high and that the majority are relatively highly educated. This is an important component in the *kampung's* human capital and it is a very important investment for getting out of poverty, as stressed by Moser and Felton (2007) who note that educational human capital is an asset that can help alleviate poverty for households in urban settlements.

Table 4.3: Highest level of education in Kampung Prawirodirjan

Level of Education	persons	%
Elementary School	1062	11.34
Junior High School	546	5.83
Senior High School and college/university	7756	82.83

Source: Junaidi (2004)

Table 4.4: Resident occupations in Kampung Prawirodirjan

Main Occupations	persons	%
informal sector	3,371	49.37
formal private sector	2,453	35.93
formal public sector	692	10.14
retired	311	4.56
Total	6,827	100.00

Source: Junaidi (2004)

Based on the owner's occupation and related to their business activities, the *kampung* hosts many shops, including an electronic shopping mall, located on Brigjend Katamso Street. Most of the roadside shops are dedicated to selling spare bicycle, motorcycle, or car parts. But other than selling the required items, shop-owners and employees also engage in services, in particular, wheel replacement for customers who live either inside or outside this *kampung*. Some employees who work in those shops also live in this *kampung*. Numerous stores, small shops, kiosks, and food-and-drink stalls serving the neighbourhood are located among the houses within the *kampung*. As noted, these facilities are called HBEs, and are provided by community members who have sufficient capital, space, and entrepreneurship to perform these services at neighbourhood level. As also mentioned above, based on the 2003 census there were 229 HBEs and in 2006 this had reached 248 scattered through the residential area. This means that home business activity has increased 2.7% per year in this *kampung*.

The majority (more than 70%) of HBE activity in this *kampung* consists of retail trade, especially the *warung kelontong* which sells daily necessities such as soap, toothpaste, cigarettes, sweets, sugar, crisps, plastic buckets and brooms. The term *warung* not only

implies a business selling items of daily necessity that are dry and durable, but also selling foods that are ready to eat, for example 'nasi goreng' (fried rice), fried noodle, 'pecel' (Javanese salad) and fried cassava. There is one particular *warung* that sells traditional Javanese herbal medicine which has operated since the Japanese occupation. In addition, *warung* can also be a place where fresh vegetables, fruit, chicken and fish are sold; this is called the '*warung sayuran*'. Furthermore, HBE for service activities are relatively numerous in this *kampung*, for example tailors, beauty salons, television or radio repair, and motorcycle and bicycle repair services. Furthermore, although the built environment is very high-density, small scale processing activities for home industries also exist in this area, for example the manufacture of scales, paper flower-crafts, frames, crackers, leather goods and silk screening t-shirts (see Figure 4.13 and Table 4.5). Some households even have a dual business, such as selling vegetables and producing handicrafts; or selling daily necessities and renting out rooms. In addition, one type of retail trade, the HBE can deal in different kinds of goods. Consequently, these cases cannot be rigidly classified into groups of retail trade, services, or production, as in many cases business activities cross group boundaries.



Figure 4.13: Examples of HBEs in Kampung Prawirodirjan

Table 4.5: Variation of HBEs based on three types in Kampung Prawirodirjan

Type	Sub-Type	Variety of sub-type
Retail Trade	<i>Warung Kelontong</i> (grocery stall)	<ol style="list-style-type: none"> 1. <u>Groceries</u>: rice, rice powder, tea, sugar, coffee, cooking oil, dry milk, beans, coconuts. 2. <u>Personal needs</u>: clothes, t-shirts, and toiletries. 3. <u>Medicine</u> 4. <u>Household Wares</u>: electrical equipment, motorcycle parts, building store/suppliers, earthenware. 5. <u>Flammable goods</u>: kerosene, petrol. 6. <u>Sundries</u>: stationary, plants and flowers, mobile-phone vouchers, cigarettes, sweets, plastic buckets, brooms.
	<i>Warung Makan</i> (food stall)	<ol style="list-style-type: none"> 1. <u>Meals</u>: steamed rice, fried rice, fried noodles, meat-ball soup, rice porridge, side dishes (fish, meat, and egg), and vegetables dishes (lotek), salad (pecel). 2. <u>Snacks</u>: crackers, roasted peanuts, crispy chips 3. <u>Drinks</u>: hot tea, coffee, iced tea, ice cream, juices, sweetened coconut drinks, soft drinks, iced syrup, medical herbal drinks ('jamu')
	<i>Warung Sayuran</i> (vegetable stall)	<i>Fresh vegetables, fruits, chicken and fish, tofu and 'tempe' (fermented soybean cake).</i>
Service	Repair	<ol style="list-style-type: none"> 1. <u>Electronic</u>: radio, television, refrigerator. 2. <u>Motorcycle and bicycle</u>
	Rental	<ol style="list-style-type: none"> 1. <u>Communications</u>: telephone. 2. <u>Games and film</u>: play station and VCD. 3. <u>Rooms</u>
	Others	<i>Beauty salon, barber, tailor, laundry, translator, reflexology (massages).</i>
Production	Food Production	<i>Meatballs, noodles, crispy chips, cakes.</i>
	Craft	<i>Bags made from coconut shell, flowers made from unused paper, decorated pencils, carved furniture.</i>
	Others	<i>Shoes, frames, small drawing tables, scales, shuttlecocks, screen printing t-shirts</i>

Source: Fieldwork, 2003 and 2006

c. Social Profile

An atmosphere of tolerance among the residents of the *kampung* is generally demonstrated through social contact, neighbouring activities and values related to community activities. This is a concept of community living that originated in villages based on agricultural livelihoods, for example, the pattern of sharing of public facilities such as bathing places and toilet facilities, which members of the family use at different times of the day. Children usually use them earliest in the morning, followed by parents washing clothes. These facilities are only for those who do not have their own facilities. Most of those facilities were constructed through the community self-help mode and some were provided by local government, especially near the river. Maintaining the cleanliness of shared facilities becomes the responsibility of all users (community members). This means that community members both share responsibilities and in doing so develop a further channel of communication within the community.



Figure 4.14: The outdoor communal meeting places in a front-yard or alley

Outdoor communal meeting places are available in several locations in this *kampung*. For example, the alleys are used as meeting places, especially at their intersections, as well as spaces in front of the small shops, and the community guard post. Men and youth often gather at night at those places and the atmosphere is very informal. In addition, the inclusion of a stranger is socially quite acceptable. Some outdoor spaces, which are vacant plots or residence front yards of varying sizes, are also a social gathering space for community (Figure 4.14).

Some HBE premises also contribute as a space of communication for their operators, customers, neighbours and suppliers. In other words, these spaces are not just for buying and selling transactions, but are also a place to share experiences of everyday life. An illustration is provided by the following. Early in the morning in the *warung makanan* (food stalls), the majority of housewives buy food for their families' breakfast. They hold conversations with each other while waiting in line (queuing). It is also possible to observe some mothers carrying babies and feeding them with rice porridge which had just been purchased and talking with other customers. Another phenomenon was also seen in the *warung sayuran* (the vegetable stalls). In the morning and afternoon, housewives were buying fresh vegetables while conversing with other housewives or customers. They usually spent more than half an hour chatting. In the afternoon, the phenomenon of communication between housewives was also seen in the *warung kelontong* (grocery store), where they chatted while watching their kids play with their friends. Variations in the amount of time spent depended on the needs of each person. In general, the housewives used their free time to keep up contact with each other, as old friends and acquaintances. Topics for discussion could also indicate familiarity between neighbours. The discussion might indicate acceptance by the community in terms of matters related to family and everyday social activities outside the home, although it could also be used for more important goals, for example, business activities. The social phenomenon of communal sharing can only happen when the respective individuals and families have the same feelings and attitudes towards the need for joint facilities and agree to share them.

The above description has shown us that community tolerance in the Kampung Prawirodirjan can be seen through the amount of time given to daily personal contacts with neighbours. This tolerant atmosphere can be directly related to the traditional value of *rukun*. Mulder (2005) pointed out that *rukun* means the social concepts that are expressed in the

ideals of *gotongroyong* and *musyawarah*, to achieve unity and harmony. Geertz (2000: 211) stated it thus:

an enormous inventory of highly specific and often quite intricate institutions for effecting cooperation in work, politics, and personal relations alike, vaguely gathered under culturally charged and fairly well indefinable value-images--rukun ("mutual adjustment"), gotongroyong ("joint bearing of burdens"), tolong-menolong ("reciprocal assistance")--governs social interaction with a force as sovereign as it is subdued.

The term *gotongroyong* cannot be explained adequately in words, because it is an abstracted form of social interaction to achieve peaceful co-existence in society. Helping neighbours in constructing or repairing houses, spontaneous assistance to neighbours in trouble, for example, neighbours mourning the death of family members, celebrating a wedding party, or participating in community projects, characterise the *gotongroyong* community. Koentjaraningrat (1974) further states that one of the elements of *gotongroyong* is the pattern of a person's feelings of dependency towards his or her community, a feeling that one is merely a part of larger society because a person needs to feel part of his or her community. Furthermore, *musyawarah* can be described as the process of decision-making by mutual discussion and consultation among members of society. The spirit of *gotongroyong* and *musyawarah* is still a cultural value in Javanese culture up to the present day. Therefore, relationships with neighbours are a very important element of the *rukun* tradition.

Finally, the *rukun*, *gotongroyong* and *musyawarah*, as traditional values, can still be seen and felt in Kampung Prawirodirjan. A long history of involvement in this *kampung*, and a high degree of tolerance and helpfulness among neighbours are also still alive in this *kampung*. Drawing on data from Surabaya, Kellett and Bishop (2006: 65) also argue that "*traditional values of co-operation, sharing and redistribution are not merely a reflection of the past but directly facilitate survival in times of crisis and appear to be conducive to longer term sustainability.*"

From this viewpoint, the community tradition enables the community to live in a settlement with such limited spatial and environmental resources. The value of tolerance actually tempers the relationship among the community members in a way that, in turn, enables them to live in such crowded conditions. For example, during the hours of work at a home business producing chips (HBE Case No.7), the corn-breaking machines make a sound that can create disturbances in the surrounding neighbourhood. Similarly, the t-shirt printing enterprise (HBE Case No.6) requires sunlight, so the t-shirts drying in the alley disrupt both the

neighbours and pedestrians. Apparently neighbours or pedestrians do not complain or protest against the inconvenience either vocally or through their use of these public spaces. This shows how the values or norms that exist in society can form an aspect of social capital and an important support to production (Francois, 2002).

4.4 Conclusion

Kampung Prawirodirjan as a small part of Yogyakarta City, and could be considered a miniature of old settlement life in the city centre with a unique, friendly, crowded atmosphere, full of opportunities, and also of problems. This *kampung* could also reflect an urban quality, in that there has been mixing of modern or contemporary culture and rural culture. This *kampung* is considered particularly strong as a research setting in which to study HBE with particular regard to the spatial context, due to various considerations that have been described. It is underlined in this conclusion that there are two important aspects related to capital, which are social capital and space as capital (physical capital). *Kampung* society still retains a traditional sense of harmony, tolerance, *musyawarah*, and *gotongroyong* as components of its social capital. The space as capital is associated with its use of spaces outside and inside of the house for business. In addition, these are supported by strong human capital resources that can raise people out of poverty. The accumulation of such capitals will play an important role in the reproduction and production of households, and not only makes a contribution to people's everyday life but also to the *kampung* itself and to urban development in general.

Kampung Prawirodirjan as a research setting embraces many phenomena, events, activities, and physical objects that are interconnected with one another to form a related system. Rapoport (1990) provides detailed description of systems of activity and systems of settings that connect humans, space, and time meaningfully. Space in the house and its form as well as the quality of spatial and symbolic elements, are a manifestation of a way of life and the realisation of cultural practices (Rapoport, 1969, 2005). Meanwhile the study of spatial elements, activities, and time provides a complex perspective on the interaction between the production of space and the production of activities in society (Lefebvre, 1991), which gives the opportunity to investigate the use of space in HBE. The question then is how to relate the various activities, events, and phenomena in the framework of a system. Chapters 5 and 6 will explain in more detail the various phenomena, activities, events, and physical assets within the frame of the built-environment.



5

Chapter 5

Capital Accumulation in Home-Based Enterprise

5.1 Introduction: <i>From Home-Domain to Home-Business</i>	137
5.2 Reasons for Operating an HBE Business	138
5.2.1 Economic Factors	139
5.2.2 Having Relevant Skills	140
5.2.3 Having Space in the House	141
5.2.4 Inherited Business.....	142
5.2.5 Having Similar Businesses	143
5.2.6 Land and Housing Tenure	144
5.2.7 Transport Cost Reduction	144
5.3 Characteristics of HBE	145
5.3.1 Economic Characteristics	145
a. Income and Expenditure Profile	146
b. Catchment Area of HBE	150
c. The Customers	152
d. The Source of Capital.....	153
5.3.2 Social Characteristics.....	155
a. Gender Issues	155
b. Workers.....	158
c. Business Start-ups and Composition.....	160
d. Working Day	161
5.3.3 Place and Space Characteristics	163
a. House and Plot Size	164
b. Rooms	164
c. House Construction and Infrastructure	167
d. Housing Quality	169
e. Housing Tenure.....	171
5.4 Market Mechanisms and Symbiotic Relationships	173
5.5 HBE Core Characteristics as an Aspect of Capital Accumulation	174
5.5.1 Business Activities as a Livelihood: <i>unique business</i>	174
5.5.2 Family as Human and Social Capital.....	177
5.5.3 Home: <i>Availability of Space</i>	179
5.6 Conclusion	181

Chapter 5

Capital Accumulation in Home-Based Enterprise

5.1 Introduction: *From Home-Domain to Home-Business*

Under an assets or capital accumulation framework, both tangible and intangible assets are a valuable contribution to poverty alleviation, with capital assets for the poor identified as physical, financial, human, social and natural capital (Moser, 2007). Housing and land are the most important components of physical capital, contributing to the early origins of HBE. In many cases in developing countries, there is a change in the function of housing so that it is not only a place for domestic activity but also a place for business activity. Being able to use the house for productive activities is a most important asset for urban families. Mobilising its productivity through the use of space inside the house is a livelihood strategy that contributes substantially to family incomes (Moser, 2009, 2007, 1998; Kellett and Tipple, 2000; Gough, 2010).

This chapter will explain the four main topics necessary for understanding the complex nature of HBE's and to clarify the phenomena of HBE associated with capital accumulation. To explain these topics, the assembled data from the semi structured interviews, observations, focus group discussions and survey questionnaires were analysed and customised to the needs of each theme. This chapter will start by presenting the seven reasons given by households for carrying out business activities in the home. This will be followed by an exploration of HBE characteristics based on data and information in the Kampung Prawirodirjan. The third part explains that a discussion of HBE does not merely concern supply and demand mechanisms but also the symbiotic relationships between HBE activities and the surrounding area. The next part, prior to concluding this chapter explains about the three core aspects of HBE: family, business activities, and home. This explanation attempts to associate these aspects with the concept of urban livelihood and the capital accumulation framework. In addition, this section also attempts to offer transferability that not only relies on the phenomena of HBE in the Kampung Prawirodirjan, but also phenomena that occur in other similar settings, especially in the *kampung* Yogyakarta.

5.2 Reasons for Operating an HBE Business

One way of understanding the complex nature of HBE and of explaining the HBE phenomenon is to elaborate the reasons given by the operators themselves for doing business from the home setting. Unpacking the motivational factors behind the decision to operate an HBE necessitates a collation of the relevant information from the study's interviews, focus groups, observations and questionnaires. Thus, the information for this discussion has been garnered from six pilot study interviews and 21 case study interviews, Focus Group Discussions (FGD) with HBE operators and with local government staff, survey questionnaires and the researcher's observations. The results of this analysis are discussed in tandem with the findings of various other relevant studies. The data collected through an open-ended question about the motivations behind HBEs included in the survey questionnaire was codified into seven categories of reason to simplify the analysis (Table 5.1). The seven reasons are as follows: economic factors, having relevant skills, having space in the house, inheriting a business, running a similar business to neighbours, land and housing tenure, as well as reducing transport costs. Table 5.1 shows that the majority of reasons given for conducting a business from the home (55%) relate to the economic factor and this is a particularly strong reason for the 'trade/small shops' and 'services' categories of business, though less so for the 'production' category. In addition, the table also suggests that the four most important reasons for setting up the business at home are the economic factor, having relevant skills, having space in the house, and inheriting a business (more than 10%).

Table 5.1: Business operation reasons by type of HBE (*percentages*)

Reasons for operating an HBE Business	Trade/ small shops (n=180)	Services (n=50)	Production (n=18)	All (n=248)
Economic factor	61.7	48.0	11.1	55.2
Having a relevant skill	6.7	28.0	33.3	12.9
Having space in the house	11.7	12.0	11.1	11.7
Inheriting a business	11.1	4.0	33.3	11.3
Having a similar business to neighbours	2.8	2.0	11.1	3.2
Land and housing tenure	3.3	0	0	2.4
Transport cost reduction	1.7	0	0	1.2
<i>No reasons/no answer</i>	1.1	6.0	0	2.0

Source: Field survey, September 2006.

5.2.1 Economic Factors

Economic factors are the main reason behind HBE operators' decision to run their business activities from the home. Strassmann (1987), Gilbert (1988) and Kellett and Tipple (2000) have stated that HBEs contribute to household income. In addition, Gough and Kellett (2001: 244) emphasise that "*home-based enterprises demonstrate the close symbiotic relationship between housing and work, and the fundamental economic role of the dwelling*". The operators participating in the FGD also argued that economic factors are the main reason, not only as a starting point for conducting the home business but also in terms of the household's daily life cycle, managing the business, and making home improvements. In addition, HBE operators noted that while they actually need a house without a business operating from it, family economic conditions have forced them to operate the business from the home. The following testimony illustrates this phenomenon:

I took the initiative to open the warung as it needs money to support my family ... [...] as you know, my husband's income as a driver, is very small. While almost all the prices of basic necessities have risen since the crisis. Besides, the children's school fees have also increased ... [...] using the initial capital from my family savings, then this warung has been able to operate up to now.

(Bu Sunarti, 51 years old, 27 June 2003)

However, the study participants also noted many advantages of doing business in the house, other than generating income: for example, they can still cook meals for the family and manage domestic affairs. Thus, on the one hand they still need to use the income generated to meet basic needs, such as eating, clothing, housing, health, and education; but on the other hand they are still in a position to perform necessary functions in terms of taking care of domestic affairs, especially parenting responsibilities.

Based on the information given by operators in the interviews, there are three categories of income source for households who run HBE activities. In the first, the activity of the HBE is the sole source of income for households. In the second, HBE income is the main or primary income, because HBE income makes up a greater proportion of total household income than non-HBE income. In the third, opposite to the second category, the proportion of HBE income is lower than other income – thus it is called an additional or secondary income. The first category identifies households that tend to rely on business activities at home for their livelihood and for whom these are the only source of income. This could imply that households have planned to run business activities in the home as their only source of income. However, another possibility is that no other sources of income are available to them

apart from those deriving from business activities at home. For example, during the monetary crisis of 1997-8, many workers were laid off. This was also underlined by Firman (1999: 74) who noted, regarding the impacts of monetary crisis on urban development in Indonesia, that *“many manufacturing and service firms in major cities, including property sectors considered as the prime movers of urban economic development during the 1980s and early 1990s, have closed and laid off their workers”*.

The above explanation shows how economic factors are one of several reasons why people choose to run a business in their home as an HBE. In the case study area, this motivation became more acute after the 1997-8 monetary crisis; although even before the crisis, Marsoyo (1992) established that economic factors were also the primary reason for starting an HBE. In addition, the number of HBEs has clearly increased over time. For example, my survey in Kampung Prawirodirjan showed that HBEs increased from 229 units in 2003 to 248 units in 2006.

5.2.2 Having Relevant Skills

While not all HBEs require a skilled operator, some require a high level of skills, especially those that revolve around delivering services and manufacturing/production. For example, operators of batik printing and t-shirt printing enterprises require a higher level of skills compared with those manufacturing small tables. Some service types also require certain skills, in some cases, at a high level, for example beauty salons or electronic equipment repair businesses. Therefore, Raj and Mitra (1990) have classified home-business related-skills into three groups, that is: (a) no skill or little skill; (b) some skills; and (c) a moderate to high level of skills. However, in practice, it is difficult to make a precise classification of skill levels, because every job is unique and cannot be subsumed into generalisations.

In the observations and interviews with HBE operators, some testified that one of the reasons for conducting a business in the home relates to the nature of their skills. The following quote illustrates this perspective:

Since graduating from high school, I attended a beauty course. However, shortly thereafter, I married Mas Bambang who was working as a contract employee at Gadjah Mada University. After that, because the children were toddlers, I could run a beauty salon at home while looking after my children, because I have expertise in that field. ..[...] Many customers have come in and it turns out, they are not only from the neighbours around here, but also from outside the kampung. This business has been intensified since Mas Bambang has been laid off from the university.

(Bu Watik, 40 years old, 20 June 2003)

It should also be noted that many home business operators have the skills necessary to enter employment in the formal sector but are unable to beat the competition to secure a job. Kellett (2000a: 2) states that:

For many households, using the home for working is an essential survival strategy, that is, they have no choice, or of the limited opportunities available this appears to be the most promising. These are people who have neither the skills, qualifications, experience or contacts to enter, compete or remain within the formal employment market or are in situations where the formal sector is contracting or unable to absorb more labour.

For operators with the right skills, working at home can present an opportunity. Some do not even want to enter the formal sector for a variety of reasons, one of which is that they would not easily be able to work outside the home because it would mean leaving young children alone. In terms of motivation, households can actually start a business from scratch based on their existing skills. For example, a young woman who is very talented in hair styling can run a business at home by operating a beauty salon which is not inferior in quality to a similar business in the formal sector elsewhere. By contrast, households will not choose to run a business such as a beauty salon or tailor if they do not have the requisite skills as a basic resource. This means that skills are important in running a home business. Nevertheless there are specific types of activities, such as running a business that sells daily necessities (*warung kelontong*), that do not require highly skilled operators. This is a characteristic of business activities in the informal sector in general, that is, it is 'easy to enter' into this sector. Meanwhile, other operators have explained that, at a minimum, the person who runs the HBE must have some basic skills in running and managing business activities. Such individuals can run HBE activities in order to generate income based on their own skills at any level. Overall, this exposition has indicated that, on a number of levels, human capital (skilled operators) plays an important role in operating a home business.

5.2.3 Having Space in the House

The other reason that operators give for running an HBE is the availability of excess space in the house. The house may be large and the family's married children may have moved out so that only the head of the household and his wife remain in the home. Rooms will be available to rent out, and thus the house can automatically generate an income. Strassmann (1987) underlined that a dwelling can yield an income through rental space. Tipple (2005b, 2000) also recognises that renting out rooms to others is an important business for generating income and does not change the appearance of the house, as would any other HBE activity. In

general it can be concluded that renting out rooms can generate income for poor households who live in urban areas. Nevertheless, this business can be disruptive to the domestic activities of homeowners when homeowners and tenants are in one dwelling, and where they are sharing space.

Generally, operators do not have a large house, and the decision to run a home business is based on their resource limitations. They have not hired or bought another place for their business activities. One of the operators as a participant in the FGD said that:

my house is small and [...] I still use the existing space to sell fresh vegetables [...] and indeed the house looks dirty but the important thing is how to generate income.
(Bu Siti Rochayah, 41 years old, 20 October 2001)

In fact, they will be rightfully proud if their house can produce an income. A statement that suggests this kind of satisfaction comes from this informant's own testimony:

Yes, although this house is a rental one, I want to help my husband so I have a business here. [...] Some time ago, I sold vegetables in the street, but I could not enjoy it much when it was raining. So, I have only the one house here and I use my house to sell vegetables as you see. I am free to use my house space.
(Bu Joko, 46 years old, 21 June 2003)

The questionnaire analysis found that the average business space is only 14% of the total house size (n= 248 units).¹¹ Observation of HBEs in Kampung Prawirodirjan shows that the position of the business space in the house is varied, because house design in this *kampung* is not uniform. For example some business spaces are positioned near the guest room or use the guest room; others are positioned in the family room or dining room, and others are in the veranda or in an empty yard. Thus, it is clear that the reason households run a home business is because they have the space to do so, despite the small size of their home. Thus, the space functions as the physical capital with which to conduct business activities.

5.2.4 Inherited Business

An inherited business is one that continues operations from the business activities of parents or grandparents who have run a home business and passed it down the generations. This type of business will thus resemble the business of parents or grandparents in cases where

¹¹ Business space is measured based on what was observed by the researcher and his assistants to be the space exclusively for business. Thus, shared space is not included in this measurement. These results may be smaller than the measurement of space usage of business conducted by Tipple and Kellett (2003), who did include shared space (joint domestic and HBE space). See also the Final Report on The Environmental Impact of Home-Based Enterprises in Developing Countries (Tipple *et al.*, 2001).

the business activity continues to be run from the house. As an example, Bu Ence (54 years old) said that her business was inherited from her parents' and grandparents' business, from a time when they lived in West Java Province. Several years ago, her mother moved to Yogyakarta to join her husband in the family business of producing crackers. Therefore, since her childhood, Ence had been accustomed to observing the process of making crackers. Recently, she has continued to manage the business activities inherited from her parents, with a workforce of eight assistants.

Observations conducted around Yogyakarta City also identified many inherited businesses which were generally family-run businesses, for example: batik printing, silver crafting, *gudeg*¹² and *bakpia*¹³ productions. Households that continue operating inherited home-based business activities generally cluster together in a specific *kampung* location. For example, batik printing can be found in the Kampung Prawirotaman, silver craft in the Kampung Kotagede, *gudeg* is located everywhere, especially in Kampung Wijilan, and *bakpia* is usually found in the Kampung Pathuk. Inherited businesses number among the *kampung's* successful and growing HBEs. Successful businesses initiated in the *kampung* are usually followed by imitators who live in the same *kampung* and run the same type of business. This implies 'positive spread effects' exercised by the activities of HBEs on neighbouring households.

5.2.5 Having Similar Businesses

Many households who carry out HBE activities are imitating the example of an initiator who runs home business activities that are quite successful in the *kampung*. Sometimes the imitators set up the business in the same alley or in the same *kampung* as the initiator. In such cases, they seem to compete with each other, but they nevertheless do not consider themselves to be operating in competition, believing that fortune (*rezeki*) is only from God.

In interviews with both the initiator and the imitators, it was reported that they never compete with each other, but rather, they function symbiotically and in some cases even develop organisations, associations or cooperatives. However, not all HBE operators join in with such organisations or associations, on the grounds that they feel their business is too small for such activities, although they also recognise the merit of any organisation or

12 Gudeg is a traditional food which is made from young jackfruit boiled for several hours with palm sugar and coconut milk.

13 Bakpia is a small round-shaped pastry, usually stuffed with mung-beans.

association for their business development. Nagano *et al.* (2010) also revealed that association or cooperation, which they named a 'Local Production System', plays a relevant role in enhancing the competitiveness, efficiency and bargaining power of the enterprise that will ultimately increase its economic development. This not only applies to businesses outside the *kampung*, but to big business everywhere.

5.2.6 Land and Housing Tenure

Business activities are often pursued more freely and comfortably at home than when the work is located in other places far away from home in a rented or purchased premises. This means that there is freedom to operate a business more flexibly both in time and space. This was the conclusion of a FGD with operators of HBEs, who use their land and homes because they own their residential property and are free to use it as they wish. In another FGD, local government officials also noted that a key element of HBE is the operators' rights of ownership, which allow them to freely engage in economic activities at home.

The FGD results also suggest that renting space for business is expensive. A rented business space is usually located close to roads of various classes, from local roads to arterial roads. The rental cost depends on several factors such as the road's classification, its strategic position, the condition of the building and the availability of infrastructure. According to my field survey (2003), the rental cost for business space is from around Rp. 25,000 up to Rp. 100,000 per m² per month.¹⁴ This is quite expensive for those who wish to conduct their businesses, especially for those who are classified as poor households, because they do not have enough initial capital. As Gilbert (1988) reported, most HBEs are small enterprises and only yield a marginal income. Consequently, operators use their home space as business space and do not need to rent or buy a business space located by a roadway.

5.2.7 Transport Cost Reduction

The final of the seven main reasons which the operators give for conducting an HBE is transport cost reduction. This reason is based on the interviews with HBE operators. In developing countries like Indonesia, public transport is not well organised by comparison with developed countries. Although the price of transport fares in developing countries is

¹⁴ This means the rental cost for business space is approximately £2 to £8 per m² per month, based on the exchange rate of 2003, where £1=Rp. 13,000.

generally cheaper than in developed countries, the timetable and the infrastructure tend to be unclear. But HBE operators do not have to pay public transportation fares or to buy petrol for their own motorcycle or car. Business activities in an HBE never range very far from the house, and can be freely conducted, at whatever times the operators want to open or close. Some HBE operators sometimes purchase or distribute goods in other locations, but this will not be an everyday activity. De Waard (1997) has also concluded that the main benefit of environmental relationships with HBE is to reduce petrol consumption and emissions through reducing the use of motor vehicles. Observation during fieldwork in Kampung Prawirodirjan also shows that suppliers from the big factories sometimes come to the *kampung* to distribute goods to the HBEs, for example cigarettes, soap, snacks, gasoline, and drugs. This means that factory suppliers' outreach activities may also reduce the transport costs involved in sourcing goods for HBE operators.

In this section, seven reasons given by HBE operators for conducting their business from the home have been examined and studied carefully. Part of the reason, it has been implied, is that they have accumulated enough capital not only to survive but also to create a better life for themselves in the future. For example, there are economic reasons why households use their financial assets to run a business, and then generate income from this business. It implies that they are in a position to both access their assets and control their assets. Similarly, the skills which they possess are one element of human capital. Various ranges of skills may be applied in running HBEs. In addition, 'having space' to run the HBE, which is supported by having 'land and housing tenure' as physical capital, are fundamental to capital accumulation in HBE. Conversely, the clustering together of similar business types, supported by a network of interrelated groups, reflects the characteristics of social capital.

5.3 Characteristics of HBE

This section will explain the characteristics of HBE in Kampung Prawirodirjan and Yogyakarta City in general. This section is grouped into three parts according to the aspects of HBE discussed: economic, social, and spatial (place and space) characteristics.

5.3.1 Economic Characteristics

The economic factor is one of the most important characteristics leading people to engage in a home business. The use of space in the house to generate income is an important economic

characteristic through which households earn money from their homes. Therefore, building a house is not only a way for households to provide themselves with physical shelter, but also functions as a source of capital accumulation. Households generate income in a variety of ways and are always looking for profit. However, in the majority of cases the profits are small and the income produced is only marginal (Gilbert, 1988). Nevertheless, all HBE operators participating in FGD stated that they are happy and proud of their business activities at home. They feel and believe that good fortune (*rezeki*) is in the gift of God and they just make a small contribution, which is the best they can do to improve the family income. This section will begin by analysing the profile of business and total income and expenditure, followed by an analysis of the catchment area, describing the boundaries of the business and the customers who contribute to its revenues, and its source of capital. However, it should be noted that the collection of data on income was conducted in 2006 when the economy was in the process of recovering from the late 1990s crisis in Indonesia. This was a period when eight years had passed since the collapse of Soeharto's New Order regime on the heels of the economic crisis of 1997–1998 (see also Section 4.2 for further details).

a. Income and Expenditure Profile

In this study, income data were collected through the question of income received by the operator. In terms of data collection in the informal sector, including HBE, it is recognised that reliable and accurate income data can be difficult to obtain. Expenditure data¹⁵ is frequently used as a proxy for income data (ILO, 2003). However, in this study it was found that expenditure and income data are very similar (with the exception of production type HBEs) (see also Table 5.3). Furthermore, the analysis indicates that for half of households with HBEs (50%), their income is solely dependent on their HBE activities (Table 5.2). The average income for those in this category is Rp.2.9 million per month. Meanwhile 28% of households indicated that HBE activities are their main source of income/primary income. A smaller proportion of households run their home business activities for a secondary income (22%). The percentage is also evident from comparing the average between an HBE and non-HBE income. This study shows a comparison of income, whereby when HBE income is the primary income for households, the income from the HBE is ten times more than non-HBE income, whereas when the income from the HBE is a secondary income, non-HBE income is twice as much as HBE income. In addition, this also means that, in total, 50% of households running HBEs have two sources of income, deriving both from HBE activity and other activities (non-HBE). Other activities beyond HBE activities include the following kinds of

¹⁵ Detailed information on expenditure was obtained in the questionnaire (see Appendix 8).

employment: in the government sector (6%); in the private business sector (11%) - as clerks, factory and shop keepers, traditional market sellers; and in the transportation sector (driver hired by the firm, truck and taxi drivers, *becak*¹⁶/rickshaw drivers); while 33% of jobs are in diverse other sectors, such as a private nurse, private teachers, and security.

Table 5.2: HBE income and Non-HBE Income

	HBE income as only household income (n=123)	HBE income as primary household income (n=69)	HBE income as secondary household income (n=56)
a. Percentages	49.8	27.8	22.4
b. Average HBE income (Rupiahs per month)	2,958,069	6,343,700	802,410
c. Average Non-HBE Income (Rupiahs per month)	-	646,647	1,605,357

Source: Field survey, September 2006.

Non-HBE income usually derives from the activities of household heads who work far away from home. The average for both household income and income from all three types of HBE, including business expenditure, will be analysed (Table 5.3). In addition, a comparison between household income in Yogyakarta and other cities in Indonesia is also discussed in Table 5.4 to determine the bargaining position between the two cities. Since there are two sources of income in the household, this profile will also compare the proportions of HBE income and non-HBE income (Table 5.5).

Table 5.3 shows that the average total household income for homes with HBEs is Rp.3.9 million per month. Based on household income and household size, the per capita household income can also be determined, which is Rp.629 thousand per month. It is slightly more than the *Upah Minimum Regional* (Regional Minimum Wage¹⁷ or RMW) in Yogyakarta (see also Table 5.6). This suggests that business activity at home is really beneficial for family members. Overall, the income from the HBE tends to be lower than the total household income. This can be understood as described above, however, income from a service type of business is lower than for the other two business types. Furthermore, the table also shows us that HBE income per worker is much higher than the RMW especially for a trade type. In addition, production type is less profitable per worker than trade type. This implies that

16 A Becak is a three wheeled, pedal-power vehicle which can carry two or maximum three passengers in a compartment located in front of the driver.

17 The Upah Minimum Regional or Regional Minimum Wage is stated by local government and in the year of 2006 (when the data was collected), it was Rp. 460 thousand per month (approximately £31).

business activity at home is a potential income for urban worker which is equivalent to the salary of the middle class government employees.

Table 5.3: Characteristics of income and expenditure by type of HBE (means)

	Trade/ small shops <i>(n=180)</i>	Services <i>(n=50)</i>	Production <i>(n=18)</i>	All <i>(n=248)</i>
Total household income <i>(Rupiahs per month)</i>	4,488,480	2,062,160	3,887,615	3,955,692
Total Expenditure ¹⁸ <i>(Rupiahs per month)</i>	3,074,812	1,330,566	10,696,206	3,409,061
Income from the HBE <i>(Rupiahs per month)</i>	3,932,543	1,497,160	3,460,667	3,406,636
Household size	6.21	6.32	7.56	6.33
Number of workers	1.26	2.00	3.72	1.59
Per capita household income <i>(Rupiahs per month)</i>	692,090	413,317	594,754	628,799
HBE income per worker <i>(Rupiahs per month)</i>	2,638,314	1,136,734	1,645,712	2,263,532

Source: Field survey, September 2006.

Concerning expenditure, a cost is the value of money that has been used up in producing something. In the questionnaire survey we asked about several items relating to how much would be paid for raw materials or pre-finished materials, necessary machinery, electricity, labour remuneration, permits, and taxes. However, space in the house is not included as an expenditure because it is considered to be a basic investment. It is also noted that the remuneration of the operators' labour is not included. The HBE is unique in this respect in that it is difficult to make a clear distinction between income and expenditure, for example because household members are sometimes workers but are not paid through formal wages. Tiple (2005b: 619) has said that *"labour relations, where there are employees, are based mostly on casual employment, kinship or personal and social relations, rather than on contractual arrangements with formal guarantees."* Furthermore, the average total expenditure is Rp.3.4 million per month, which is similar to the total mean of business income. However, examining this in more detail by type of enterprise, especially production, it becomes clear that there are considerable differences. In production, business expenditure is three times greater than business income, because expenditure must be made for long term investment, especially with regard to machines or basic processing workshops. The above

18 Total expenditure means the costs paid out by households for both daily life and business activities. Distinguishing between the costs for the two activities is sometimes rather difficult because, for example, food for lunch is not only provided to family members but also to workers. Only a few components can be identified, such as production equipment.

data analysis suggests that for the production type of HBE, expenditure is higher and more dynamic in term of economics than for the trade/small shops type. Likewise, the expenditure for trade/small shops is higher than for services. The service sector of HBEs could be called a marginal sector compared to the other two types.

Table 5.4: Comparison between total household income in Yogyakarta and Surabaya

	Year	Yogyakarta	Surabaya
The GDP deflator (*) (a constant price at year 2000)	1992	38.80	30.41
	2006	93.20	82.65
	1999	169.10	176.45
Household income - (<i>nominal</i>) (Rupiah per month)	1992	358,857(**)	-
	2006	3,995,692 (***)	-
	1999	-	1,090,214 (****)
Household income - (<i>real</i>) (Rupiah per month)	1992	924,802	-
	2006	2,339,245	-
	1999		1,319,124
Growth rate per year		7%	-

Source: (*) BPS, 2001, 2004, 2010c; (**) Marsoyo (1992); (***) Field survey, September 2006, and (****) Tipple et al. (2001).

Based on the two-city comparison in Table 5.4, the growth rate for household income in Yogyakarta from 1992 to 2006 was 7% per year. Taking into account the inflation rate,¹⁹ household income in Yogyakarta is almost twice that in Surabaya. This means that business activities at home in Yogyakarta have relatively good prospects compared to those in other cities, and each year the household has an increased level of income. From the analysis comparing HBE- and non-HBE income, it is surprising to the observer that the average HBE income is 3.6 times greater than non-HBE income (Table 5.5). The table shows that HBE is a business activity which can increase a household's total income.

19 To compare household income between several cases in a country but at different times it is necessary to consider inflation. Two commonly used measures of inflation are the CPI (Consumer Price Index) and the GDP (Gross Domestic Product) deflator. This analysis uses the GDP deflator.

Table 5.5: Comparison between HBE income and Non-HBE income

Components	HBE income	Non-HBE income
Sample size*	125	125
Average Mean	Rp.3,861,202	Rp.1,809,000

Note: * This sample consists of that section of the total sample where the families have two sources of income (HBE income and non-HBE income). Thus, these 125 units are those from the total sample (n=248 units) with a dual income.

Source: Field survey, September 2006

The actual income from HBEs shows positively when compared with the *Upah Minimum Regional* (Regional Minimum Wage or RMW), because only 23% is below the RMW (Table 5.6). This means that more than 70% of HBE activities have produced income in excess of the RMW threshold. The finding shown in this table is also reflected for each type of business activity; and furthermore, all households running the production type of business have reached above the RMW. This is important for the households and means that most of them are enabled to achieve a better life through their HBEs. This condition is also reinforced by the figures for total household income, in which more than 80% of total income for households is above RMW limits. This may imply that the various activities which generate income for a household may accelerate the process of poverty alleviation. Moreover, this fact shows that HBE activity in the urban area makes a significant contribution to poverty alleviation. It is also suggests that HBE activities provide a livelihood for poor urban people, who deploy a variety of assets in strategies to raise their standards of living.

Table 5.6: Comparison between HBE income, household income and Regional Minimum Wage by type of HBE (percentages)

UMR (RMW)		Trade/small shops (n= 180)	Services (n= 50)	Production (n=18)	All (n= 248)
HBE income	< Rp460,000	22.2	32.0	0	22.6
	≥ Rp460,000	77.8	68.0	100.0	77.4
Household income (total income)	< Rp460,000	11.7	18.0	16.7	13.3
	≥ Rp460,000	88.3	82.0	83.3	86.7

Source: Field survey, September 2006

b. Catchment Area of HBE

The catchment area is the boundary of the customer base for those buying goods and services from a particular HBE. This delineation is divided into four groups, as follows: around the neighbourhood, outside the *kampung*, outside the city, and unknown. There are many small

shops selling daily domestic necessities, where customers who live near the shops can buy what they need. Catering to less frequent requirements, services such as example beauty salons, tailors, television repair, and play station and video rental services, tend to have a larger catchment area than small shops. Moreover production or manufacturing, such as furniture from rattan or wood, small drawing tables for children, scales, and silver crafts, also have wider boundaries.

Based on the data collected in this study, Table 5.7 shows that the majority of customers for these businesses come from the environs of this *kampung* (66%), while only 14% come from outside this *kampung*, and only 12% come from outside the city, while the origins of 8% are unknown. These proportions show that HBEs are more important for an inner circle of neighbourhoods than for a wider catchment of customers. There is also evidence that HBEs function as local commercial facilities in the city. This occurs, particularly, in the trade/small shops and services, 78% and 48% respectively of whose customers are from around the neighbourhood. This suggests the degree to which home business activities provide services for the people who live near or around the HBE. Focusing on the type of business, services and production are types of business with a smaller scope of trade around the neighbourhood, drawing more of their clientele from outside the *kampung*. Production, in particular, has more clients from outside the *kampung* and outside the city. For example, the majority of customers for this type of production come from outside the city (56%). However, for all three income groups the majority of customers are from the neighbourhood (Table 5.8). This means that the role of customers around the neighbourhood is very important for the sustainability of business activities at home.

Table 5.7: Catchment area of customers by type of HBE (*percentages*)

	Trade/small shops (<i>n= 180</i>)	Services (<i>n= 50</i>)	Production (<i>n=18</i>)	All (<i>n= 248</i>)
Around the neighbourhood	78.3	48.0	0	66.5
Outside the <i>kampung</i>	8.9	24.0	33.3	13.7
Outside of the city	5.0	20.0	55.6	11.7
Unknown	7.8	8.0	11.1	8.1

Source: Field survey, September 2006

Table 5.8: Catchment area of HBE customers for different HBE income groups (*percentages*)

	Less than Rp.700,000 (n=82)	Rp.700,000 - Rp.2,000,000 (n=83)	More than Rp.2,000,000 (n=83)
Around the neighbourhood	73.2	71.1	55.4
Outside the <i>kampung</i>	17.1	9.6	14.5
Outside of the city	4.9	15.7	14.5
Unknown	4.9	3.6	15.7

Source: Field survey, September 2006

The research on HBEs in Surabaya (Tipple *at el.*, 2001) showed that the contribution of mainly non-local customers to HBE income is four times greater than the contribution of mainly local customers. The ratio found in this study is only three times, although noting that both customers from around the neighbourhood and the outside of the *kampung* are considered as mainly local customers (Table 5.9). The overall finding is that mainly non-local customers' contribution to monthly HBE income is greater than the contribution of mainly local customers. This can occur due to the type of business activity, for example Table 5.7 shows that customers from outside the city make up a larger section of the clientele of the production type of business.

Table 5.9: Comparison between HBE income in Surabaya and in Yogyakarta by mainly local customers or non-local customers (*means*)

	Mainly Local customers	Mainly Non-Local customers	Comparison
HBE income in Surabaya, 1999 (<i>Rupiah per month</i>)	523,026	2,181,571	1 : 4
HBE income in Yogyakarta, 2006 (<i>Rupiah per month</i>)	1,399,852	4,530,873	1 : 3

Note: The above figure for HBE income took into consideration the rate of inflation using the GDP deflator approach.

Source: Field survey, September 2006 and Tipple *et al.*, 2001.

c. The Customers

The customers are important figures in the development of HBEs everywhere. They are the key people outside of the operators. The average for the total customers per month varies depending on type of business. For example electronic goods servicing or t-shirt printing has a lower total customer base than a vegetable or everyday goods stall. Electronic goods servicing may be required by one or two customers per month, while an everyday goods stall may have 10 to 40 customers per day. From Table 5.10, it can be seen that the average

monthly number of customers for trade/small shops is 1,049 persons. This breaks down to around 35 persons per day. However, for other businesses, the numbers of customers varies, depending on the materials or goods to be sold. Servicing and manufacturing have quite similar rates of patronage, with monthly rates of 326 persons and 296 persons respectively.

Table 5.10: The number of customers based on catchment area by type of HBE (means)

	Trade/small shops (n= 180)	Services (n= 50)	Production (n=18)	All (n= 248)
Around the neighbourhood	603	284	0	557
Outside the <i>kampung</i>	779	300	587	576
Outside of the city	1,467	263	307	2,980
Unknown	760	818	270	723
Average by type	1,049	326	296	856

Source: Field survey, September 2006.

d. The Source of Capital

The source of capital is a further aspect that is important for the understanding of informal sector activity. According to Table 5.11, the main source of initial funds or capital is personal/family savings (67%). Other sources include loans or gifts from others, such as family, friends, *arisan*²⁰, and loan cooperatives. This suggests that people running HBEs are involved in generating their own family funds.

Table 5.11: Source of initial capital by type of HBE (percentages)

Source	Trade/small shops (n= 180)	Services (n= 50)	Production (n=18)	All (n= 248)
Personal /family savings	83.3	32.0	5.6	67.3
Public organisation/Bank loan	1.1	14.0	66.7	8.5
Other	15.6	54.0	27.8	24.2

Source: Field survey, September 2006

Only a few received support from public organisations such as government banks (9%). This feature is uniformly reflected across all three types of business activity. The table also shows that the majority (83%) of households who do business with the trade/small shops type of

²⁰ *Arisan* is an informal community-based self-help groups mainly concerned with rotating savings and credit funds. For further definition see footnote 1 in Chapter 1.

enterprise are supported by funding from the family. In the case of the production type of business, the majority are supported by a bank loan (67%). This suggests that most types of production HBE do require financial support from banking institutions or public organisations, although the overall activity of HBE is not enough supported by the banking institutions. Meanwhile, the research conducted by Tipple *et al.* (2001) in Surabaya showed that the amount of capital sourced from banks is also smaller than the amount sourced from family savings. In addition, Tipple and Coulson (2009) stated that most HBEs in their study areas (Surabaya, New Delhi, Pretoria and Cochabamba) operated without credit from a bank. Banking institutions come lowest as providers of initial capital for establishing a home business. In general, informal sector enterprises often lack access to bank credit for start-up capital.

Table 5.12: Relationship between HBE and household income, business start-up, length of stay in the *kampung* and source of initial capital (*percentages*)

		Personal/ family savings (n= 167)	Public organisation/ Bank loan (n=21)	Other (n=60)
HBE Income	Less than Rp.700,000	92.7	0.0	7.3
	Rp.700,000 – Rp.2,000,000	69.9	12.0	18.1
	More than Rp.2,000,000	39.8	13.3	47.0
Household income	Less than Rp.1,000,000	87.8	2.4	9.8
	Rp.1,000,000–Rp.3,000,000	74.7	10.1	15.2
	More than Rp.3,000,000	41.4	12.6	46.0
Length of time running the HBE	Less than 5 years	68.4	2.5	29.1
	5 years – 15 years	63.4	9.8	26.8
	More than 15 years	70.1	12.6	17.2
Length of stay in the <i>kampung</i>	Less than 20 years	66.7	7.1	26.2
	20 years – 40 years	63.9	12.0	24.1
	More than 40 years	71.6	6.2	22.2

Source: Field survey, September 2006

Table 5.12 shows that the relationship between HBE income and source of initial capital has the same frequency distribution pattern as the relationship between household income and source of initial capital. The similarities in the patterns shows that a low income and medium income is generally supported by personal/family savings, while a high income is supported by a source of initial capital from other source (46%-47%). In addition, length of time

running the HBE and length of stay in the *kampung* are not associated with a source of initial capital. It can be seen that the majority (more than 60%) of each group of them are supported by the personal/family savings.

Ultimately, the above discussion (Section 5.3.1) shows us how the available financial capital or financial resources are used to construct, operate and manage HBEs run by low-income households as a source of livelihood in urban areas. In addition, running a business activity indicated that they were able to survive and in the process raise themselves out of poverty. The acquisition of capital is a prerequisite for households seeking to accumulate assets on their own and move out of poverty, because these assets are not static but dynamic and change over time. For example, when business activity rises, the growth of financial assets will be greater. Conversely, when there is a financial crisis, there is a danger that assets could be depleted by the household for basic needs or other purposes. From the description of the economic characteristics and economic motivations revealed by households, it became clear that financial capital is at the centre of HBE activities.

5.3.2 Social Characteristics

The aim of this section is to identify the social characteristics of those who run a home-business, providing profiles for different HBE social phenomena. It seeks to explain an important factor in determining the potentials of individuals involved in this type of work. This section will begin by analysing gender issues, and thereafter proceed to look at operators, how businesses are started in this *kampung*, and finally how the working day is organised.

a. Gender Issues

There is general assumption that women are more likely to be at home taking care of domestic activities than men. It is more common for men to work outside the home than women, “...because the home is considered a female space, hence men tend to be more reluctant to work from the home” (Gough, 2010: 48). Similarly, Smith argues that:

women use the dimension of control more frequently in organising these domestic situations [and this] suggests that personal control is an aspect of home experience which most women share, regardless of their gender role (1994b: 134).

In addition, in certain cultures there are differences between men and women in terms of their activities and use of space (Ghafur, 2002; Mahmud, 2003). However, with the process of

urbanisation and globalisation, these differences have become unimportant, especially for poor people in the urban *kampung* in Indonesia. It is nevertheless recognised that specific work is more suitable for either men or women. In Javanese culture, there is a sense of '*ora lumrah*' (unusual) when women are doing jobs which require muscular strength, such as the production of wooden doors for the house. And vice versa, it would be unusual for men to engage in work usually done by women, such as sewing women's clothes. For the urban poor, Ghafur (2002) states that for survival on a daily basis, the complementary involvement of men and women is necessary for the operational convenience of business activities in the home.

Observation in the field showed that women tend to work on the *warung sayuran* (fresh vegetable stalls), *warung makan* (food stalls), and *warung kelontong* (everyday goods stalls). It is also clear from Table 5.13 that the majority (90%) of workers in trade/small shops are women. In addition, the same picture as a whole also shows that business activity at home is dominated by female workers (77%). Especially with regard to the distribution of the number of workers in HBEs, the average number of female workers (8 persons) is greater than the number of male workers (2 persons).

Table 5.13: Gender of workers and operators by type of HBE
(percentages)

	Trade/small shops (n= 180)	Services (n= 50)	Production (n=18)	All (n= 248)
Women	90.0	48.0	27.8	77.0
Men	10.0	52.0	72.2	23.0

Source: Field survey, September 2006

Table 5.14: Distribution of number of workers in HBEs by gender
(percentages)

Number of workers	Women (n=14)	Men (n=17)	All (n= 31)
1 person	27.3	72.7	35.5
2+ persons	55.0	45.0	64.5
Mean (persons)	7.9	2.1	4.7
Median (persons)	4.0	2.0	2.0

Source: Field survey, September 2006

Table 5.14 also shows that the number of workers in businesses where there is more than one person has a notably greater percentage of female workers (55%). This phenomenon

also occurs in Surabaya (Tipple *et al.*, 2001) where the average number of HBE workers per household shows that female workers (1.13 person) outnumber male workers (0.95 person). This means that the majority of HBEs in Indonesia use female labour. Tipple *et al.* (2001: 8-7) state that “HBEs are very important for providing earning opportunities for women. Not only do more than twice as many women have gainful employment where HBEs are present but most of them work in the HBE”. Moreover, participants in the interviews (June 2003) conducted with mothers who work on the *warung* stated their reasons as follows: the ease of handling this kind of business; producing a supplementary family income because their husbands work outside the house; and the ability to work from home while continuing with a variety of domestic activities. Moreover, beauty salons are generally run by women, while the kinds of tasks associated with barbers are performed by men. In some cases, the process of cooking noodles and meatballs is performed by men, who sell them around the *kampung* (Figure 5.1). The photos show the cooking of the meatballs being carried out by men prior to selling them around the *kampung*.



Figure 5.1: The process of cooking meatballs performed by men
Source: Fieldwork, 2003

This phenomenon suggests that the types of HBE cannot be divided up by gender. All vary depending on the conditions and situation of the business itself, and its operators. Only a small number of business activities are specifically related to male or female operators. As an example, the job of making furniture or making wooden doors and windows tends to be done by men, while making wedding party costumes or offering baby massage is carried out by

women. Generally it can be concluded that the activities of HBE can be carried out by women or men, except for a few specialist business activities that require special handling according to gender.

b. Workers

The workforce for an HBE is usually quite small in number. It can generally be counted on the fingers of one or two hands. The questionnaire survey in Kampung Prawirodirjan showed that 88% of total HBEs are not assisted by workers outside the household and only a very small percentage of HBEs (0.8%) employ more than 10 people (Table 5.15). That means the entire business is operated by the operators themselves. It also means that HBEs are family enterprises, because they are operated by a household member and aim to optimise their income by reducing expenditure on labour. However, the majority (39 %) of workers in the production type of business are between 1 and 10 workers. This implies that the total number needed for specific categories of job depends on the job description itself and the space for accommodating these activities. For example, the workshop that produces metal weighing scales can employ 15-20 workers, but the *warung sayuran*, which sells fresh vegetables, only employs one worker, usually the operator her/himself. However, family members, such as children outside of school hours, sometimes assist in running the business. Children who work are not paid as family members, but neither are they exploited as child labour, because parents teach their children how to take care of the stalls, or even train them in business skills, as mentioned by Tipple (2006: 175), who notes they are asked to “*mind the shop’ if a parent or adult family member has to go out or do something in the house.*”

Table 5.15: Percentage of workers from outside the household by type of HBE

	Trade/small shops (n= 180)	Services (n= 50)	Production (n=18)	All (n=248)
None	78.8	18.4	2.8	87.5
1 - 10 (n=28)	28.6	32.1	39.3	11.7
> 10 (n= 3)	33.3	33.3	33.3	0.8

Source: Field survey, September 2006

Table 5.16: Distribution of number of workers from outside the household in HBEs by type
(percentages)

Number of workers	Trade/small shops (n= 9)	Services (n= 10)	Production (n=12)	All (n= 31)
1 person	27.3	54.5	18.2	35.5
2+ persons	30.0	20.0	50.0	64.5
Mean (persons)	5.2	5.0	4.1	4.7
Median (persons)	4.0	1.0	2.0	2.0

Source: Field survey, September 2006

Out of all the HBEs, a total of 31 have workers from outside the household, or 13% of the total (Table 5.16). The average workforce for an HBE is 5 people and a majority (65%) have more than one worker. This was also found in Surabaya, which had an even greater percentage of HBEs employing more than one person than Yogyakarta, at 72% (Tipple *et al.*, 2001). This means that the sampled HBEs employ about 155 workers (31 units x 5 people). Thus, the likely total workers employed by HBEs in the sample is 403 people (155 workers plus 248 operators as workers). This implies that the activities of HBE in the *kampung* can absorb significant urban workforce without having to leave the neighbourhood. Besides, Table 5.16 shows that the majority (50%) of HBEs in the production type of business employ more than one worker. It has been stated that the number of workers in production as a type of home business needs to be greater than for other types. When the characteristics of a small or larger number of HBE workers is associated with HBE income and total expenditure, it is clear that a higher HBE income is also associated with having a larger number of workers (Table 5.17), although income is not solely determined by the number of workers.

Table 5.17: Comparison of income and expenditure between HBEs with smaller and larger workforce (*mean and median, in parentheses*)

	Small (1 worker) (n=217)	Large (2 or more workers) (n=31)
HBE income (Rupiah per month)	2,411,783 (1,000,000)	10,423,916 (2,000,000)
Total expenditure (Rupiah per month)	2,657,882 (1,500,000)	8,796,825 (1,820,000)

Source: Field survey, September 2006

The survey also shows that a high proportion of the better-educated HBE operators (those with senior high school or university education, around 57% of the total) reported difficulties in entering into the formal sector, as well as noting the psychological factor of social acceptability that regards an HBE as a more established and prestigious way of earning a living than other sub-sectors of the informal sector like hawking or street trading. Furthermore, skill is required for several types of HBE, such as beauty salons, handicrafts, and watch repairs. Some operators testified that they have followed training run by local government or NGOs, because they realise that developing their skills represents an investment into their future business activity. Scholars note that individuals have different innate skills or abilities (Carter, 2007). Associated with the issue of workers' skills and abilities, Carter states that:

Individuals have access to two livelihood strategies: a low-potential and a high-potential strategy. The low-potential strategy can be run with very little accumulated capital assets; whereas the high-potential strategy requires a minimum level of capital before it is effective. Higher skill levels boost the returns to both strategies. The key question [...] is whether individuals who begin with low asset levels will be [...] able to accumulate assets over time so that they can eventually switch to the high-potential strategy and reach a non-poor standard of living (2007:56).

As mentioned above, some types of HBE can be run by a sole operator. These are usually the trade type, for example, a *warung*/stall. The survey in this *kampung* indicates that as many as 79% of HBE-type trades are managed by a single operator (see Table 5.15). Conversely, in several cases the nature of the business compels a sizeable workforce, often on a casual or one-off basis. For instance, in making costumes for a wedding party, as many as 20 women workers might be required, while catering events for formal agencies and universities can require around 30 hired hands. The implication is that hired workers tend to be required more in servicing and manufacturing activities than in trade.

c. Business Start-ups and Composition

Generally, an HBE has a long duration under the same operators. Based on the field survey, the home business has run for an average of 14 years, while the shortest and longest durations were found to be 1 year and 62 years respectively (Table 5.18). This indicates that the average operator has experience in dealing with the home business and that it pre-dates the monetary crisis in 1997. It should be noted that after the monetary crisis, there was an increase in HBEs. This was thought to be due to many enterprises in the formal sector having closed or gone bankrupt, leading their former employees to turn to home businesses. In other words new HBEs have arisen due to the impact of the monetary crisis.

Table 5.18: Length of time running the HBE and length of stay in kampung (years)

		Trade/small shops (n= 180)	Services (n= 50)	Production (n=18)	All (n= 248)
Length of time running the HBE	Minimum	1	1	5	1
	Maximum	52	39	62	62
	Median	9	8	14.5	9
	Mean	13.5	11.9	17.4	13.5
Length of stay in the kampung	Minimum	1	2	2	1
	Maximum	87	57	67	87
	Median	34.5	31	31	31.5
	Mean	32.4	27.0	29.9	31.1

Source: Field survey, September 2006

Table 5.18 shows that each type of HBE has been running for a minimum of 1 year, even though the maximum time the operators have lived in the *kampung* is considerable, at 87 years. The production type of HBE generally has a longer average running time than other types due to the need for investment in machinery and tools to establish the business. It can be concluded that the length of time an HBE has been operated by the operator is associated with the length of their residence in the *kampung* and this reflects the fact that these business activities constitute their livelihoods.

d. Working Day

The structure of the working day for home business activities is very flexible. The average length of the working day for HBEs is 13 hours (Table 5.19). Some, especially small shops/*warung*, have a 24 hour working day. However, observation indicates that the work schedule is flexible and there are no fixed hours of business. The operators are able to work on domestic activities, for example child care and food preparation, and simultaneously keep their business open. In addition, the *warung kelontong* (everyday goods stall), which provides daily necessities such as sugar, rice and cigarettes, caters for neighbours' practical needs as well as offering a way of socialising with them.

Table 5.19: Working day by type of HBE (*percentages*)

	Trade/small shops (<i>n=180</i>)	Services (<i>n=50</i>)	Production (<i>n=18</i>)	All (<i>n=248</i>)
< 7 hours	15.0	6.0	16.7	13.3
> 7 hours	85.0	94.0	83.3	86.7
Minimum (hours)	3	2	5	2
Maximum (hours)	24	22	20	24
Median (hours)	13	13	9.5	13
Mean (hours)	12.7	14.6	12.8	13.1

Source: Field survey, September 2006

As regards the working week, the average for all types of HBE is a 6.5 day week. Only manufacturing activities have a working week equal to or less than 6 days. This indicates that manufacturing activities allow a day or more of respite for operators, as would occur in the formal sector. The government sector in Indonesia operates a 5 day week, with a break on Saturday and Sunday; it also has a working day of around 7 hours, or 35 hours a week. By comparison, Table 5.19 shows also that overall 87% of HBEs in this *kampung* have working days longer than 7 hours. This goes equally for the three types of business which each shows a high percentage in the category of a working day longer than 7 hours. The phenomenon of working hours over 7 hours has also emerged in other cities such as Surabaya (Tipple *et al.*, 2001). This suggests that HBE activities are characterised by excessive hours under the 'decent work' indicator, as stated by Bescond and Chataignier (2003). The authors also mention that not only are working hours excessive, but they also interfere with the balance between work and family life. However, the hours worked by many HBE operators do not necessarily have the same implications: they are able to stay close to the family because they work inside the house. The ILO (2002: 1), however, argues that "*work in the informal economy cannot be termed 'decent' compared to recognised, protected, secure, formal employment*".

The working days shown above might be considered to indicate the existence of exploitative labour because they go beyond the standard hours of work and rest. However, Tipple (2006) rejects the idea that the activities of HBEs could be called exploitative, by highlighting how this emerges from a conflation of the HBE with the 'home-working enterprise' (HWE) in the work of some authors. There are nevertheless fundamental differences between the HWE and HBE, with the HWE by contrast representing a contractual business relationship. Tipple explains that:

home-working refers to the production of goods for an employer or contractor in which the worker is usually supplied with raw materials for processing in the home and gives up the finished product against a payment per piece (2006: 167).

The characteristics of HBEs are quite distinct from what takes place in home-working for a non-resident employer or contractor who pays the worker at home. HBE operators work to pay for themselves. Thus, it is clear that in case of the HBE and in accordance with its characteristics, operators are more independent and not directly subordinate to other enterprises. Even if there are relationships with other parties such as customers or buyers, there is a reciprocity in trade relationships, as opposed to mistreatment or unfair exploitation for the benefit of others. This was revealed in the testimony of an informant as follows.

Actually, my shop is never closed. I open the shop at around 05:30 until 20:00. However, I can still serve a buyer at the midnight, because I know, usually, that the buyer is also my neighbour. For me to open this business for 24 hours is no problem, because in the sidelines, at the same time, my wife and I can still perform domestic activities such as cleaning the house or preparing food.

(Pak Bagyo, 46 years old, 14 June 2003)

In the end, the social characteristics outlined above explain that the operator, their family members, and other workers provide the human capital for running the HBE. Similar to other informal sectors, most of these activities do not require skilled labour. Basically, there is no requirement for the operator to be skilled. This means that unskilled operators may nevertheless run a home business activity to generate income. However, the components of human capital, such as skills and competencies, are necessary for some specific home business activities. Poor households in dense urban settlements run businesses at home based on their own skills, abilities, and capabilities, using flexible timing to operate their business. Their initiatives are conducted over time in order to allow them to survive in urban areas, and in turn raise them out of poverty. Based on a study in Guayaquil Ecuador, Moser and Felton (2007: 29) argue that “... *human capital is an intermediate asset rather than an end in itself that can help households escape poverty*”. This is because the indicator for whether a household has been raised out of poverty is based on its physical capital.

5.3.3 Place and Space Characteristics

This section specifies the characteristic place and space conditions of ‘dwellings with HBE’ in Kampung Prawirodirjan. These have several aspects, such as: house and plot size, rooms, house construction and infrastructure, internal assessment of housing quality, and housing tenure. All of these aspects will be described drawing on the study’s survey data and observation in the field.

a. House and Plot Size

In the case of 'dwellings with HBE', house size means the combined size of the domestic space and workspace. The average house size is around 93 m² and the plot size is around 111 m² (Table 5.20). These two figures show us that the Building Coverage Ratio (BCR) of housing in this *kampung* has exceeded the permitted standard. The actual BCR is 84%, which is considerably greater than the 60% standard prescribed by the Public Works Department (1987). The average size of the HBE house is also considerably larger than the minimum size prescribed for public housing, which is 54 m². This is also similar to the minimum lot size for new core housing construction in *PERUMNAS* (the National Housing Corporation). It means that the average house size in the *kampung* is large enough to use some of the area for business space. However, many households run a home business from a dwelling with a small area and no front yard or side yard.

Table 5.20: House and plot size by type of HBE

		Trade/small shops (n=180)	Services (n=50)	Production (n=18)	All (n=248)
HOUSE SIZE (m ²)	Minimum	18	18	28	18
	Maximum	400	500	300	500
	Median	60	80	97.5	70
	Mean	84.9	103.4	139.4	92.6
PLOT SIZE (m ²)	Minimum	18	18	36	18
	Maximum	600	650	370	650
	Median	70	92	132	72
	Mean	100.3	130.0	165.3	111.0

Source: Field survey, September 2006

The minimum of size of such houses is 18 m². Overall, however, the average house size in this study is larger than has been found in other studies of HBEs, both in Surabaya (mean=59 m²) and New Delhi (mean=11 m²) (Tipple and Kellett, 2003). This indicates that home business activity in Yogyakarta is likely to impinge less on other household activities than in places where average house size is much smaller.

b. Rooms

Rooms in this context can be used for domestic and/or business space. The overall average break down of space is 14% for business and 86% for domestic use respectively (Table 5.21). The percentage of business space in this study is smaller than the study conducted by Tipple *et al.* (2001) in Surabaya (20%) and New Delhi (36%). Nevertheless, in cases where the house is very small, households use the majority of the house for business activities during the daytime, while at night it is used for sleep. However, for most low income people in the

urban *kampung*, some rooms are not tied to a single function. Examples of such rooms are family rooms for low income people. They feel that the family room is general purpose because sometimes it can be used for dinner activities, entertaining a guest, or sleeping. Conversely, a bedroom has the specific purpose of a place for sleeping and the boundary of this space is fixed, whether separated by a brick wall, plywood, or just a curtain. Observation shows that members of a household sometimes sleep in the family room or guest room due to there being insufficient bedrooms in their home. Table 5.22 also shows that the allocation of domestic space per person is still adequate for the numbers of people who sleep in the house (13 m² per person). These conditions are better than those in Surabaya (12 m² per person) and New Delhi (2 m² per person) (Tipple and Kellett, 2003).

Table 5.21: Business Space and Domestic Space by type of HBE

	Trade/small shops (n= 180)	Services (n= 50)	Production (n=18)	All (n= 248)
Average Business space (m ²) (percentage)	18.3 (22)	36.1 (31)	39.8 (37)	12.7 (14)
Average Domestic space (m ²) (percentage)	66.6 (78)	79.6 (69)	69.0 (63)	79.9 (86)
Total average (m ²) (percentage)	84.9 (100)	115.7 (100)	108.8 (100)	92.6 (100)
Domestic space per person (m ² /person)	12.7	14.1	15.4	13.2

Source: Field survey, September 2006

Table 5.22: Business space per worker and operator by type of HBE

	Trade/small shops (n= 9)	Services (n= 10)	Production (n=12)	All (n= 31)
Business space per worker (m ² /person)	13.4	35.7	13.0	20.4
Business space per worker and operator (m ² /person)	7.6	18.2	9.0	11.5

Source: Field survey, September 2006

Business space per worker as well as per worker and operator can be viewed in Table 5.22 above. Overall business space per worker is 20 m² per person, although the figure is lower for the trade and production types of business, at 13 m² per person. However, business space per worker and operator is less than business space per worker only, at 12 m² per person. For workers and operators together, business space is lower, at 12 m² per person. This condition

indicates that the workspace is still meets to the criteria necessary for human freedom of movement, but the reality is that the measurement of the business area has not taken into account the presence of the HBE merchandise. Therefore, this needs careful consideration in order to determine the adequacy of the living space and business space. The number of persons per room or persons per bedroom is widely used as indicators of crowding. However, the determination of the number of rooms or bedroom in dwellings in the *kampung* is rather difficult because they are not always physically bounded by walls. Space per person is another indicator of crowding and this is a more feasible measurement on which data can be collected. Although the above indicators can be measured objectively, the determination of crowding in the dwelling is sometimes deemed to be a subjective measure, and thus direct observation of the spaces would be needed to assess crowding. This will be explained in the section on housing quality.

A workspace is usually situated in the front indoor area of the home, especially for stalls/*warung* and types of services such as beauty salons, watch repair or electronic equipment servicing. Rooms for food preparation or cooking foods that are sold around the *kampung*, such as noodles, meatballs and fresh fruit, are usually located to the side of the house or in the front yard. However, for some HBEs there is no definite physical separation between business and domestic space as mentioned above, because each of these activities occupies space in the house in a flexible way and the boundaries are unclear. Although analysis of the spatial in the context of economic activity at home has shown encouraging results, field data collection has still found some cases that do not meet the set standards, as will be demonstrated in Chapter 6.

Table 5.23 demonstrates that the average size of a habitable space²¹ is 10 m² per person. Although the average figure is higher than the existing official standard of 6 m² per person, 53% of habitable spaces are still below the standard. For all types of HBE, the majority of habitable spaces do not meet the space standard. This phenomenon shows that there is a need for a greater understanding of the way domestic and business space is used in the homes of HBE operators. This could include investigation of the motivations and decisions of households in organising their small spaces to accommodate two activities in the home simultaneously.

21 A habitable space is a space used for domestic activities, such as living, sleeping, and cooking, but does not include bathrooms, halls, and storage rooms.

Table 5.23: Habitable space by type of HBE (percentages)

	Trade/small shops (n=180)	Services (n=50)	Production (n=18)	All (n=248)
< 6m ² /person	52.8	52.0	55.6	52.8
> 6m ² /person	47.2	48.0	44.4	47.2
Minimum (m ² per person)	1	1.8	2	1
Maximum (m ² per person)	29.5	42.8	38.7	42.8
Mean (m ² per person)	9.9	10.7	11.2	10.1

Source: Field survey, September 2006

c. House Construction and Infrastructure

Sub-standard housing conditions are not a constraint for households that regard housing as a form of productive capital. This means that house construction and business activities conducted by the household to generate income will be part of the same strategy. House construction is classified into three classes, on the basis of building structure and material, namely: permanent, semi-permanent, and temporary (Table 5.24). The class of construction can be observed from the form of the building's roof, main structures, walls, floors and ceilings. A permanent structure denotes the durability of all materials used, as indicated by concrete, asbestos or zinc roofing materials; a building frame of concrete, brick or timber; brick wall materials; flooring that uses tiles, ceramic materials or plastering; and a ceiling using asbestos or plywood materials. Where these are absent, the labels 'semi-permanent' or 'temporary' are used. A temporary physical construction reflects the impermanence of the materials used. From the data collected, it has emerged that of the *kampung's* residences, 13% are permanent, 74% are semi-permanent, and 13% are temporary. The fact that the majority of residences are semi-permanent shows that most HBE operators have as yet been unable to substantially improve their housing quality. However, it is possible for them to develop their houses gradually as the accumulation of capital becomes sufficient to invest in home improvements.

Table 5.24: House construction and infrastructure by housing tenure
(percentages)

		Owner-occupied (n= 210)	Renter-occupied (n= 38)	All (n= 248)
Housing Construction	a. Permanent	13.8	7.9	12.9
	b. Semi-permanent	82.9	23.7	73.8
	c. Temporary	3.3	68.4	13.3
Water supply	a. Public well	3.8	57.9	12.1
	b. Individual well	87.6	2.6	74.6
	c. Public water supply	8.6	39.5	13.3
Sanitation	a. Sewer	11.0	21.1	12.5
	b. Septic tank	55.7	76.3	58.9
	c. Watercourse	33.3	2.6	28.6
Solid Garbage	a. Own yard	49.5	23.7	45.6
	b. Public bin	47.1	50.0	47.6
	c. Others	3.3	26.3	6.9

Source: Field survey, September 2006

Nevertheless, Table 5.25 shows that households living in houses with semi-permanent construction have made changes to their homes (68%), although the majority of alterations (81%) were conducted by households living in permanent houses. Conversely, the majority of houses with no changes (91%) are temporary houses. However, this study was not focused on housing transformation, so it has not been possible to record the home improvement process properly.

Table 5.25: Alteration of the dwelling by housing construction
(percentages)

	Permanent (n= 32)	Semi-permanent (n= 183)	Temporary (n=33)	All (n=248)
Alteration	81.3	68.3	9.1	62.1
No-alteration	18.8	31.7	90.9	37.9

Source: Field survey, September 2006

One aspect of place and space characteristics in HBE that cannot be ignored is the degree to which infrastructure supports home business activities and their environment. The meaning of infrastructure here corresponds to water supply, sanitation, and solid garbage disposal. Generally, water supply in the *kampung*, and especially for home-business activity, is

differentiated between the public well, individual well and public water supply; while sanitation consists of sewers, septic tanks and watercourses. Solid garbage disposal comprises the yard of a property, public bins and other. One of the government staff interviewed commented that many home businesses process food by cooking on an open flame, and thus fire accident prevention should be regulated. This is because data shows that 92% of HBEs do not furnish themselves with fire extinguishing equipment, such as a portable extinguisher, sand or gunny sack. Electricity infrastructure was not included in the data collected, because accurate information on this element of infrastructure has already been provided by the National Agency for Electricity. Looking at the situation above, most of the HBEs in Yogyakarta have been furnished with sufficient infrastructure facilities. However, the fact that the government and residents of the *kampung* have not provisioned themselves with fire extinguishing tools shows residents' lack of awareness about the importance of protecting themselves from the danger of fire.

d. Housing Quality

Good-quality housing is a key element for ensuring a healthy *kampung*. Poor housing can cause many health problems, and is associated with various diseases. House quality can be observed through non-physical conditions (subjective conditions). The subjective aspects of housing quality have led to a debate among researchers about how it should be defined. To investigate housing quality in the context of HBE, housing quality has been assessed using the following factors: air circulation, lighting, cleanliness, smell, noise, and crowding. Adequate ventilation for the home, especially a dwelling with an HBE, is very important. For example, where wood or charcoal is used for cooking by the operators this could interfere with their health because of fuel fumes containing harmful chemicals and particulate matter. Moreover, a home business that produces handicrafts, for example, may use chemicals. This can cause respiratory problems such as asthma and bronchitis for the operators or family members. A poorly lit working environment at home can cause problems with vision, which particularly arises for women who cook or sew clothing in a poorly lit room. Meanwhile, cleanliness around the home environment significantly reduces the risk of disease transmission. Some HBE activities create odour, for example, the odour of fresh vegetables or chemicals used in the production of handicrafts. This odour may cause respiratory problems and allergies. With regard to the noise indicator used in this case, this is because some HBEs generate sound, as in the process of craft production or food production. Crowding can induce mental health disorders in some occupants due to a lack of personal space. Crowding is not only caused by a

large number of people in a confined space but can also be the result of sharing a space with large quantities of merchandise.

In the case of HBE, the indicator set for housing quality covers both domestic and business space. Morris *et al.* (1972) reveal that an objective scoring system should be developed for assessing the quality of each dwelling. Thus, to assess the housing quality of each HBE, a scale system was used, that ranged from 1 (very bad quality) to 5 (very good quality), based on the observations of the researcher and their assistants. For the purposes of this analysis and to clarify the indicators for each housing quality variable, the 'good' and 'very good' indicators have been merged into a category of 'good', while the 'bad' and 'very bad' indicators have been merged into a category of 'bad'. Of the 248 HBEs in Kampung Prawirodirjan, overall housing quality was determined through a combination of multiple variables, showing that the majority – in fact 56% (Table 5.26) can be classified as good quality. Good housing quality was achieved through the variables of air circulation, lighting, cleanliness, smell and noise, with percentages of 51%, 52%, 43%, 76% and 81% respectively. Only the conditions of crowding were generally classified as bad (49%). This indication shows that while the home-business has its potential as an income generator, but on the other side, crowding is a constraint for HBE activities, not only in terms of physical but also psychological aspects.

Table 5.26: Housing quality (*n* = 248, percentages)

Indicator	Air circulation	Lighting	Cleanliness	Smell	Noise	Crowding	Total
Bad	18.4	20.8	24.1	8.6	12.2	49.3	20.9
Medium	30.6	27.3	32.7	15.1	7.3	30.2	23.6
Good	51.0	51.9	43.2	76.3	80.5	20.5	55.5

Source: Field survey, September 2006

The indication of generally good quality of housing from Table 5.27 is apparently reflected across each type of business, except for the cleanliness variable, where a lack of cleanliness was found in half (50%) of the production type of business. This indication may be interpreted as suggesting that reasonable conditions can be maintained in most HBE premises but either due to constraints of space, or to the number of employees, or a combination of both, production businesses are hard-pressed to maintain adequate standards of cleanliness. However, in general it can be concluded that most of the dwellings with HBEs in Kampung Prawirodirjan have achieved a good quality of housing. This condition reflects the existence of sufficient awareness among HBE operators about the importance of

keeping the environment clean, healthy and comfortable and adding their support to preserving a good environment in the *kampung* as a whole.

Table 5.27: Housing quality by type of HBE (percentages)

		Trade/small shops (n=180)	Services (n=50)	Production (n=18)	All (n=248)
AIR CIRCULATION	Bad	18.9	14.0	27.8	18.5
	Medium	30.6	34.0	22.2	30.6
	Good	50.6	52.0	50.0	50.8
LIGHTING	Bad	21.1	18.0	27.8	21.0
	Medium	30.0	20.0	16.7	27.0
	Good	48.9	62.0	55.6	52.0
CLEANLINESS	Bad	20.6	28.0	50.0	24.2
	Medium	33.9	28.0	33.3	32.7
	Good	45.6	44.0	16.7	43.1
SMELL	Bad	6.1	6.0	38.8	8.5
	Medium	15.0	14.0	22.2	15.3
	Good	78.9	80.0	39.0	76.2
NOISE	Bad	14.4	6.0	5.6	12.1
	Medium	2.8	16.0	27.8	7.3
	Good	82.8	78.0	66.7	80.6
CROWDING	Bad	52.2	40.0	44.4	49.2
	Medium	31.7	26.0	27.8	30.2
	Good	16.1	34.0	27.8	20.6

Source: Field survey, September 2006

e. Housing Tenure

“Regularisation or legalisation is promoted on the assumption that security of tenure encourages individuals to put their own energy and resources into improving their shelter” (Setiawan, 2001:220). This means that the legal status of the house is important, not only with regard to the dwelling in general but also as regards the ‘dwelling with HBE’. The above statement also implies that there is a relationship between the housing’s legal status and the improvement of living standards within the housing. There are two categories of housing tenure in the ‘dwelling with HBE’ in Kampung Prawirodirjan, that is: owner-occupied (85%) and renter-occupied (15%). The high percentage of owner occupation is also reflected across each type of business (Table 5.28). This explains many households’ freedom in choosing to use their home for business activities. In other words the majority of housing tenure is

owner-occupied, and it can thus be assumed that there is greater independence available to households regarding the use and maximisation of the physical assets of the home for business activities. Nevertheless, some tenants have also chosen to use their home's physical assets in order to run a home business.

Table 5.28: Housing tenure by type of HBE (*percentages*)

	Trade/small shops (<i>n= 180</i>)	Services (<i>n= 50</i>)	Production (<i>n=18</i>)	All (<i>n= 248</i>)
Owner-occupied	84.4	84.0	88.9	84.7
Renter-occupied	15.6	16.0	11.1	15.3

Source: Field survey, September 2006

It should be underlined that a household's decision to run a business from the home is not only based on housing tenure. Many other variables influence the decision, for example, whether there is sufficient space, the mother's need to work at home while caring for a baby, among other variables. However, the majority of HBE households who own their home (70%) dispose of the added freedom of being able to make alterations to their house as they please (Table 5.29). Reciprocally, households in rented accommodation are likely to be more constrained, as indicated by the data where 82% of such households did not alter the house.

Table 5.29: Alteration of the dwelling by housing tenure (*percentages*)

	Owner-occupied (<i>n= 210</i>)	Renter-occupied (<i>n= 38</i>)	All (<i>n= 248</i>)
Alteration	70.0	18.4	62.1
No-alteration	30.0	81.6	37.9

Source: Field survey, September 2006

Ultimately, the place and space characteristics highlighted in the discussion above show how space can be used as an asset for the HBE. Households use and manage the space in the house as an asset to generate income and as an important means of rising out of poverty. This is not directly related to housing tenure, in the sense that a rented-house can also be used to generate income. This suggests that housing is the most important factor in physical capital. A more detailed discussion of space as capital will be presented in Chapter 6. The following section describes market mechanisms and symbiotic relationships that involve at least two variables and cannot be explained solely in terms of the characteristics of HBE.

5.4. Market Mechanisms and Symbiotic Relationships

The nature and core of HBEs in terms of their continuation and endurance is not only related to market mechanisms but also to symbiotic mutualism. From the market mechanism point of view, the HBE can be seen as a meeting between supply and demand. The analysis of the FGD with government officials comes to the conclusion that HBEs arise in the *kampung* of Yogyakarta and generally occur in cities in Indonesia based on this market mechanism. In practice, sellers are keen to identify business opportunities in the *kampung* based on the demand coming from their neighbours. For example Bu Muhadi (Case No.2), Bu Yudo (Case No.10), Bu Rohayah (Case No.18) and Bu Ruby (Case No.19) said that they sell fresh vegetables because there is a need in the surrounding community, where the traditional market is located at some distance from home and operates only in the morning. Thus, the needs of the surrounding community can be met by establishing HBE, as the following informant testified:

At first I was selling fried food such as fried banana, cassava, and fried yams in the front of the dining room... however many neighbours asked me: are you selling sugar, salt and crackers as well?... From those neighbours' requests I then set up warung/stalls which are still going, selling daily necessities including fresh vegetables.

(Bu Rohayah, 46 years old, 18 June 2003)

The explanation above shows also that location is an important factor for HBE in terms of market mechanisms as described by Strassmann (1987). Nevertheless, services and goods produced by HBE in the *kampung* are not always needed by those living nearby. Examples are weighing scales, screen printed t-shirts and picture frames, most of whose customers are located outside the *kampung*. The market mechanism network not only operates in the *kampung*, but beyond its borders.

In addition to market mechanisms that bring together the supply and demand sides of the business, HBE also has symbiotic relationships, relating to interdependence between the businesses and their communities. Providers of goods and services require buyers/customers who are also neighbours to survive, while buyers are enabled to meet their needs more conveniently, as well as reducing expenditure on travel. For example, neighbours requiring everyday goods like sugar, soap and cigarettes can be easily serviced by a *warung/stall* near to their home, early in the morning, at midnight or at any other time. When the neighbour does not have the money to buy, for example, sugar, then he/she can take sugar from the *warung kelontong* on credit. Payment can be made at a later date. In

relation to such cases, Kellett (2000a: 2) has stated that “*home based enterprises provide many local services for neighbours and contribute to the wider economy in significant ways.*” The neighbours’ tolerance is also required for some aspects of running an HBE. For example, in some cases HBEs producing goods are using public space such as encroachment on the alley that is generally passed by the neighbours. In this case, HBEs activities that use the public space in general do not interfere with other people passing by, while they were passing by also providing tolerance to HBEs activities. This means that the HBE is not only a result of the supply-and-demand mechanism, but is also a neighbourhood facility that supports people through a symbiotic relationship. Thus, with regard to this phenomenon, it can be said that it shows the existence of reciprocity and trust embedded in social relations that allow community members to achieve their individual and community goals – an important component of social capital.

5.5 HBE Core Characteristics as an Aspect of Capital Accumulation

The three discussions in Sections 5.2, 5.3, and 5.4 above and supported by Section 2.2.2 show that the core characteristics of HBE are business activity, family and space/house. All of these are important factors in the accumulation of capital. The business may be described as a working activity to generate a primary, secondary or sole income. The operators can be categorised as families. They not only take the opportunity of running a business in the house but also occupy themselves with its development. Moreover, a house may be regarded as a place and a space. Place is the location of the HBE in the macro context of the urban area. Location shapes the development of the HBE in that each location has its advantages and disadvantages. Location in this regard is not only a geographical, physical matter but is also a social relationship between customers and operators. In the micro context, space also plays an important role because it is related to domestic and business space in the house. The three components mentioned above play a core part in the life-cycle of an HBE. The next sections elaborate further about the three core components of HBE as an important part of capital accumulation and urban livelihoods.

5.5.1 Business Activities as a Livelihood: *unique business*

A home-based enterprise differs from every other business type, because it is unique and it covers a very large range of manifestations. It can be called unique because there is no format

of operation, development, and marketing that quite resembles it, but it has great powers of survival (Lipton, 1980). Furthermore, it is varied in range as a result of wide diversity in its type and scale. The range is from very micro-scale enterprises through to macro-scale enterprises, with many variations in the way the business is conducted. For example, these business activities in urban areas can range from small-scale trading and services types to manufacturing. There are many small shops selling everyday household goods. Services are represented by tailors, repair shops, hairdressers, rental of tables and chairs for occasions, and video rental. There are also several producer HBEs, such as those making furniture and handicrafts.

According to reconnaissance observations across the whole city and continued by observation in Kampung Prawirodirjan, many households run HBEs such as *warung*/stalls, rented rooms (also known as *kost*), laundry, photocopying services, and beauty salons. The *warung* is the most popular HBE due to its ease of operation and maintenance without skilled labour. There are also varieties of business activities. Some *warung*/stalls sell fresh vegetables, everyday goods, soft drinks and simple prepared dishes such as *soto* (spicy soup with bean sprouts and chicken or mutton) or *bakso* (noodle soup with meat balls). Some types of home businesses are shown in Figure 5.2.



Figure 5.2 Four examples of HBEs in Yogyakarta *kampung*

Source: Fieldwork, 2003

The scale of this business is also varied in terms of space, commodities, capital, and labour. For example, in terms of space, the resident needs only one table for selling the commodity under the eaves of the house while other types of enterprise need more space in the house. In addition, the existence of *warung* is akin to small neighbourhood shopping facilities in the city. Many of these businesses (*warung/stall*) are operated directly by the operators, without employing extra workers. As such businesses provide something akin to a second job for the family, thus the family members contribute in working on an unwaged basis.

Another type of HBE consists of renting out rooms. As we know that Yogyakarta is a city hosting many universities, rooms are mainly rented out to students who are studying in Yogyakarta and share space with the house owner. This business is very simple, in that, whenever the operators have spare rooms in their domestic space, they can generate income in this way (see Gilbert, 1987). It noted by Strassman (1987) at the beginning of his paper that a “*dwelling can provide not only shelter and amenities but also an income through rental space or use as a shop*” (p.121). In addition, laundry and photocopying services are also available to meet the needs of the students. This phenomenon shows the way market mechanisms provide reconciliation between demand and supply.

Ultimately, the essential conclusion of this discussion is that HBE business activities are unique and varied; and exist in the *kampung* where people live and work. These business activities not only follow the market mechanism of supply and demand, but also serve their surrounding neighbours as local business facilities. However, most important of all is that home-based businesses provide a livelihood for the households of the urban poor. With these activities, households can generate income that is used for daily living or for surviving; although this study shows that HBE income is greater than other sources of income or non-HBE income (see Table 5.5). This means that HBEs as a source of urban livelihood not only help people to survive but also to build a better life by meeting their basic needs and improving living standards, developing their skills, and helping them to upgrade their houses. In addition, business activities that generate income provide economic capital, in terms of the financial resources used to achieve livelihood goals. This emphasises the close relationship between urban livelihood and financial capital.

5.5.2 Family as Human and Social Capital

Family behaviour, in attempting to meet the family's changing needs, is a key aspect of the nature and growth of HBE. In other words, the operation of HBEs is determined by the household or family. There are three elements used by families to conduct HBEs: (1) housing, (2) neighbourhood, and (3) family. These three elements combine together in the decision of whether or not to run a business in the house. For example, with regard to housing, if it is not physically satisfactory and adequate for conducting the kind of business which is preferred by the family, then the family will not develop the business in the house. However, many families are still doing business despite having extremely small house as discussed in chapter 6 (see also Tipple *et al.* (2001) who state that many HBEs in Surabaya utilising the corners of the dwellings as business space). Neighbourhood is also very important, because the family needs to subscribe to its social norms and in the *kampung*, the pursuit of harmony, tolerance, and *gotongroyong* are highly appreciated. However, the neighbourhood norms of each *kampung* are different and the family running an HBE must adapt itself to them. The family is also important because it has a role in the business development process, not only the head of household but also the individual members. In addition, the family is a major actor in the HBE, especially the mother, because she usually spends her time on domestic activities in the house.



Figure 5.3: Four examples of female operators in HBEs
Source: Fieldwork, 2003

Based on this study's observations, the female household members provide the majority of labour for HBEs especially in some typical businesses like the tailor, beauty salon, and fresh

vegetable stall/*warung* (Figure 5.3). As mentioned previously, *warung* and beauty salon are popular occupations for HBEs, particularly in *kampung*. Nevertheless, this does not rule out the possibility that the operator of a home business may be male (as described in 'Gender Issues' in section 5.3.2). In this section, however, the role of women will be emphasised, as a reflection of the human and social capital associated with the family. Many studies in both developed and developing countries have concluded that female operators presently predominate in HBEs (Fanning, 1981; Ahrentzen, 1997; Felstead and Jewson, 2000; Felstead *et al.*, 2001; Edwards and Field-Hendrey, 2002; Ghafur, 2002; Mahmud, 2003; Tipple, 1993, 2006). This is reasonable, because women especially the mother, work in the house taking care of children or cooking meals for all the family. Once a mother, as a key member of her family, has decided to become a home worker, she must find customers and suppliers. They are not usually very difficult to find, because they are usually her friends and neighbours in nearby houses, and sometimes her friends in *arisan*. Moreover, many studies have concluded that men currently predominate in the formal sector and formal offices far from home. However, some operators are also male due to types of work that require greater physical strength, for example bamboo craft, lettering work, leather work, silverware and batik processing. In addition, children sometimes also support their parents, especially the mother, in working at home while their mother cooks in the kitchen or takes a bath. These children's activities are not necessarily exploitative, but may be seen in a positive way as reproducing skills in business activity for future generations.

Thus, the family performs as an actor, planning, managing and developing the home business. The mother is the key person in managing many home business activities, of course, in collaboration with her husband. In terms of generating income, the HBE income is not the mother's income only but a family income. Tipple *et al.* (2001: 8-7) also stated that in Surabaya "*HBEs are very important for providing earning opportunities for women. Not only do more than twice as many women have gainful employment where HBEs are present but most of them work in the HBE.*" Ultimately, in the case of running a business at home, the role of family members as actors, especially mothers, is very important, not only with regard to understanding their skills, abilities, and capabilities, but also taking into consideration their social and economic networks. Both need to be counted as assets. Explanations and explorations of data and information about HBE in the Kampung Prawirodirjan have shown this. Thus, it is clear that one of the cores of HBE is family. This is also highlighted by Lipton (1980), with regard to the family mode of production in HBEs.

5.5.3 Home: Availability of Space

The availability of space is a fundamental element in operating a business at home. The word 'availability' has a subjective meaning, because it depends on the views of the residents. However, there is no guideline about how large or small a space can be used for a business. This will depend on the characteristics of the business type. Several types of business only need a small space and others need a large space. For example, a tailor with only one sewing machine only requires a space of approximately 4 m², while beverage sellers only need an area covering a small table, as shown in Figure 5.4. On the other hand, producing meat balls that are sold around the *kampung* using carts, and vendors of food that can be eaten in the business premises, as in a restaurant, require a larger space (see Figure 5.5).



Figure 5.4: An example of two cases of HBE using a small space
Source: Fieldwork, 2003



Figure 5.5: An example of two cases of HBE use large space
Source: Fieldwork, 2003



Figure 5.6: An example of two cases of HBE using the public space
 Source: Fieldwork, 2003

Besides the availability of space in the home, it is also important to consider the existence of public space, that is, an alley or neighbourhood open space. Sometime vacant land near the home can be used to operate an HBE for temporary craft materials preparation (Figure 5.6). Therefore, the availability of space here is not only a question of interior space, in the home, but also outside. The description above makes it clear that the availability of space is the most important requirement for households who run businesses at home. Moser and Felton (2007: 25) stress that *“housing is the most important component of physical capital.”* However, while the analysis of place and space (in Section 5.3.3) demonstrates the importance of the house, it is clear from the above that the most important aspect for an HBE is the space. Availability of space and how households use, manage, organize that space will be further explored in Chapter 6.

In this section, three important core aspects of HBEs have been highlighted and discussed that not only reflect the phenomenon of HBEs in Kampung Prawirodirjan, but also the activities of home businesses in Yogyakarta in general. This discussion also implies that households use their capital assets, and have ‘access to’ these assets, as well as exercising ‘control over’ their assets, as part of their livelihood strategies. Accordingly, on the one hand, HBE activities play an important role in providing a livelihood for poor households in urban areas; and on the other hand, households use and exercise all of their assets, and accumulate further assets, in order to survive, escape poverty, and achieve a better standard of living.

5.6 Conclusion

This chapter started by exploring the reasons for households to conduct business at home. Exploring these reasons gives a better understanding of the context for HBE, and in general of the complex nature of business phenomena at home. The main reason for conducting HBE is economics. This is reasonable as the operators are the urban poor who live in urban *kampung*. Based on their existing assets (having relevant skills and having space in the house), they are using, controlling, and managing their business as a livelihood and, at the same time, trying to survive and gradually rise out of poverty. Economic factors, having relevant skills, and having space can be regarded as the three most important reasons for the existence of HBE in general, as these are often noted by respondents. However, other reasons should also be considered, including inheriting a business, being able to run a similar business to one's neighbours, land and housing tenure, and transport cost reduction. Overall, the reasoning above shows that the assets disposed of by households, such as physical and human assets, are deployed by them in with considerable flexibility and efficiency, towards the goal of survival.

The second part of this chapter investigates the characteristic of HBEs. The purpose of this investigation is to understand the phenomena of HBE cases in the Kampung Prawirodirjan. Therefore, this section has explained the characteristics of HBE, categorised under economic, social and spatial headings, based on the available data for that *kampung*. The results of the investigation of the HBEs economic characteristics clarify why many households in the urban *kampung* run HBE activities. This is due to economic factors, as mentioned above, and also because business activities generate income at home, which, at least in gross, is 3.6 times more than non-HBE income and also could be seen to compare favourably with Regional Minimum Wage standards. It has been shown that the majority of the initial capital for HBEs comes from family savings. This explains how the urban poor with initial capital can generate income through HBEs in order to increase their ability to survive. In addition, the HBE is a livelihood strategy of the poor in urban areas, in that business activities at home are expected to be able to reduce poverty. The exploration of HBEs social characteristics tells us that the family is generally the operator and operates the home business more flexibly than other businesses in term of time. This means that, from the perspective of economic efficiency, the inputs of family members as operators increase labour productivity, and overall raise the family's quality of life. The examination of place and space characteristics shows that physical capital, as embodied in plot, house and infrastructure, plays an important role in HBE

activities. For instance, households used their space to generate income, even though the space in the house may be very small.

The third section of this chapter explained the operation of market mechanisms and symbiotic relationships in HBE. A home business is not merely a manifestation of supply and demand forces of the market economy in general, but also results from a symbiotic relationship, especially with regard to the small trader type of HBE, because HBEs provide a local service to their surrounding neighbours, while the surrounding neighbours receive benefits from the existence of such convenient services. Thus, a symbiotic relationship in HBE is generated and the benefits it provides through the social networking system are a form of social capital. Thus, we can clearly see that among the poor who run HBEs, social capital is a hidden investment and even serves as a form of insurance against difficult times.

The fourth section of this chapter has explained the core aspects of HBE, drawn from the essence of the preceding discussion. It is clear that space at home, family, and business activities are the core aspects of HBE and these three elements are important assets for every household which runs a home business. Housing is a key asset in running an HBE, because it is used by poor families in urban areas as a place for conducting business activities. This is followed by other assets, for instance labour and financial. The available space can be large or small. The use of space for business activities depends on household decisions because in economic terms, space is a commodity that can be used to generate income. The households use the availability of space in the house as a form of physical capital. In addition, looking at the family as an actor shows how the family is also asset in HBE, because family members are the source of available labour and they can be developed and empowered. In addition, they form part of a social and economic network alongside a range of other actors. In this respect, there are two assets (human and social assets) which are also important for conducting business activities to generate income. Ultimately, this additional income or primary is used by poor households to further their survival and gradually to effect improvements to their housing. An experienced HBE operator and adequate housing are necessary prerequisites for the accumulation of other kinds of assets, so that business activity can be better developed. Finally, specifically with regard to the motivations and decisions of households which inhabit small dwellings, the use of small spaces for business activities needs to be further explored. This relates to how households organise their space, especially in terms of arranging their space, creating additional space, and managing their behaviour as a result of the existence of business activities at home. In addition, it will be important to understand how they adapt to

the coexistence of two activities in the house, which has implications for the use of space. In the next chapter, households' adaptation strategies will be discussed in terms of space usage due to business activities at home.



6

Chapter 6

Household Adaptation Strategies in the Use of Space

6.1. Introduction	186
6.2. Adaptation Strategies by Arranging Interior Space	187
6.2.1. Horizontal Arrangement of Furniture as an Enclosed Space.....	188
6.2.2. Shared Furniture both for Domestic and Working Activities	191
6.2.3. Moving Domestic Furniture to Create a Larger Working Space.....	193
6.2.4. Vertical Placement of Furniture to Optimise Space	194
6.2.5. Minimal Arrangement of Interior Space	196
6.2.6. Partitioning Space	199
a. Existing Partition.....	199
b. Permanent New Partition.....	202
c. Non-Permanent New Partition	202
<i>c.1. Solid Partitions</i>	203
<i>c.2. Transparent Partitions</i>	204
<i>c.3. Moveable Partitions</i>	205
6.3. Adaptation Strategies by Making More Space	206
6.3.1. Horizontal Housing Extension.....	207
a. Adjacent Space.....	207
b. Separate Space	210
6.3.2 Vertical Housing Extension	211
a. Construction of the First Floor	212
b. Mezzanine	216
6.3.3 Encroachment on Public Space	218
a. Permanent Encroachment on Public Space.....	218
b. Temporary Encroachment on Public Space.....	221
6.4. Adaptation Strategies by Managing Activities and Movements	226
6.4.1. Different Activities in the Same Space at Different Time.....	227
6.4.2. Activities Follow Sunlight and Shade.....	230
6.4.3. Sitting and Waiting in the Guest Room: <i>Strategic Position</i>	233
6.4.4. Blocking and Marking the Space.....	237
6.4.5. Facilitating Social Interaction	241
6.4.6. Shifting the Essence of Home.....	243
6.5. Conclusion: <i>Three Adaptation Strategies</i>	245

Chapter 6

Household's Adaptation Strategies In the Use of Space

6.1 Introduction

The previous chapter examines linkages between assets accumulation and the characteristics of HBEs. In general, the results of the analysis indicate that the assets owned by urban households, including physical assets, human, financial, and social assets, are used optimally and flexibly in order to survive. Thus, for example, housing and land are used as a physical asset, the mother and/or family members who work at home as a human asset, and the initial capital from family savings as a financial asset, as well as networking with the surrounding neighbours as a social asset/capital. Nevertheless, there are some disadvantages of HBE viewed from the perspective of households, such as crowding and the encroachment by others that may reduce the privacy of household members, especially in a small dwelling. However, the dwelling is an important physical asset in the urban households' ability to survive, which suggests the need for adaptation strategies in terms of space usage.

To investigate adaptation strategies undertaken by the household in terms of limited space, intrusion, and crowding, which are expressed by spatial arrangements or space use, this thesis adopted Berry's notion of a tripartite division of adaptation strategies, by adjustment, by reaction, and by withdrawal (Berry, 1980). In addition, the discussion divided into two major parts: the first, dealing with space and objects therein such as furniture (semi-fixed elements); and the second associated with activities and movement. Therefore, the first part focused on the arrangement of interior space as a reflection of 'adaptation by adjustment'; and on making more space as a reflection of 'adaptation by reaction'. This study did not find any evidence of 'adaptation by withdrawal' because in the view of the households studied, the home is an important asset not only as a place to live but also in which to make a living. The second part focused on the meaning of the activities and movements of the actors associated with HBEs, particularly the HBE operators.

Observations of space, activities and movements are the main method of investigating the adaptation behaviour undertaken by households. Both can be called mapping and trace measures. Sommer and Sommer (1997: 60) argue that:

mapping is used in the behavioural sciences to study people's relationship to the environment, including how they imagine it to be and how they use it. [...] Behavioural mapping deals with people's location and movement, how people actually distribute themselves in a particular area.

Both synchronic and diachronic approaches were used to investigate phenomena related to space. A synchronic analysis views spatial phenomena at one point in time through utilising physical observation with a camera (photographs) as well as detailed plans of dwellings that capture both internal and external arrangements, including the layout of furniture and partitions. The other approach, diachronic analysis, captures many phenomena concerning the movement and activities of the various actors over time, particularly the households who are involved in HBEs.

The 21 cases were researched through observations, interviews, field-notes, photographs, and drawing plans, to explore and investigate households' adaptation strategies within dual-use space as a research setting. Analysing the data involved the coding, organising into patterns, categorising, synthesising and interpretation of cases. Categorising information from the data sources is expected to reveal themes that represent tentative findings. Interpretation involves connecting meaning and significance to the analysis, and explaining the patterns in households' behaviour, motivations and decisions.

6.2 Adaptation Strategies by Arranging Interior Space

Arranging/adjusting interior space is the easiest strategy for households in relation to the dual activities taking place in the house. It is also stated by Rapoport (1982: 89) that:

semi fixed-feature elements range all the way from the arrangement and type of furniture, curtains and other furnishings, plants and screens [...] window displays in shops, garden layouts. These can, and do, change fairly quickly and easily.

Therefore, adaptation strategies undertaken by households in terms of interior space arrangements include setting up their furniture to distinguish between the two activities (business and domestic); or sharing furniture that can be used by both activities; or hanging

goods, both domestic and business, from the walls, for the optimisation of space; or other ways to show the division of interior space.

Ching (1987) formulates two technical terms, namely, 'tight fit' and 'loose fit'. In conditions of 'tight fit', furniture and equipment is placed at a fixed position and in a certain configuration, whereas in the condition of 'loose fit', furniture can be easily set up more flexibly according to user needs. Indeed, many variables affect the arrangement of housing space, for example socio-demographic factors (the number of people in a room, their age, sex, marital status, and so on), economic factors, psychological dimensions (Heimstra and McFarling, 1974; Kent, 1984; Lawrence, 1993a; Tipple *et al.*, 2000), and cultural variables (Rapoport, 1969, 2005). This study found several strategies for household adaptation regarding the arrangement of interior space both for domestic and business activities. Such conditions are manifested in several cases, allowing an examination of how households adapt to mixed space use for the HBE. However, the reality of how households adapt the use of space for domestic and business purposes is complex and varied. These strategies have been described as a change in conditions (Heimstra and McFarling, 1974; Kellet *et al.*, 1993), as adjustments (Berry, 1980), as some sort of compromise (Bell *et al.*, 2001), as transformation (Tipple, 1996, 2000), as modifying the existing environment (Rapoport, 2005), or as alteration (Heywood, 2005).

6.2.1 Horizontal Arrangement of Furniture as an Enclosed Space

The horizontal arrangement of furniture as an enclosed space is a strategy used to divide a space between two functions or more. In line with the general approach of this study, this section on the division of space by furniture will examine two functions: domestic and working activities. Generally, the house is used for domestic purposes, but in this study of HBE the house is also for working/business purposes which use the same building. Due to the house space in the *kampung* being very small, households feel that through their arrangement of furniture, it can be easy to change as well as to manage the space. For example, they can make a larger working space if their enterprises are expanding, or remove some furniture if they are holding social activities or meetings in their house. This action can be seen as creating a flexible boundary or flexible space in which to work or live efficiently and comfortably.

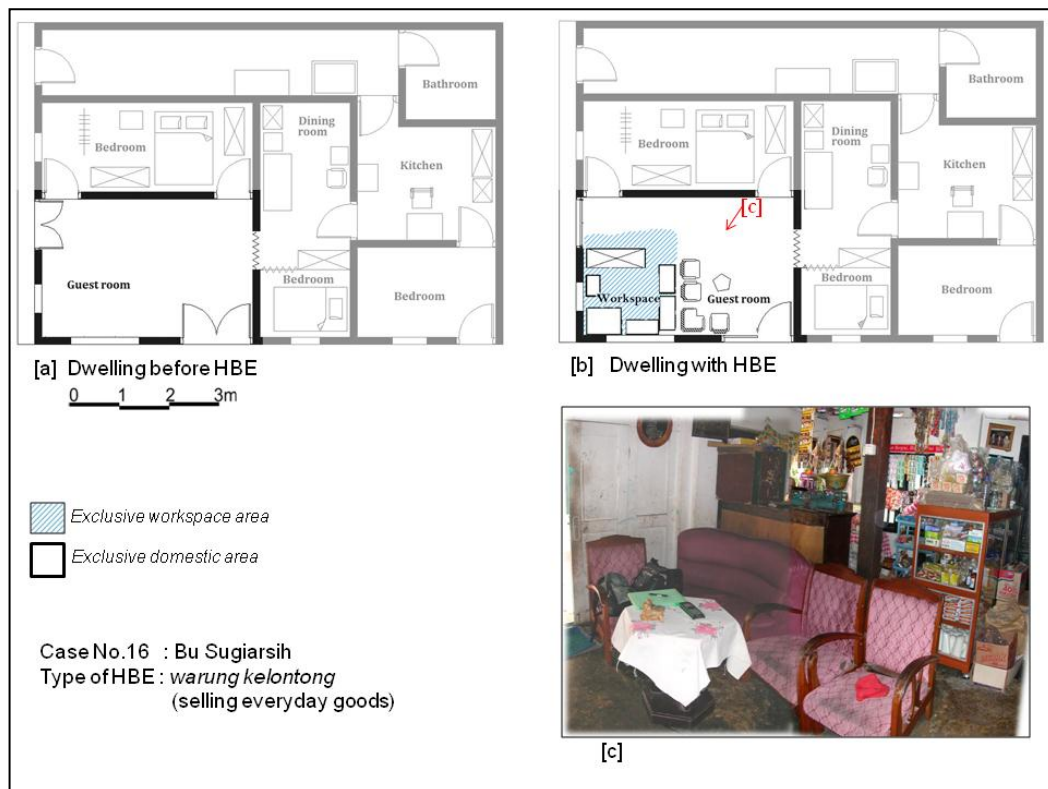


Figure 6.1: An example of the horizontal arrangement of furniture - Case No.16
Source: *Fieldwork, 2003.*

Figure 6.1 shows an example of the horizontal arrangement of the furniture as one of adaptation strategies undertaken by households. In Figure 6.1, part [a] shows that the ground floor plan²² of Case No. 16, operated by Bu Sugiarsih, 40 years old, has an area of 13.5 m² which was previously used for a guest room.²³ Since Bu Sugiarsih's family ran a business from the house, the 'previous guest room' became a new guest room and business space (Figure 6.1 [b]). This household runs a business from home because the income of the head of household is very low.

²² In most cases, informants could not recall how the furniture had previously been arranged, so the floor plan is made empty.

²³ A guest room is a direct translation of '*Ruang Tamu*' (in the Indonesian language, *ruang* is a room and *tamu* is a guest). In Javanese society and Indonesian society in general the guest room is a very important room exclusively for receiving guests. This room is usually located at the front, inside the house, and is more formal and quiet than other rooms for purposes of entertaining. Furthermore, this room is usually separated from the family room which is used for more relaxed and informal activities. In Western society, this term is often known as a living room, that is a room for entertaining guests, reading, watching television or other activities but there are essential differences between this and the concept of a "guest room." For the purposes of this research, the term "guest room" will always be used.

My husband is a government employee who gets salary of only 750,000²⁴ rupiah per month while my two children need tuition fees for their school. So three years ago, we created a warung (stall for everyday goods) to add to the family income. We invested only two and half million rupiah in this business and now it's still continuing.
(Bu Sugiarsih, 40 years old, 18 June 2003)

This *warung* business is the type that sells everyday goods like sugar, rice, noodles, sweets and cigarettes. This business is typical of HBE in the *kampung* because it is easy to handle and the goods sold are durable. Figure 6.1 [b] showed that the guest room, as with the previous space, is divided into two spaces to become a workspace and a guest room. The space is divided using only furniture. We can see that the guest chairs and the office furniture have become the boundary between the two new spaces. Therefore, 4.5 m² of the room is used for a business space, and 9 m² is used for a guest room. If customers want to buy goods, they talk to the seller through a window that also functions as an opening for the workspace, but, alternatively, the customers sometimes enter the workspace through the guest room.

A second example is Case No.18 (Figure 6.2). In this case, at first Bu Rohayah (46 years old) sold fried food such as fried banana, fried cassava, and fried yams in the front of the dining room near the door. But over time, many neighbours asked her for other daily goods such as sugar, salt, and chips. Then she and her husband made a stall/*warung* using the dining room as a space for business, despite its being only a very small space (only 4 m²). Fortunately, she still remembered the lay-out of the original dining room when the researcher asked about it, because this *warung* was developed only two years ago. Additionally, although her husband is an informal worker at the bus station, he also had a home business of 'Flowers-Horn' fish.²⁵ The fish business started one and half years ago (at the time of the interview), that is, from 2003. The fish business has grown, along with Bu Rohayah's business, at home. Consequently, the husband bought more aquariums than before, and these aquariums and the television on the cupboard are placed as a barrier between the two functions of the space. This is good evidence of how both the furniture and aquariums divide one room into two rooms to generate an enterprise in the home and simultaneously to create a boundary between the two activities (business and domestic).

²⁴ Rp. 750,000 is approximately £47 (the currency rate of 2003 was £1 equal Rp.16,000).

²⁵ 'Flower Horn' fish is an aquarium fish kept for its beauty; it is also known as '*Hua Lou Han*' (Mandarin language) or '*Ikan Lohan*' (Bahasa Indonesia).

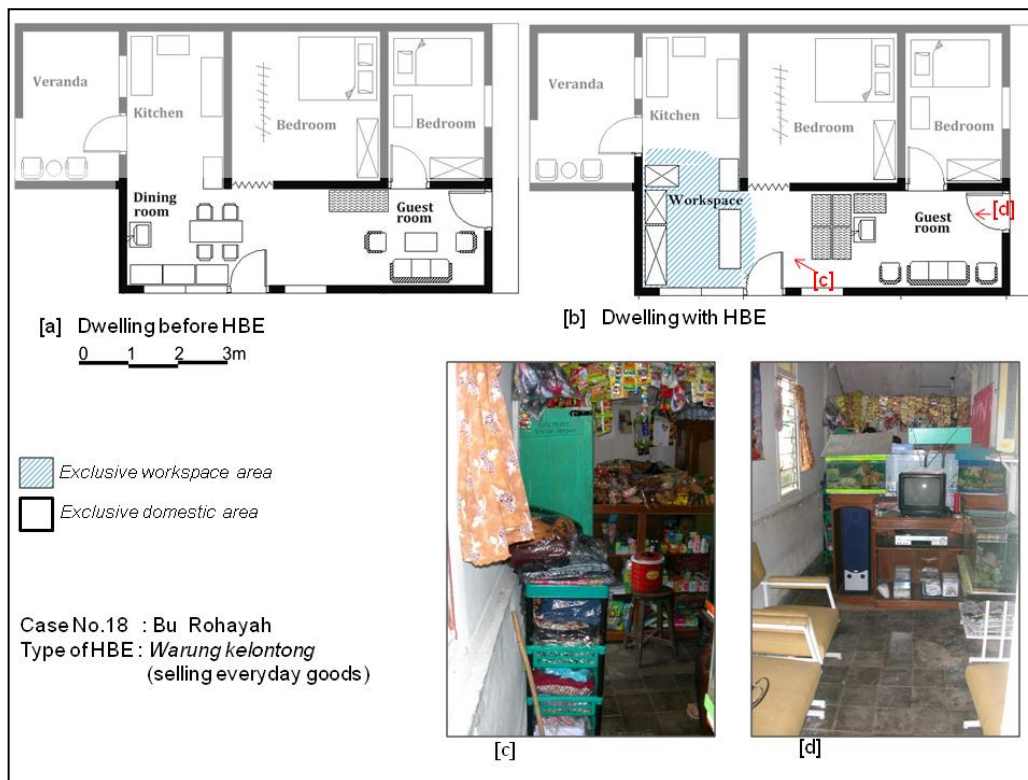


Figure 6.2: An example of the horizontal arrangement of furniture -- Case No.18
 Source: Fieldwork, 2003.

Ultimately, we can learn from the explanation above that the arrangement of furniture is varied and the positioning of furniture can create an enclosed space separating two different activities. Both Cases No.16 and No.18 are good evidence of household strategies for adapting to the existence of two different activities in one small space by arranging furniture. They create a flexible boundary because the furniture can be easily moved to fit their needs, and the size and shape of space, as well as the type and size of the furniture itself.

6.2.2 Shared Furniture for both Domestic and Working Activities

Shared furniture is one of the phenomena of interior space arrangement found in many HBE cases. Further understanding of shared furniture as one of adaptation strategies used by households can be gained from an exploration of Case No.17. This case is a home beauty salon and belongs to the service type of HBE. Bu Watik (40 years old), a salon operator, said that before she did business at home, this space [she indicated the front room in her house] was a guest room, used solely for entertaining guests and its lay-out was in the same position as when I made my observation (Figure 6.3 [a]). However, she had forgotten about the lay-out of

the other furniture besides the guest chairs. She explained that she has skill in cutting hair, and for a long time gave hair cuts on an amateur basis. But because the household required more income for their daily needs, since 1987 she has been operating a salon at home. Furthermore, Pak Bambang, her husband, has just discontinued as a part-time worker at the university, because the salaries are very low, and the family has four children. Nowadays, this business continues to exist and has been expanded by Bu Watik, assisted by her husband.



Figure 6.3: An example of shared furniture in the beauty salon - Case No.17
Source: Fieldwork, 2003.

Based on my observation, Figure 6.3 [b] shows that the left side space is used for the business of operating a salon at home. The layout of the guest chairs is relatively similar to the previous layout, but some furniture has been added for business activities, such as a large cupboard on which to hang wedding dresses²⁶. The important thing to note during the observation was that the guest chairs in the guest room are not only used to separate the space but also serve as seating for waiting customers. This means that the guest chairs are not only for guests but for customers as well. This is an example of shared furniture, which is one of the adaptation strategies used in relation to the presence of HBE activities.

²⁶ Bu Watik does wedding makeup and wedding dresses rented as well.

From the explanation above it can be understood that this household's strategy is only for reasons of practicability, although, at the same time, it seems to extend the status of the household's guests, beyond its guests in normal situations, to include the guest-as-customer. Only the HBE operator knows the distinction between guests and customers. If the customer does not need to wait in the queue, he/she can go straight to the work space (salon space). However, if customers need to wait in the queue, Bu Watik usually gives them a cup of tea or coffee. An interesting phenomenon occurs when Bu Watik has both customers and guests at the same time. In that situation, Bu Watik will handle the customer while talking with her guests, because there is no border between the two spaces. This indicates that she relates to the customer to earn money, but relates to the guest in order to maintain social interaction. Finally, social networks and business networks are merged together, because the house is not only for domestic activities but also for business activities, taking place at the same time, and in same space, but for different purposes. It seems to resemble a symbiotic mutualism in terms of furniture, space, activity, and time.

6.2.3 Moving Domestic Furniture to Create a Larger Working Space

As mentioned above the guest room is very important in Indonesian society, so the household must have a guest room, whether of a smaller or larger size, and whether or not they are running an HBE. There is obvious evidence of this in Case No.13. This case concerns a dress-making business (including wedding dresses) which is owned by Bu Sri (50 years old). In 1990, when she began, she worked alone making fashion dresses at home, but this business gradually increased, attracting a customer-base not only from local neighbours but also from further afield, outside the *kampung*. Therefore, in 1993 she recruited a number of neighbours with dress-making skills to help her. When I observed this case in 2003, she had 10 workers with 10 sewing machines and two hemming machines.

Because these employees carry out their work in her house, in what is now a workshop space but was previously used as a guest room, the household decided to move the household furniture, such as tables and guest chairs, onto the veranda (Figure 6.4) This phenomenon shows us that the guest room continues to be a very important place, both prior to and during the operation of, an HBE. It also suggests that, while a home business must continue to grow to earn more income, if the business is growing, it will use more domestic space or squeeze

the existing domestic space. Indeed, this case also pertains to the horizontal arrangement of furniture to create an enclosed space, because it appears that two cupboards are being used as the boundary between the workshop space/business space and the dining room/domestic space (see also Section 6.2.1 above).

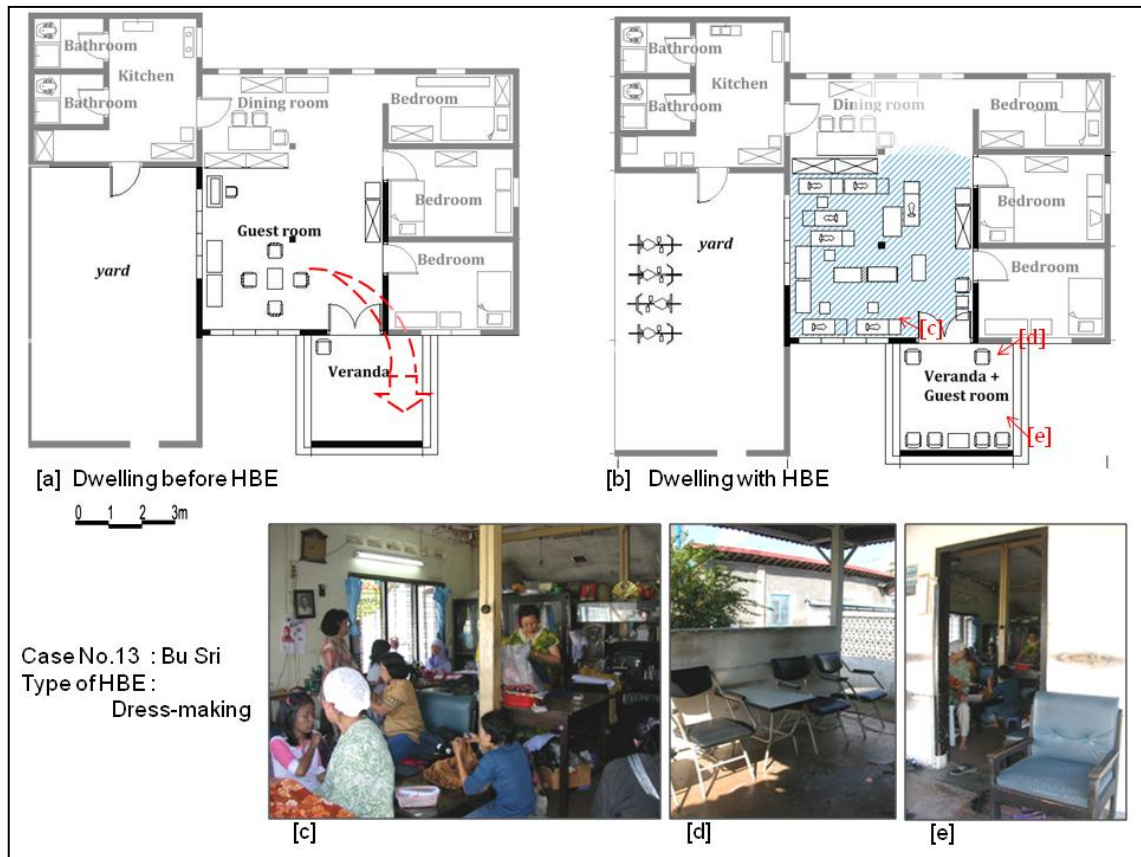


Figure 6.4: Moving the guest chairs onto the veranda - Case No.13
Source: *Fieldwork*, 2003.

6.2.4 Vertical Placement of Furniture to Optimise Space

A further adaptation strategy of households lacking space in the house is to create a vertical placement of furniture. Designing for the vertical placement of furniture is dependent on the needs of households and the suitability of the size and shape of space. The purpose of placing furniture vertically is to optimise the space on the floor; thus it is different from the purpose of the horizontal placement of furniture, one of the functions of which is to effect a separation between two different activities.

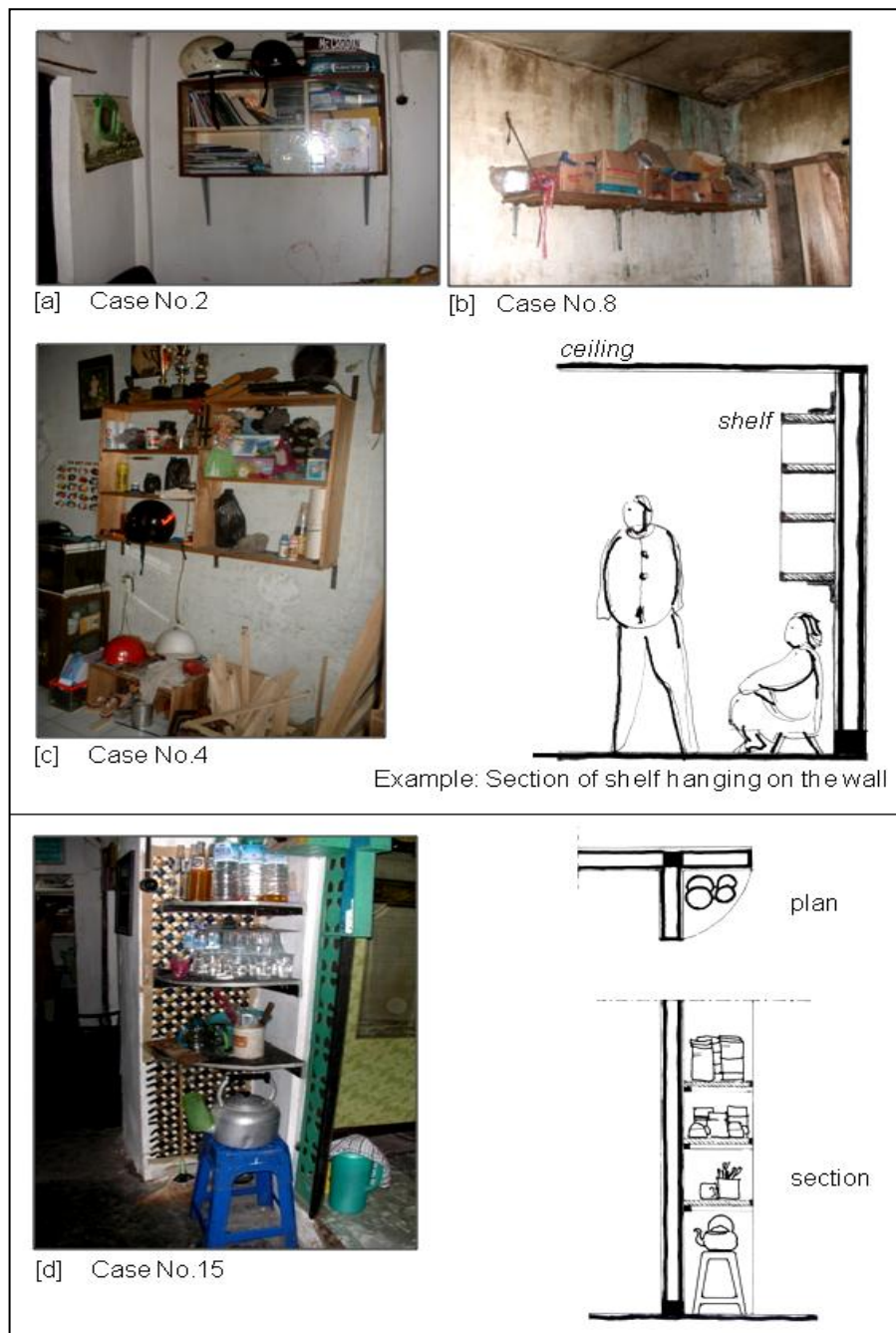


Figure 6.5: Vertical placement of furniture –
Case Nos. 2, 4, 8, and 15
Source: Fieldwork, 2003.

Based on my observations, this study has some evidence of the vertical placement of furniture with various designs and functions. Vertical furniture usually consists of a lightweight wooden rack that can be hung on the wall. Furniture hung vertically on the wall is common in Yogyakarta because many students who study at universities typically use such

furniture for their books, due to the small space in the student accommodation. Figure 6.5 (Case No. 2, 4, and 8) shows the shelves or racks that hang on the wall. Each rack is different in terms of design and content, but the important thing is the purpose of maximising the floor space. The observations also identified a way of placing furniture vertically that is different from the three previous cases. This occurred in Case No. 15. The purpose in this case is not only to optimise the space but also to utilise the empty space at the corner between two walls. This rack has been made by the head of the household himself.

The function of vertical furniture varies and can be identified from its contents. This can be determined by the location of its placement within the house. If the location of the rack is in the domestic sphere, it can be seen that it is used for domestic goods, such as documents, note-books, or other valuable items. Likewise, if the location of furniture is in the business space, it can be seen that the contents are items of business. This rack is sometimes also used as raw material storage. Strategies of adaptation that occur in the case of HBEs with a vertical placement of furniture can be identified based on their contents, and on their placement in space that is unequivocally either in the domestic space or the business space, as in the examples in Case Nos.2, 8, and 15. However, this does not occur in Case No. 4, which is located in an equivocal space; the contents of the shelf are also difficult to identify. From the description above, it is clear that adaptation strategies of households with a vertical placement of furniture aim to optimise the space due to the limited space available at home for dual activities. The optimisation of space is an alternative way for households to increase residential areas and reduce crowding.

6.2.5 Minimal Arrangement of Interior Space

One adaptation strategy undertaken by households is what might be described as the minimal arrangement of interior space within their homes. In this situation, the separation between business and domestic space is less clear, because households tend to use a passive or minimal strategy for spatial arrangements. In such cases, Priemus (1986) makes use of the term 'apathy', while Rapoport (2005) coins the term 'giving-up' to capture this response. In this study I use the term 'minimal', to indicate that households are not at all apathetic or 'giving up', because they still do arrange the interior space, even though they do not make a clear separation between the two activities. As an example of households who choose this adaptation strategy, Case No.7 is one of the most compelling cases. This case produces corn flour crackers and is managed by Bu Ence. This business has been previously described as an

inherited business. The crackers manufactured here are distributed to school canteens in this *kampung* and the surrounding area because they sell at a cheaper price than crackers produced in big factories.

Based on my observations, Case No. 7 does not separate clearly between domestic and business spaces. Raw materials and crackers are scattered everywhere in the house. For example raw materials are located in the guest room, crackers ready to be distributed are located in the dining room (Figure 6.6). Furniture arrangements are tailored to the spaces required for production activities. The only room that is differentiated from the domestic sphere is the engine room for crushing corn. This phenomenon clearly shows us an example of a minimal interior space arrangement strategy adopted by households. All the activities of both domestic and business purposes are mixed together, except the activities of the corn crusher. The engine room is kept separate because it produces smoke and noise. Even the process of cooking the raw crackers uses a kitchen area which is usually used for domestic cooking.

Based on interviews with Bu Ence, it was revealed that she was aware of the need for a separation of functions, but for the time being, for her and family the important thing is to have a place to run the business at home, because the space at home is still able to accommodate business activities. By utilising her house for such activities, she can stay with her family, earn an income, and contribute by providing jobs and income for the neighbours. At that time, she had not thought to alter, adjust, or improve the condition of her home. The following testimony demonstrates this phenomenon:

Yes, I think that we do not give attention to the health and cleanliness of the home, except that we can sleep well especially in my bedroom, so that other rooms can be used optimally for money-making activities [...] I am running this business because of the traditional business inherited from my parents and grandparents; I have to continue even though I have to compete with big factories that produce similar goods [...] In addition, by handling this business, I can help some neighbours to increase their income by involving them in this business as part-time workers. I know them closely, we trust each other and they feel this house is theirs. I do not care if they occupy space to do their job in this house, except my room.

(Bu Ence, 54 years old, 7 June 2003)



Figure 6.6: An example of minimal interior space arrangement - Case No.7
 Source: *Fieldwork*, 2003.

The explanation above shows that the bedroom is considered as a very personal space while other spaces are semi-public. In addition, it also shows that the strategies undertaken by households are minimal in terms of furniture arrangement, although the main function rooms for business and domestic purposes (the engine room and bedroom respectively) are separated by the existing wall. Existing partitions will be discussed in the next section. A noteworthy aspect of this testimonial is (1) space in the house is a valuable asset for generating income, and (2) cooperation with neighbours in terms of business at home is one important aspect of social capital.

6.2.6 Partitioning Space

Environment [...] can be partitioned physically by means of walls, screens, curtains, mats, or other physical barriers (e.g., to create separate dwellings or rooms).
(Kent, 1991: 438)

Humans tend to create a partition to make a bounded space or to distinguish one activity from another within a space, for example to distinguish the dining room and living room. The phenomenon of the partition of space also occurs in HBEs which distinguish domestic and business spaces. The quotation above lists the forms of physical partitions created by humans. It also mentioned other physical barriers, of course, including furniture such as desks, chairs, and cupboards. The arrangement of furniture for partitioning has been discussed in Section 6.2.1. Hence, this section will discuss non-furniture partitions such as walls and curtains. A wall is usually a solid and permanent structure, made from brick or concrete-blocks, but a partition is not always such a solid and permanent structure. Partitions can be made from non-permanent materials such as wood, plywood, wire mesh, plaited bamboo (*gedèg* in Javanese) or curtains. Based on the observation of space, with particular regard to the partitions observed in the cases in this study, the partition of space can be divided into two forms, which are the 'existing partition' and the 'new partition'. The 'new partition' can also be divided into two parts: the permanent partition and the non-permanent partition, whereas non-permanent partitions are subdivided into solid, transparent, and moveable partitions (Figure 6.7).

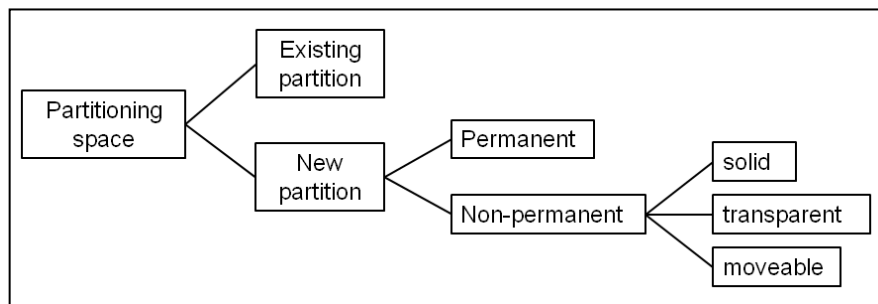


Figure 6.7: Variations of partitioning space in HBEs

a. Existing Partition

Existing partitions in the HBE cases are physical partitions within the dwelling that are used as the boundary between two different activities (domestic and business), and where the physical partition was already available before the household started up a business in the

house. This implies that the house has several rooms and a certain space converted from space for domestic activities into space for business activities. An available partition is usually a fixed wall. This phenomenon shows that not much cost and effort has been incurred by households in creating a partition. However, in terms of space, the dwelling tends to be reduced, due to business activities usurping a room from the domestic space. Based on the observations, there are two categories of existing partition, that is, those in (a) one room which is used entirely for business activities, and (b) one room which is used for both business and domestic activities (shared room).

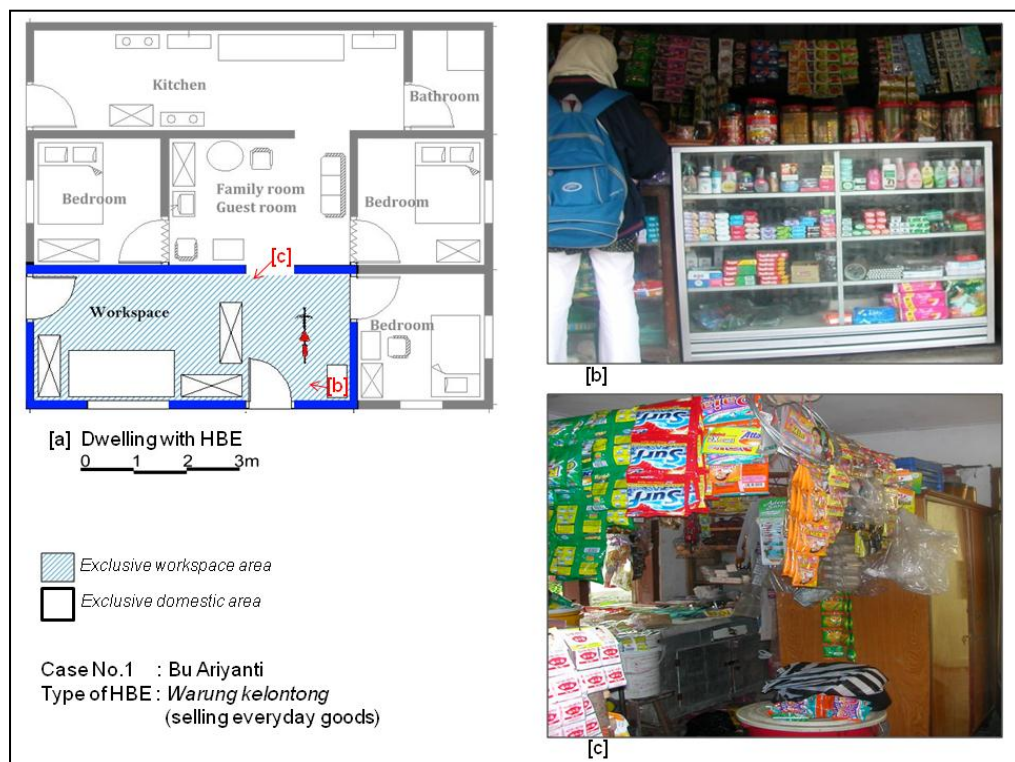


Figure 6.8: An example of partitioning the space with the existing wall-Case No.1

Source: fieldwork, 2003.

To explain the first category, Case No.1 is a good example. This case is operated by Bu Ariyanti, 50 years old, who sells everyday goods (*warung kelontong*). The whole guest room (15 m²) is used for a workspace, so the guest chairs have been moved to the family room in the middle of the house (Figure 6.8). Furthermore, the window is used to provide a visual opening onto the workspace, so that the goods can be viewed by customers. To purchase goods, customers carry out transactions through the window or by directly entering the workspace. When guests arrive, they are served standing up by Bu Ariyanti in the *warung*. Guests who come to talk longer will be served in the family room, even though they must pass through the workspace.

Similarly, an example of where the existing partition acts as a barrier between business and domestic activities as well as a shared room is supplied by Case No.5. This case has been operated by Pak Sofyan, 24 years old. He uses a guest room (25 m²) as a workshop space for producing screen printed t-shirts. The boundaries between the printing workshop and other domestic spaces are the existing walls. Because this room is a shared space, the guest chairs are placed close to the wall, to increase the dimensions of the workspace (Figure 6.9). Consequently, if a guest comes, then the guest has to sit in a chair placed among quantities of t-shirts. Finally, these two examples show us that the 'existing partition' is a boundary between two different activities that is used by households as a strategy for effecting the dual use of space with minimal cost and effort.

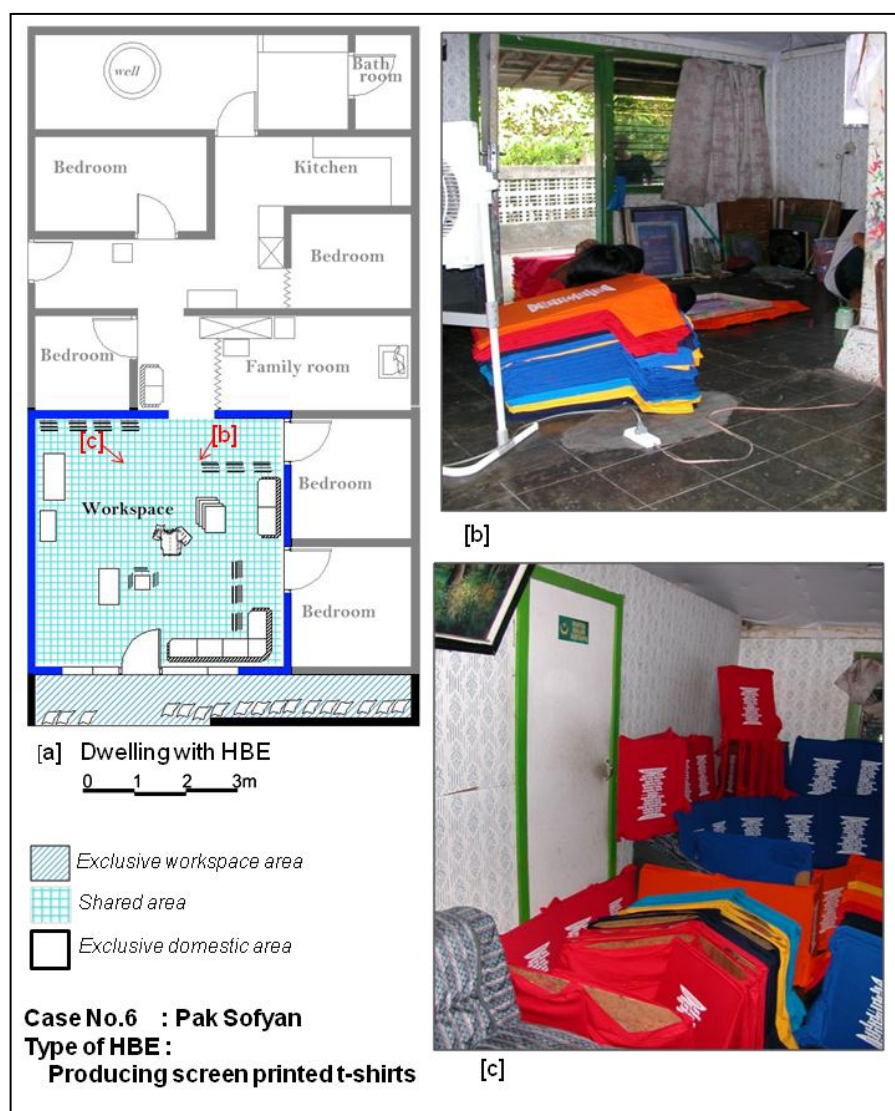


Figure 6.9: An example of partitioning the space with the existing wall - Case No.6

Source: fieldwork, 2003.

b. Permanent New Partition

One of the adaptation strategies adopted by households to separate between domestic and business space is the construction of a new wall, using either brick or other solid materials. For example, Case No. 12 shows us this phenomenon in the context of a business selling fresh vegetables, which is operated by Bu Dariman (52 years old). She says that she created a workspace (6 m²) in the dining room (17.5 m²) with a new brick wall about five years ago, due to the increased business activities at home (1998). This means that there is a room within the room (Figure 6.10). Below is her testimony:

At the start my business was only selling fresh vegetables in the house and the customers were neighbours. But the neighbours are always asking for other goods, so I added some goods such as cooking oil, sugar, tea, coffee and so on..., then those goods spilled and scattered on the ground in my dining room. So, my husband built the wall like this [she showed the new wall].

(Bu Dariman, 52 year old, 10 June 2003)

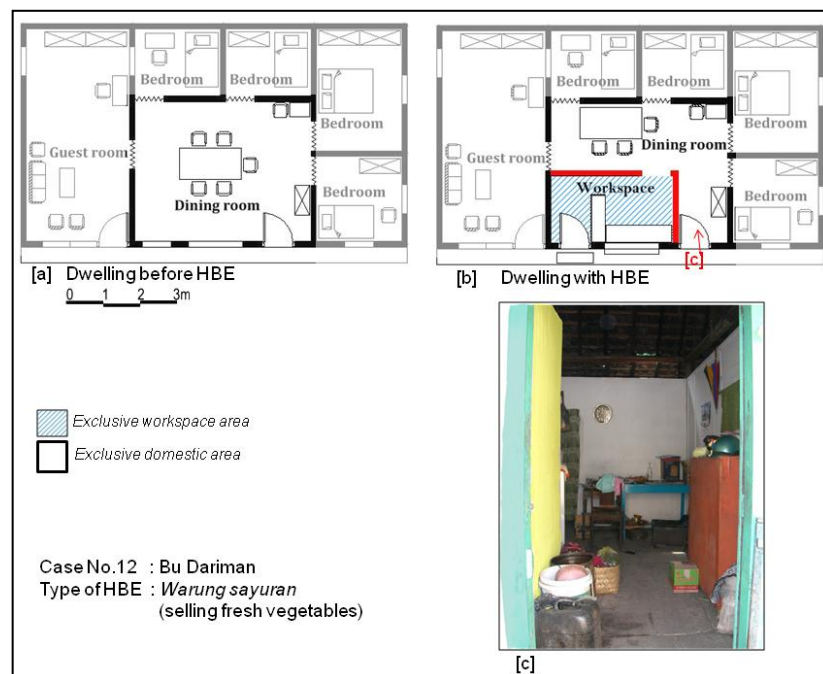


Figure 6.10: An example of a new partition – Case No.12

Source: Fieldwork, 2003

c. Non-Permanent New Partition

The definition of a 'non-permanent new partition' is a new partition created by the household which can be attached and removed from the main structure easily and flexibly. Based on my observations, there are three forms of this kind of partition, namely, solid, transparent, and moveable partitions. Each of these forms will be explained below.

c.1. Solid Partitions

Solid partitions are made of plywood, wood, or woven bamboo. Bu Rubi, a widow aged 44, the operator of Case No.19, explained that she built a barrier between the two activities with plywood because this material is cheaper than a wall made of brick and is easily moved or demolished. Observation in this case indicates that the plywood as a solid non-permanent partition is only a boundary between the workspace and guest room, in other words, it is not a full barrier. According to Bu Rubi, the space was partitioned seven years before (1996) in the dining room and family room, with assistance from the surrounding neighbours who are sometimes not skilled carpenters. In Javanese society, asking for help from a neighbour is called '*sambatan*'.²⁷ Bu Rubi needs the neighbours' help to make a plywood partition because her husband died several years ago. A clarification of the above explanation can be seen from Figure 6.11.

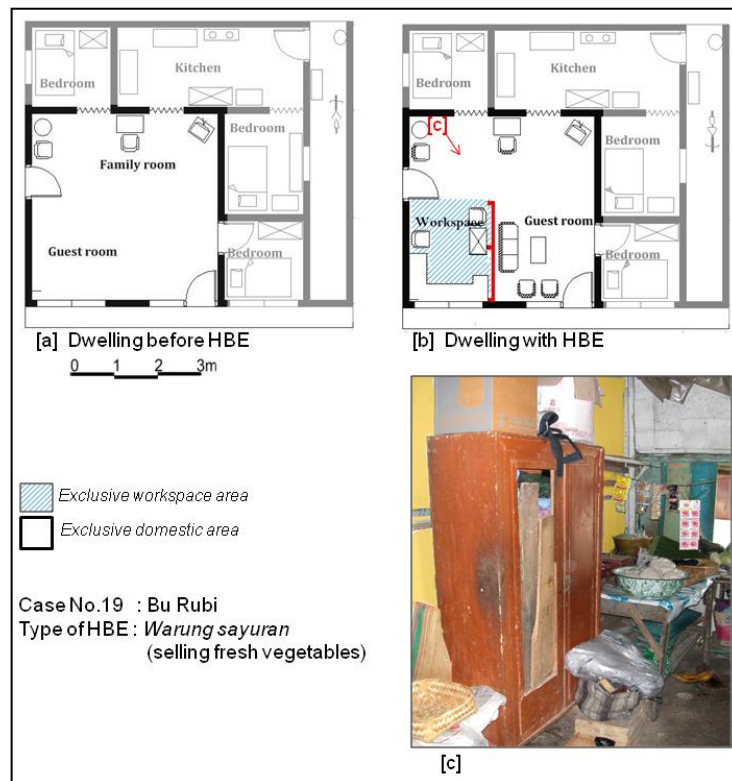


Figure 6.11: An example of plywood as a non-permanent solid partition – Case No.19

Source: *Fieldwork*, 2003

²⁷ '*Sambatan*' is a Javanese term referring to mutual assistance among members of a community for certain events, such as the death of one member of society, birth, marriage, or building a house.

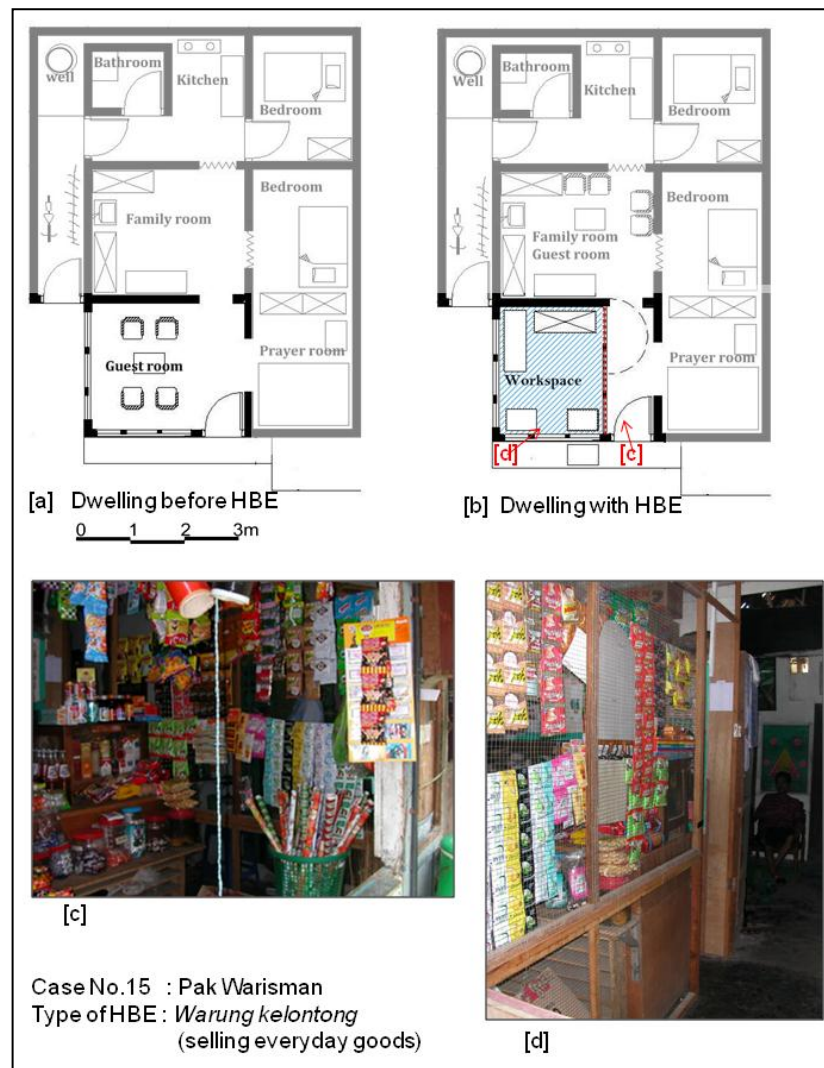


Figure 6.12: An example of a transparent partition – Case No.15
Source: Fieldwork, 2003

c.2. Transparent Partitions

A transparent partition is an adaptation strategy for separating the two activities in the house where a business is run, which allows the contents of each compartment to be viewed by anyone. Materials for a transparent partition can be either made of glass or wire mesh. Case No.15 is an example of a transparent wire mesh partition (Figure 6.12). This case is operated by Pak Warisman (53 years old) who sells everyday goods (*warung kelontong*). He explained that the purpose of the use of wire mesh is not only to separate the two spaces, but also that there is a desire to make the house look cleaner, to avoid scattering the goods everywhere, and making the room look more spacious. He believes that cleanliness and neatness are an expression of his religious faith, even though his house is very small. In addition, he has stated that his house of 45 m² lacks side windows that can illuminate the work space, and this

is an additional reason for using a transparent partition. In the domestic sphere the use of glass tiles is also visible. This description illustrates the many adaptation strategies undertaken by households, especially in terms of the partition. For households, the partition is not only a barrier, but also takes into account the ambient environment. Illumination, odour, noise, and temperature are what Heimstra and McFarling (1974) call the ambient environment.

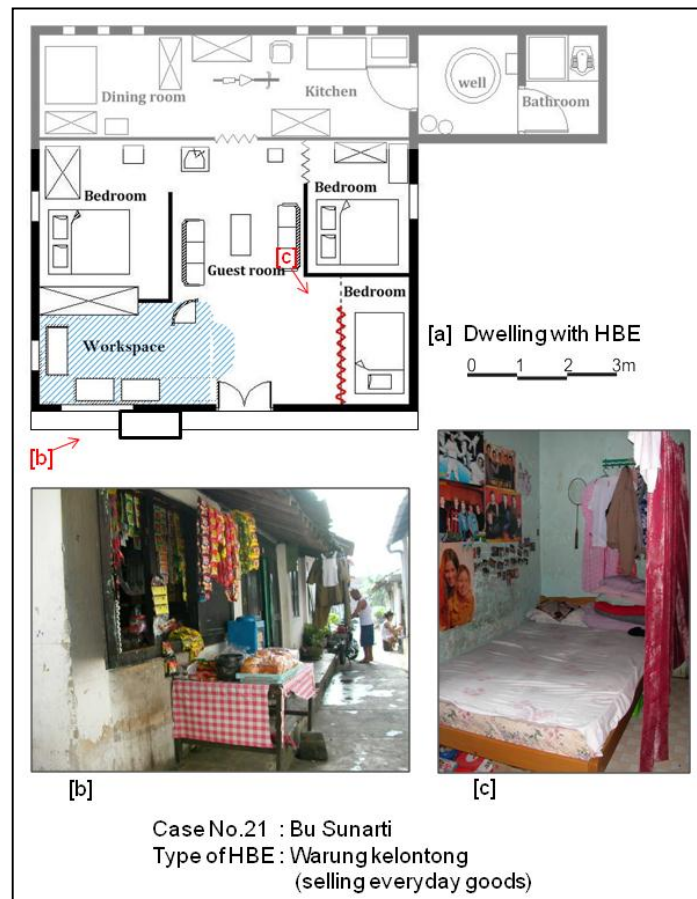


Figure 6.13: An example of a movable partition—Case No.21
Source: Fieldwork, 2003.

c.3. Moveable Partitions

Hanging a curtain is also one of the ways of creating a partition easily, which can be flexibly moved, opened and closed. Compared with the other partitions that have been discussed above, the curtain is cheaper and lighter. Based on my observations, many households use a curtain as a substitute for the bedroom door. In the case of HBE, many operators also use this as a partition between the business and domestic activities. Case No.21 is one of the examples that show a movable partition. Actually, this is a complex case in terms of partitions because

it uses three types of partition, that is, curtain, cupboard, and plywood (Figure 6.13). Interesting in this case is that the curtain not only functions as the door of a room, but even as a separator between the workspace and bedroom.

Three types of partition as the boundary between business and domestic space have been explored. The physical configuration of the partition varies depending on its technical elements, functional elements and behavioural elements. Its technical elements consist of types and forms of material; functional elements concern the fit between the space (both business and domestic space) and household activities; and behavioural elements deal with the feelings, emotions and reactions of households concerning the barrier and other environments. Obviously the three types of partition configuration and their three elements emerge gradually over time along with the development of the home business.

6.3 Adaptation Strategies by Making More Space

Adaptation strategies that proceed by making more room are due to households' reaction to the dual activities in the house which can cause discomfort and crowding for its occupants. As mentioned in Chapter 5 that crowding is not only seen by objective measure such as the space per person, but also requires a subjective measure. For example in Table 5.23 shows that the habitable space is 10m² per person which in this case is not considered as crowding, but not with subjective measures because many variables that affect about that notion. Various strategies have been undertaken by the household to anticipate discomfort. This is done by households because of their dissatisfaction with arranging interior spaces only. There are two main strategies in this regard, that is, (1) the physical construction of new space and (2) the encroachment of another space, because the capacity of the existing space is inadequate. Tipple (2000) has stated that the selection of improvements and extensions are made by a transformer as an alternative rather than moving out.

Some cases of HBE were found to show that the extension of the physical construction of a space to make more space can be divided into two types, that is, the extension of horizontal and vertical space. The extension of horizontal space also divides into two subcategories, which are adjacent rooms and separate rooms, whereas the vertical extension of space divides into two types of construction, which are 1st floor and mezzanine construction. In addition, making more space is also achieved by way of encroachment on public space. This may be done for various reasons as follows: because the size of the dwelling and the plot are

limited; public space is relatively large; the operator does not have enough funds to construct a partition; or a house does not belong to the household, thus limiting their ability to make more space. This phenomenon can be seen from the household's behaviour in both domestic and business activities. The encroachment on public space conducted by households may have been permitted by the neighbours, and tends to take place gradually through time, no matter whether the space is legal/illegal or private/public. The above explanation can be illustrated as follows.

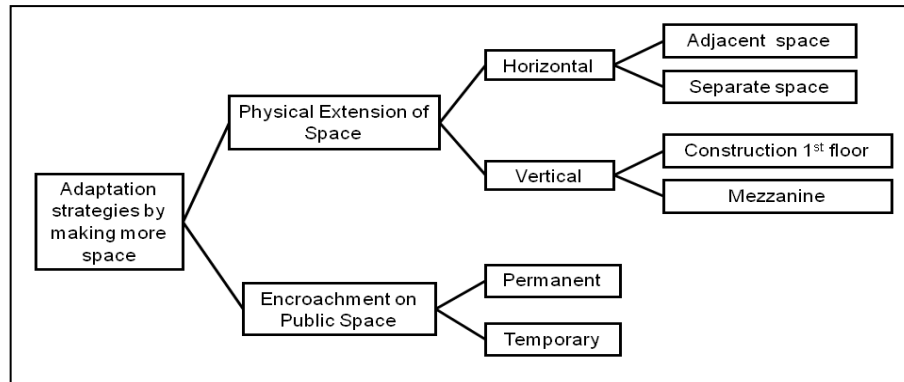


Figure 6.14: Adaptation strategies by making more space conducted by the households of HBE

6.3.1 Horizontal Housing Extension

This section will discuss two types of horizontal housing extension: first, creating an adjacent room and then, creating a separate room. An adjacent room means making a new room which is attached to the main house. This arises because households with a family business do not want to use the existing domestic space as a place for business activities. In addition, households have a sufficiently ample plot to create a business space outside the domestic sphere. Whereas, a separate room means creating a new room entirely separate from the main house which is still in the same plot or a different plot but not far from the main house, for various reasons. Thus, certain households build additional space for business uses, generally in their yards.

a. Adjacent Space

Cases No. 3 and No. 8 are two examples of cases using extension into adjacent space. The case of HBE No.3 is a seller of everyday household goods, such as cigarettes, sugar, dried noodles, crackers, rice and kerosene. The size of the house is actually 82.5 m² and it really has sufficient space for business activities, but Bu Dina (30 years old) who is the HBE operator

said that she did not want to use her house as a place for business activities because it could lead to a dirty environment for her baby. In addition, she said that her family has a yard in front of the house, into which the household built a one room extension for the business, with an area of 12 m², in 1999 (Figure 6.15). This proves that there is a rejection of the use of domestic space for business activities by some households with specific reasons for doing so.

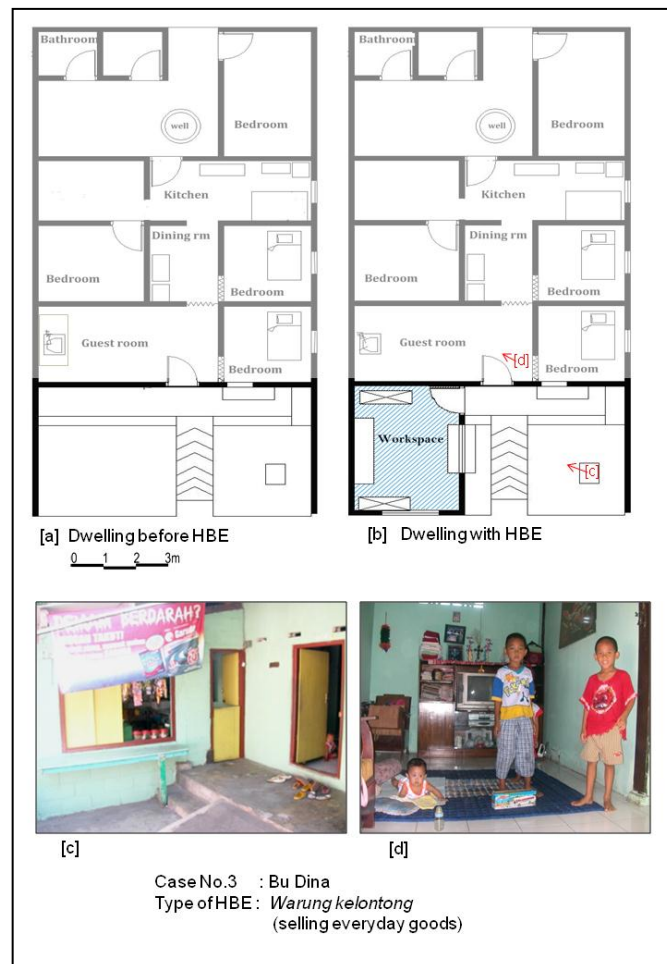


Figure 6.15: An example of adjacent space in front of the main house – Case No.3

Source: Fieldwork, 2003

Another example is Case No. 8, which is operated by Pak Warno (75 years old). At first, Pak Warno was a carpenter who produced furniture in the home such as chairs, cabinets, and tables, but in 1993 he gave up this kind of work for reasons connected with his age. After that, he made wooden push carts used by his workers to sell meatball soup and fresh fruits around the *kampung*. In addition, some push carts were also rented out by people from rural areas

engaging in 'circular migration',²⁸ with the aim of making a business selling the same type of food. To process raw materials into food ready to be eaten, prior to selling it around the *kampung*, both his workers and the migrant workers need a large kitchen. Consequently, he built a kitchen for the workers in the side yard and in front of the house, attached to the main house (Figure 6.16). This was because the house, with an area of 112 m², was being used for domestic activities, but the area of the yard was 228 m². As migrant workers, the seasonal staff automatically slept in this house too. When the observation was in progress, many workers were sleeping in the guest room or in the kitchen with mats, and thus Pak Warno makes bed space, for them but they have to pay rent for it. He has also built a second floor/vertical extension, which will be discussed in another section. Thus, this case is complex in terms of the nature of the home business, which rents out push carts, produces meatball soup and fresh fruits, and rents bedspace for migrant workers to sleep in. However, the main business, is actually producing meatball soup and selling fresh fruits.



Figure 6.16: An example of adjacent space in the side yard and at the front of the main house – Case No.8

Source: Fieldwork, 2003

²⁸ The term of circular migration in this case applies to villagers who come to the urban *kampung* as seasonal or periodic workers, because the paddies which they planted are still growing.

b. Separate Space

Case No.12 is discussed as an example of the phenomenon of a separate space related to the family business (Figure 6.17). The extension of the space for business activities into a new, separate room is conducted by households with certain characteristics which are a large plot size and running business activities which cannot be adjacent to the domestic sphere because they are malodourous and dirty. Bu Dariman, the operator of this HBE, explained:

“Vacant land in front of my house next to the kitchen and bathroom is also mine. I use it as a place for my business chicken coop and fish ponds. You know [...] these activities generate smells and are dirty. So, it is not possible to have them close to house. [...] Although my other business activities are to sell fresh vegetables, this does not cause smells and does not pollute other space (with dirt) because my husband made a separation wall.”

(Bu Dariman, 52 years old, 10 June 2003)

This case is interesting because there are two business activities. The main activity is to sell fresh vegetables, which, as has been discussed above (Section 6.2.5), do not smell. However, the business activities of the poultry and fish ponds also provide additional income. During this time, the local government still does not prohibit livestock in urban areas as well as in densely populated urban *kampung*, although, lately, there have arisen many diseases originating from the chicken farm such as ‘avian influenza’ (bird flu). Fish ponds may be cultivated by many households as long as they have a big enough plot. Households around the river in the study area also utilise the river for aquaculture. Figure 6.17 shows that the location of the chicken coop and fish ponds in Case No.12 is separated from the main house by 1.5 m alley. Bu Dariman said that to reduce the smell and dirt, she closed off the chicken coop area with bamboo fences. Fortunately, the neighbours do not complain about the business, although it is possible that the heavy rains will spread the unpleasant odours it generates. Even in such situations, however, the neighbours will generally remain silent, because tolerance, harmony and respect are the key words coexisting in *kampung* society (Mulder, 1994; Guinness, 1986). A study conducted by Mulder in Yogyakarta states that “living in good harmony with each other is conducive to the pleasure of enjoying peacefulness and quietness, people are generally highly aware of the material utility of good relationships and the demand for reciprocity” (1994: 40). Kellett and Bishop also argue that:

business is not regarded as a separate activity to be valued only in economic terms. The layout, scale and character of the residential environment which they have created themselves directly reflect and reinforce these traditional values of collaboration, trust and respect (2006: 65).

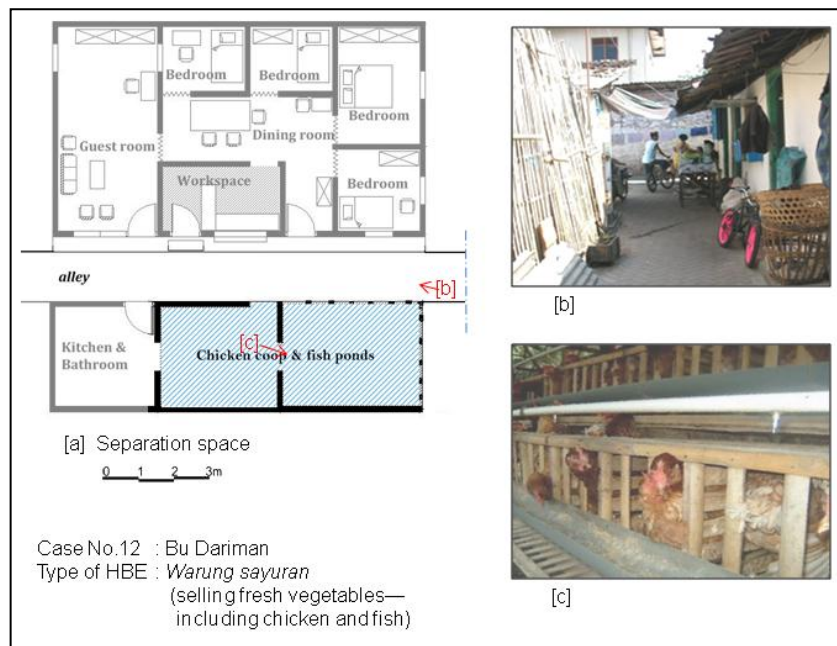


Figure 6.17: An example of separate space – Case No.12
 Source: *Fieldwork, 2003*

All three cases above show us adaptation strategies carried out by households who run a business in the house, by way of horizontal extension of the area for business activities attached to or separate from the main house. Cases No. 3 and 8 imply that the house size is not large enough to accommodate these business activities, households do not want the domestic space of their homes to become dirty, and the home needs to be a clean and safe place for children. In addition, Case No.12 shows a separation made not only due to the dirt factor but also due to odour. Finally, we have discussed the variety of reasons for making an horizontal extension of the housing and it has become clear to us that these phenomena not only represent economic and physiological needs, but also psychological needs.

6.3.2 Vertical Housing Extension

In contrast to the horizontal housing extension, vertical housing extension has been conducted by households as an adaptation strategy because they do not have sufficient plot size, but the main structure of their house is on more than one storey. Based on observation, there are two types of vertical adaptation strategy, that is (a) by construction of a first floor, and (b) by construction of a mezzanine. The construction of a first floor must depend upon the main structure of the existing house being strong enough to hold up the load of what will be on the first floor. This construction of a first floor could be total or partial. The material

structure of columns and floors are usually made from concrete, however, wood and boards are also used. The first floor is commonly used for domestic activities, especially for sleeping, whereas the ground floor is used for business activities. A mezzanine is defined as 'intermediate floor between the ground floor and the roof' which usually use boards and timber as the material structure. In case of HBE, the function of the mezzanine is usually for sleeping or storage of goods. Generally, households opt to build a mezzanine due to financial problems or the limits of their building structure.

a. Construction of the First Floor

Based on observation, Case No. 4 is an interesting case to illustrate vertical extension through the construction of a first floor (Figure 6.18). This case is operated by Pak Pramono who produces small tables and picture frames. This case shows the operator using various adaptation strategies over time to pre-empt conflicts between householders about the use of space due to running a business from a small house where the size of the ground floor is only 12.5 m² (see also section 6.2.4). When I observed the space in Case No.4, Pak Pramono and his relatives and neighbours were constructing a first floor, which was still under construction. To keep his business running, Pak Pramono and his relatives (three workers) were working on the ground floor during the day, but at night slept on the same floor used by his family as a space to sleep. He stated that the ground floor was not large enough space for both activities (working and sleeping), although it was used for these at different times. In addition, he felt embarrassed when he and his family slept on the ground floor, because their sleeping space was only marked off by a curtain as a barrier. For this reason, he built the first floor as a space for sleeping. Thus, when the first floor construction is finished, the ground floor will be used as a workshop, kitchen and bathroom. According to Pak Pramono, the first floor is cleaner, quieter and more private than the ground floor, as he expresses below:

We have been sleeping here [the ground floor] for one year. Sometime I feel shy of my workers and also guests who come at night because the mattress space is only closed off by a curtain. Besides that, sleeping on the ground floor is also dirty due to the many materials and I know it is not healthy. I feel sleeping on the first floor is clean and healthy.

(Pak Pramono, 37 years old, 8 June 2003)



Figure 6.18: An example of vertical housing extension (under construction) – Case No.4
Source: Fieldwork, 2003

The phenomenon of vertical housing extension also emerged from Case No.8. Indeed, Case No. 8 has been described above, regarding the horizontal housing extension made to accommodate activities of workers making the meatballs and cutting up fresh fruit. By contrast, this section will discuss the bedroom accommodation for migrant workers on the first floor which was built by Pak Warno. He said that at first the workers slept in the guest room or in the kitchen or in front of the house (see Figure 6.19 [c] and [d]). Then he felt that this arrangement was not good for health and privacy, so he built the first floor at the front of his house. The size of the first floor is 18 m² and it contains three bedrooms. The main building material is concrete and it is a separate structure from the main house. Figure 6.19 [e-1] shows the construction process for the first floor in 2003 and picture [e-2] shows the first floor as used by workers in 2005. In addition, the ground floor can be used for parking carts.

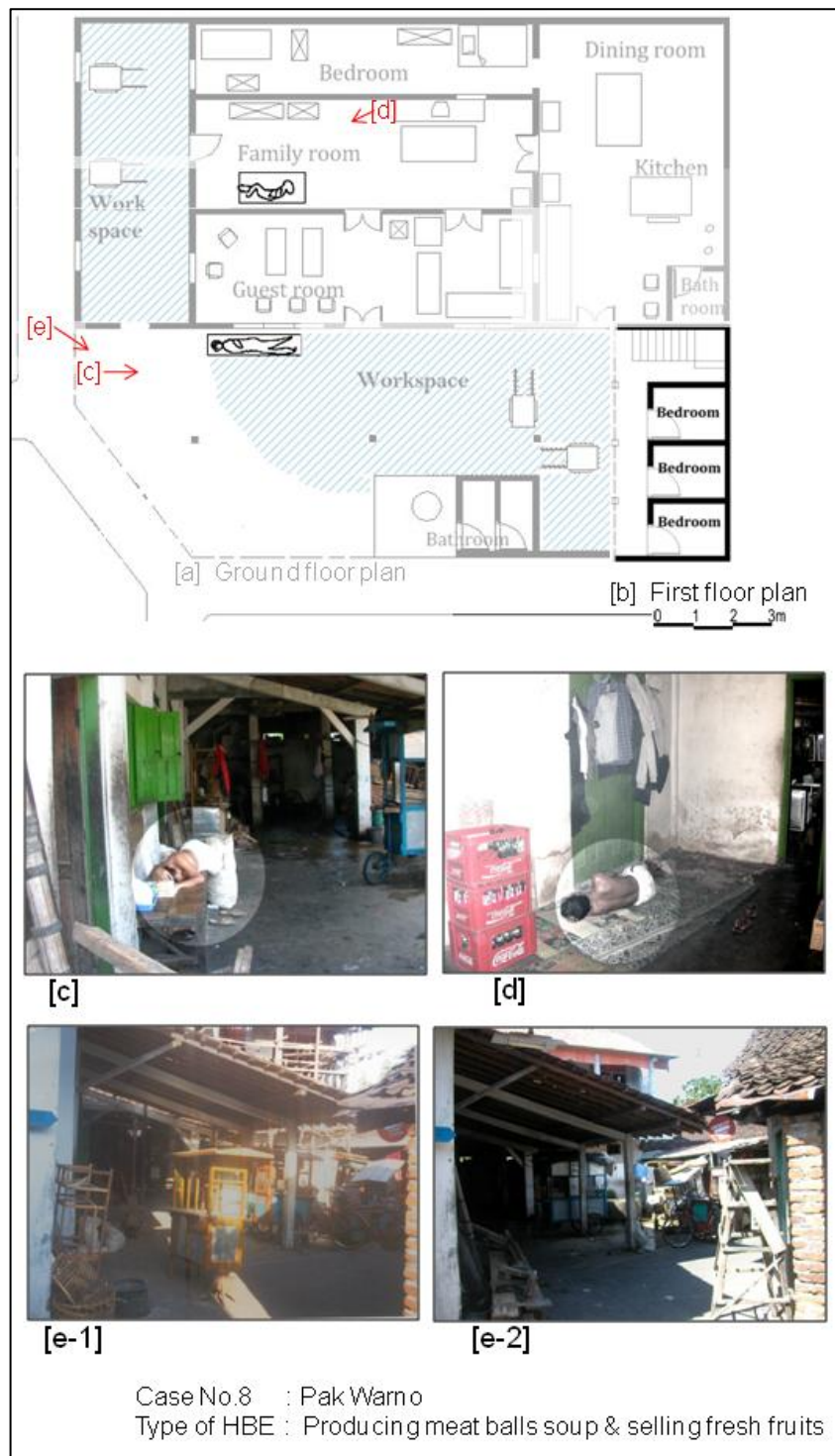


Figure 6.19: Process of developing of the first floor as a vertical housing extension – Case No.8

Source: Fieldwork, 2003 and 2005.

An adaptation strategy through adding a vertical structure which is not a full first floor extension is demonstrated in Case No.2 (Figure 6.20). This extension is not directly for business activities, but has been created as a result of business activities at home. Thus it is

an extension of domestic activity. This case is operated by Bu Muhadi (70 years old) who sells fresh vegetables. She relates that selling fresh vegetables at home has long been an activity of this household. In addition, this business activity not only provides the main income for the family, but is also a place for the surrounding neighbours to shop for vegetables on a daily basis, as this residential location is at some distance from the neighbourhood market. Many similar such businesses appear in urban *kampung* and are known as "warung sayuran".

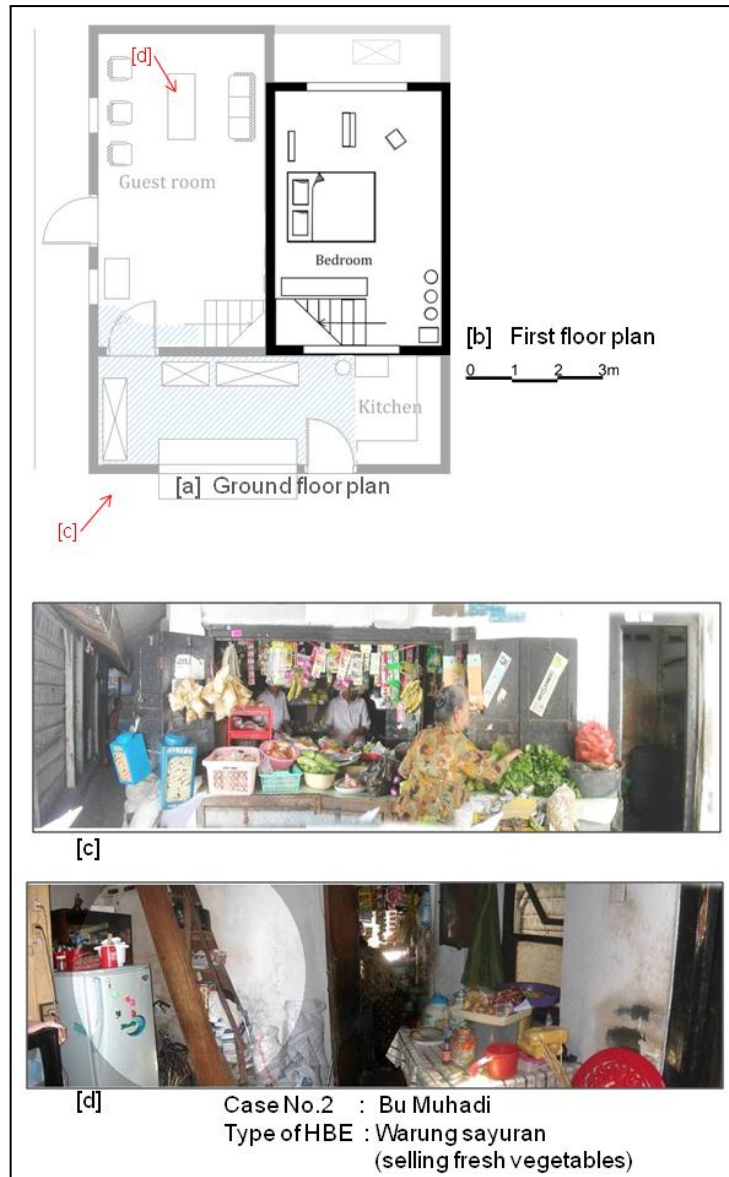


Figure 6.20: An example of a vertical housing extension – Case No.2
Source: Fieldwork, 2003

In this household, the kitchen (8 m²) is used for the working space because it is close to the alley, where a large window display has been created to exhibit the goods on sale. Consequently, Bu Muhadi used a small space near the bathroom as a new kitchen for cooking family meals. The business operates from early morning until evening and is run by Bu Muhadi and relatives, including her daughters, who helped after the completion of work outside the home. The ground floor (at 45 m²) contains only one bedroom, guest room, kitchen, bathroom, and business space, and the house is inhabited by five people. Bu Muhadi has built one bedroom on the first floor for her two grown-up daughters who are at an age where they need privacy. The main construction materials for the first floor, including the stairs, are boards and timber (Figure 6.20 [d]).

To sum up, the three cases above have been explored to explain the physical extension of the housing via two types of horizontal extension and the construction of the first floor. It has also been shown that households with HBEs can find an adaptation strategy in creating a vertical housing extension, due to the inadequate size of their plots for the purpose of horizontal extension. A further vertical extension strategy is the mezzanine, which will now be explored.

b. Mezzanine

It has been explained earlier that a mezzanine can be built to create accommodation for sleeping space or for goods storage, which is one of the adaptation strategies undertaken by households based on various considerations, including the construction cost factor. Indeed, efforts to build a first floor are likely to be expensive out of proportion with a households' income. Therefore, the construction of a mezzanine is easier and cheaper than constructing a first floor. Case No.5 is evidence of an adaptation strategy conducted by household through the construction of mezzanine (Figure 6.21). This case is quite similar to Case No.8, because Case No. 5 produces food noodles which are sold by the workers around the *kampung* using pushcarts. Pak Warindi operates this business assisted by employees. It also has migrant workers. Actually, this case is also an extension of the housing horizontally as in Case No. 8, using the side yard which is covered by a roof extension as a space for food processing. To avoid the construction costs for a second storey, Pak Warindi has instead built a mezzanine in the workspace for processing the raw materials for making noodles. It is situated on top of the bathroom and is used as a sleeping space for workers. The mezzanine has been constructed from timber and plywood, which is cheaper and easier than concrete blocks.

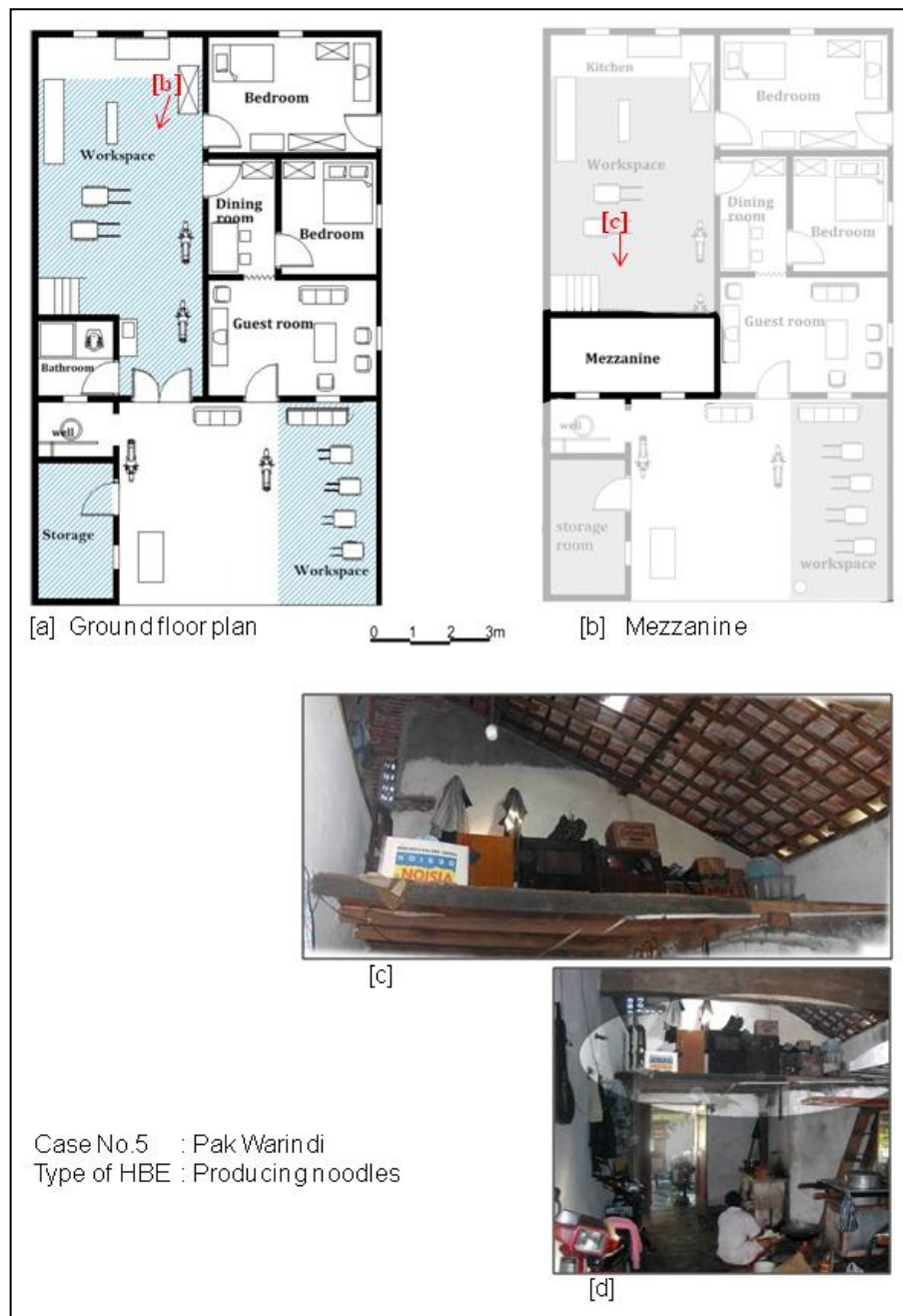


Figure 6.21: An example of a mezzanine for a workers' sleeping space – Case No.5

Source: Fieldwork, 2003

We have discussed both horizontal and vertical housing extensions. Some cases of HBE have shown evidence about the motivations and decisions of households pursuing a strategy of adaptation by creating more physical space. These are strategies that go beyond simply reconfiguring an existing interior space, which is easier, cheaper and more flexible than making a physical extension of the housing is expensive but may be compatible with long-term goals for those who live in urban

settlements, such as maintaining a livelihood. For example, bedrooms constructed on the first floor can be rented out to the workers or to anyone who works in an urban centre. This means that the physical extension of housing by building bedrooms for rent is also an HBE activity. The discussion will now, however, move on to consider the strategy of encroachment on public space, which is not a physical extension of the house but rather an addition to the space.

6.3.3 Encroachment on Public Space

The term encroachment in this case means the act of gradually or silently impinging upon the rights of another or of public property. Households effect an encroachment on public space because they need the space for business activities or due to business activities that require outdoor space. Households are generally sensitive to reactions from neighbours or even seek their informal consent when necessary in the case of encroachment on public space. Consequently, this process can take a relatively long time, in accordance with the development of the necessary space requirements. This section will be divided into two sub-categories based on the findings in the field, that is, permanent encroachment and temporary encroachment.

a. Permanent Encroachment on Public Space

The meaning of a permanent encroachment on public space by households is the act of using public space instead of one's own property, which then in turn comes to be perceived as being under that household's ownership, which is characterised by the space being enclosed under a permanent physical roofing. Both cases discussed in this regard (Cases No. 2 and 11) are examples of permanent encroachment on the public space of the alley that is located at the front of the house. This strategy was undertaken by both households because their house size was not sufficient to accommodate their business activities (Figure 6.22). For example, Case No. 11 is a two-storey dwelling owned by Bu Tri. The ground floor (17.5 m²) is used for selling everyday goods, while the first floor is used for sleeping space. Because the ground floor is not large enough to accommodate business activities, Bu Tri chose the strategy of encroachment into the alley in front of her house. Similarly, in Case No. 2, which has been discussed earlier, the business space (8 m²) is not sufficient to accommodate the activities associated with the fresh vegetable stall, and the operator has therefore appropriated public space.

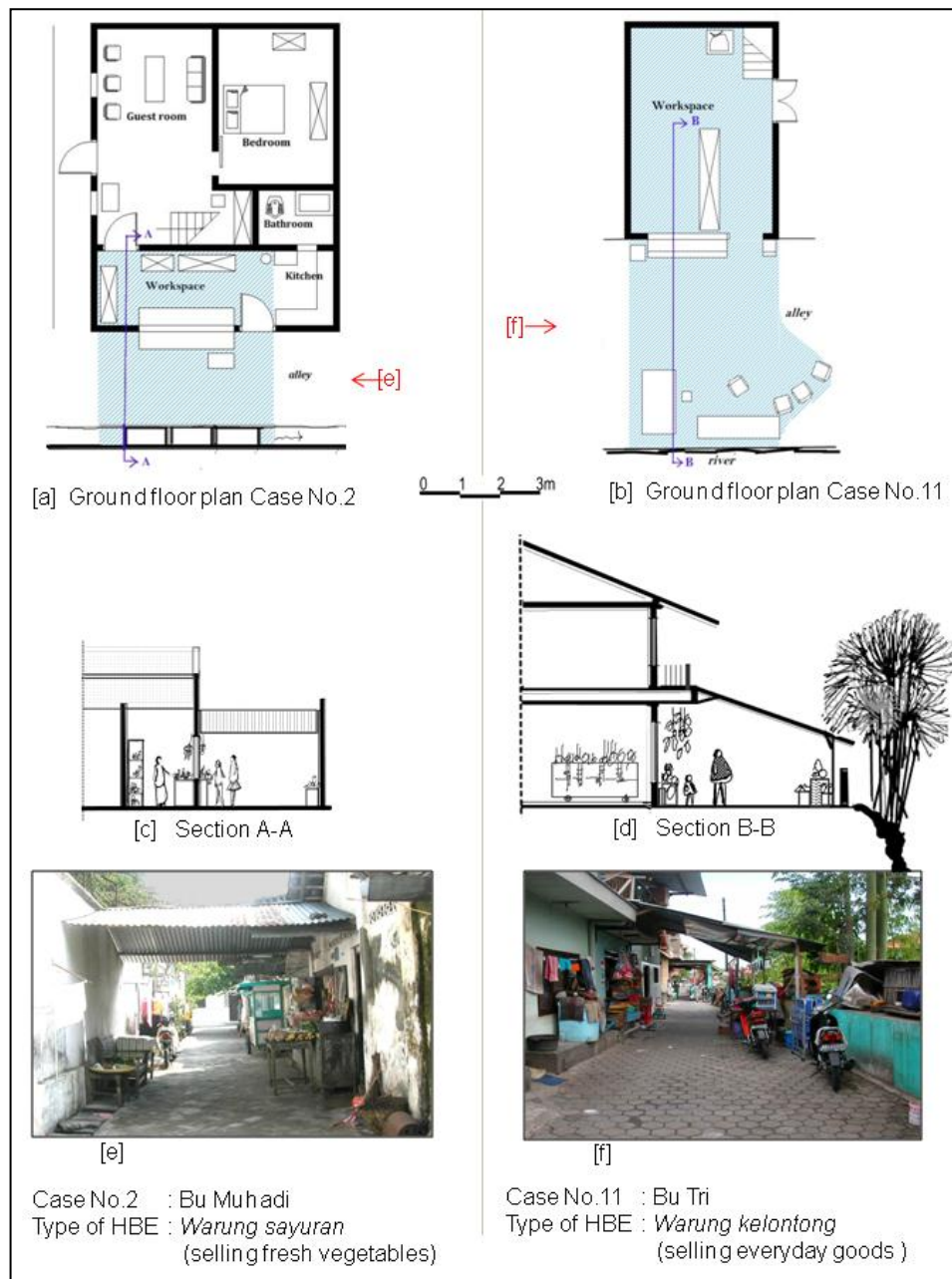


Figure 6.22: Two examples of permanent encroachment into public space
Source: Fieldwork, 2003

However, the householder in both cases admitted that the process of encroachment on the alley takes a long time, taking into account the presence or absence of complaints from neighbours and pedestrians. Members of households consider that if the neighbours and pedestrians do not express objections, either through words or physical actions, it means that their encroachment on the public space has been found acceptable by them. At first, the encroachment on the alley takes place without any roofing, but over time the owners felt the need for a protective roof to shield the goods being sold from the heat. Ultimately, making

more space through encroachment on an adjacent alley and covering goods with a permanent roof is an adaptation strategy chosen by households due to the lack of space for business activities in the house. It is possible to construct a roof in front of the house when their home faces a high fence or river bank (rather than a house belonging to someone else), meaning that they are free to build a permanent zinc roof.

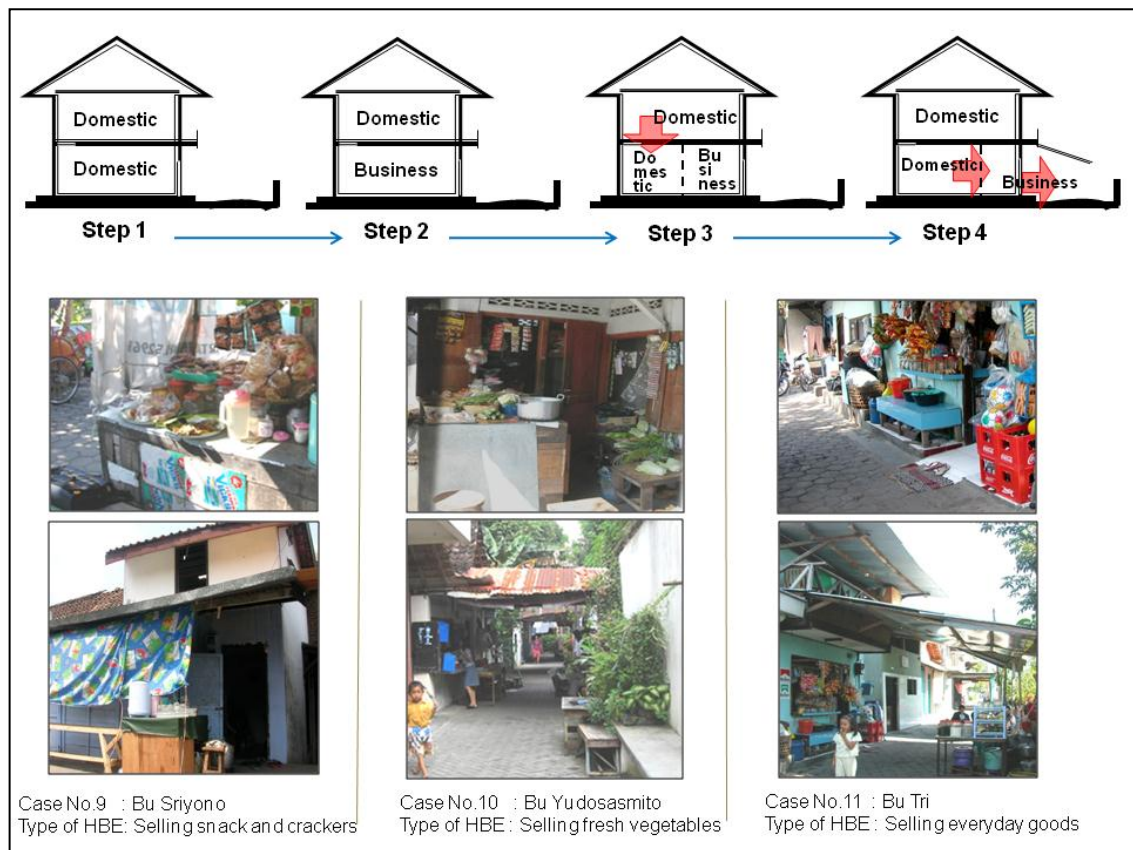


Figure 6.23: Three examples of the process of encroachment into public space
Source: Fieldwork, 2003

An interesting discussion can be had about similarities in the process of encroachment on public space found in three cases of two-storey dwellings (Cases No.9, 10 and 11). These three cases also have other similarities: (a) the residents are elderly, (b) they have a two-storey rented house but with a ground floor of small dimensions, and (c) the business is a retail type (Figure 6.23). In the course of their interviews, the informants explained that at first, they had used all the floors for domestic activities only (prior to running a business at home). Because they need to generate money to pay the house rent, they run a home-business. Consequently, the ground floor is used for business activities and the first floor is used for sleeping. Subsequent to this, over time they have become less inclined to use the

stairs due to their age, and have thus decided to use the ground floor space both as a place for business activities and for sleep. Meanwhile, their business is growing, so the effect is to push business activities out of the house or to effect an encroachment on public space.

The above discussion has addressed permanent encroachment on public space carried out by households as an adaptation strategy to accommodate the presence of HBE activities. Households have many reasons for taking this strategy and realise that it takes a long time. Generally, the main reason is insufficient space for business activities at home. However, it should also be noted that households limit themselves in their encroachment on public space. This means that households use only part of a public space. In addition, the degree of compromise and tolerance shown by the neighbours is a key factor in this phenomenon. The next discussion focuses on temporary encroachments into public space, with three variations in the strategy.

b. Temporary Encroachment on Public Space

Basically, the process of encroachment, as an adaptation strategy undertaken by households, is identical to that discussed above, with the difference that the households concerned do not construct a permanent roof. This section will describe three kinds of temporary encroachment on public space, based on observations and interviews. **The first** is a common encroachment conducted by households due to insufficient space with which to accommodate their business activities; **the second** is an encroachment caused by the need for sunlight; and **the third**, the encroachment on public space for social activities, is because the space in the house is being used for business activities, and thus, the available domestic space has reduced (shrinking of domestic space).

Good examples of the first type of temporary encroachment are found in Case No. 4 and No. 12, whose characteristics have been discussed previously. Figure 6.24 below shows Case No.12, operated by Bu Dariman who sells fresh vegetables in her workspace (6 m²) and has effected an encroachment on the adjacent alley. In this case she protects the commodity from the weather with a tarpaulin sheet which is put away in the afternoon or evening. It is easy to install the tarpaulin because in front of the house is a plot that also belongs to her, the tarpaulin only covers 1.5 m of the alley. The phenomenon of temporary encroachment on an alleyway is common in *kampung* because the dwelling is not sufficient to accommodate the household's business activities, but based on observations in the field, those using this strategy tend to encroach on only part of the public space.

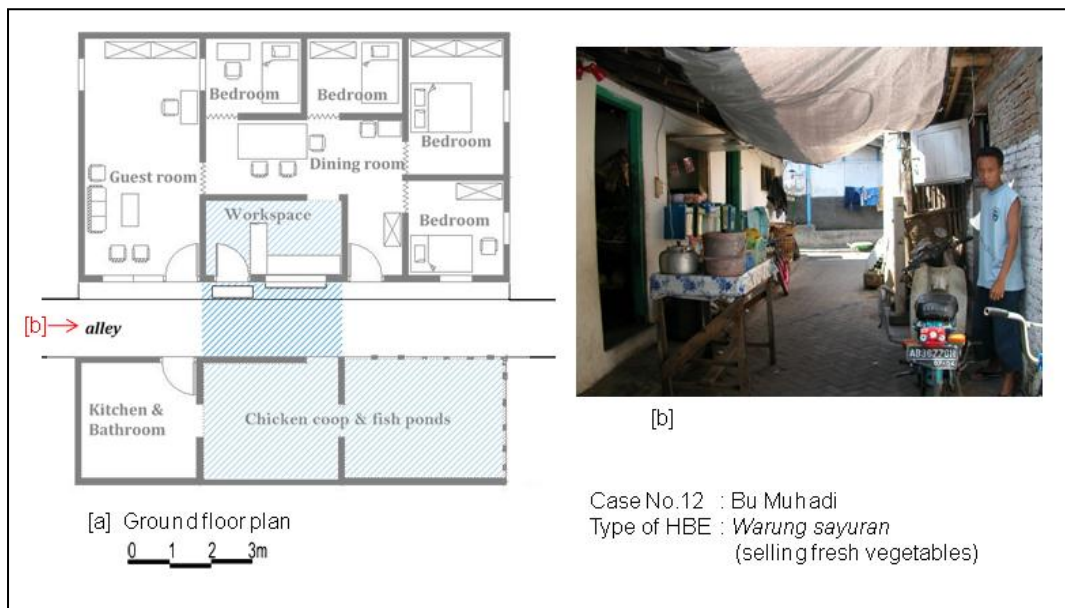


Figure 6.24: An example of a temporary encroachment into public space – Case No.12

Source: Fieldwork, 2003

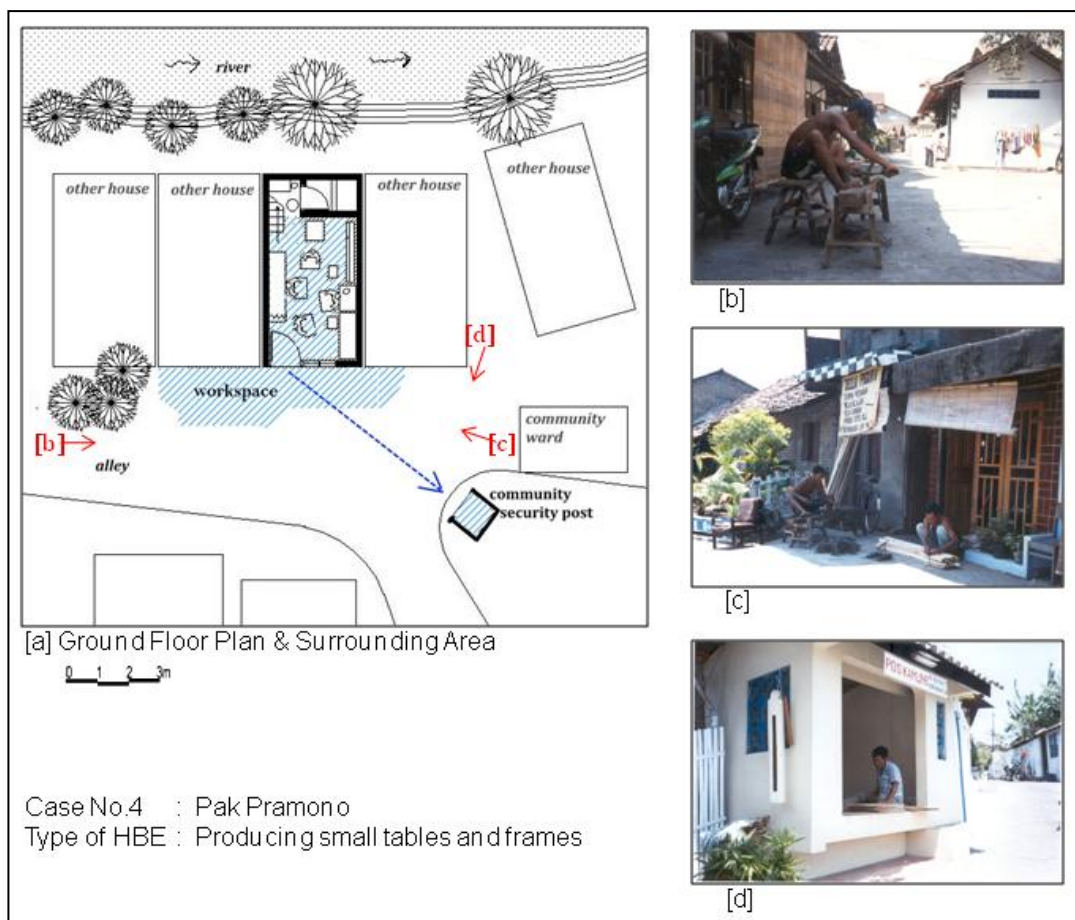


Figure 6.25: An example of a temporary encroachment into public space – Case No.4

Source: Fieldwork, 2003, 2005

Another example of a temporary encroachment on public space is Case No. 4 (Figure 6.25). This case, whose characteristics have been discussed earlier, is run by Pak Pramono, who produces small tables and frames. Because of the small workspace, the operators work outside the house and encroach on the space of the alley in front of the house; one worker even cuts plywood in the 'community security post' (see Figure 6.25 [c]). Fortunately, the alley in front of the house is quite wide, which makes it easier for operators to cut the iron bars for table legs there. Observation of this case shows that the encroachment on the alley is limited to the shaded area (Figure 6.25 [a] and [b]). Thus, the shaded area is an important area which limits activities in terms of a temporary encroachment on public space.

The second variation on a temporary encroachment on public space is demonstrated by Case No. 6, an HBE producing screen printed t-shirts (Figure 6.26). Due to the nature of its activities, there is a need for sunlight to dry the screen printed t-shirts, and these operations encroach onto the alley. From the photographs in Figure 6.26, it can be seen that the t-shirts which have been screen printed are placed on the edge of the alley and a fence belonging to someone else to dry in the sunlight. Pak Sofyan told me about how the drying process is managed in the rainy season. In that season, production activity is still running but the drying process, using the fan only, takes a long time. In addition, when asked about whether the drying activities interfere with neighbours/pedestrians or not, he explained that so far there have been no complaints from them. As long as these operations do not damage the fence, which belongs to someone else, then the drying process continues undisturbed.

The third variation is encroachment onto public space for social activities, resulting from business activities that restrict the available space in the house. This therefore represents a displacement of activities. The householders may like to stay at home alone or with family but also need social interaction with their neighbours. In Javanese urban areas, neighbourhood life is important because it strengthens community solidarity. Many kinds of social activity occur in the Java community in the urban *kampung* and especially in rural areas, for example *arisan*, *slametan*, *kenduren* and *sambatan*²⁹ (Guinness, 1986; Koentjaraningrat, 1984; Mulder, 1994). Case No. 1 is one of the HBEs that exhibit a temporary encroachment on public space due to insufficient space in the house for social activities.

²⁹ *Arisan* (see footnote 1). *Slametan* is a communal feast which symbolises the unity of social life and relationship with God which deals with safe, safety, and happiness. *Kenduren* is the expression activity of *slametan* where the host invites family, friends and neighbours to share food with them. *Sambatan* (see footnote 27)

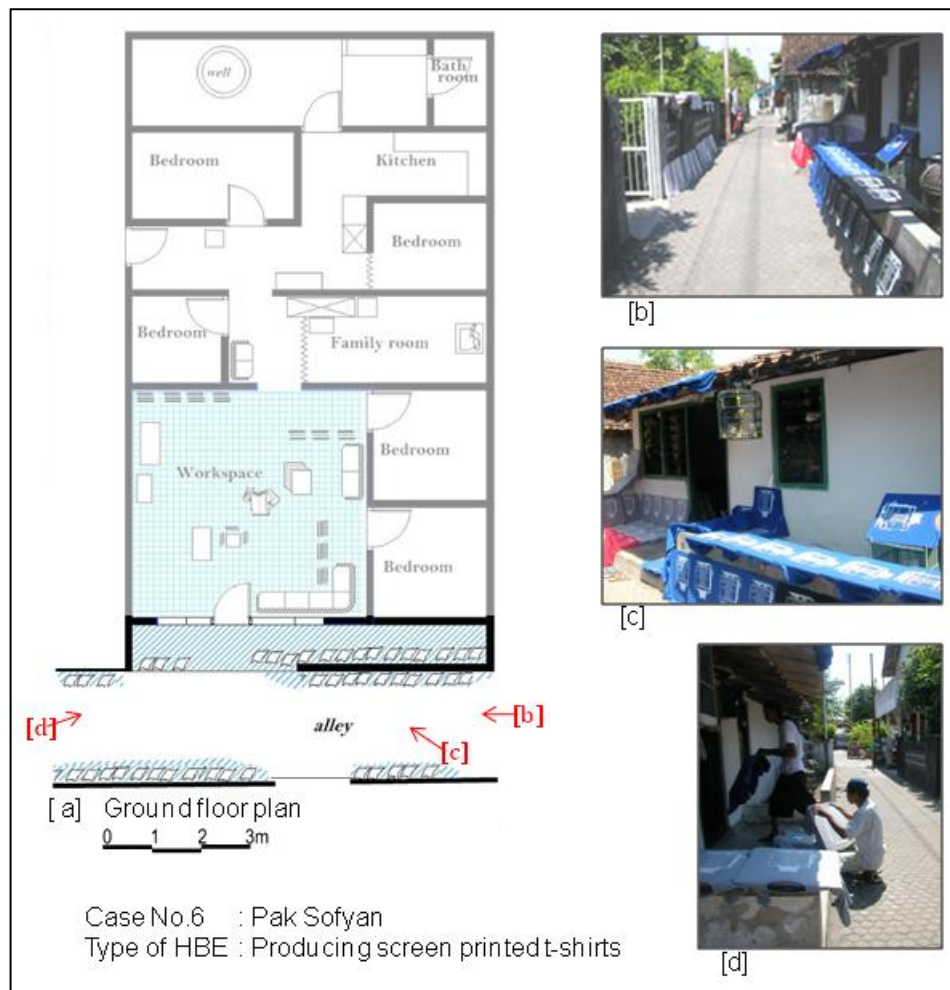


Figure 6.26: An example of a temporary encroachment into public space – Case No.6

Source: Fieldwork, 2003

At the time of observation, Bu Ariyanti (Case No.1) was the host for *arisan* activities because she had been the ‘winner’ of the previous *arisan* meeting. The *arisan* activity is generally carried out in the guest room and family room, and is attended by around ten members of the *arisan* group. However, in this case, because the guest room has functioned as a *warung kelontong* and the household has a very small family room, Bu Ariyanti has taken the initiative of using the alley and ‘community security post’ which is adjacent to her house (Figure 6.27) for the gathering. This means that the household has effected an encroachment on public space for social activities that are indirectly caused by HBE activities. Indeed, the life of the urban *kampung* includes many events that can take place in public space, for example wedding ceremonies or events around a death in the family. In this respect, community members accept the existence of such activities because they only make a temporary use of public space. Likewise, business activities that use the public space can

generally be accepted by society. This demonstrates how social tolerance becomes an important factor in *kampung* life.



Figure 6.27: An example of a temporary encroachment into public space for an 'arisan' meeting - Case No.1

Source: Fieldwork, 2005

To sum up, the discussion of temporary encroachment on public space above shows that it has characteristic differences in comparison with permanent encroachment. Both are adaptation strategies that allow householders to exploit the valuable asset of the house to earn an income by running HBEs from a small space in their homes. Insufficient space in the home stimulates an encroachment into public space, but at the same time, householders must also pay attention to the reaction of the surrounding community. Thus, living in dense settlements requires that each individual and household should seek relationships of mutual respect and tolerance with others.

Overall, in this section, we have examined the adaptation strategy of making more space as operated by households who run HBEs, which was originally based on Berry's notion of 'adaptation by reaction'. The strategies adopted by householders show that there are two phenomena under this heading, which are: expanding physically and encroaching upon

public space. The first is more permanent and more expensive than the second. However, the strategy depends on the needs of each household in terms of finance, business growth, the availability of space, and social relations with the surrounding community. In addition, this strategy also depends on motivations and decisions taken by households. Accordingly, it also proves that there are variations in the utilisation of assets owned by each household with a home-based business. This is underlined by Moser (2007a: 94), who states that *“asset accumulation strategies are tailored to the different types of assets. Issues relating to trade-offs, sequencing, and prioritization are all critical and context specific.”* Furthermore, only one of the components of the physical environment has so far been examined, that is fixed and semi-fixed elements, using Berry’s theory of adaptation strategies which is discussed in two parts, namely arranging interior space and making more space. The next section will explore adaptation strategies by households in terms of activities and movements. Activities and movements are recorded not only for the operators or households who run this business, but for the other actors who are involved, either directly or indirectly, such as customers, suppliers and neighbours. The results of the observations have thrown up some unexpected findings, including the strategic position of the operator, and blocking the space, among others.

6.4 Adaptation Strategies by Managing Activities and Movements

Activities undertaken by humans can be another way of adapting to their environment. Analysing this has required an understanding of how humans manage and control their activities (Rapoport, 1990a, 1990b, 2005). Cresswell (2006) observes that people’s movement is full of meaning. Furthermore, *“time is an inherent factor in adaptive processes, and temporal aspects of adaptation always must be studied if the movements of the behavioural systems are to be thoroughly understood”* (Bennett, 1980: 249). The meaning and power of human movement reflects issues such as dominance over the use of space, personal space, territoriality and many others (Bennett, 1980), depending on the themes identified. The technique of creating a ‘portrait of a place’, as proposed by Farbstein and Kantrowitz (1978), is used and further developed in this study’s analysis. This can also be called behavioural mapping, which deals with people’s location and movements, and how people actually distribute themselves in a particular area or location. Based on the foregoing suggestions, this section will explain the movements and activities relating to HBEs, in particular, those of their

operators, as adaptation strategies to cope with the co-existence of two activities in their dwelling.

6.4.1 Different Activities in the Same Space at Different Time

Table 5.21 in Chapter 5 shows that the average breaks down of space between business and domestic uses is 14% and 86% respectively. However, several cases were found that the households have very small house. In the case of insufficient space, households usually carry out a creative strategy to optimize the use of space, as has been discussed earlier, such as through the vertical placement of furniture, or through organising different activities to take place in the same space at different times, as will be discussed in this section. Generally in urban *kampung*, particularly in the urban centre, the houses and plots are small in size, with many residents. Various strategies relating to fixed and semi-fixed elements of the setting have been examined in the previous section. However, one part of that element has not been discussed. This concerns modifications to the windows, because this element is related to the analysis of different activities taking place in the same space at different times. For example, Case No. 20 is an HBE selling everyday food run by Bu Joko (46 years old), who occupies a small dwelling (12.5 m²). This dwelling is inhabited by four occupants, including Bu Joko, and contains one bedroom, a multi-purpose room, a kitchen, and a bathroom (shared with the next door neighbour), and thus the organisation of space in this case is very simple.

Based on my observations, the window of the Case No.20 has two functions (Figure 6.28). During the day, the opened window serves both for ventilation and as a table for selling food, while at night the window is closed so that the room can provide a more spacious sleeping space for Bu Joko's sons. This strategy is carried out because of the small size and rented tenure of the house, which means that there are fewer options for arranging interior spaces and creating more space. Figure 6.28 [c] indicates that Bu Joko was serving customers by placing food on 'the table'. During the day, this multipurpose space was used by customers to eat, which they would do sitting down on the carpet (Figure 6.28 [d]). This meant that the operation time for business activities was more limited than for other cases, because this household had to manage domestic matters related to the sons' education, mainly in terms a space for them to do their homework. In addition, the room was also used as a place in which to watch television and sleep. For this reason, then, according to Bu Joko, the business closed at 7 pm, and opened at 8 am the next day after her sons had gone to school. However, she

testified that its activities actually started up at 5 am, when she had to begin cooking in the kitchen and preparing food for customers and for the family.

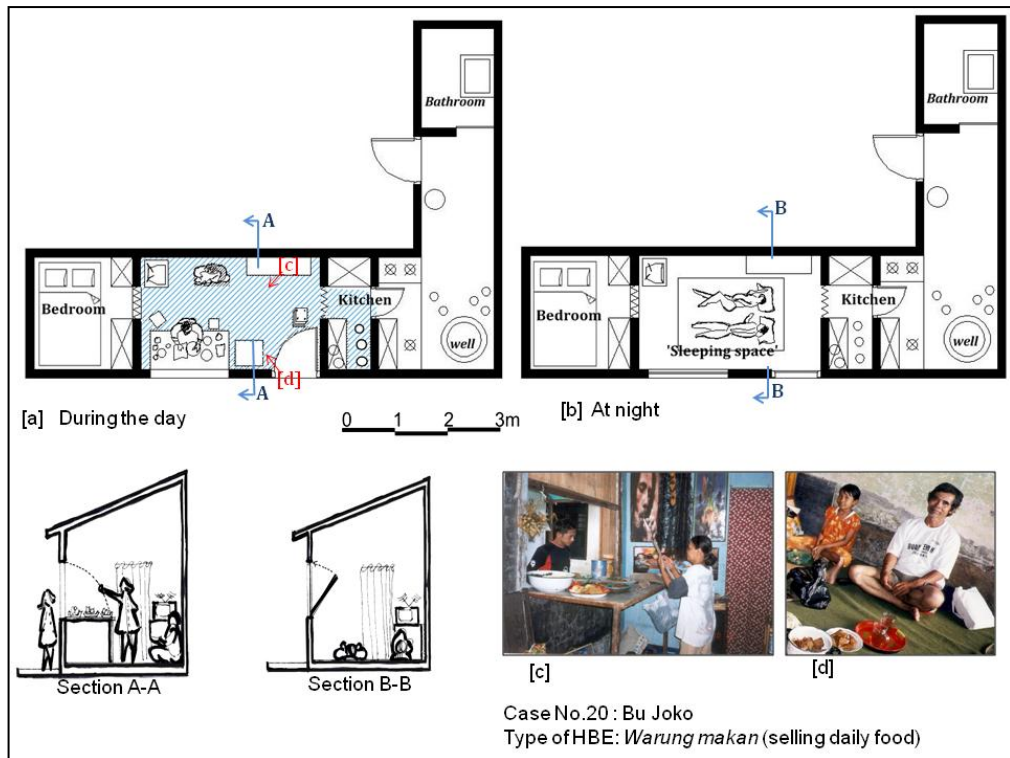


Figure 6.28: An example of different activities taking place in the same space at different times – Case No.20
 Source: Fieldwork, 2003

Similarly, in Case No. 4, the household was pursuing a strategy of adaptation to the use of a small space for two different activities at different times (Figure 6.29). As explained earlier (see Section 6.3.2 regarding vertical housing extension), prior to the completion of first floor construction, both domestic and business activities were conducted in the same space on the ground floor (12.50 m²). Therefore, during the day the ground floor was used as a workspace for finishing the production of small tables and frames, while the process of cutting plywood and metal table legs was undertaken outside the home, because it would not be possible in a small space at home (see Section 6.3.3 about encroachment into public space). To create the products for the business, Pak Pramono was assisted by three workers, all relatives also living in this *kampung* (Figure 6.29 [c]). His wife sometimes helped him by contributing to finishing the production of a small table after she had completed her domestic tasks, including delivering her daughters to school.

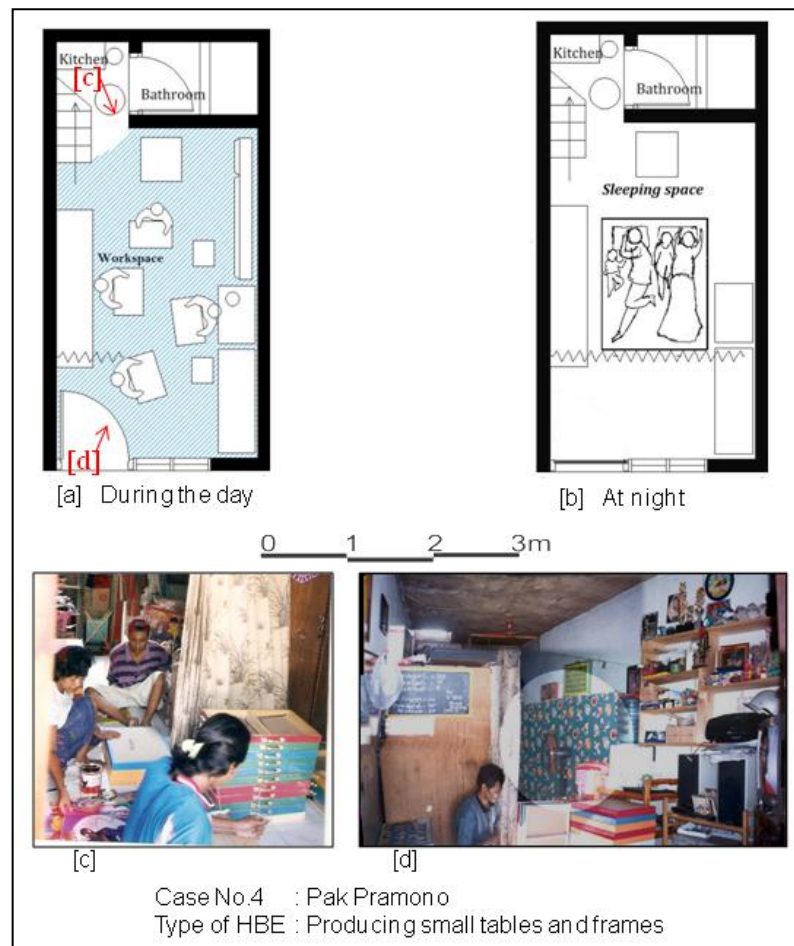


Figure 6.29: An example of different activities taking place in the same space at different times – Case No.4
Source: Fieldwork, 2003

At night the ground floor is used as a sleeping space for Pak Pramono, his wife and their two daughters, who are still in elementary school. They used a mattress as a sleeping mat which was propped against the wall during the day when this room is used as a place for working activities (Figure 6.29 [d]). The following account testifies to this statement:

[...] Since the first floor is still under construction, so in the morning after my daughters went to school I had to move the mattress and prop it up against the wall because this space will be used by my workers to work [...] but at night, the mattress will be laid on the floor to sleep.

(Pak Pramono, 37 years old, 8 June 2003)

Furthermore, he said that both finished and semi-finished goods were meant to be placed alongside a wall. The area for sleeping was also screened by the curtain because in the evenings, guests often arrived while his wife and daughters were asleep. He only hoped the

first floor construction could be completed soon, so that they did not have to keep moving the mattress every night.

The two cases above (Cases No. 4 and 20) illustrate the creative adaptation of households who run a business from home but in a limited space that has to be arranged differently at different times. Rapoport (1990b) showed that the organisation of time can be effected through the organisation of space. He also stressed that “*the same space can then be different settings through changes in the semi-fixed elements and varied activities of the occupants*” (p.13). Semi-fixed elements in this respect are the setting of the window, with its dual functions, and the arrangement the mattress. Finally, adaptation strategies undertaken by households in conditions of limited space that set the activities at different times have been examined. This also suggests that the concept of ‘representational space’, which is put forward by Lefebvre, can be seen clearly in the HBE cases where there is a relationship between space and time. Lefebvre (1991: 42) argues that:

[...] representational space is alive: it speaks. It has an affective kernel or centre [...]. It embraces the loci of passion, of action and of lived situations, and thus immediately implies time. Consequently it may be qualified in various ways: it may be directional, situational or relational, because it is essentially qualitative, fluid and dynamic.

6.4.2 Activities Follow Sunlight and Shade

Behaviour that encroaches into public spaces is common in the *kampung*, and is acceptable as long as it does not interfere with the surrounding community. If an alley or public space in front of a house is relatively large, then the household may use that space temporarily for either social or business activities. Some cases were found on behaviour that encroaches into public spaces due to the alley in front of the house is wider than elsewhere. The use of public space on a temporary basis can be understood and households also understand that the space is not theirs. Consequently, they are able to maintain harmony with their neighbours as long as they do not disturb others in any way. As stated by Sullivan (1980: 28): “*the idea of neighbours helping each other without expectation of reward, of working [...] helping in harmony for communal ends*” reflects life in the Yogyakarta *kampung*.

The movements of operators who engage in activities outside the home due to encroachment into adjacent public space seem to follow the movement of sunlight and shadow. Some of the HBE activities require sunlight for drying products, such as the production of screen printed

t-shirts, or the handicraft production of flowers from old newspapers. Some other activities require shade, because the nature of the activities requires neither sunlight nor permanent cover. Good examples for illustrating this phenomenon are two cases of HBEs that nevertheless differ in terms of their use or avoidance of sunlight. These are Cases No.4 and No.6, both of which have been discussed in Section 6.3.3 about encroachment into public space. The phenomenon of activity that follows the shade is drawn from Case No. 4. Figure 6.30 [b] illustrates that operators cut the metal furniture legs and prepare the raw material for the frames. At this point, they were using less public space, because at noon, the house shadow falls about 1 m from the house. In the afternoon, these activities continued and were able to occupy more public space because the shade was more extensive than at noon (Figure 6.30 [c] and [d]). In the photographs [b] and [c] it can be seen that the operators worked without their shirts, due to the hot weather at noon.

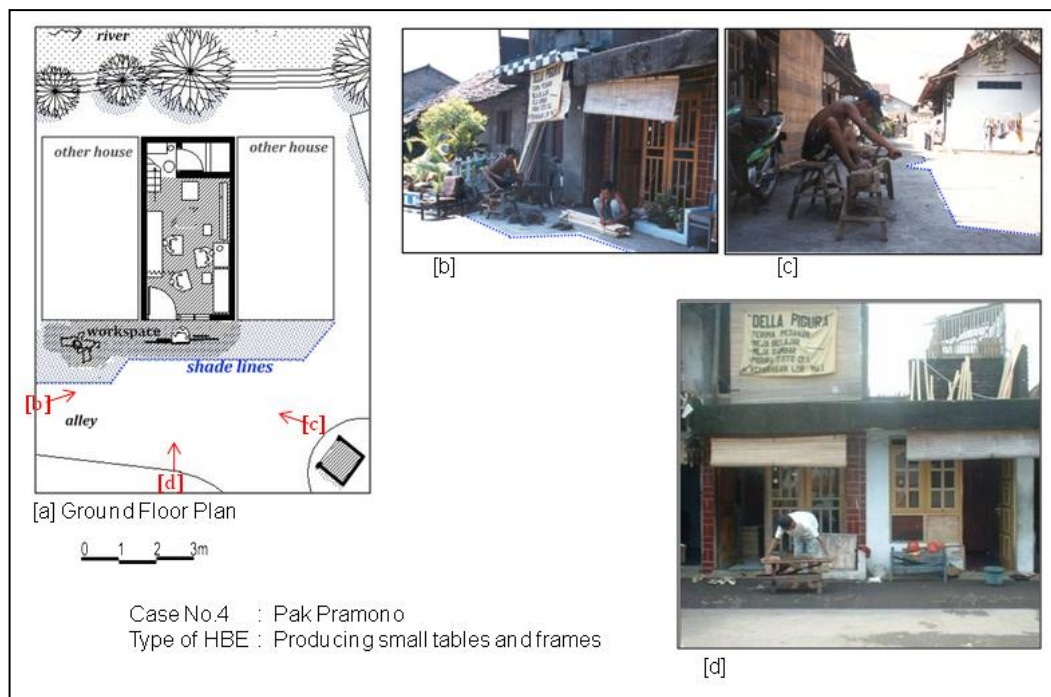


Figure 6.30: An example of the activities following the shade – Case No.4

Source: Fieldwork, 2003 and 2005

The opposite phenomenon is shown by Case No-6 (Figure 6.31). In this case, the operator needs sunlight to dry screen printed t-shirts. Wet screen printed t-shirts were dried on both sides of the alley in order not to interfere with pedestrians, cyclists, or motorcyclists. Figure 6.31 [b] illustrates that some shirts were dried on a neighbour's fence. Pak Sofyan, the operator of this business activity, recognised that their actions took place with the agreement of a neighbour, whose fence was used for drying. According to the neighbour, even had their

agreement not been asked, they would definitely provide opportunities for business activities as long these did not damage the fence. It should also be underlined here that the duration of use of the fence is only about four hours (10 am to 2 pm) per day, which is the time of maximum sunlight. This phenomenon also reflects the tolerance among community residents in the *kampung* which is marked by a community member's agreement to the use of their fence by a neighbour. In addition, this case is closely related to energy, space and time, as Lefebvre (1991: 12) has noted that:

When we evoke 'space', we must immediately indicate what occupies that space and how it does so: the deployment of energy in relation to 'points' and within a time frame. When we evoke 'time', we must immediately say what it is that moves or changes therein. Space considered, [...]; likewise energy and time.

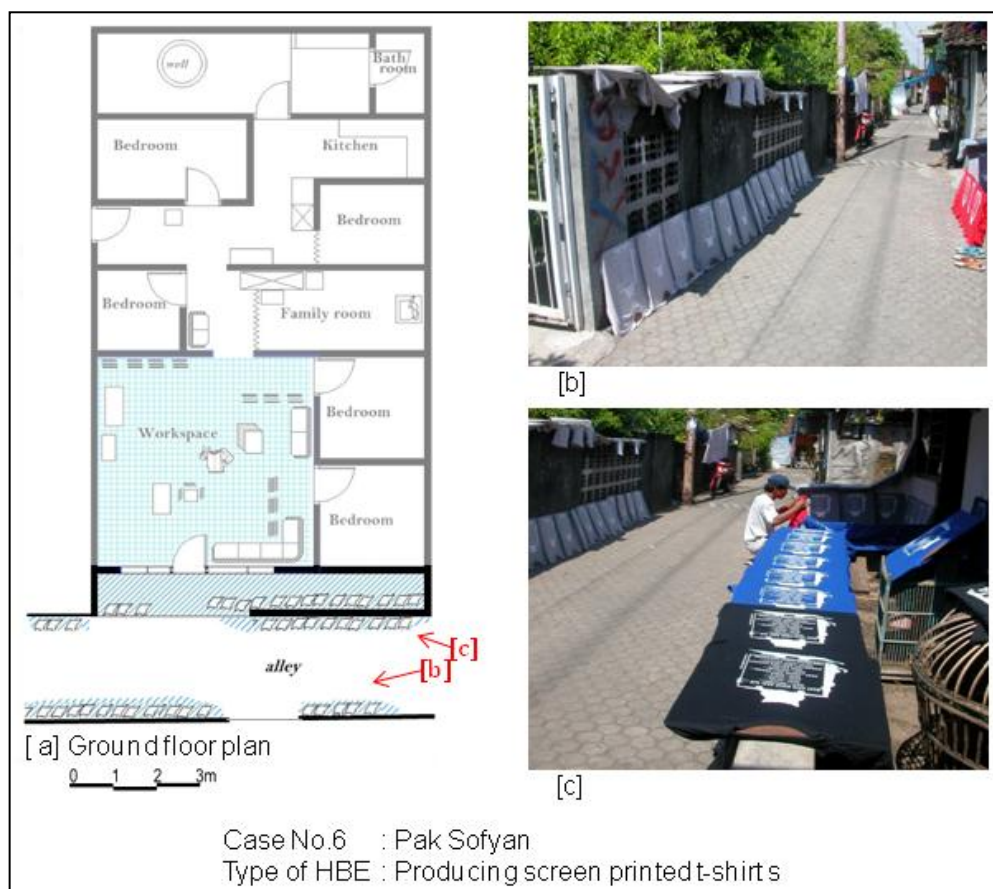


Figure 6.31: An example of activities that follow the sunlight – Case No.6

Source: Fieldwork, 2003

The conclusion that can be drawn from the two examples above is that encroachment into public space by HBE operators is not always caused by insufficient space at home.

Encroachment can also occur because of the specific nature of the business in requiring heat energy, which has implications for the space itself. Furthermore, territorial claims in this context are effected through the implications of undertaking business activities in a public space, even though the claim may be limited by time. Thus, 'time' plays an important role in HBE activities that encroach into public space. Another implication of this phenomenon is tolerance, which is not only indicated by neighbours around HBE activities, but is also expressed by the HBE operators themselves. Tolerance, according to Guinness (1986), contributes towards achieving social harmony in the *kampung*. Public space is a mediator to reflect an attitude of tolerance among community family members. Thus, space is not simply as a container of physical activity but becomes a container that also has a social meaning. Lefebvre (2009: 186-187) emphasised the importance of public space as a social space for the community and states that "*space is social: it involves assigning more or less appropriated places to social relations [...] social space has thus always been a social product.*"

6.4.3 Sitting and Waiting in the Guest Room: *Strategic Position*

As mentioned in the previous section, the guest room is an important space in residential Indonesia. This room is usually equipped with tables and chairs or sofas. Even when households run a home business, this room is usually provided, although it may be quite a small space. For HBE operators, especially those who sell fresh vegetables or sell everyday goods, this room becomes important and strategic as an 'intermediary space' for the two activities (domestic and business). Therefore, in the small-sized houses that characterise the *kampung* of urban centres, the guest room is often combined with the family room, which is usually a room in which family members eat and watch television. In such cases, the guest room is equipped with a television and a sound system.

Based on observation of their activities and movements, operators who sit in the living room, watching television, and waiting for customers are an interesting phenomenon of the HBE, especially businesses selling everyday goods or fresh vegetables. For example, in Case No.1 at a certain time, Bu Ariyanti sat watching television in the guest room, while waiting for customers to arrive (Figure 6.32 [b]). When customers turned up, wanting to buy something, she moved to the workspace and served her customers. After the transaction was complete, she generally moved back to the guest room (which is also a family room) to sit, watch, and wait. Sometimes, however, she would move into the kitchen to cook for the family or to the bedroom or bathroom. In this case the distance between the guest rooms and work space was

only 6 m (Figure 6.32 [a]). Although from a sitting position, the operator could not directly watch the workspace, when customers arrived and asked to buy something, she could still hear their voices. Because the bedroom is a very personal space, people's movements to and activities in the bedroom are not subject to observation. According to Bu Ariyanti, normal activities in the bedroom during business operating hours are changing clothes or praying. Family members rarely slept during the day, including at weekends. Hence, bedrooms are mainly used at night.

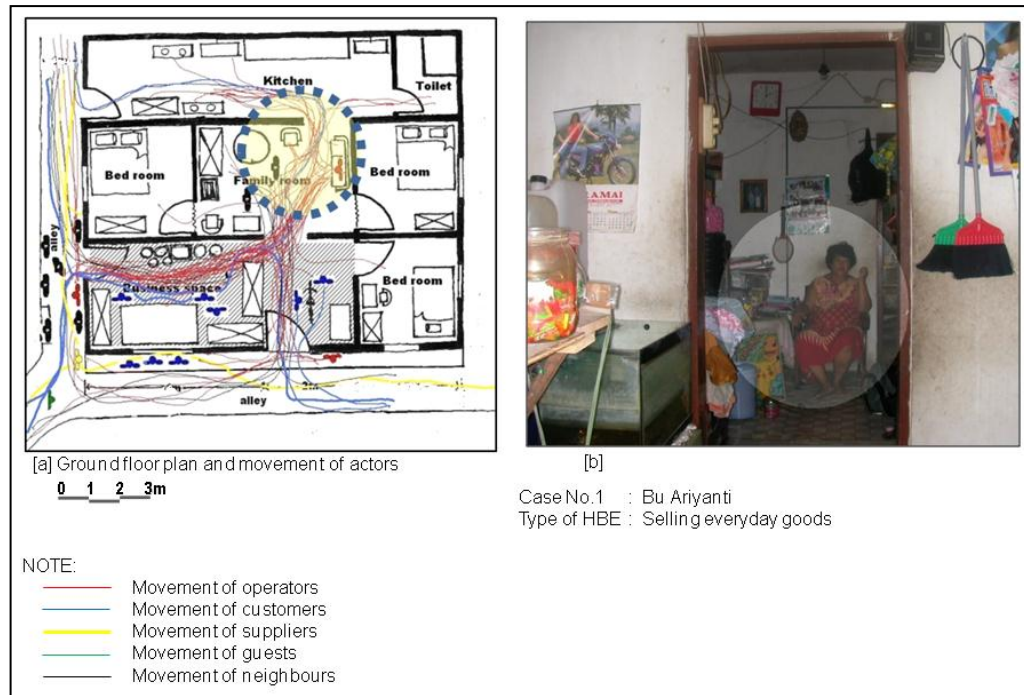


Figure 6.32: An example of a strategic position – Case No.1

Source: Fieldwork, 2005

The same phenomenon occurs also in Cases No. 2 and No.15. Bu Muhadi and her family's activities connected with their business selling fresh vegetables begin at 6 am every day. From 6 am until 1 pm they are busy serving customers. When I observed, after this seven hour period of serving customers, Bu Muhadi looked tired and sat down. Sometimes she has lunch or prepares food in the guest room between 2 pm and 4 pm because at that hour customers seldom buy vegetables (Figure 6.33 [a] and [b]). Nevertheless, if customers should arrive wanting to buy vegetables at that hour, she would be happy to serve them. In such cases there is no time restriction on serving customers, as compared with the formal sector, where there is generally a break-time. Time is money for HBE operators. In several cases of HBE which sell fresh vegetables, the operators use the afternoon as a time to pick out and

remove vegetables that have withered or wilted. Similarly, Bu Muhadi removes vegetables that are no longer fresh enough to sell before closing her work space in the afternoon. The *warung's* closing time is 8 pm. Fresh vegetables are sold seven days a week unless there is an important event such as a wedding for a near neighbour or, and especially, if a neighbour has died. This explanation is important because space, time, labour and money are all significant resources for urban households.

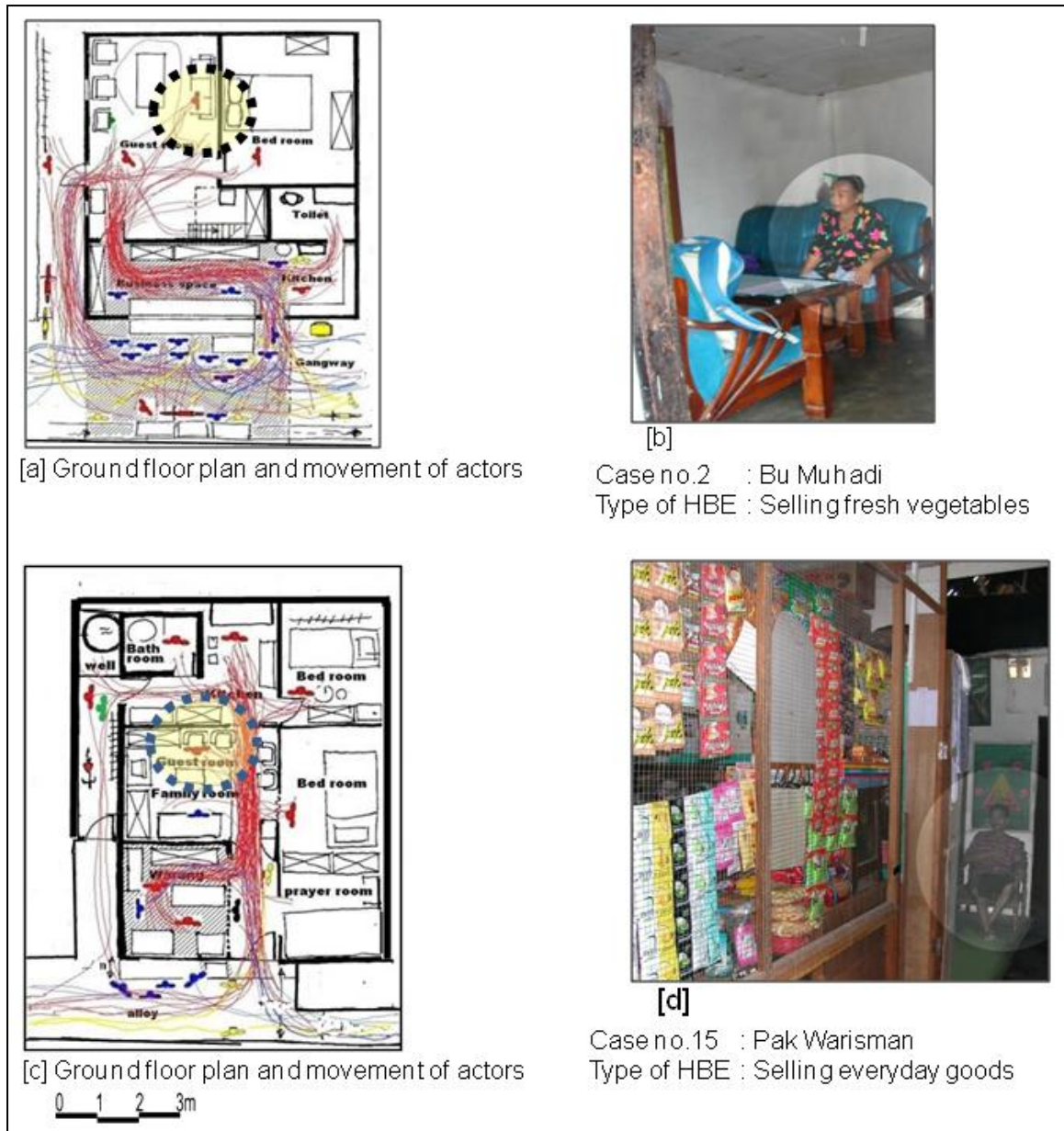


Figure 6.33: Two examples of a strategic position – Cases No.2 and No.15

Source: Fieldwork, 2005

The phenomenon above also occurred in Case No.15 (Figure 6.33 [c] and [d]). When there are no customers seeking to buy his range of goods, Pak Warisman is usually to be found sitting in the guest room, which is also the family room, watching television. As with Case No.1, the guest room is located relatively centrally within the house space, and the workspace is at the front. Thus, the guest room is in a central position (Figure 6.34). As well as the importance of where the guest room is located, the operators' sitting position is also significant, because the selection of the sitting position in the guest room indicates a dual role, as an actor in both domestic activities and business activities. Indications can be gathered from the operators' activities in that space. For example, when sitting in the guest room, operators can both prepare food for cooking and keep an eye on the workspace. Nevertheless, the activities which they find appropriate for this space depend on the operators themselves. It is difficult for us to identify in any more detail whether these might be domestic affairs or business or both. One important point is that operators are rarely seen sitting in their workspace over long stretches of time. This phenomenon reminds us that the home is a domestic sphere, even though business activities take place therein.

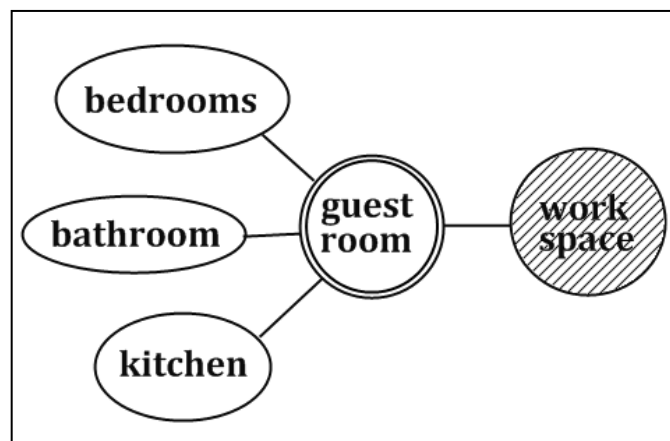


Figure 6.34: The central position of the guest room in the spatial organisation of the *kampung* house

The three cases above are examples that show the importance of the guest room, and where the operator sits within it, in the home business phenomena. The central position of guest rooms in the organisation of space in *kampung* homes is obvious from the description above. Based on observations of other HBE cases, it turns out that this phenomenon also occurred even when the workspace is outside the main house (adjacent space). Even when the workspace is located relatively far from the main house (although it should be noted that it is still in the same plot), operators also sit in the guest room, not only to receive guests, but also

to keep an eye on the workspace. This all implies that there is some specific movements relating to business activities in the home and implicating to the organisation of space, because of the unwritten rules of the culture, which are reflected in the spatial organisation of the operators' houses (see Rapoport, 1994).

6.4.4 Blocking and Marking the Space

There are many varieties of response to preserved and protected territorial boundaries, from simple indicators to complex signals and hard physical responses (Altman, 1975). When I observed households' behaviour, it became clear that they tended to close their bedroom doors, as they responded to the presence of other people who are regarded as potentially encroaching on their territory, since the bedroom is a private space. Some cases had a bedroom door which was open, but screened with a curtain in order to avoid being seen by others directly through the open door. Another response is to block access to the area through the household members' movements and gestures. This was done so that other people would not encroaching further into their territory. The movements and gestures of the operator can have the effect of making an invisible barrier between operators and new customers (Figure 6.35).

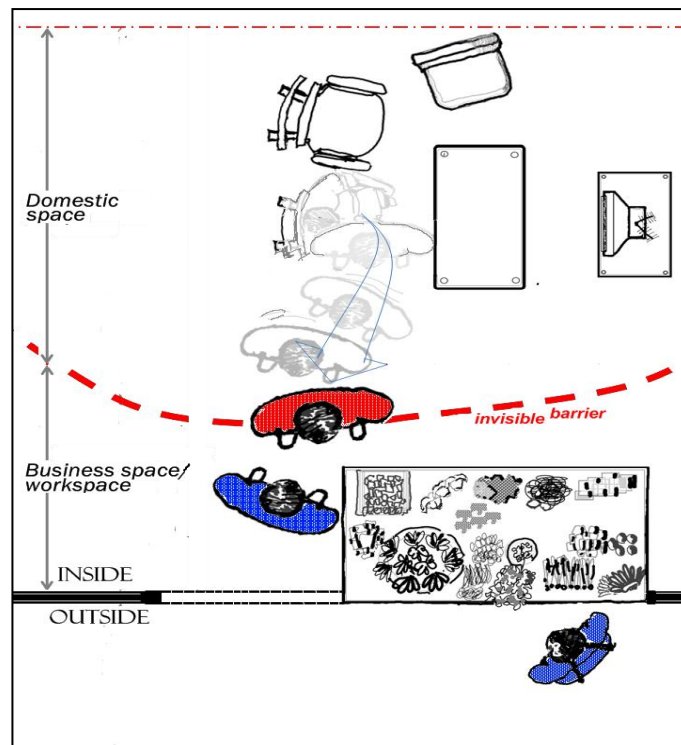


Figure 6.35 Blocking space with invisible barrier

The above phenomenon also occurred in Case No. 14. Based on my observations, which are represented based on records tracking the movement of the operator, Bu Sugiarti moved quickly to approach a new customer who entered her house through creating an imaginary boundary or an invisible barrier (Figure 6.36). With this action, the customer stayed just within the business area. The blocking phenomenon is usually applied to new customers or buyers who are not close neighbours. The new customer rarely goes into the house so as to enter the private sphere, because that behaviour could be considered a serious breach of good manners. The opposite phenomenon, however, occurs with the customer who also is a close neighbour, such that these kinds of customer are allowed to buy goods by passing through the kitchen, as long as the kitchen door has not been locked by the operator (Figure 6.37). Nevertheless, this kind of activity and movement depends on the specific organisation of space in each house running a business activity. In the case mentioned, neighbours are customers. The role of actors involved in the HBE activities depends on circumstances and can very quickly change as needed. For example, a neighbour who communicates with the operator in front of the workspace can at the same time act as a customer.

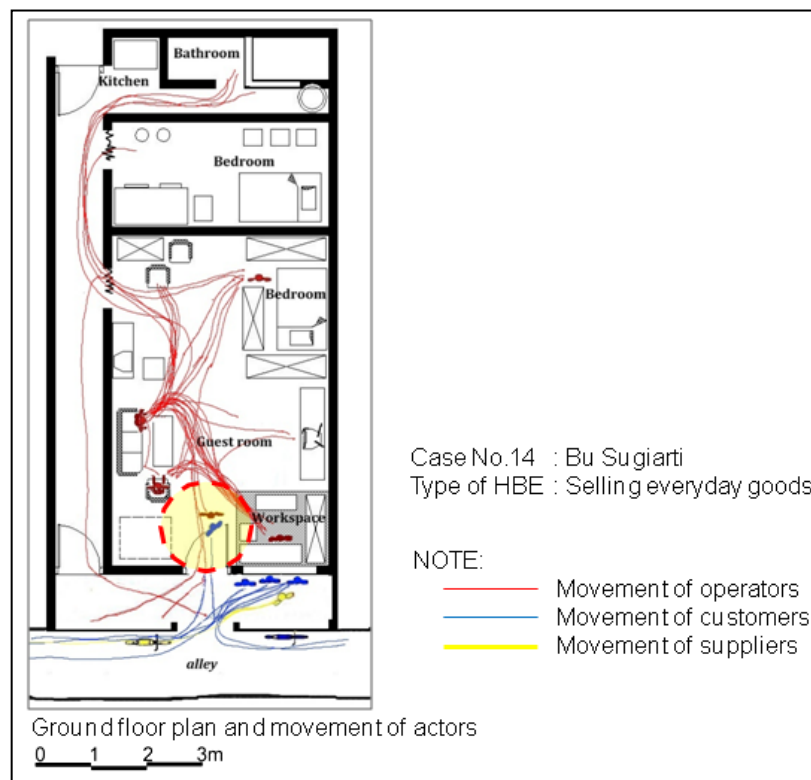


Figure 6.36: Blocking space by an operator – Case No.14
 Source: Fieldwork, 2005

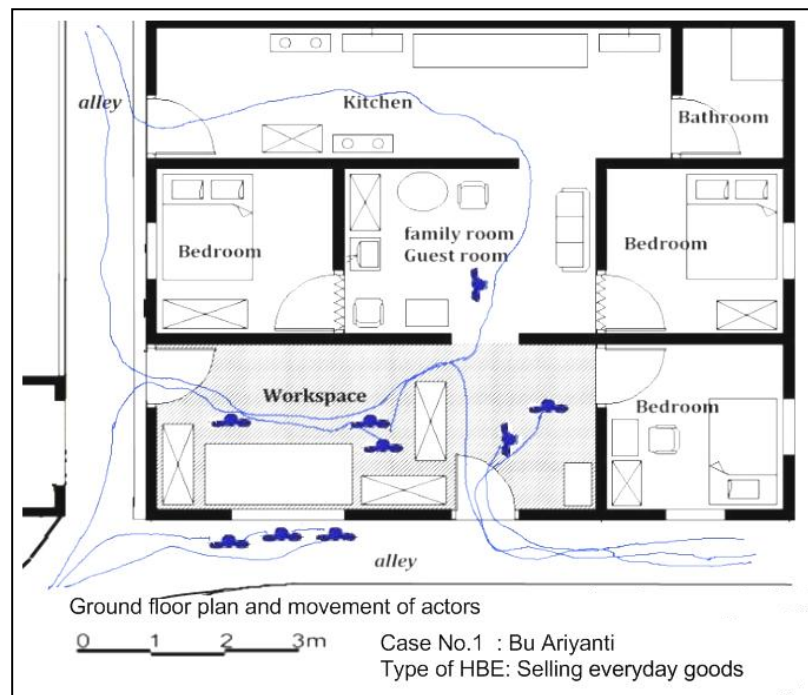


Figure 6.37: The movement of a neighbour as customer, passing through the kitchen – Case No.1
 Source: Fieldwork, 2005

The best choice for a customer is generally to stand outside the house and make their purchase through the workspace window. However, they may move into the house if they need to look at the goods more closely. Nevertheless, the behaviour of entering the house to buy goods is not common. The observation of actors' activities and movements indicated that customers and suppliers are rarely to be seen near private areas, such as bedrooms. The observation also recorded that new customers will not enter the house uninvited or without the operator's permission. In addition, if no one is in the house or the operator is in their workspace, customers and especially new buyers will say "*permisi*" (excuse me) and stand near the door or window workspace. In situations where there is no operator, the customer who is also a close neighbour will usually take their goods and pay at a later date when they see the operator. The culture of mutual trust among community members is still held by them in high esteem.

Blocking and marking space by creating an invisible barrier has been discussed above. Some cases demonstrated a blocking strategy implemented with a half-door or by removing shoes and sandals at the door to keep the area clean. The concept of clean and dirty areas, generally, applied in Muslim households. Kellett and Bishop (2000: 6) also state that "*the dichotomy between clean and dirty becomes an important factor in organising working and living*

activities in both space and time.” Figure 6.38 [b] demonstrates Case No.16, in which the household uses a strategy to remove shoes and sandals at the door so that the home space remains clean. Whereas Figure 6.38 [d] and [e] show that the half-door was built in order to block customers, so that they do not enter the domestic territory, but the household can still see the situation outside the house. The example in Case No.15 reflects the phenomenon of cleanliness in the house through the construction of a half-door. Pak Warisman said:

“I built the business space with a barrier of wire mesh so that the merchandise is not scattered everywhere [...] I also built a half-door which is aims not only to deter customers from entering the house, but also because sometimes the neighbour’s chickens entered the house and littered the floor,.. [...] whereas near this door is a space for prayer.”

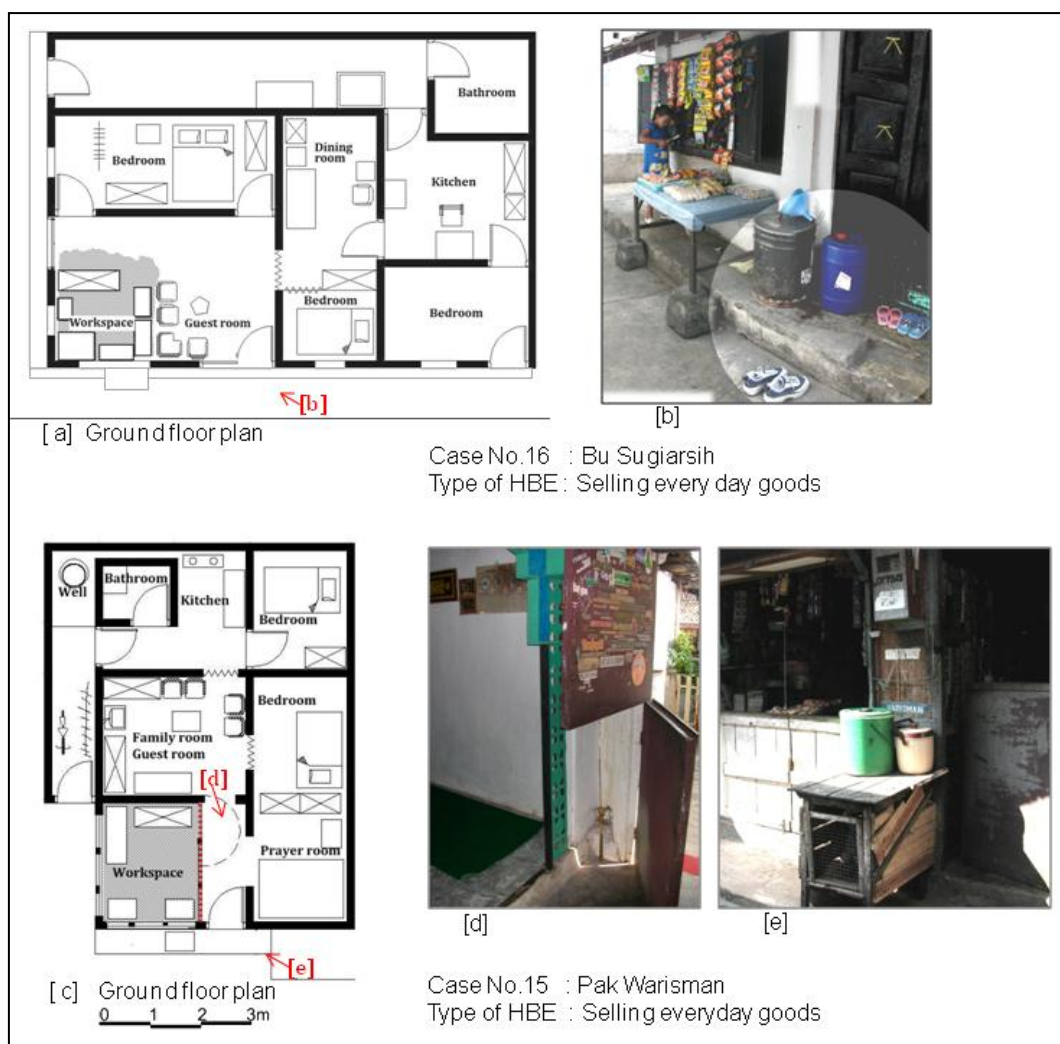


Figure 6.38: Examples of blocking and marking the space with a half-door and removing shoes and sandals – Case No. 15 and No. 16

Source: Fieldwork, 2005

From the above description, it can be concluded that one of adaptation strategies undertaken by households with business activities at home is to use a blocking technique to protect themselves from the encroachment of customers into the house. The attitude shown by the operator who blocks a space is protection of their territory, of course, in a way that will be perceived as courteous. In addition, the encroachment of some type of customers into the space does not necessarily have a negative connotation. This clearly shows that it is possible to make a separation between domestic and business space not only through using fixed and semi-fixed elements but also through the movements and gestures of the operators.

6.4.5 Facilitating Social Interaction

As an unplanned consequence, the location of HBEs, either directly or indirectly, is an aspect that facilitates social interaction among sellers/operators, buyers/customers, surrounding neighbours, and suppliers. Initially, meetings between a particular customer and other customers, or between a customer and a seller, are limited to retail trade transactions, as for trading activity in general. Because this activity becomes a daily routine performed by people who regularly meet at the same place, a relatively large space in the front of the workspace thus becomes a place for social interaction among them. The size of the space that is formed in the presence of this activity is dependent on the existing site, which is essentially a public space. The activities of those interacting generally include sitting, conversation and caring for infants.

Cases No.2 and No.19 are two examples demonstrating the phenomenon of HBE as place facilitating social interaction. (Figure 6.39). In Case No.2, as discussed earlier, the household had made a permanent style of encroachment into public space with a zinc roof. This space became a gathering place for customers and surrounding neighbours, especially in the morning when they bought fresh vegetables (Figure 6.39 [b]). My first assumption was that the customers only intended to buy fresh vegetables, but based on my observations over time, it became clear that their activities were not only limited to buying but included interacting and occasionally joking with each other. This phenomenon in this space is not only a morning occurrence. In the afternoon (around 4 pm), such phenomena also occur, but with different characteristics. That is, neighbours get together in that space, sitting, talking, and joking. This is because the space is covered with a roof, so that the neighbours feel comfortable in using it as a place for social interaction with others. This also gave the operator the opportunity to ask the neighbours what kind of vegetables they needed.

Similarly for the neighbours, the opportunity was used by them to order certain types of vegetables from the operator.

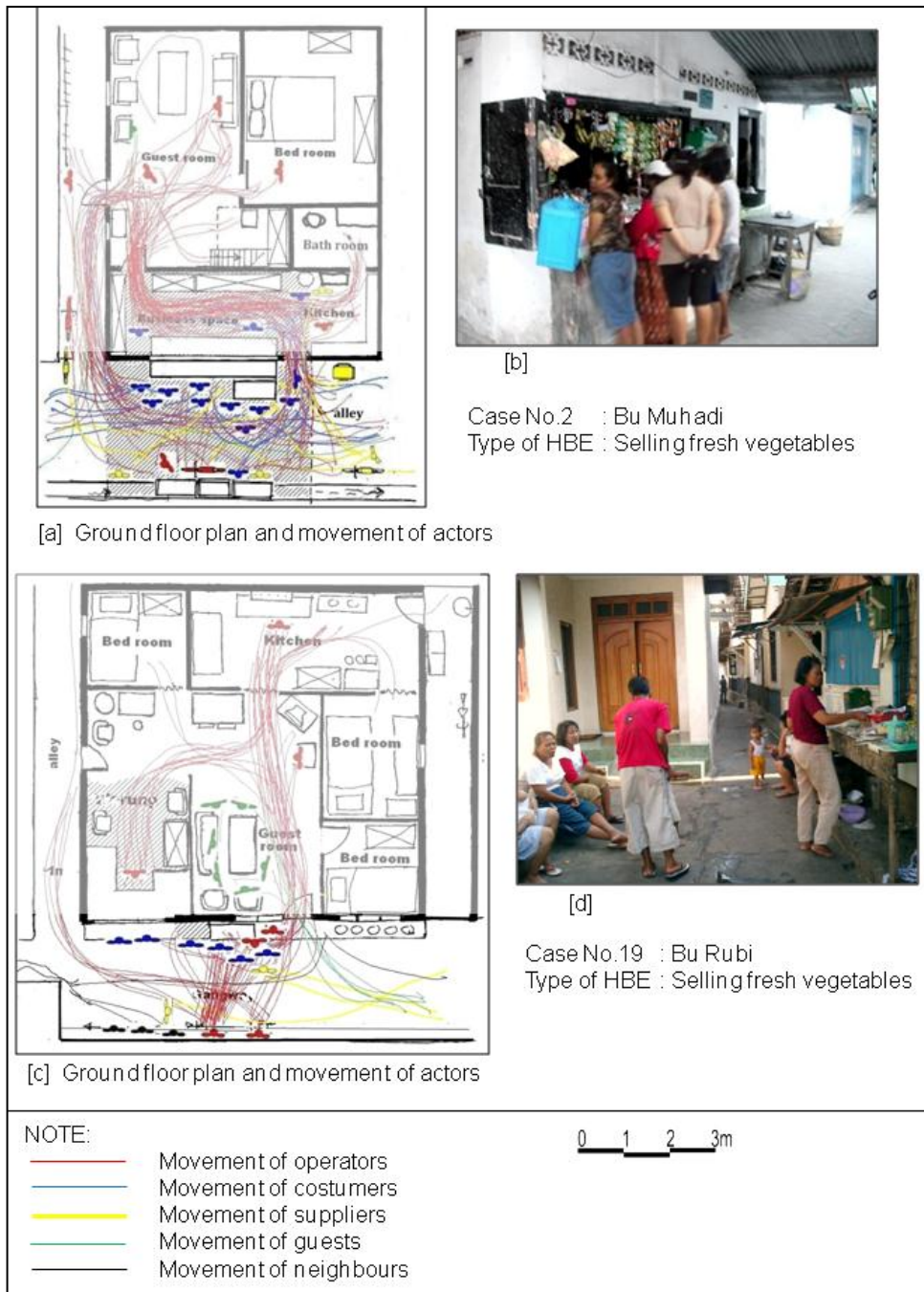


Figure 6.39: Two examples of an HBE as a place for facilitating social interaction
Source: Fieldwork, 2005

Similarly to Case No.2, but with different nuances, the HBE in Case No.19 is also a place for social interaction supported by a shaded space, due to the effects of house shadows in the afternoon. The houses in this location are very densely clustered, so that the shadows they

cast can protect people from sunlight. It was mentioned earlier that the type of HBE in Case No.19 sold fresh vegetables as a main activity in the morning. However, this household also had an additional activity, which was selling fried food in the afternoon. Figure 6:39 [d] shows the neighbours communicating with each other, while others watched children playing, and among them were also customers buying fried food. Bu Rubi sometimes serves customers, or fries the food, and sometimes takes part in the conversations with other neighbours. The essential subjects of conversation are homemaking, child development, schoolchildren's activities, the rising prices of basic commodities, and cooking methods. This corresponds with the demonstration by Guinness (1986) of the importance to people living in the *kampung* of maintaining a sense of closeness and neighbourliness.

The two examples above indicate that there is a link between social and business relations in terms of HBE in urban *kampung*, as stressed by Kellett and Bishop (2006). Economic linkages can be used to consolidate social networks, and vice versa. Social relations in this case are not only between the seller and buyer, but also among other actors when the business activities take place. This involves sellers/operators, buyers/customers, neighbours, pedestrians and also suppliers. These activities indicate that proximity and familiarity with neighbours are one key to the success of the home business. In other words, maintaining social links, as an element of social capital, has implications for financial capital, either directly or indirectly. Space for facilitating their social interaction acts as a medium for the phenomena that occur and is an 'extension of the favourable business space'.

6.4.6 Shifting the Essence of Home

Many authors have discussed the meaning of home and the body of literature on this topic is very large and rich (see Smith, 1994a; Wise, 2000; Ryd, 1991; Rybczynski, 1988; Harris and Brown, 1996; Altman and Werner, 1985; Cooper-Marcus, 1995; Lawrence, 1993a; Moore, 2000; Perkins *et al.*, 2002). One of the normative meanings of home is domesticity. A discussion of domesticity explains a large set of elements, such as emotional feelings, relaxation, social and family interaction, privacy and intimacy. It is defined more comprehensively by Benjamin with regard to home as domestic daily life, that is:

The home is that spatially localised, temporally defined, significant and autonomous physical frame and conceptual system for the ordering, transformation and interpretation of the physical and abstract aspects of domestic daily life at several simultaneous spatio-temporal scales, normally activated by the connection to a person or community such as a nuclear family (1995: 299).

In addition, Kellett and Moore (2003: 24) also point out that “*the concept of home is of value as it uniquely encompasses the social, psychological and cultural aspects of domestic living including key processes and goal-making.*” For example, the types of cooking activities included in domestic activities at home are influenced by differences in ethnic group, class and location that reflect a particular culture. Cooking is often used to explain domestic activities within the home by Rapoport (2005, 1999) and Kent (1990, 1984). Similarly, Rechavi (2009) revealed that many studies on the living room tend to regard it as a place for domestic activities. Therefore, these two examples of the use of space tell us that the house, basically, is a place for domestic activities.

Business activities in the home lead to a shift in the essence of the house such that it is no longer purely a place for domestic activities. During the day, space in the house is more dominated by business activities. This is evidenced from the results of observations over time (Figure 6.40). Although the movement patterns of the actors are varied, the movements of the operator in the home are more dominant in the workspace, and are marked by shading. This is evident from the accumulation of traces marked in red (the red line traces the movement of the operator). The intensity of operators’ movements depend on the type and scale of business, number of employees, number of customers, the organisation of space, the form and shape of the room, and the house location. During the day when the observation took place, the intensity of the operators’ movements in the domestic areas has created some tracings. This means that during the day while they conducted their business, they also still undertook domestic activities, such as cooking in the kitchen. However, as has been discussed earlier, despite the dominance of the intensity of their activity in the workspace, when they sit down for a while, take a rest, or eat, they will tend to remain in domestic spaces, such as in the family room.

Finally, exploration of the movement traces tells us that there are differences in the intensity of space usage by users, which in this case means the operator. The point is that the spaces in the house allows for the creation of different settings at different times, as was explained earlier (Section 6.4.1), but in this section, the emphasis is on movement. Settings and rules are usually communicated by cues (Rapoport, 2005), one of which is the movement of the user. Thus, different settings cause a shift in the essence of the house, from what was originally a single entity as a place for domestic activity, becoming place with a multiple identity, that is, as a place for both domestic and business activities.

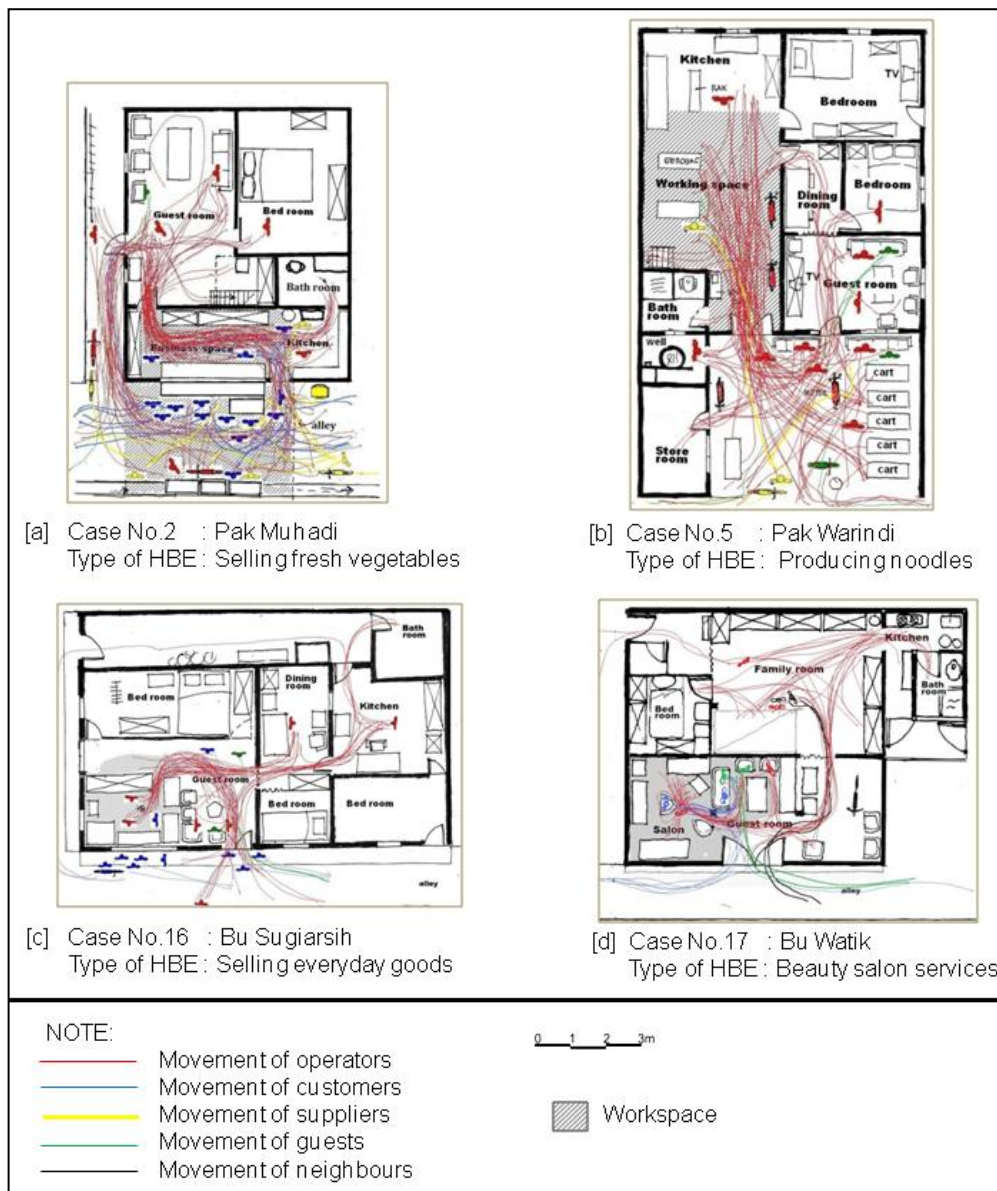


Figure 6.40: Examples of a 'portrait of place' made by the movements of actors
Source: Fieldwork, 2005

6.5. Conclusion: Three Adaptation Strategies

The adaptation strategies conducted by households as a response to multiple-activities taking place in the limited space of the house are varied. These variations are influenced by many factors, such as size of space, form and shape of space, organisation of space, scale and type of business, business characteristics, the number of workers and financial matters. Three strategies of adaptation in line with Berry's (1980) theoretical proposition have been adopted in this study to initiate the analysis. Adaptation strategies undertaken by households

with HBEs reflect two of the Berry's three propositions, which indicate the existence of an 'active' strategy taken by households in adapting to their environment. However, the analysis of the third, 'adaptation by withdrawal' did not manage to establish any convincing evidence that households move out due to the pressures on space. While some residents wish to move out to find a larger house and a better location, this it is not actually progressed, based on many considerations, one of which is the cost factor. The household become resigned to their environmental conditions and this attitude is called the strategy of 'passive' adaptation. The analysis of this study has focused on 'active' adaptation strategies, pursued by manipulating the fixed, semi-fixed and non-fixed elements that are part of the 'system of settings and system of activities' introduced by Rapoport (1990b). Accordingly, the conclusions of this chapter will be described in three parts.

The first part, covering two sections of this chapter, has investigated the adaptation strategies of households through elements that are semi-fixed and fixed, such as furniture arrangements and wall construction. The discussion focused on existing space and on the extension of space. Both reflect an adaptation strategy by adjustment and by a reaction in terms of physical interventions. Based on interpreting the physical elements of the built environment, through methods including interviews and other observations during the fieldwork, this study found six themes within households' strategies in adapting a small house for business activities. These are as follows:

1. Dividing the existing domestic space into two separate spaces for business and domestic activities;
2. Sharing the domestic furniture for business activities;
3. Expanding the workspace but still providing a substitute for domestic space;
4. Optimise small spaces and utilising empty space;
5. Creating new space for business or for domestic use or both; and
6. Encroaching into public space.

The second part of the chapter has involved strategies for adapting to a small house in which dual activity is based, in terms of the activities and movements of operators and other actors. This analysis has found three more themes of strategies undertaken by households which are directly related to the condition of running an HBE in a small space. These are as follows:

1. Households adapt to the limitations of space through strategies managing activities and time; and

2. Encroachment into public space for business activities is not only because there is only a small space in the house, but also because sunlight (or shade) may be required, in accordance with the characteristics of the business.
3. To protect the territorial space in the house from encroachment by customers and strangers, operators applying blocking to the area through their attitudes and gestures, physical boundaries and rules. This ensures that the space inside the house is clean, although the outside is dirty. Space in the home is for family and friends/ neighbours/close customers.

In addition, there are three other findings which are not directly related to limited residential space but may be important for housing policy and/or development of housing design in the future, especially where there is a business presence in the house. The three findings are as follows:

- a. The guest room is the intermediary between the domestic and business spaces, because this room is usually in a central position, functioning as a place for operators to rest and for other domestic activities, a place to wait for guests and customers, and a place for keeping an eye on the workspace.
- b. The existence of a place for retail business activities at home in the urban *kampung* also becomes a gathering place for customers and their surrounding neighbours. Thus, this place is not only a physical space, but is also a social and economic space. This implies a paradigm shift in housing from the individualistic to the more collectivistic.
- c. The dominance of the activities and movements of operators and other actors indicates that there is a shift in the essence of the home as a place for domestic activities into a place for both business and domestic activities, particularly during working hours. The behaviour of other actors in the house showed that the space inside the house is no longer private. The most private room is the bedroom.

Finally, the analysis of the physical elements, activities and movements of households have been explored in an attempt to reveal the adaptation strategies that they pursue in response to crowding and the encroachment of other people as a result of running business activities at home. The nine themes that have been found above can basically be grouped into three main adaptation strategies undertaken by households in relation to the business in the house. These are (a) the adaptation strategy by sharing, (b) the adaptation strategy by extending, and (c) the adaptation strategy by shifting. The grouping is based on similarities among the characteristics that have implications for space.

The **'adaptation strategy by sharing'** means a domestic space in the house was originally intended to be used for domestic activities is shared for business activities. There is a variety of ways to share used by households, such as those discussed in this chapter, for example, where the space is divided between two activities by positioning the furniture or erecting a partition. This group includes adaptation strategies in the form of optimising, shrinking, and blocking and marking the space, as strategies conducted by households that are still within the sense of a domestic space shared for business activities. **'Adaptation strategy by extending'** means households have made additional space for both their domestic and business activities. It has been discussed previously that the addition of space to their physical assets might be vertical or horizontal or in both directions. Nevertheless, this strategy includes encroachment into public space because this strategy also creates an additional space for household activities, even beyond their physical assets. However, households are sometimes unable to pursue the two strategies mentioned above due to various factors, one of which is that their house is very small. Thus it is due to a variety of considerations and motivations that they adopt the **'adaptation strategy by shifting'**, in which the space is used for two activities that are differentiated by time.

The next and final chapter presents the conclusions and recommendations of this study which includes a summary of findings and correlates them with the initial research objectives. In addition it will describe the implications of the research results for theory and practice as well as making recommendations for further research.



7

Chapter 7

Conclusion: Constructing Spatial Capital

7.1 Introduction	251
7.2 Lessons Learned from HBEs in Urban <i>Kampung</i>	251
7.2.1 Positive Issues	251
a. Poverty Alleviation	252
b. Housing Improvement	253
c. Increasing Invisible Workforce	255
d. Freedom of Business Activities	255
e. Local Service of Neighbourhoods	256
7.2.2 Negative Issues	257
a. Infrastructure and Housing Conditions	257
b. Crowding	258
c. Reducing Privacy	260
d. Business Location: <i>Choices and Constraints</i>	262
7.3 Spatial Capital: <i>Reflecting on the Research Objectives</i>	263
7.3.1 HBEs as Sustainable Urban Livelihoods	264
7.3.2 Accommodating Two Functions through Two Patterns	268
7.3.3 From Single Function to Dual Functions	270
7.4 Implications of Findings and Further Research	271
7.4.1 Implication for the Urban Livelihoods Concept	271
7.4.2 Implication for Berry's Theory	272
7.4.3 Towards Future Housing Design and Policy	273
7.4.4 Suggestions for Further Research	275
7.5 Concluding Thoughts	276

Chapter 7

Conclusion: Constructing Spatial Capital

7.1 Introduction

This concluding chapter discusses the theoretical implications of the main findings of the study and makes a number of recommendations. Rather than functioning as an overall summary of chapters, the chapter's main purpose is to clarify the inter-linkages among the key issues. Therefore, this chapter focuses on the results of the analysis that has been presented in Chapters 5 and 6. Based on that analysis, there are lessons to be learned which will be described in the first section. This chapter also has two other sections concerning: lessons to be learned from the HBE cases, which are then followed by a reflection on the research objectives, and the implications of the findings and suggestions for further research. This chapter will close with some concluding thoughts.

7.2 Lessons Learned from HBEs in Urban *Kampung*

Several lessons have been learned, based on the characteristics of HBEs described in Chapter 5 and from the unpredicted findings presented in Chapter 6. For example, shifting the essence of the house from the 'home-domestic domain' to a 'home-business' is an important lesson from this study, showing that the house is not just a dwelling as a shelter, but is also more than physical form, in particular, a place to generate income. A house is not only a relaxation place or retreat space or a place for family members to meet, but a place for production activity, for income earning, for interpersonal relationships, and part of a public facility as well. However, the consequences of a shift in the essence of the home for low-income households who live in small houses include both benefits and inconvenience. In other words a home business can be a source of both positive and negative changes for households and potentially, also for the surrounding environment.

7.2.1 Positive Issues

There are five lessons to be learned from business activities at home, which concern: poverty alleviation, housing improvement, an increasingly invisible workforce, freedom of business

activities, and local neighbourhood services. Each of these lessons is presented in more detail below.

a. Poverty Alleviation

Up to the present day, the definition of poverty continues to be debated by scholars because of its multi-dimensional characteristics. One dominant approach to poverty divides it into two main concepts, absolute or relative poverty. This approach also continues to provoke debate, because the threshold below which someone is categorised as being poor can be drawn on quite different bases, for example, income received or daily calorie intake. Absolute poverty is defined as “*a condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information*” (Whitman, 2008: 4). Thus, absolute poverty refers to a set of resources for maintaining a ‘minimum standard of living’, whereas relative poverty refers to a relationship of falling below existing standards in a community, and focuses on concerns about inequality. This is intended as a more social definition and contrasts with the idea of absolute poverty (Spicker *et al.*, 2006). Both imply a lack of resources but each views this in a different way. However, understanding poverty does not only reflect a statistical approach to resources, but is also understood as an incapacity to actualise human potential, due to a lack of access to certain facilities, such as employment or productive assets. Hence, poverty alleviation involves marshalling a wide range of resources to improve the living standards and living conditions of the poor. Singh and Pandey (1990: 540) hypothesised that “*income and physical quality of living position influenced perceived economic status. The psychological aspect of poverty was strongly related to objective economic and physical living conditions.*” This means that increasing income and a better quality of life are closely interrelated and directly implicated in the reduction of poverty.

The analysis of income in Chapter 5 found that the income received by families which they source from HBE activity is 3.6 times greater than the income from household activities from sources other than HBE. Meanwhile, a study conducted by Tipple *et al.* (2001) in Surabaya showed that the income of households where the household who have home-business is 1.4 times greater than from sources other than HBE. Based on the above explanation, in the light of the average income in Yogyakarta found for HBEs (Rp.3.4 million or approximately £230 per month) and the finding that 77% of them generate an income greater than the standard Regional Minimum Wage, it can be stated that households who have business in the house can exceed the poverty line, where this refers to the daily requirement of 2,100 kcal per

capita plus non-food minimum requirements such as for living, schooling, and other basic individual needs. In addition, almost half of households with HBEs (49.6%) are entirely dependent on the home business for the income that supports their daily life. This means that for such households, the income from the HBE can be considered to be their sole source of income. Furthermore, the number of households with HBE has increased surprisingly by 2.7% per year from 2003 to 2006. In addition, the analysis of income in Chapter 5 also showed that the growth rate per year of household income was 7% from 1992 to 2006.

The urban poor develop many types of strategy in order to survive. The strongest reason behind households' choice to run a home business is because it can form part of their survival strategies relating to the economic dynamics of families, which consist of an intra-familial network of social and economic relations and interdependence. This means that the home business is a strategy for survival they can operate from their home location, and indirectly can contribute to a strategy for their own poverty reduction, as long as the government places no restrictions on these activities. The location, in this context the house, is a very important factor because it constitutes real capital within the business, on which they do not pay tax to the government. In addition, the operators can reduce unnecessary costs and overheads. Finally, HBEs as business activities at home are assets that generate income for households. The varieties of capital owned by low income households in urban *kampung*, including physical, human, financial, social, have been managed in such a way to support them to rise out of poverty. They mobilise this base to generate income and additional resources for future generations. Similarly, studies conducted by Gough *et al.* in Ghana and South Africa, particularly with regard to the contribution of HBEs to livelihoods, conclude that "*HBEs are an important income-generating strategy and play a key role in poverty alleviation at the household level*" (2003: 264).

b. Housing Improvement

Housing improvement activities are generally linked to savings schemes, although it is well understood that the amount of savings is limited for low-income groups. However, some households have been successful in managing their savings finances and these are very important for housing improvements (Satterthwaite, 2002). Business activities at home provide an increasing income for households, but on the other hand the essence of the house as a domestic sphere may gradually change as it transforms into a place with dual functions. This study found that operators feel proud of their home business activities and tend to want

the place where they live to have a better appearance that reflects their advances in terms of increased income.



Figure 7.1: Two cases of HBE indicating housing improvement

Source: fieldwork, June 2003

This study found that the majority of HBE operators (62%) recognise that they have managed to improve their homes, regardless of housing ownership. However, when this dimension is associated with ownership, it turns out that 70% of owner-occupiers have made housing improvements. This means that through increased income and home ownership, HBE operators become able, and feel free, to change and improve their houses. However, by contrast 30% of HBE operators living in owner-occupied housing recognise that they have not been able to improve their houses. The main reason is that they have to use the income generated to fulfil the needs of everyday life. Thus, as Madhu Sarin observed, "*incremental improvement of dwellings depends heavily on the household's ability to sustain and improve its income*" (in Strassmann, 1987: 124). Overall, it can be concluded that HBE activities provide advantages for operators in terms of their ability to maintain or improve their house, though usually only gradually (Figure 7.1). Similarly, studies conducted by Gough and Kellett (2001) in two Colombian cities demonstrate that there is a close relationship between income level, the level of home improvements and household profile, whereby all undergo continuous change. In addition, they conclude that:

Home-based enterprises demonstrate the close symbiotic relationship between housing and work, and the fundamental economic role of the dwelling. Such economic activities provide income which enables housing improvement and consolidation to take place and the dwellings themselves improve opportunities for income generation, employment prospects and productivity.

(Gough and Kellett, 2001: 244)

c. Increasing the Invisible Workforce

The study found that the number of HBEs has increased significantly over time, growing by 2.7% per year since 2003. Surprisingly, the HBEs did not cease trading or experience bankruptcy, although shaken by the financial recession. However, these business activities, including their workforce, are largely invisible, being difficult to survey, and are not included in the official statistics. In fact, operators and workers in HBEs constitute a skilled, knowledgeable and experienced urban workforce which makes a significant contribution to the urban and (even) national economy.

The majority (77%) of HBE operators are women and most of them are involved in selling fresh vegetables (*warung sayuran*), selling everyday goods (*warung kelontong*), and food stalls (*warung makan*), types of business which are easier to operate than others. *Warung* are characteristic of typical HBE activity in the *kampung*. This is because running a small trading business has numerous advantages for households, especially for housewives who still have a baby or toddler to look after. These business activities are flexible in terms of space and time, so that most women who work at home make a significant contribution to family income while still being able to manage domestic activities. Ahrentzen (1997: 88) indicates that home “*is more than a place for domestic and family activities, but it also the place of paid labour for women.*” However, in statistical terms, such labourers are an invisible workforce in urban areas and are not recorded in official statistics. Edgar (1990) calls these ‘underground economic activities’ because of the nature of activities in the ‘unreported’ and ‘unrecorded economy’. Recently many scholars and institutions have attempted to develop measurement methods for the informal sector including HBEs (for example Hussmanns, 2004; BPS, 2008; ADB-BPS, 2010). The development of a measurement method aims for better assessment of both activity and employment, especially in urban areas. In addition, more accurate data on the amount of labour that occupies informal sector workers in urban areas could be used to better determine the actual number of unemployed. Furthermore, accurate data collection can form a basis for an improved political bargaining position, especially in terms of public policies on the informal sector workforce.

d. Freedom of Business Activities

The freedom to carry out business activities in the house is a significant advantage for low income households in urban areas, because they can use all assets, especially land and housing, to generate income in support of their survival strategy. Moser (2009: 260) argues

that “*physical capital (basic shelter) was the prerequisite for the accumulation of other assets.*” On this basis, HBE operators tend to occupy their land and house as effectively as possible to support their income-generating activities. The majority (85%) of HBE cases are owner-occupied, and thus households are free to maximise their use of space. Therefore, owner-occupier status is an important factor in determining the level of flexibility householders have to make use of space in the home. On the other hand, this study found that the average working day is 13 hours and the average working week is 6.5 days. Some *warung kelontong* even operate 24 hours, 7 days a week. Based on these factors, it is clear that flexibility and independence are the key points for such businesses for several reasons such as: maximising the use of housing, flexible working times and days, and integrating domesticity and employment (Felstead and Jewson, 2000). Brower (1980) stated that personal occupancy is associated with a particular range of controls, a particular kind of occupant, and distinctive territorial signs that serve as cues for behaviour. Thus, this shows that private dwellings that are owned by their occupiers yield a certain range of controls for households, including free ‘access to’ and ‘control over’ their assets, optimally and flexibly for the purpose of their business activities.

e. Local Service of Neighbourhoods

According to the guidelines provided by the Public Work Department of the Republic of Indonesia (1987) for the planning of urban residential areas, local services are required for neighbourhoods in all areas of the city. One of several guidelines on this issue concerns local services in the residential area, including in the *kampung*. The criterion for determining the provision local services is the number of residents who will be served. For example a *warung/stall* serves a population of 250 people. Higher service levels, such as a mall or supermarket, will serve a larger number of city dwellers. Thus, the number of HBE activities in Kampung Prawirodirjan, at more than 180 units, exceeds the official guidelines, which require only 47 units of local service.³⁰ In addition, one in three dwellings has a business at home, mostly consisting of shops for everyday goods (*warung kelontong*, fresh vegetable stalls (*warung sayuran*), food stalls (*warung makan*) and beauty salons. This figure suggests that local services have exceeded the requirements and also shows that HBEs are facilitating the requirements of *kampung* residents. Their provision of local services to neighbourhoods based on quantitative calculations from official guidelines is not the only positive aspect of HBEs: they are also places for social interaction. In this study it was found that many *warung* provide a location for social interactions between operators, customers, neighbours and also

³⁰ This is based on the calculation of the total population which is 11,738 people.

suppliers. Furthermore, the existence of HBEs also reduces the number of trips, especially work trips for the operators and shopping trips for the customers, which has the consequence of saving transport costs and reducing traffic accidents and congestion.

7.2.2 Negative Issues

Aspects of physical, psychological, and business development have been recorded as negative issues in the section on lessons to be learned from this study. A detailed explanation can be outlined as follows.

a. Infrastructure and Housing Conditions

Some HBEs produce waste materials, such as solid and liquid garbage, fumes and odours, which have to be discharged and disposed of. However, Tipple (2005a: 275) revealed that although *“some are undoubtedly generating dangerous wastes, they are only a small proportion of all HBEs and [operators] tend to be aware of at least some of the problem[s] and take mitigating steps.”* He added that most HBEs are quite benign in their environmental impact, so that there is no need to impose a general negative judgment on them.

However, the study found that some cases of HBE impair the physical appearance of the house. For example, in the case of food produced in large quantities, where the operators are still using firewood or charcoal, walls and ceilings become marked with smoke and soot. Figure 7.2 shows the process of cooking crackers and meatballs which results in the walls of the operators' houses becoming sullied. In addition, 92% of dwellings with HBE are not provisioned with a fire extinguisher, while some HBEs located in the middle of densely populated settlements sell flammable goods such as kerosene and petrol (Figure 7.3). The presence of highly flammable goods and the lack of fire extinguishers create great danger for the inhabitants and their environment from fire hazard. The two cases above provide lessons for us about the negative impacts of business activities at home. Efforts to prompt dwellers to take responsibility for improving their housing by themselves and government support for the provision of fire extinguishers to the local neighbourhoods need to be pursued. In addition, the government needs to implement strict controls on flammable goods in residential areas.



Figure 7.2: Two examples of dirty walls in dwellings with HBE
Source: fieldwork, June 2003.



Figure 7.3: Two examples of HBE which sell inflammable goods
Source: fieldwork, June 2003

b. Crowding

Crowding in a particular area does not necessarily imply a stressful situation and sometimes dense populations in particular areas are also acceptable. Besides, the terms crowding and high density are not always made clear (Altman, 1975): sometimes, the two terms are used synonymously and sometime as opposites. Density is limited to a physical meaning, such as the number of people per unit of space, while crowding tends rather to indicate a psychological concept or behavioural problems.



Figure 7.4: Crowding in HBEs

Source: fieldwork, June 2003

However, doing business in the house potentially creates greater crowding and higher densities not only in terms of physical occupation, but also psychological perceptions (Figure 7.4). Thus, higher levels of crowding and unacceptable densities can be produced, leading to conflict between family members. In addition, such conditions have the potential to cause discomfort and inconvenience to customers. Although, workspace is still meets to the criteria necessary for human freedom of movement (see also Table 5.21), but the reality is that the measurement of the business area has not taken into account the presence of the HBE merchandise. In examining housing quality in HBEs through physical characteristics, this study found that 49% of the dwellings with HBEs score negatively for crowding. Although the assessment was based on the researcher's observations and perceptions, it included both a crowding indicator based on the numbers of people in a space, and also an indicator based on the number of merchandise items. This can be seen in Figure 7.4, which shows four types of production, with the operators and workers pictured at their work. It shows how the physical characteristics of crowding in HBEs can include numbers of workers packed together in small spaces (Figure 7.4 [a], [b], and [c]) and quantities of goods stored in a guest room (Figure 7.4 [d]). However, the psychological characteristics of crowding can only be experienced firsthand, in the real location. Thus, the lesson that can be drawn from these HBE cases is that

crowding will be increasingly felt both physically and psychologically when business activities occur in a very small space with many workers and this will gradually come to influence domestic activity.

c. Reducing Privacy

The level of privacy may vary, depending on factors in the individual, socio-cultural and physical environment. As discussed in Section 2.6.4, privacy is closely related to territoriality. Home is the primary territory; however the bedroom is the primary territory in terms of the arrangement of rooms. Secondary territories are semi-public so other people can use it temporarily. Thus, HBEs are clear examples of the secondary territory, where operators interact with customers or neighbours in their home location on a relatively regular basis. Based on that, the case of HBE provides a lesson to us that the privacy of occupants tends to be reduced in terms of primary territories at home, due to the presence of workers, customers, neighbours, and suppliers. Primary territories can be shifted to secondary ones when they are entered or exist in a dwelling with HBE. Shifting the level of territories in the case of HBE from primary into secondary territory is also one reason why households apply adaptation strategies to the use of space, as has been discussed in Chapter 6. Various adaptation strategies have been carried out by households in order to anticipate in or respond to the reduction in privacy that arises from intrusion by others. During the fieldwork observations, there were indications of intrusion that can be associated with this discussion of privacy and territoriality. The lesson to be drawn from observations in the case of HBEs is that there are two types of intrusion, that is, soft and hard intrusion.

Soft-intrusion occurs where the position of customers, neighbours, and suppliers is still beyond the boundaries of the physical house, but they are able to observe the conditions of the house through windows, openings, or doorways. Merchandise is generally placed on a table near the windows, openings, or doorways of workspaces, which are always kept open to serve the customers (Figure 7.5). Conversely, hard intrusion is not merely visual but is rather physical, where customers, workers, and suppliers can actually enter into the workspace in the house (Figure 7.6). Each type of intrusion effects a different level of privacy disturbance for the occupants, because the level of privacy is influenced by many factors. These two types of intrusion are consequences that have to be accepted by HBE operators, although they present a dilemma for them, because on the one hand they run a business to generate an income, but on the other hand this activity can reduce their privacy. This means that households who run a home business need to pay attention to these consequences.



Figure 7.5: Soft intrusion in HBEs
 Source: fieldwork, June 2003



Figure 7.6: Hard intrusion in HBEs
 Source: fieldwork, June 2003

d. Business Location: *Choices and Constraints*

The spatial location of an HBE can not only attract business activities, but also needs to be considered by operators in terms of their business development. This study found that one in three dwellings in the *kampung* hosts business activities, and the rate of growth of such home business is 2.7% per year. On the one hand, this phenomenon indicates that the HBE provides added value to the household in terms of income, but on the other hand, the clustering of a large number of HBEs in the *kampung* make the *kampung* a location for business activities. It is clear that the *kampung* is a mixed-use area, a place to live and work (Benjamin *et al.*, 1985; Patton and Leksono, 1988). This study found that one reason for the establishment of an HBE is the existence in that location of similar businesses, so the discussion here is more focused on the development of such businesses, in relation with business agglomeration in the location. This study found that many HBEs of the same type, that is, *warung kelontong* (everyday goods stalls), are located on the same path, even being run by close neighbours (Figure 7.7).

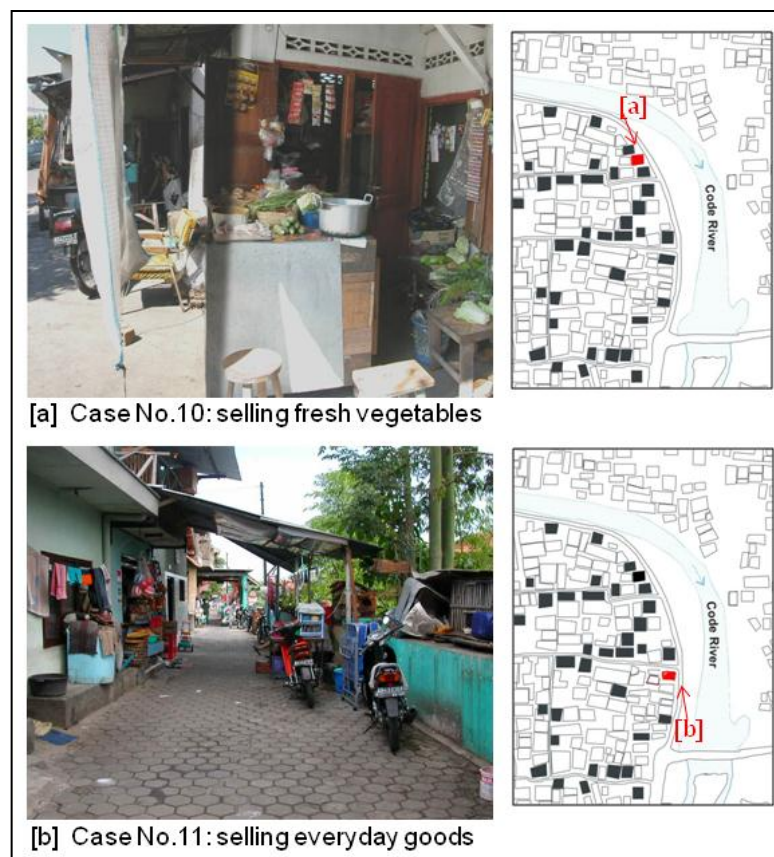


Figure 7.7: Two examples of the same type of HBE showing their proximity of location

Source: fieldwork, June 2003

Reid (2006) explains that conducting business activities from the perspective of a traditional small business enterprise involves complex choices, one of which is location (both physically and in terms of the characteristics of the space), thus there are many possibilities in terms of competition with other businesses. In other words, the business location can determine the development of the business. However, it is recognised that home business operators have no other choice in terms of location. Bu Yudosasmito (June 2003), who runs the same type of *warung* as her neighbours, expressed anxiety in her interview about similar businesses in the alley, because they could reduce her customers, or in other words, limit the number of customers. A similar situation also occurred to Pak Sriyono (June 2003) whose business is located adjacent to four similar businesses. However, both of them also said that they have no option to move or change their business. The consequence is that they continue to run their business at home because the house is the key asset for them. Thus, the two cases above show that *warung* operating in a row in the same alley may have the effect that one of them does not develop properly, due to there being too much competition. This is a negative consequence of the co-location of HBEs running the same type of business.

The above description of the lessons learned from HBEs has provided an understanding of their activities in the urban *kampung*. It should be noted that HBE activities provide many benefits, both to low-income households and to the surrounding community, even acting in support of government programmes, especially in terms of poverty, housing, and employment, as well as supporting government guidelines about the provision of neighbourhood facilities. Conversely, it has also revealed that the activity can have disadvantages, both physically and psychologically. However, households who run an HBE activity have sought to anticipate and respond to the disadvantages that may be generated. An example of this is the way in which they have pursued a strategy of adaptation, both physically and behaviourally, in terms of crowding and reductions in privacy. Thus, the following section will reflect upon the research objectives, which focused on space as capital and housing as part of capital accumulation.

7.3 Spatial Capital: *Reflecting on the Research Objectives*

Turner and Fichter (1972) state housing for the poor in urban areas is best understood not by seeing it for what it *is*, but for what it *does*, because housing is a process (housing as a verb) rather than simply a physical product (housing as a noun). On the other hand, Turner

(1976) stresses that housing should be autonomous, which means that it can provide the occupiers with dweller-control, individual satisfaction and social wellbeing. The idea is reminiscent of the researchers and practitioners who consider relationships between human processes in certain localities and housing conditions (Lawrence, 2008). Thus, HBE as a research subject contains many aspects that need to be reviewed and analysed including the physical condition of the house and human processes in terms of economic activity. For that reason, through a qualitative research approach, this study has revealed how human behaviour is associated with certain physical conditions in housing and how space is used as an asset to generate income. This study has explored the nature of how urban households understand, construct, respond to and interpret their small space as a type of capital.

This section will offer three reflections from the analysis based on the research objectives. The first reflection is based on the livelihoods approach, in which low-income households in urban areas carry out HBE activities in an effort to maintain their survival. This will be explained in Section 7.3.1, to reflect the findings of Chapter 5 with regard to the relationships between the core of HBE and its four assets in terms of capital accumulation. The next reflection is also based on the urban livelihoods framework, which confirms that housing is a basic physical asset for low-income urban households. Starting from this premise, the section explains the importance of understanding the adaptation strategies undertaken by operators to address the co-existence of business and domestic activities in their small space. The options for such strategies will be formulated in more detail in Section 7.3.2. Analyses of the use of space and human behaviour in the context of HBE activities have also identified other findings, such as the importance of the guest room and social space to facilitate social interactions. These findings will be outlined in Section 7.3.3.

7.3.1 HBEs as Sustainable Urban Livelihoods

Chapter 5 includes the analysis of three core aspects of HBEs (business, family, and home) which are connected with the concept of urban livelihoods, by attempting to analyse the accumulation of capital. The core aspects of HBEs have been identified as a result of reflection based on the reasons the operators have given for running them and on the characteristics of the business itself. Thus, the three main reasons given by operators of economic factors, having the necessary skills, and having space in the house, are clearly associated with the core aspects of HBEs. However, this does not mean that the four other reasons given by

operators are unimportant, for instance the fact of inheriting a business need to be considered, as well as allowing for the development of sustainable business.

As discussed in Chapter 5, business activities at home result in a unique business because it responds to economic conditions in its own distinctive way. In addition, such businesses encompass immense diversity and there is no common format for operating, developing and marketing business activities, but whatever the economic situation, these activities continue to exist in support of the survival for households and the sustainability of business activities (see also Lipton, 1980). Business activities as one of the core aspects of HBEs also reflect the question of financial capital, both because these activities are supported in the majority of cases (67%) by an initial capital sum originating from personal/family savings; and because HBE activity generates income three times greater than income sourced from other activities. HBEs as urban livelihoods are also supported by numerous customers: the average number of customers is 856 people per month or 28 people per day, although this varies depending on the type of business, that is, the average number of customers for the trading type of HBE is greater than for other types. Besides, the activities of HBE in the *kampung* can absorb significant urban workforce without having to leave the neighbourhood. In addition, this study also found that the majority (77%) of HBE incomes and the majority of total of household incomes (87%) are greater than Regional Minimum Wage. This can be interpreted to mean that HBE activities as urban livelihoods are not only to enable poor households to survive but also to improve their life and get out of poverty. Improving access to finance is the key to helping poor urban households realise their economic opportunities. Moser (2007a: 7) argues that “*financial assets are crucial both in themselves and for the accumulation of other assets.*” It is obvious that business activity as a core aspect of HBE is to generate a sustainable urban livelihood and its components contain financial capital within the framework of capital accumulation.

Because they generally have a degree of flexibility in dealing with domestic activities, women have a significant role in running business activities at home. Those with a high level of knowledge and access to financial and social resources play an important role in such activities. It has been shown from the findings of this study that 77% of HBE operators and workers are women. This is also supported by the fact that 88% of HBEs are operated solely by family members, of whom many are well educated. This means that HBE activities are a family enterprise, based on human capital within the framework of capital accumulation by poor households in urban areas. HBE as a family enterprise has freedom and flexibility in

terms of working hours and days. Because HBEs are family enterprises in which the operator works in the home, the working hours they describe could be considered unrepresentative when compared with formal standards, because they do not, in fact, work continuously; operators share their time flexibly between business and domestic affairs. Freedom and flexibility in the use of time and space is a comparative advantage of running this kind of business activity.

The use of space does not only concern space in the house but includes space outside the house, which might in some cases be public space. This use of space requires the operator to follow the norms of life in the *kampung* such as harmony, tolerance and *gotongroyong* (see Guinness, 1986). The social relations maintained by family members as HBE operators are a form of social capital that is essential for households who live in dense urban settlements and run business activities at home. Thus, the family as one of the core components of HBE represents both human and social capital that is important in the context of the capital accumulation framework. A longitudinal study of the poor conducted by Moser and Felton in Guayaquil also concluded that human capital is important and they stated that “*over time those who do best consolidate slowly — first human capital, followed by financial-productive capital*” (2007: 41).

Housing is a fundamental component of HBEs and functions as physical capital within the capital accumulation framework, irrespective of housing tenure and size. This means that even those who are tenants in rented housing (15%) and those in small houses (less than 18m²), have the opportunity to conduct the business activities at home for their survival strategy. In addition, they generally start with small-scale enterprises, especially for those who have a very small house, for example *warung* or home-industry without the use of machinery that takes up space in the house. This study found that although the size of the average dwelling with HBE is 93 m², which is not small, some HBEs take place in very small houses. In addition, 42% consist of households who inhabit the house below the official standard in terms of habitable rooms, and the majority live in houses classified as semi-permanent (58%). They also allocate space in their houses for business activities, but less than for domestic activities. Although not denying the significance of the proportion of space devoted to business use, it is clear the space in the house may generate income that supports households’ survival. In fact, the majority of indicators of housing quality show positive results (in 55% of houses), and only the component of crowding was in a negative direction for a large proportion (49% of households). This can be understood as resulting from two

activities at home causing crowding, due not only to higher numbers of people but also to the presence of merchandise. Accordingly, it is clear that housing is an initial requirement of HBE activity because it is a place from which to generate income and the livelihoods of poor households in urban areas. It is also emphasised and underlined by Moser who argued that with regard to *“productive assets for poor urban households the most important is often housing”* (1998: 4). Similarly, Kellett and Tipple (2000) pointed out that housing, in terms of its economic role as a production base, is important for many low-income households in urban areas.

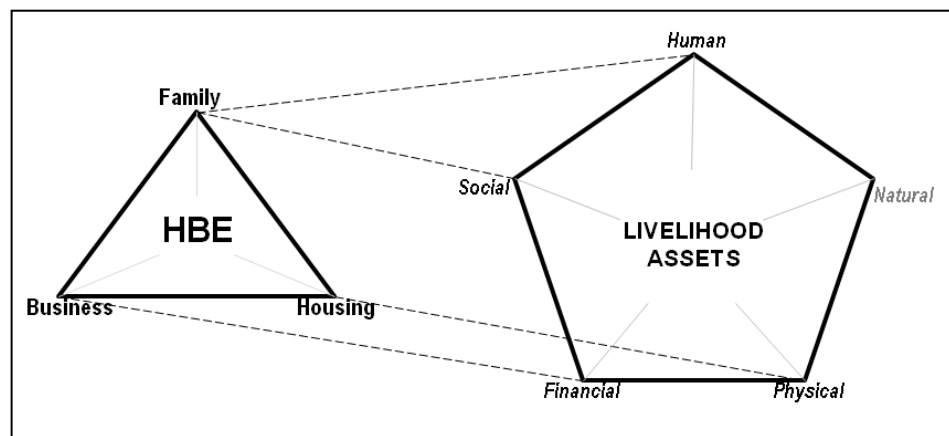


Figure 7.8 Relationship between the core aspects triangle of HBE and the assets pentagon of urban livelihood

Summarising and highlighting the research findings in Chapter 5 has indicated that there is a relationship between **the core aspects triangle of HBE** and the **assets pentagon of livelihood** which is powered by low-income households through asset accumulation (Figure 7.8). The relationship between the two models is equivalent but not congruent. The family forms a component part of the core aspects triangle of HBE related to human capital and social capital in the assets pentagon of urban livelihood. The quality of human resources for each family member is a valuable asset for households in sustaining business activities at home to pursue a better life and urban livelihoods. This is the basis of human capital, supporting the quality of human resources in the family associated with it. In addition, urban business activities require support from networking with various community members and this networking may not be separate from the way the family members carry out their various roles. Thus, the family forms a component part of social capital. In other words, the family component of the triangle HBE is related to social capital at the pentagon of urban livelihood. Business activities are highly correlated with financial capital in urban livelihood.

Business activities provide an opportunity for households to generate income, contributing to the development of reproduction and production. With the economic resources available, they carry out business activities at home as part of urban livelihoods. Finally, housing as a component part of the core aspects triangle of HBE is an important physical asset that generates income through home enterprises activities. In another words, housing as a place for business activities from which households generate income is an important part of urban livelihoods in terms of physical capital. Thus, HBEs are an essential part of the livelihood portfolio of many low-income households in urban areas (see also Rakodi and Lloyd-Jones, 2002; Verrest, 2007; Moser, 2007c). However, there is no magic recipe in terms of the ways households use and manage their assets to gain urban livelihoods for survival and raising living standards, because this will depend on each individual household's strategy.

7.3.2 Accommodating Two Functions through Two Patterns

Payne (2002) and Rakodi (1999) argue that housing is the main physical asset through which the poor in urban areas can generate income. However, how low income urban households organise and manage the space in their houses to become more productive is still somewhat overlooked, both by themselves and by others who are concerned about physical capital within the concept of urban livelihoods. Chapter 6 has analysed this issue and found three adaptation strategies, namely, adaptation by **sharing, extending, and shifting** (Figure 7.9).

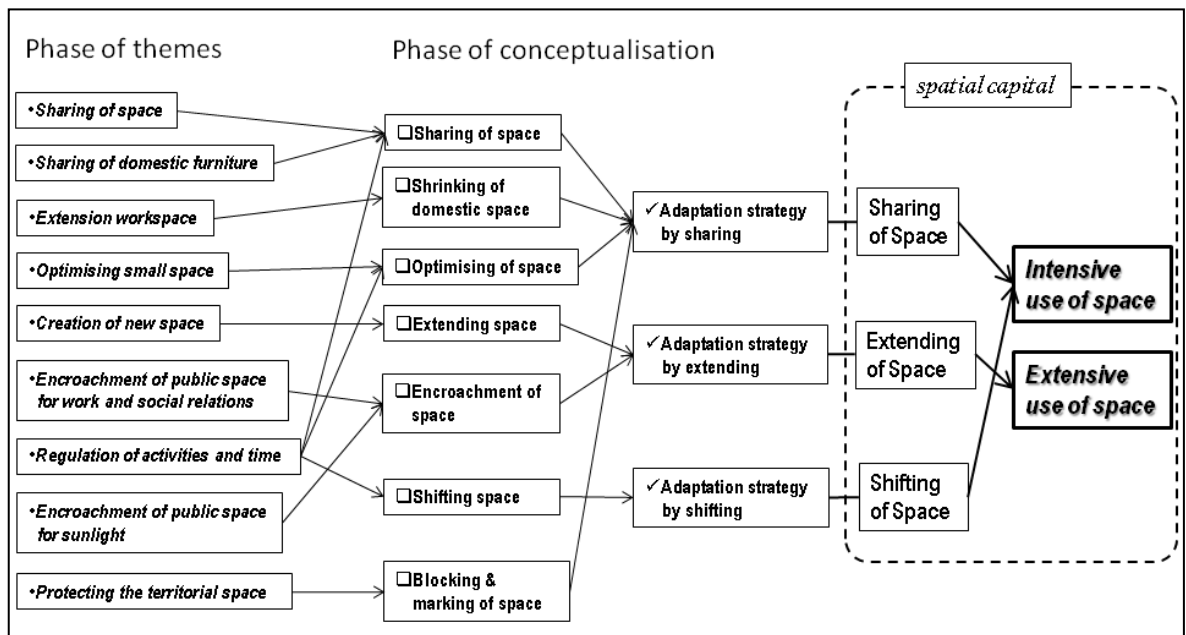


Figure 7.9: The concepts of intensive and extensive use of space in HBEs

The three adaptation strategies undertaken by households have resulted from grouping together similar themes from the analysis in Chapter 6. These strategies, in relation to 'constructing spatial capital' in the case of HBE, may be directly transformed into three categories regarding space use that is (a) the **sharing of space**, (b) the **extending of space**, and (c) the **shifting of space** (Figure 7.9). The first two of the categories have also been identified by Tipple and Kellett (2003) who conducted their study in four cities of developing countries (Cochabamba, New Delhi, Surabaya, Pretoria). They did not accentuate the 'shifting of space' category, although this phenomenon occurs in Surabaya. Furthermore, these three categories of space use may be grouped into two basic patterns, namely: **intensive use of space** and **extensive use of space**. This grouping gives more detail about the use of space based on the physical aspects of the space. Thus, the sharing and shifting of space take place without increasing the overall net floor area. For this reason, both categories are grouped into the intensive use of space. Conversely, the extending of space is automatically included in the opposite pattern, of extensive use of space.

The 'sharing of space' is generally adopted by households to accommodate business activities at home, as this can be done in large or small housing. Furthermore, the concept of 'loose fit' and 'tight fit', formulated by Ching (1979), can be applied to this concept. In this respect, households may use space in the house to the maximum in order to generate income. Households who live in limited space generally employ a pattern of shared space, in which family interaction takes place in locations that are not exclusive or restrictive. Domestic furniture which is used for business activities (sharing of domestic furniture) and moving furniture to expand the working space are also included in this category because households are still attending to the space as a fixed element in their house, whereas furniture is a non-fixed element in space. This includes the positioning of other elements such as the use of partitions to divide a space into two functions, and the vertical placement of furniture. This type of space use is basically cheaper and easier in terms of increasing spatial capital, compared with other patterns such as extending the space.

The 'extending of space' is the transformation of adaptation strategies undertaken by households in terms of expansion, or 'adaptation strategies by extending'. In this case, to make the separation of business and domestic activities more apparent, the household must invest greater effort, by comparison with other patterns. Extending space can be done by adding physical space horizontally and/or vertically, and may also include encroachment into

public space. The latter requires a greater social than physical effort than the former, with social effort needing to be expended to assure neighbourhood relations. However, the notion of extending of space is related either directly or indirectly to the interests of business activities, for example the construction of a first floor used for a sleeping space can result from the effects of conducting business activities at home. Using the dwelling as a resource may generate income for households and Tipple (2000: 51) states that "*the modification of existing space and the addition of extra space through transformation can be essential prerequisites.*" However, for households who do not have large plots and/or are financially constrained, the construction of the space extension will take the sharing or shifting pattern.

The 'shifting of space' is a strategy used by households to accommodate business and domestic activity at different times of the day which accommodates the extremely small size of the house. In consequence of such conditions, households become more creative in managing the space as a capital, with the aim of generating income. This means that the activities taking place within the space are segmented by time (Kent, 1991). During the day, extremely small spaces are exclusively used for business activities and when activities are completed (which is usually at night), these spaces take on domestic functions, for instance as a place for family interaction or sleep. Therefore, space as capital has been exploited with a high intensity of use, because the "*spatial and chronological symbiotic interaction of activities creates a greater effective space than exists physically*" (Payne, 1974: 64).

The exploration of space as a mode of production-reproduction in the case of HBEs has identified three patterns of space use as described above. The pattern of use of space for dual functions in the case of HBEs was adopted by households aiming to achieve harmony, even though Lefebvre (1991) argues that space as process and in process involves time, sometimes in harmony and sometimes in conflict. Thus, adaptation strategies performed by households proceed under the influence of a range of factors but always strive to reach the highest values of harmony, as well as reconciling the co-existence of two different functions in the space where they take place.

7.3.3 From Single Function to Dual Functions

One of the advantages of qualitative research is that it is able to uncover social phenomena that may be concealed in such a way that is flexible enough to allow the investigation of unexpected findings (Mills *et al.*, 2010; Neuman, 2007). With regard to the impact of the shift from a single function to dual functions in HBE cases, there are at least four other significant

research findings. The first finding concerns the function and role of the guest room in the HBE dwelling. This function is generally not only to entertain guests but in the case of HBE also functions as a place from which to keep an eye on the work space, and in some cases becomes a space shared with both guests and customers. Therefore, its new role in the organisation of space at home is as an intermediary space between the two functions. This suggests the important role played by the guest room in dwellings with HBEs.

The shift that takes place in the essence or meaning of home from a place of domesticity to a place of work, especially during the day, is one of the other findings of this study. A ramification of this finding is that it not only applies to constructing the space but also to maximising the space for the purpose of generating income. During the day, the function of the house has turned into that of a workplace, with subsequent effects on the meaning of the space in terms of territory and privacy. In such cases, dwellings with HBEs become secondary territories (see Altman, 1975) because they become less private and are open temporarily to customers, neighbours as customers, suppliers and workers. Furthermore, this research also found that HBE activities not only generate income but also generate or produce communal space in the *kampung*. This means that the HBE shows the existence of spatial tolerance. The implications of the production of this space enhance social relations between members of surrounding communities. Space is not only produced but also consumed or becomes a space of consumption, which is always spatial, based on the spatial arrangement and display of commodities in the social space. This thesis agrees with Lefebvre's idea of social space and social relations. Lefebvre states that "*social space also contains specific representations of this double or triple interaction between the social relations of production and reproduction*" (1991: 32). Finally, a broad spectrum of meanings of livelihoods and economic opportunities appear to have affected the essence of home and social relations from more collectivistic rather than individualistic perspectives; this is an important aspect of changes to the social value system that are related to HBEs.

7.4 Implications of Findings and Further Research

7.4.1 Implication for the Urban Livelihoods Concept

This study is in line with the concept of urban livelihoods in deploying understanding of the four assets owned by urban households. However, this study explores the physical assets in

greater detail, with an emphasis on space. The main finding from this study indicates that spatial capital, which is part of physical capital/assets in urban households, consists of three categories, namely the sharing, extending, and shifting of space. These are methods used to increase or manage spatial capital, which can also be reclassified from a physical perspective as the intensive and extensive uses of space. This reclassification has been added to sharpen the understanding of physical capital within the concept of urban livelihoods. In this respect, space in the house, regardless of its size and housing tenure status, plays an important role in urban livelihoods, and for urban households, space is an asset that can be acquired and used in accordance with the purpose of generating income. This study demonstrates the role of HBEs in terms of the first generation asset accumulation framework developed by Moser (2007b) in which three important assets (human, financial, and physical) are accumulated to provide the social and economic infrastructure essential in urban households. She assumed that “*acquisition of such capital is the precondition for individuals and households to further accumulate assets on their own and move out of poverty*” (Moser, 2007b: 95). This study does not address the second generation of asset accumulation which is basically designed to strengthen asset accumulation to improve household members’ well-being.

7.4.2 Implication for Berry’s Theory

Berry's theory of adaptation strategies has been adopted for this research, in terms of his identification of three strategies: adaptation by adjustment, reaction, and withdrawal (see Berry, 1980). The notion of adjustment and reaction in his theory are open to criticism due to their ambiguity. Thus, in deploying this theory to explore the adaptation strategies of households in terms of space usage in HBE cases, they have been re-interpreted with two clearer terms, namely ‘arranging’ and ‘making’ the space. This study found no strong evidence of adaptation strategies by withdrawal. Furthermore, the possible further development of a more applicable term could be achieved through the merger of the two adaptation strategies into adaptation strategies by reaction, so that there are only two strategies (by reaction and by withdrawal). It is thereby recognised that reaction actually involves adjustment, in the sense that in certain environmental conditions, humans will engage in reactions of various gradations in terms of the extent of the actions taken, and adjustment is an action on that continuum. An illustration of how ‘housing adjustment’ is used in theory can be taken from the argument about the motivation towards improving the housing, in which regard Tipple uses of the term ‘housing transformation’ (1991, 1992, 2000). Tipple (1991: 4) defined transformation as “*an alteration or extension involving construction activity and using*

materials and technology in use in the locality.” Alteration is “*internal changes to the layout of the units without increasing the overall net floor area*” (p.20). These imply that transformation can involve both extension and alteration, with alteration as a kind of adjustment that is part of transformation or reaction.

7.4.3 Towards Future Housing Design and Policy

Housing is not only part of the package of consumption but also productive capital for low income urban households in developing countries, including Indonesia. This study elaborates in great detail how households exploit the space in their housing through creative and flexible actions to generate income as part of achieving sustainable urban livelihoods. This tends to impact on the sustainable housing development process. As an illustration, the discussion of sustainable livelihoods in urban areas basically highlighted the importance of housing as an asset and housing consolidation as a key strategy in order to reduce the vulnerability of low-income households (see, for example Gough and Kellett, 2001). There is a need for policies that encourage people's ability to generate income, which are expected to have implications for their housing conditions (Gilbert, 1988; Tipple, 1993; Kellett and Tipple, 2000). Policy-makers need to emphasise the importance of better housing conditions for low-income households in urban areas not only with regard to the goal of healthy homes, but also as part of poverty alleviation programmes.

Moser (2007b, 2009) argues that housing has a major impact on other assets, including social capital (based on the local community), human capital (through the impact of housing on health), and financial assets (through the importance of housing space for capital access to employment). Thus, the Indonesian government should give more attention to improving the quality of housing in urban areas by encouraging and accommodating business activities that provide livelihoods for residents. From another angle, in terms of local land use and development controls, Kellett and Tipple (2002) propose that these should be derived from the lowest institutional level. In addition, whenever possible at the neighbourhood level, a *Rukun Tetangga* (caretaker) should be available to monitor and control the building and the business activities of residents (Tipple *et al.*, 2001; Kellett and Tipple, 2002). Nevertheless, Tipple (2005a) demonstrates two contrasting approaches in terms of restricting HBEs through the prescriptive and the *laissez-faire*. Each municipal authority has its own rules for controlling either allow or prohibit HBEs in residential areas. For example in both New Delhi and Durban enforce the use of a list of activities that are allowed or prohibited, while in other

cities (e.g. Cochabamba, Surabaya and Pretoria) adheres to the *laissez-faire* approach. In these three cities, Tipple (2005a: 282) noted that "*HBEs are acknowledged as desirable for low-income household livelihoods and there is a high degree of acceptance.*" Hence, it is clear that there is no accurate recipe in terms of control the activities of HBEs in residential areas because every the city government and the surrounding community has its own way to do it. Furthermore, Tipple (2005a: 295) confirmed that "*the unwritten rule in enforcement of home occupations for most communities is that, if no-one complains, there is no problem.*" The next issue for attention is the provision of an appropriate level of infrastructure services in dense settlements, including fire extinguishers. Furthermore, the city government needs to restrict and control a small number of particularly dangerous business activities in residential areas (e.g. selling flammable substances).

Concerning housing design, this study has provided a more in-depth analysis of the interior of the house, especially in relation to the positioning of furniture and partitions, and thus further recommendations on housing design are required. Some business and domestic activities at home may need to be closely related or adjacent to each other, while others may be more distant or allow enough distance for privacy. Some of these activities may require easy accessibility, while others may require control and some activities may have quite specific spatial requirements. The kinds of demands made by the users of the home space (households) will differ, and thus design flexibility is needed in order to respond to the demands of the various challenges. Hamdi (1991) advocates flexible housing designs which can accommodate changes and incremental growth. He explained that "*flexibility expresses freedom to choose among options or devise programs that fit individual needs and aspirations*" (Hamdi, 1991: 51). Implementing flexible housing designs for existing housing requires the resident's participation. "*Participation does not necessarily imply self-help home building by undernourished and over-worked people without credit, with inadequate tools and poor materials. [...] The central issue is that of control and power to decide*" (Turner, 1976: 133). In this regard, collaboration between architects and residents aiming to realise flexible housing is necessary; as illustrated in research conducted by Chutapruttikorn (2011) on re-housing projects involving various development actors in Bangkok.

In Indonesia, new housing units that are provided either by the PERUMNAS (National Housing Corporation) or by private institutions, including through self-help, should be designed to accommodate income-generating activities such as HBEs, as well as implementing flexible house designs. Currently, the construction of single detached housing

is the main goal; however flats³¹ or two-storey shop houses should be promoted through housing development agencies for people with a certain income level to address the limited supply of land in urban areas. With two-storey shop houses, the ground floor can be used for work while the upper floor is used for domestic activities. This design strategy can be anticipated to eliminate some of the negative effects of conducting business activities at home and support a healthy family life, as related by Pak Pramono in Section 6.3.2 of this study.

7.4.4 Suggestions for Further Research

This study is an attempt to understand the relationship between HBEs and urban livelihoods in a macro context, as well as to explore physical capital in terms of capital accumulation in more detail in a micro context. However, the process of capital accumulation for the purpose of a better standard of living and to rise out of poverty has not been shown in any detail by this study and its comprehensive consideration would require a study with a longitudinal design. It is recognised that the process of capital accumulation is complex and that each household with HBE activities has different strategies in terms of problem solving. Besides the relationship with poverty, there is a correlation between urban livelihoods and vulnerability which is associated with environmental changes in various forms, one of which is a sudden shock, as caused, for example, by an earthquake or other natural disaster. Causal relationships or the direct or indirect relationships between various interests in terms of HBEs, urban livelihoods, poverty, and vulnerability, still need to be explored more deeply, both in urban and rural areas.

In addition, this study also identified a shift in the essence of home, necessitating further research in order to better understand contemporary meanings that go beyond the classical notion of home as explored by numerous scholars (for example, Hayward, 1975; Rybczynski, 1988; Douglas, 1991; Hareven, 1991; Rykwert, 1991; Cooper-Marcus, 1995). It could be argued that in areas of informal settlements, 'home' reverts to a meaning resembling traditional rural models where the house has always been central to work. In this respect, historical studies might examine how work and domestic activities were integrated in the past, where in many societies the dwelling accommodated multiple activities prior to the Industrial Revolution and widespread urbanisation. Thus, further study is needed of the role of the dwelling in relation to the household economy in both urban and rural areas.

³¹ As a precedent, flats which accommodate HBE activities have been introduced in Surabaya, but have seldom been implemented elsewhere in the nation.

Furthermore, in some particular cultures, residents believe that there is a sacred space in their houses. Tensions between income generation and the sacred dimension of the home can occur. Thus, the study of these relationships needs to be explored in detail. Moreover, the process of housing consolidation, especially the process of constructing an upper floor based on the generation of surplus resources through HBE activities needs to be elaborated more closely. In addition, greater understanding is needed of the relationship between earned income, savings, expenses for subsistence, and construction costs, in terms of the process of consolidating housing over time

7.5 Concluding Thoughts

This thesis must be concluded with some final reflections. Earlier drafts of this thesis focused on household strategies that address dual activities at home, but over the course of time, the focus yielded to the greater challenge of describing the findings through the framework of the urban livelihoods approach; although ultimately, this was not quite as fully realised as anticipated. However, from its beginning, the main stress of the study has continued to be the dimension of space. Space has been explored in response to the need for research on housing as physical capital in HBE cases. The main gateway for the exploration of space has been Berry's theory of adaptation strategies. Taking place through a long journey, with several phases of fieldwork, and utilising the methods of space and activities observation, as well as interviews with 'ordinary' people who are nevertheless extraordinary in dealing with life in urban areas through running business activities in small homes finally identified two patterns of space use: the intensive and extensive use of space. Beyond the immediate context, it was realised that research on HBEs may be complex and dynamic but is important in order to increase understanding of the lives of people who can be considered marginalised even though they work hard. This realisation demands that there should be further research on HBEs, with a wider scope and deeper analysis. HBEs as subjects of study can be found everywhere, in both developing and developed countries. In terms of the recent economic crisis taking place in almost all countries, the HBE may provide an option for households that will help them to survive difficult situations, thus making it likely that HBEs will increase. To conclude, it should be highlighted once more that dwelling space will play an increasingly important role as capital for low income households in urban areas.

References

- ADB-BPS 2010. The Informal Sector and Informal Employment in Indonesia: Country Report 2010. Mandaluyong: Philippines.
- AHRENTZEN, S. 1991. *Hybrid Housing: A Contemporary Building Type for Multiple Residential & Business Use*, Milwaukee, Center for Architecture and Urban Planning Research University of Wisconsin-Milwaukee.
- AHRENTZEN, S. 1997. The Meaning of Home Workplaces for Women. In: JONES III, J. P., NAST, H. J. & ROBERTS, S. M. (eds.) *Thresholds in Feminist Geography: Difference, methodology, Representation*. Lanham: Rowman & Littlefield.
- ALLAN, G. 1989. Insiders & Outsiders: Boundaries around the Home. In: ALLAN, G. & CROW, G. (eds.) *Home and Family: Creating the Domestic Sphere*. London: Macmillan.
- ALLAND, A., JR. 1975. Adaptation. *Annual Review of Anthropology*, 4, 59-73.
- ALLSOPP, B. 1974. *Towards a Humane Architecture*, London, F. Muller.
- ALTMAN, I. & CHEMERS, M. 1986. *Culture and Environment*, Cambridge, Cambridge University Press.
- ALTMAN, I. & WERNER, C. M. (eds.) 1985. *Home Environments*, London: Plenum Press.
- ALTMAN, I. 1975. *The Environment and Social Behavior: Privacy, Personal Space, Territory, Crowding*, Monterey, California, Brooks/Cole Publishing.
- AMBERT, A.-M., ADLER, P. A., ADLER, P. & DETZNER, D. F. 1995. Understanding and Evaluating Qualitative Research. *Journal of Marriage and The Family*, 10, 879-893.
- AMIN, A. 1991. Urban Planning in Metropolitan Area of Asia: The Challenge of Accommodating the Informal Sector. *Session on Description of the City Through Different Eyes in the Asian Workshop on Nutrition in the Metropolitan Area*. Kuala Lumpur.
- AMOLE, D. 2005. Coping Strategies for Living in Student Residential Facilities in Nigeria. *Environment and Behavior*, 37, 201-219.
- ARIAS, E. G. (ed.) 1993. *The Meaning and Use of Housing: International Perspectives, Approaches and Their Applications* Avebury: Aldershot.
- BALCHIN, P. & RHODEN, M. 2002. *Housing Policy: An Introduction*, London, Routledge.
- BANK INDONESIA 2003. 2003 Economic Report on Indonesia. Jakarta: Bank Indonesia.
- BAPPEDA KOTA YOGYAKARTA 2007. Data Berbasis 9 (Sembilan) Fungsi Perencanaan Pembangunan (BASIS DATA). Yogyakarta: Badan Perencanaan Pembangunan Daerah Kota Yogyakarta.
- BAPPENAS, BPS & UNFPA 2008. Proyeksi Penduduk Indonesia (*Indonesia Population Projection*) 2005-2025. Jakarta: Bappenas-BPS.
- BARKER, R. G. & WRIGHT, H. F. 1978. Standing Patterns of Behavior. In: BARKER, R. G. (ed.) *Habitats, Environments, and Human Behavior*. London: Jossey-Bass Limited.
- BECHTEL, R. B. & CHURCHMAN, A. (eds.) 2002. *Handbook of Environmental Psychology*, New York: John Wiley & Sons.
- BELL, P. A., GREENE, T. C., FISHER, J. D. & BAUM, A. 2001. *Environmental Psychology*, Belmont, Thomson Wadsworth.

- BENJAMIN, D. N. 1995. Afterword. In: BENJAMIN, D. N. & STEA, D. (eds.) *The Home: Words, Interpretations, Meanings and Environments. Ethnoscapes: Current Challenges in the Environmental Social Sciences*. Aldershot: Avebury.
- BENJAMIN, S., ARIFIN, M. A. & SARJANA, F. P. 1985. The Housing Costs of Low-Income Kampung Dwellers: A Study of Product and Process in Indonesian Cities. *Habitat International*, 9, 91-110.
- BENNETT, J. W. 1980. Human Ecology as Human Behavior: A Normative Anthropology of Resource Use and Abuse. In: ALTMAN, I., RAPOPORT, A. & WOHLWILL, J. F. (eds.) *Human Behavior and Environment: Advances in Theory and Research*. New York: Plenum Press.
- BENNETT, J. W. 1993. *Human Ecology as Human Behavior: Essay in Environmental and Development Anthropology*, London, Transactions Publishers.
- BERNSTEIN, H., CROW, B. & JOHNSON, H. 1992. *Rural Livelihoods: Crises and Responses*, New York, Oxford University Press in association with The Open University.
- BERRY, J. W. 1980. Cultural Ecology and Individual Behavior. In: ALTMAN, I., RAPOPORT, A. & WOHLWILL, J. F. (eds.) *Human Behavior and Environment: Advances in Theory and Research* London: Plenum Press.
- BESCOND, D. & CHATAIGNIER, A. 2003. Seven Indicators to Measure Decent Work: An International Comparison. *International Labour Review*, 142, 179-211.
- BHATT, E. 1989. Toward Empowerment. *World Development*, 17, 1059-1065.
- BISHOP, W. & KELLETT, P. 2000. Exploring the Boundaries of Home and Home-Based Enterprise in an Indonesian Kampung. Paper presented at Conference on Housing, Work and Development: The Role of Home-Based Enterprises, 26-28 April. Newcastle. University of Newcastle upon Tyne.
- BLACK, J. A. & CHAMPION, D. J. 1976. *Methods and Issues in Social Research*, New York, John Wiley & Sons.
- BLACKMAN, A. 2000. Informal Sector Pollution Control: What Policy Options Do We Have? *World Development*, 28, 2067-2082.
- BOGDAN, R. C. & BIKLEN, S. K. 1982. *Qualitative Research for Education: An Introduction to Theory and Methods*, Boston, Allyn and Bacon.
- BOGDAN, R. C. & TAYLOR, S. J. 1975. *Introduction to Qualitative Methods*, New York, John Wiley.
- BORIS, E. & PRÜGL, E. (eds.) 1996. *Homeworkers in Global Perspective: Invisible No More*, New York: Routledge.
- BOSE, M. 2000. Women's Home-based Work in the Slums of Calcutta, India: Meaning and Status Implications. Paper presented at Conference on Housing, Work and Development: The Role of Home-Based Enterprises, 26-28 April. Newcastle, University of Newcastle upon Tyne,
- BPS 1994. PDRB Kabupaten/Kota di Indonesia 1983-1993. Jakarta: BPS (Central Bureau of Statistics).
- BPS 1998. National Socio-Economic Survey (Susenas) 1998. Jakarta: BPS (Central Bureau of Statistics).
- BPS 2001. PDRB Kabupaten/Kota di Indonesia 1997-2000. Jakarta: BPS (Central Bureau of Statistics).

- BPS 2008. Indonesian Country Paper On Informal Sector and Its Measurement. *Workshop on Measuring Informal Sector*, 20-23 May, Manila: Asian Development Bank.
- BPS 2010a. Laporan Bulanan: Data Sosial Ekonomi. Jakarta: BPS (Central Bureau of Statistics).
- BPS 2010b. Hasil Sensus Penduduk 2010: Data Aggregate per Propinsi (*Results of Population Census 2010: Aggregate Data per Province*). Jakarta: BPS (Central Bureau of Statistics)
- BPS 2010c. PDRB Kabupaten/Kota di Indonesia 2004-2008. Jakarta: BPS (Central Bureau of Statistics).
- BPS KOTA YOGYAKARTA 2009. Kota Yogyakarta Dalam Angka (*Yogyakarta City in Figures*). Yogyakarta: BPS (Central Bureau of Statistics)-Statistics of Yogyakarta City.
- BPS YOGYAKARTA PROVINCE 2009. Daerah Istimewa Yogyakarta Dalam Angka (*Yogyakarta Special Region Province in Figures*) 2009. Yogyakarta: BPS (Central Bureau of Statistics)-Statistics of Yogyakarta Province.
- BRANNEN, J. 1995. *Mixing Methods: Qualitative and Quantitative Research*, Aldershot, Avebury.
- BREWER, J. D. 2000. *Ethnography*, Philadelphia, PA, Open University Press.
- BROWER, S. N. 1980. Territory in Urban Setting. In: ALTMAN, I., RAPOPORT, A. & WOHLWILL, J. F. (eds.) *Human Behavior and Environment: Advances in Theory and Research* London: Plenum Press.
- BROWER, S. N. 1980. Territory in Urban Setting. In: ALTMAN, I., RAPOPORT, A. & WOHLWILL, J. F. (eds.) *Human Behavior and Environment: Advances in Theory and Research*. London: Plenum Press.
- BROWN, A. & LLOYD-JONES, T. 2002. Spatial Planning, Access and Infrastructure. In: RAKODI, C. & LLOYD-JONES, T. (eds.) *Urban Livelihoods: A People-centred Approach to Reducing Poverty*. London: Earthscan.
- BRYMAN, A. 2008. *Social Research Methods*, Oxford ; New York, Oxford University Press.
- BUDIARDJO, E. 1998. *Percikan Masalah Arsitektur, Perumahan, Perkotaan (Spark issue on Architecture, Housing, Urban)*, Yogyakarta, Gadjah Mada University Press.
- BULOS, M. & CHAKER, W. 1993. Homebased Workers: Studies in the Adaptation of Space. In: BULOS, M. & TEYMUR, N. (eds.) *Housing: Design, Research, Education*. Aldershot: Avebury.
- CANTER, D. V. 1977. *The Psychology of Place*, London, Architectural Press.
- CARTER, M. R. 2007. Learning from Asset-Based Approaches to Poverty. In: MOSER, C. O. N. (ed.) *Reducing Global Poverty: The Case for Asset Accumulation*. Washington: Brookings Institution Press.
- CASE, D. 1996. Contributions of Journeys Away to the Definition of Home: An Empirical Study of a Dialectical Process. *Journal of Environmental Psychology*, 16, 1-15.
- CHAMBERS, R. & CONWAY, G. R. 1991. Sustainable Rural Livelihoods: Practical Concepts for the 21st Century. Institute of Development Studies (IDS) Discussion Paper 296.
- CHAMBERS, R. 1991. In search of Professionalism, Bureaucracy and Sustainable Livelihoods for the 21 Century. *IDS Bulletin*, 22.
- CHAMBERS, R. 1995. Poverty and Livelihoods: Whose Reality Counts? . *Environment and Urbanization* 7, 173-204.
- CHAN, E. H. W., TANG, B.-S. & WONG, W.-S. 2002. Density Control and the Quality of Living Space: a Case Study of Private Housing Development in Hong Kong. *Habitat International*, 26, 159-175.

- CHING, F. 1987. *Interior Design Illustrated*, New York, Wiley.
- CHING, F. D. K. 1979. *Architecture: Form, Space & Order*, New York, Van Nostrand Reinhold.
- CHUTAPRUTTIKORN, R. 2011. *Life on Tracks: Reconstructing Home in Informal Railway Settlements, Bangkok*. unpublished PhD thesis. Newcastle, University of Newcastle upon Tyne.
- CLAPHAM, D. 2005. *The Meaning of Housing: a Pathways Approach*, Bristol, Policy.
- CLITHEROE, H. C., STOKOLS, D. & ZMUIDZINAS, M. 1998. Conceptualizing the Context of Environment and Behaviour. *Journal of Environmental Psychology*, 18, 103-112.
- COOPER-MARCUS, C. 1995. *House as a Mirror of Self: Exploring the Deeper Meaning of Home*, Berkeley, Conari Press.
- CRESSWELL, T. 2006. *On the Move: Mobility in the Modern Western World*, London, Routledge.
- CRESWELL, J. W. 1998. *Qualitative Inquiry and Research Design: Choosing among Five Traditions*, Thousand Oaks, California, Sage Publications.
- CRESWELL, J. W. 2003. *Research Design: Qualitative, Quantitative, and Mixed Method Approaches*, California, Sage Publications.
- DANE, F. C. 1990. *Research Methods*, California, Brooks/Cole Publishing Company.
- DAVIES, S. 1996. *Adaptable Livelihoods*, London, Macmillan Press.
- DE SILVA, W. & JAYASINGHE, L. P. 2000. Child Labour Issues in Home-based Enterprise in Sri Lanka. *Paper presented at Conference on Housing, Work and Development: The Role of Home-Based Enterprises*, 26-28 April. Newcastle, University of Newcastle upon Tyne.
- DE SOTO, H. 2000. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*, New York, Basic Books.
- DE WAARD, B. 1997. Home-Based Business = Green Business? *Urban Policy and Research*, 15, 51 - 54.
- DENZIN, N. K. & LINCOLN, Y. S. 1994. *Handbook of Qualitative Research*, Thousand Oaks, Sage Publications.
- DEY, I. 1993. *Qualitative Data Analysis: a User-Friendly Guide for Social Scientists*, London, New York, Routledge.
- DFID 2001. *Sustainable Livelihoods Guidance Sheets*, London, The Department for International Development (DFID).
- DHEMBA, J. 1999. Informal Sector Development: A Strategy for Alleviating Urban Poverty in Zimbabwe *Journal of Social Development in Africa*, 14, 5-9.
- DIXON-FYLE, K. 2000. Integrating Employment into Urban Investment Planning: Towards a Planning and Impact Evaluation Methodology. Geneva: Employment Intensive Investment Programme (EIIP) International Labour Office
- DOLING, J. 2002. The South and East Asian Housing Policy Model. In: AGUS, M. R., DOLING, J. & LEE, D.-S. (eds.) *Housing Policy Systems in South and East Asia*. Hampshire: Palgrave Macmillan.
- DOMENICO, D. M. 2008. I'm Not Just a Housewife: Gendered Roles and Identities in the Home-Based Hospitality Enterprise. *Gender, Work & Organization*, 15, 313-332.
- DOOLEY, L. M. 2002. Case Study Research and Theory Building. *Advances in Developing Human Resources*, 4, 335-354.
- DOUGLAS, J. 2002. *Building Adaptation*, Oxford, Butterworth-Heinemann.
- DOUGLAS, M. 1991. The Idea of a Home: A Kind of Space. *Social Research*, 58, 287-307.
- DOVEY, K. 1985. Home and Homelessness. In: ALTMAN, I. & WERNER, C. M. (eds.) *Home Environments*. London: Plenum Press.

- DRAKELEY, S. 2005. *The History of Indonesia*, Westport, Greenwood Press.
- EDGAR L, F. 1990. Defining and Estimating Underground and Informal Economies: The New Institutional Economics Approach. *World Development*, 18, 989-1002.
- EDWARDS, L. N. & FIELD-HENDREY, E. 2002. Home-Based Work and Women's Labor Force Decisions. *Journal of Labor Economics*, 20, 170.
- ELLIS, F. & FREEMAN, H. A. 2004. *Rural Livelihoods and Poverty Reduction Policies*, London, Routledge.
- EMERSON, R. M. (ed.) 1983. *Contemporary Field Research: A Collection of Readings*, Boston: Litle, Brown.
- EVANS, G. W. & MCCOY, J. M. 1998. When Building Don't Work: The Role of Architecture in Human Health. *Journal of Environmental Psychology*, 18, 85-94.
- FANNING, M. J. 1981. Why Women Work Closer to Home. *Urban Studies*, 18, 181-194.
- FAQIH, M. 2005. *Domestic Architecture and Culture Change: Re-Ordering the Use of Space in Madurese Housing*. unpublished PhD thesis. Newcastle, University of Newcastle upon Tyne.
- FARBSTEIN, J. & KANTROWITZ, M. 1978. *People in Places: Experiencing, Using, and Changing the Built Environment*, Englewood Cliffs, Prentice-Hall.
- FARRINGTON, J., RAMASUT, T. & WALKER, J. 2002. *Sustainable Livelihoods Approaches in Urban Areas: General Lessons, with Illustrations from Indian Cases*, London, ODI (Overseas Development Institute).
- FELSTEAD, A. & JEWSON, N. 2000. *In Work, at Home: Towards an Understanding of Homeworking*, London, Routledge.
- FELSTEAD, A., JEWSON, N., PHIZACKLEA, A. & WALTERS, S. 2001. Working at Home: Statistical Evidence for Seven Key Hypotheses. *Work, Employment & Society*, 15, 215-231.
- FELSTEAD, A., JEWSON, N., PHIZACKLEA, A. & WALTERS, S. 2002. Opportunities to Work at Home in the Context of Work-Life Balance. *Human Resource Management Journal*, 12 (1), 54-76.
- FIRMAN, T. 1999. Indonesian Cities Under the "Krismon": A Great "Urban Crisis" in Southeast Asia. *Cities*, 16, 69-82.
- FIRMAN, T. 2002. Urban Development in Indonesia, 1990-2001: From the Boom to the Early Reform Era Through the Crisis. *Habitat International*, 26, 229-249.
- FORD, L. R. 1993. A Model of Indonesian City Structure. *Geographical Review*, 83, 374-396.
- FRANCESCATO, G. 1993. Meaning and Use: A Conceptual Basis. In: ARIAS (ED), E. G. (ed.) *The Meaning and Use of Housing: International Perspectives, Approaches and Their Applications* Avebury: Aldershot.
- FRANCOIS, P. 2002. *Social Capital and Economic Development*, London, Routledge.
- FRAYNE, B. 2004. Migration and Urban Survival Strategies in Windhoek, Namibia. *Geoforum*, 35, 489-505.
- FRIEDMANN, J. & SULLIVAN, F. 1974. The Absorption of Labor in the Urban Economy: The Case of Developing Countries. *Economic Development and Cultural Change*, 22, 385-413.
- FRIJNS, J. & VAN VLIET, B. 1999. Small-Scale Industry and Cleaner Production Strategies. *World Development*, 27, 967-983.
- GEERTZ, C. 2000. *Local Knowledge: Further Essays in Interpretive Anthropology*, New York, Basic Books.

- GHAFUR, S. 1999. The Role of Home-based Income Generation in Local Economic Development: Towards Sustainable Livelihoods. Evidence from Bangladesh. *Proceedings of the International Seminar on Human Resources Development for Sustained Economic Growth and Poverty Alleviation*, 11-13 April. Dhaka, Bangladesh: Islamic Institute of Technology.
- GHAFUR, S. 2000. Urban Poor Home-based Work and Development in Bangladesh: an Entitlement Perspective. *Paper presented at Conference on Housing, Work and Development: The Role of Home-Based Enterprises*, 26-28 April. Newcastle, University of Newcastle upon Tyne,
- GHAFUR, S. 2002. Gender Implications of Space Use in Home-Based Work: Evidences from Slums in Bangladesh. *Habitat International*, 26, 33-50.
- GIFFORD, R. 2002. *Environmental Psychology: Principles and Practice*, British Columbia, Optimal Books.
- GILBERT, A. 1987. Latin America's urban poor: Shanty dwellers or renters of rooms? *Cities*, 4, 43-51.
- GILBERT, A. 1988. Home Enterprises in Poor Urban Settlements: Constraints, Potential and Policy Options. *Regional Development Dialogue*, 9, 21-39.
- GOUGH, K. V. & KELLETT, P. 2001. Housing Consolidation and Home-based Income Generation: Evidence from Self-help Settlements in Two Colombian Cities. *Cities*, 18, 235-247.
- GOUGH, K. V. 1996. Home-based Enterprises in Low-Income Settlements: Evidence from Pereira, Colombia. *Danish Journal of Geography*, 96, 95-102.
- GOUGH, K. V. 2010. Continuity and Adaptability of Home-based Enterprises: A Longitudinal Study from Accra, Ghana. *International Development Planning Review*, 32 (1), 45-70.
- GOUGH, K. V., TIPPLE, A. G. & NAPIER, M. 2003. Making a Living in African Cities: The Role of Home-based Enterprises in Accra and Pretoria. *International Planning Studies*, 8, 253-277.
- GREEN, H., STRANGE, A. & TRACHE, H. 2000. The Homeworking Revolution: Considering the Property Dimension. *Regional Studies*, 34, 303-307.
- GROAT, L. N. & WANG, D. 2002. *Architectural Research Methods*, New York, J. Wiley.
- GUBA, E. C. 1990. *The Paradigm Dialog*, Newbury Park, California, Sage Publications.
- GUBA, E. G. & LINCOLN, Y. S. 1981. *Effective Evaluation: Improving the Usefulness of Evaluation Results Through Responsive and Naturalistic Approaches*, San Francisco, Jossey-Bass Publishers.
- GUINNESS, P. 1986. *Harmony and Hierarchy in a Javanese Kampung*, Oxford, Oxford University Press.
- HAKIM, C. 1987. *Home-based Work in Britain: a Report on the 1981 National Homemaking Survey and the DE Research Programme on Homework*, London, Department of Employment.
- HAMDI, N. 1991. *Housing Without Houses: Participation, Flexibility, Enablement*, New York, Van Nostrand Reinhold.
- HAREVEN, T. K. 1991. The Home and the Family in Historical Perspective. *Social Research*, 58, 253-285.
- HARRIS, P. B. & BROWN, B. B. 1996. The Home and Identity Display: Interpreting Resident Territoriality from Home Exteriors. *Journal of Environmental Psychology*, 16, 187-203.

- HART, C. 1998. *Doing a Literature Review: Releasing the Social Science Research Imagination*, London, Sage.
- HART, K. 1973. Informal Income Opportunities and Urban Employment in Ghana. *The Journal of Modern African Studies*, 11, 61-89.
- HAYWARD, G. 1975. Home as an Environmental and Psychological Concept. *Landscape*, 20, 2-9.
- HEERWAGEN, J. H. & ORIAN, G. H. 1986. Adaptations to Windowlessness: A Study of the Use of Visual Decor in Windowed and Windowless Offices. *Environment and Behavior*, 18, 623-639.
- HEIMSTRA, N. W. & MCFARLING, L. H. 1974. *Environmental Psychology*, California, Wadsworth.
- HERTZBERGER, H. 2000. *Space and the Architect: Lessons in Architecture 2*, Rotterdam, 010 Publishers.
- HEYWOOD, F. 2005. Adaptation: Altering the House to Restore the Home. *Housing Studies*, 20, 531-547.
- HILLIER, B. & HANSON, J. 2003. *The Social Logic of Space*, Cambridge England ; New York, Cambridge University Press.
- HOWARD, R. W. 1984. *Coping and Adapting: How You Can Learn to Cope with Stress*, London, Angus & Robertson.
- HUSSMANN, R. 2004. Measuring the Informal Economy: From Employment in the Informal Sector to Informal Employment. *Working Paper No. 53*. Geneva: Policy Integration Department, Bureau of Statistics, International Labour Office.
- HUTCHEON, L. 2006. *A theory of adaptation*, New York, Routledge.
- ILO 2002. Report VI: Decent Work and the Informal Economy, Sixth Item on the Agenda. *International Labour Conference, 90th Session*. Geneva.
- ILO 2003. Report II: Household Income and Expenditure Statistics. *Seventeenth International Conference of Labour Statisticians*, Geneva, 24 November-3 December 2003. Geneva.
- JENSEN, R. 1966. *High Density Living*, London, Leonard Hill.
- JUNAIDI, W. 2004. Laporan Kompilasi Data Kecamatan Gondomanan Kota Yogyakarta tahun 2004 (*Data Compilation Report on District Gondomanan Yogyakarta City 2004*), unpublished report. Yogyakarta: Gadjah Mada University.
- KANNAN, K. P. & PAPOLA, T. S. 2007. Workers in the Informal Sector: Initiatives by India's National Commission for Enterprises in the Unorganized Sector (NCEUS). *International Labour Review*, 146, 321-329.
- KAR, S. & MARJIT, S. 2009. Urban Informal Sector and Poverty. *International Review of Economics & Finance*, 18, 631-642.
- KARANASUTA, K. 1987. Homework in Developing Countries: A Case of Thailand. Bangkok: National Institute of Development Administration.
- KARTASASMITA, G. 1998. *Krisis Moneter dan Dampaknya Terhadap Repelita VII (Monetary Crisis and Its Impact on Repelita VII)* [Online]. Jakarta: <http://www.ginandjar.com/public/01KrisisMoneterdanDampaknya.pdf>. [Accessed 7 March 2011].
- KELLET, P., TORO, A. & HARAMOTO, E. 1993. Dweller-Initiated Changes and Transformations of Social Housing: Theory and Practice in The Chilean Context. *Open House International*, 18, 3-10.

- KELLETT, P. & BISHOP, W. 2000. Work and Home: Spatial Implications of Income Generation in the Domestic Setting. *Paper presented at The IAPS 16 International Conference: Cities, Social Life and Sustainable Development*. July, Paris.
- KELLETT, P. & BISHOP, W. 2006. Reinforcing Traditional Values: Social, Spatial and Economic Interactions in an Indonesian Kampung. *Open House International* 31, 58-66.
- KELLETT, P. & MOORE, J. 2003. Routes to Home: Homelessness and Home-Making in Contrasting Societies. *Habitat International*, 27, 123-141.
- KELLETT, P. & TIPPLE, A. G. 2000. The Home as Workplace: a Study of Income-Generating Activities Within the Domestic Setting. *Environment and Urbanization*, 12, 203-214.
- KELLETT, P. & TIPPLE, A. G. 2002. Home-Based Enterprise and Housing Policy: Evidence from India and Indonesia. *Paper presented at the ENHR 2002 Conference*, 1-5 July. Vienna.
- KELLETT, P. & TIPPLE, A. G. 2003. Exploring Space: Researching the Use of Domestic Space for Income Generation in Developing Cities. *ENHR, IAPS and KTH International Conference: Methodologies in Housing Research*, September. Stockholm.
- KELLETT, P. 1995. *Constructing Home: the Production and Consumption of Popular Housing in Northern Columbia*. unpublished PhD thesis. Newcastle, University of Newcastle upon Tyne.
- KELLETT, P. 2000a. Home-Based Enterprises in Developing Cities: An International Perspective. *International Seminar: Rumah Produktif: The Productive House*. Surabaya.
- KELLETT, P. 2000b. Voices from the Barrio: Oral Testimony and Informal Housing Processes. *Third World Planning Review*, 22, 161-177.
- KELLETT, P. 2010. Living in the Field: Ethnographic Experience of Place. *AHRA International Conference (paper unpublished)*. November. Edinburgh,
- KELLETT, P., SENKWE, B. & SPEAK, S. 2000. Creating and Sustaining Livelihoods in Ipusukilo: A Pilot Study of Home-based Enterprise and Poverty Alleviation in Zambia. *Conference on Housing, Work and Development: The Role of Home-Based Enterprises*. 26-28 April. Newcastle, University of Newcastle upon Tyne.
- KENT, S. 1984. *Analyzing Activity Areas: An Ethnoarcheological Study of the Use of Space*, Albuquerque, University of New Mexico Press.
- KENT, S. 1990. Activity Area and Architecture: an Interdisciplinary View of the Relationship between Use of Space and Domestic Built Environments. In: KENT, S. (ed.) *Domestic Architecture and the Use of Space: an Interdisciplinary Cross-Cultural Study*. Cambridge: Cambridge University Press.
- KENT, S. 1991. Partitioning Space: Cross-Cultural Factors Influencing Domestic Spatial Segmentation. *Environment and Behavior*, 23, 438-473.
- KHAIRUDDIN, H. 1995. *Filsafat Kota Yogyakarta (Yogyakarta City Philosophy)*, Yogyakarta, Liberty.
- KHUDORI, D. 2002. *Menuju Kampung Pemerdekaan: Membangun Masyarakat Sipil dari Akar-akarnya: Belajar dari Romo Mangun di Pinggir Kali Code (Towards the Kampung of liberation: Building Civil Society from the Roots: Learning from Romo Mangun on the Edge of the Code)*, Yogyakarta, Yayasan Pondok Rakyat.
- KIGOCHIE, P. W. 2001. Squatter Rehabilitation Projects that Support Home-Based Enterprises Create Jobs and Housing: The Case of Mathare 4A, Nairobi. *Cities*, 18, 223-233.
- KING, P. 2004. *Private Dwelling: Contemplating the Use of Housing*, London, Routledge.
- KOENTJARANINGRAT 1974. *Kebudayaan, Mentalitet dan Pembangunan (Culture, Mentality and Development)*, Jakarta, Gramedia.

- KOENTJARANINGRAT 1984. *Kebudayaan Jawa (Javanese Culture)*, Jakarta, Balai Pustaka.
- KRUEGER, R. A. & CASEY, M. A. 2000. *Focus Groups: a Practical Guide for Applied Research*, London, Sage Publications.
- KUO, F. E. 2001. Coping with Poverty: Impacts of Environment and Attention in the Inner City. *Environment and Behavior*, 33, 5-34.
- KUPRITZ, V. W. 1998. Privacy in the Work Place: The Impact of Building Design. *Journal of Environmental Psychology*, 18, 341-356.
- LANE, B. M. 2007. *Housing and Dwelling: Perspectives on Modern Domestic Architecture*, London, Routledge.
- LAQUIAN, A. A. 1983. *Basic Housing: Policies for Urban Sites, Services, and Shelter in Developing Countries*, Ottawa, Canada, International Development Research Centre.
- LAWRENCE, R. J. 1987a. What Makes a House a Home? *Environment and Behavior*, 19, 154-168-NA.
- LAWRENCE, R. J. 1987b. *Housing, Dwellings and Homes: Design Theory, Research and Practice*, Chichester West Sussex ; New York, Wiley.
- LAWRENCE, R. J. 1990. Public Collective and Private Space: A Study of Urban Housing in Switzerland. In: KENT, S. (ed.) *Domestic Architecture and the Use of Space: An Interdisciplinary Cross-cultural Study*. Cambridge: Cambridge University Press.
- LAWRENCE, R. J. 1993a. The Meaning and Use of Home: It's Interior. In: ARIAS, E. G. (ed.) *The Meaning and Use of Housing: International Perspectives. Approaches and Their Applications*. Aldershot: Avebury.
- LAWRENCE, R. J. 1993b. Housing and Homes: Agenda for Future Research. In: BULOS, M. & TEYMUR, N. (eds.) *Housing : design, research, education*. Aldershot: Avebury.
- LAWRENCE, R. J. 1995. Deciphering Home: An Integrative Historical Perspective In: BENJAMIN, D. N. & STEA, D. (eds.) *The Home: Words, Interpretations, Meanings and Environments. Ethnoscapes: Current Challenges in the Environmental Social Sciences*. Aldershot: Avebury.
- LAWRENCE, R. J. 2008. Rethinking Residential Mobility: An interdisciplinary interpretation. *International Journal of Architectural Research*, 2, 70-83.
- LAWSON, B. 2001. *The Language of Space*, Oxford, Architectural Press.
- LAZARUS, R. S. & FOLKMAN, S. 1984. *Stress, Appraisal, and Coping*, New York, Springer Publishing Company.
- LEEDY, P. D. & ORMROD, J. E. 2005. *Practical Research: Planning and Design*, Upper Saddle River, N.J., Prentice Hall.
- LEFEBVRE, H. 1991. *The Production of Space*, Oxford, Blackwell.
- LEFEBVRE, H. 2009. *State, Space, World: Selected Essays*, Minneapolis, University of Minnesota Press.
- LINCOLN, Y. S. & GUBA, E. G. 1985. *Naturalistic Inquiry*, Beverly Hills, California, Sage Publications.
- LIPTON, M. 1980. Family, Fungibility and Formality: Rural Advantages of Informal Non-Farm Enterprise versus the Urban Formal State. In: AMIN, S. (ed.) *Human Resources, Employment, and Development, Volume 5, Developing Countries*. Proceedings of the Sixth World Congress of the International Economic Association, Mexico City: MacMillan, London.
- LOUW, E. & DE VRIES, P. 2002. Working at Home: The Dutch Property Dimension. *Planning Practice & Research*, 17, 17-30.

- MAHMUD, S. 2003. Women and the Transformation of Domestic Spaces for Income Generation in Dhaka Bustees. *Cities*, 20, 321-329.
- MAJALE, M. 2008. Employment Creation through Participatory Urban Planning and Slum Upgrading: The Case of Kitale, Kenya. *Habitat International*, 32, 270-282.
- MALDONADO, C. 1995. The Informal Sector: Legalization or Laissez-faire? *International Labour Review*, 134, 705.
- MANANDHAR, L. K. 2000. Development of Home-Based Enterprises by Women and Their Gender Relations in Nepal. *Paper presented at Conference on Housing, Work and Development: The Role of Home-Based Enterprises*. 26-28 April. Newcastle, University of Newcastle upon Tyne.
- MARSOYO, A. 1992. *Place-Space and Socio-Economic Analysis of Home-Based Enterprises in Yogyakarta Indonesia*. unpublished master thesis, Bangkok, Asian Institute of Technology.
- MAXWELL, J. A. 1996. *Qualitative Research Design: An Interactive Approach*, London, Sage Publications.
- MCCOY, J. M. 2002. Work Environments. In: BECHTEL, R. B. & CHURCHMAN, A. (eds.) *Handbook of Environmental Psychology*. New York: John Wiley & Sons.
- MCILWAINE, C. & MOSER, C. O. N. 2003. Poverty, Violence and Livelihood Security in Urban Colombia and Guatemala. *Progress in Development Studies*, 3, 113-130.
- MEIKLE, S. 2002. The Urban Context and Poor People. In: RAKODI, C. & LLOYD-JONES, T. (eds.) *Urban Livelihoods: A People-centred Approach to Reducing Poverty*. London: Earthscan.
- MERRIFIELD, A. 2000. Henri Lefebvre: A Socialist in Space. In: CRANG, M. & THRIFT, N. (eds.) *Thinking Space*. London: Routledge.
- MILLS, A. J., DUREPOS, G. & WIEBE, E. (eds.) 2010. *Encyclopedia of Case Study Research*, California: Sage Publications.
- MOORE, G. T., TUTTLE, P. D. & HOWELL, S. C. 1984. *Environmental Design Research Directions: Process and Prospects*, New York, Preager.
- MOORE, J. 2000. Placing Home in Context. *Journal of Environmental Psychology*, 20, 207-217.
- MOORE, J. 2006. Homeworking and Work-Life Balance: Does It Add to Quality of Life? *Revue européenne de psychologie appliquée*, 56 5-13.
- MORLEY, D. 2000. *Home Territories: Media, Mobility and Identity*, London, Routledge.
- MORRIS, E. W., WOODS, M. E. & JACOBSON, A. L. 1972. The Measurement of Housing Quality. *Land Economics*, 48, 383-387.
- MOSER, C. O. N. & FELTON, A. 2007. Intergenerational Asset Accumulation and Poverty Reduction in Guayaquil, Ecuador, 1978-2004. In: MOSER, C. O. N. (ed.) *Reducing Global Poverty: The Case for Asset Accumulation*. Washington: Brookings Institution Press.
- MOSER, C. O. N. 1996. Confronting Crisis: A Summary of Household Responses to Poverty And Vulnerability in Four Poor Urban Communities. Washington: ESD-World Bank.
- MOSER, C. O. N. 1998. The Asset Vulnerability Framework: Reassessing Urban Poverty Reduction Strategies. *World Development*, 26, 1-19.
- MOSER, C. O. N. 2007a. Introduction. In: MOSER, C. O. N. (ed.) *Reducing Global Poverty: The Case for Asset Accumulation*. Washington: Brookings Institution Press.
- MOSER, C. O. N. 2007b. Asset Accumulation Policy and Poverty Reduction. In: MOSER, C. O. N. (ed.) *Reducing Global Poverty: The Case for Asset Accumulation*. Washington: Brookings Institution Press.

- MOSER, C. O. N. 2009. *Ordinary Families, Extraordinary Lives: Assets and Poverty Reduction in Guayaquil, 1978-2004*, Washington, Brookings Institution.
- MULDER, N. 1994. *Individual and Society in Java: A Cultural Analysis*, Yogyakarta, Gadjah Mada University Press.
- MULDER, N. 2005. *Mysticism in Java: Ideology in Indonesia*, Yogyakarta, Kanisius.
- MUNITZ, M. K. 1957. *Space, Time, and Creation: Philosophical Aspects of Scientific Cosmology*, Glencoe, Ill., Free Press.
- MURAYA, P. W. K. 2006. Urban Planning and Small-Scale Enterprises in Nairobi, Kenya. *Habitat International*, 30, 127-143.
- NAGANO, M. S., LACONO, A. & FILHO, E. E. 2010. Cooperation, Interaction and Learning in Local Production Systems: Evidence in Brazilian Firms. *African Journal of Business Management*, 4, 2459-2479.
- NAS, P. J. M. 2003. *The Indonesian Town Revisited*, Verlag, LIT.
- NEUMAN, L. W. 2007. *Basic of Social Research: Qualitative and Quantitative Approaches*, Boston, Pearson Education.
- NEWELL, P. B. 1995. Perspectives on Privacy. *Journal of Environmental Psychology*, 15, 87-104.
- NORBERG-SCHULZ, C. 1971. *Existence, Space and Architecture*, London, Studio Vista.
- OMUTA, G. 1986. The Urban Informal Sector and Environmental Sanitation in Nigeria: The Needless Conflict. *Habitat International*, 10, 179-187.
- ONYEBUEKE, V. U. 2001. Denied Reality, Retarded Perception or Inaction?: Official Responses to the Incidence of Home-based Enterprises (HBES) and its Housing Corollary in Nigerian Cities. *Cities*, 18, 419-423.
- ORR, A. & MWALE, B. 2001. Adapting to Adjustment: Smallholder Livelihood Strategies in Southern Malawi. *World Development*, 29, 1325-1343.
- PAL, A. 2008. *Planning from the Bottom Up: Democratic Decentralisation in Action*, Amsterdam, IOS Press.
- PATTON, C. V. & LEKSONO, P. S. 1988. Meeting Shelter Needs in Indonesia. In: PATTON, C. V. (ed.) *Spontaneous Shelter: International Perspectives and Prospects*. Philadelphia: Temple University Press.
- PATTON, M. Q. 1987. *How to Use Qualitative Methods in Evaluation*, California, Sage Publications.
- PATTON, M. Q. 2002. *Qualitative Research & Evaluation Methods*, London, Sage Publications.
- PAYNE, G. 2002. Tenure and Shelter in Urban Livelihoods. In: RAKODI, C. & LLOYD-JONES, T. (eds.) *Urban Livelihoods: A People-centred Approach to Reducing Poverty*. London: Earthscan.
- PAYNE, G. K. 1974. Functions of Informality: Squatter Settlements in Delhi. *Ekistics* 224, 63-66.
- PEARSON, R. 2004. Organising Home-based Workers in the Global Economy: an Action-Research Approach. *Development in Practice*, 14, 136-148.
- PEATTIE, L. R. 1979. Housing Policy in Developing Countries: Two Puzzles. *World Development*, 7, 1017-1022.
- PEATTIE, L. R. 1980. Anthropological Perspectives on the Concepts of Dualism, the Informal Sector, and Marginality in Developing Urban Economies. *International Regional Science Review*, 5, 1-31.

- PEDERSEN, D. M. 1997. Psychological Functions of Privacy. *Journal of Environmental Psychology*, 17, 147-156.
- PERERA, L. A. S. R. & AMIN, A. T. M. N. 1996. Accommodating the Informal Sector: A Strategy for Urban Environmental Management. *Journal of Environmental Management*, 46, 3-15.
- PERKINS, H. C., THORNS, D. C., WINSTANLEY, A. & NEWTON, B. M. 2002. *The Study of 'Home' From a Social Scientific Perspective: An Annotated Bibliography*, Christchurch, New Zealand Foundation for Research, Science and Technology.
- PRIEMUS, H. 1986. Housing As a Social Adaptation Process: A Conceptual Scheme. *Environment and Behavior*, 18, 31-52.
- PRIJOTOMO, J. 1999. Griyo dan Omah: Penelusuran Makna dan Signifikansi di Arsitektur Jawa (*Griyo and Omah: Search Meaning and Significance in Javanese Architecture*). *Dimensi Teknik Arsitektur*, 27, 30-26.
- PROSHANSKY, H. M., ITTELSON, W. H. & RIVLIN, L. G. (eds.) 1976. *Environmental Psychology: People and Their Physical Settings*, New York: Holt, Rinehart and Winston.
- PUBLIC WORK DEPARTMENT 1987. Petunjuk Perencanaan Kawasan Perumahan (*Guideline of Urban Residential Area Planning*). Jakarta: Departemen Pekerjaan Umum (Public Work Department), Jakarta.
- RAJ, M. & MITRA, B. 1990. Household, Housing, and Home-Based Economic Activities in Low-Income Settlements. In: MULKH, R. & NIENTIED, P. (eds.) *Housing and Income in Third World Urban Development*. London: Aspect.
- RAKODI, C. & LLOYD-JONES, T. (eds.) 2002. *Urban Livelihoods: A People-centred Approach to Reducing Poverty*, London: Earthscan.
- RAKODI, C. 1995. Poverty Lines or Household Strategies?: A Review of Conceptual Issues in the Study of Urban Poverty. *Habitat International*, 19, 407-426.
- RAKODI, C. 1999. A Capital Assets Framework for Analysing Household Livelihood Strategies: Implications for Policy. *Development Policy Review*, 17, 315-342.
- RAPOPORT, A. 1969. *House Form and Culture*, New Jersey, Prentice-Hall.
- RAPOPORT, A. 1977. *Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design*, Oxford, Pergamon Press.
- RAPOPORT, A. 1980. Cross-Cultural Aspects of Environmental Design. In: ALTMAN, I., RAPOPORT, A. & WOHLWILL, J. F. (eds.) *Human Behavior and Environment: Advance in Theory and Research -- Environment and Culture*. London: Plenum Press.
- RAPOPORT, A. 1982. *The Meaning of the Built Environment: A Nonverbal Communication Approach*, Beverly Hills, Sage Publications.
- RAPOPORT, A. 1985. Thinking about Home Environments: A Conceptual Framework. In: ALTMAN, I. & WERNER, C. M. (eds.) *Home Environments*. London: Plenum Press.
- RAPOPORT, A. 1990a. *The Meaning of the Built Environment: A Nonverbal Communication Approach*, Tucson, The University of Arizona Press.
- RAPOPORT, A. 1990b. Systems of Activities and Systems of Settings. In: KENT, S. (ed.) *Domestic Architecture and the Use of Space: An Interdisciplinary Cross-cultural Study*. Cambridge: Cambridge University Press.
- RAPOPORT, A. 1994. *Thirty Three Papers in Environment-Behaviour Research*, Pune, Sangam Press.
- RAPOPORT, A. 1995. A Critical Look at the Concept 'Home'. In: BENJAMIN, D. N. & STEA, D. (eds.) *The Home: Words, Interpretations, Meanings and Environments. Ethnoscapes: Current Challenges in the Environmental Social Sciences*. Aldershot: Avebury.

- RAPOPORT, A. 1999. On the Relationships Between Family and Housing. *In: AWOTONA, A. (ed.) Housing Provision and Bottom-up Approaches: Family case studies from Africa, Asia and South America.* Aldershot: Ashgate.
- RAPOPORT, A. 2005. *Culture, Architecture, and Design*, Chicago, Locke Science Publishing.
- RATCLIFFE, J. 1992. *An Introduction to Town and Country Planning*, London, UCL Press.
- RECHAVI, T. B. 2009. A Room for Living: Private and Public Aspects in the Experience of the Living Room. *Journal of Environmental Psychology*, 29, 133-143.
- RELPH, E. 1976. *Place and Placelessness*, London, Pion Ltd.
- ROGERSON 1985. The First Decade of Informal Sector Studies: Review and Synthesis. Johannesburg: University of the Witwatersrand.
- ROWE, B. R., HAYNES, G. W. & STAFFORD, K. 1999. The Contribution of Home-Based Business Income to Rural and Urban Economies. *Economic Development Quarterly*, 13, 66-77.
- RYBCZYNSKI, W. 1988. *Home: a Short History of an Idea*, London, Heinemann.
- RYD, H. 1991. My Home is My Castle--Psychological Perspectives on "Sick Buildings". *Building and Environment*, 26, 87-93.
- RYKWERT, J. 1991. House and Home. *Social Research*, 58, 51-62.
- SATTERTHWAITE, D. 2002. Lessons from the Experience of Some Urban Poverty-reduction Programmes. *In: RAKODI, C. & LLOYD-JONES, T. (eds.) Urban Livelihoods: A People-centred Approach to Reducing Poverty.* London: Earthscan.
- SAUNDERS, P. & WILLIAMS, P. 1988. The Constitution of the Home: Towards a Research Agenda. *Housing Studies*, 3, 81-93.
- SCHWANDT, T. A. 2001. *Dictionary of Qualitative Inquiry*, Thousand Oaks, California, Sage Publications.
- SEBBA, R. & CHURCHMAN, A. 1983. Territories and Territoriality in the Home. *Environment and Behavior*, 15, 191-210-NA.
- SEBBA, R. & CHURCHMAN, A. 1986. The Uniqueness of the Home. *Architecture & Behavior*, 3, 7-24.
- SERFATY-GARSON, P. 1985. Experience and Use of the Dwelling. *In: ALTMAN, I. & WERNER, C. M. (eds.) Home Environments.* London: Plenum Press.
- SETHURAMAN, S. V. 1985. The Informal Sector in Indonesia: Policies and Prospects. *International Labour Review*, 124, 719.
- SETIAWAN, B. 1999. Survival Strategies by the Poor in Yogyakarta, Indonesia: the Importance of "Social Capital". *In: HAINSWORTH, G. B. (ed.) Globalization and the Asian Economic Crisis: Indigenous, Coping Strategies, and Governance Reform in Southeast Asia.* Vancouver: Centre for Southeast Asia Research-Institute of Asian Research.
- SETIAWAN, B. 2001. The Future of Kampung in Indonesia: Costs and Benefits of Illegality. *Forum Teknik*, 25 (2), 220-233.
- SHEEHAN, M. F. 1996. Home-Based Enterprise in Oregon: Improving Local Regulation of an Important Economic Asset. Oregon: Fisher, Sheehan & Colton Public Finance and General Economics.
- SIDDIQUI, R. N. & PANDEY, J. 2003. Coping with Environmental Stressors by Urban Slum Dwellers. *Environment and Behavior*, 35, 589-604.
- SILVERMAN, D. 2005. *Doing Qualitative Research: a Practical Handbook*, London, Sage Publications.
- SINAI, I. 1998. Using the Home for Income-Generation: The Case of Kumasi, Ghana. *Cities*, 15, 417-427.

- SINAI, I. 2002. The Determinants of the Number of Rooms Occupied by Compound Dwellers in Kumasi, Ghana: Does Working at Home Mean More Rooms? *Applied Geography*, 22, 77-90.
- SINGARIMBUN, M. 2003. *Reflection from Yogya: Portraits of Indonesia Social Life*, Yogyakarta, Galang Printika.
- SINGH, A. K. & PANDEY, J. 1990. Social Support as a Moderator of the Relationship Between Poverty and Coping Behaviors. *Journal of Social Psychology*, 130, 533-541.
- SMALDONE, D., HARRIS, C. & SANYAL, N. 2005. An Exploration of Place as a Process: The Case of Jackson Hole, WY. *Journal of Environmental Psychology*, 25, 397-414.
- SMITH, S. G. 1994a. The Essential Qualities of a Home. *Journal of Environmental Psychology*, 14, 31-46.
- SMITHERS, J. & SMIT, B. 1997. Human Adaptation to Climatic Variability and Change. *Global Environmental Change*, 7, 129-146.
- SNYDER, C. R. 1999. *Coping: the Psychology of What Works*, New York, Oxford University Press.
- SOMMER, B. & SOMMER, R. 1997. *A Practical Guide to Behavioral Research: Tools and Techniques* New York, Oxford University Press.
- SPENCER-WOOD, S. M. 2007. The World their Household. In: LANE, B. M. (ed.) *Housing and Dwelling: Perspectives on Modern Domestic Architecture*. London: Routledge.
- SPICKER, P., LEGUIZAMON, S. A. & GORDON, D. (eds.) 2006. *Poverty: an International Glossary*, New York: Zed Books.
- STAKE, R. E. 1994. Case Studies. In: DENZIN, N. K. & LINCOLN, Y. S. (eds.) *Handbook of Qualitative Research*. Thousand Oak: Sage.
- STAKE, R. E. 1995. *The Art of Case Study Research*, Thousand Oaks, Sage Publications.
- STAKE, R. E. 2003. Case Studies. In: DENZIN, N. K. & LINCOLN, Y. S. (eds.) *Strategies of Qualitative Inquiry*. 2 ed. London: Sage Publications.
- STEA, D. 1995. House and Home: Identity, Dichotomy, or Dialectic. In: BENJAMIN, D. N. & STEA, D. (eds.) *The Home: Words, Interpretations, Meanings and Environments. Ethnoscapes: Current Challenges in the Environmental Social Sciences*. Aldershot: Avebury.
- STEDMAN, R. C. 2002. Toward a Social Psychology of Place: Predicting Behavior from Place-Based Cognitions, Attitude, and Identity. *Environment and Behavior*, 34, 561-581.
- STRASSMANN, W. P. 1985. Home-Based Restaurant, Snack Bar, and Retail Stores: Their Contribution to Income and Employment in Lima, Peru, Working Paper#86. Washington: World Bank.
- STRASSMANN, W. P. 1986. Types of Neighbourhood and Home-Based Enterprises: Evidence from Lima, Peru. *Urban Studies*, 23, 485-500.
- STRASSMANN, W. P. 1987. Home-based Enterprises in Cities of Developing Countries. *Economic Development & Cultural Change*, 36, 121-144.
- SUECA, N. P. 2003. *Housing Transformation: Improving Environment and Developing Culture in Bali*. unpublished PhD thesis. Newcastle, University of Newcastle upon Tyne.
- SULLIVAN, J. 1980. *Back Alley Neighbourhood: Kampung as Urban Community in Yogyakarta*, Melbourne, Monash University.
- SULLIVAN, J. 1986. Kampung and State: The Role of Government in the Development of Urban Community in Yogyakarta. *Indonesia*, 41, 63-88.

- SURJOMIHARDJO, A. 2008. *Kota Yogyakarta Tempo Doeloe: Sejarah Sosial 1880-1930 (First Period of Yogyakarta City : Social History 1880-1930)*, Jakarta, Komunitas Bambu.
- SURYO, D. 2004. Penduduk dan Perkembangan Kota Yogyakarta 1900-1990. *the 1st International Conference on Urban History*. Surabaya, 23-25 August.
- TIPPLE, A. G. & COULSON, J. 2009. Funding the Home-based Enterprise: Finance and Credit in Developing Country Livelihoods. *IDPR*, 29, 125-159.
- TIPPLE, A. G. 1991. *Self-help Transformations of Low Cost Housing: An Introductory Study*, London, Urban International Press for the Overseas Development Administration.
- TIPPLE, A. G. 1992. Self-Help Transformations to Low Cost Housing: Initial Impressions of Cause, Context and Value. *Third World Planning Review*, 14 167-192.
- TIPPLE, A. G. 1993. Shelter as Workplace: A Review of Home-based Enterprise in Developing Countries. *International Labour Review*, 132, 521.
- TIPPLE, A. G. 1996. Housing Extensions as Sustainable Development. *Habitat International*, 20, 367-376.
- TIPPLE, A. G. 2000. *Extending Themselves: User-Initiated Transformations of Government-Built Housing in Developing Countries*, Liverpool, Liverpool University Press.
- TIPPLE, A. G. 2004. Settlement Upgrading and Home-based Enterprises: Discussions from Empirical Data. *Cities*, 21, 371-379.
- TIPPLE, A. G. 2005a. Pollution and Waste Production in Home-Based Enterprises in Developing Countries: Perceptions and Realities. *Journal of Environmental Planning and Management*, 48, 275 - 299.
- TIPPLE, A. G. 2005b. The Place of Home-based Enterprises in the Informal Sector: Evidence from Cochabamba, New Delhi, Surabaya and Pretoria. *Urban Studies*, 42, 611-632.
- TIPPLE, A. G. 2006. Employment and Work Conditions in Home-based Enterprises in Four Developing Countries: Do They Constitute 'Decent Work'? *Work, Employment & Society*, 20, 167-179.
- TIPPLE, A. G., AMOLE, B., KORBOE, D. & ONYEACHOLEM, H. 1994. House and Dwelling, Family and Household: Towards Defining Housing Unit in West African Cities. *Third World Planning Review*, 16.
- TIPPLE, A. G., COULSON, J. & KELLETT, P. 2001. The Environmental Impact of Home-Based Enterprises in Developing Countries, Final Report DfID Research No.R7138. Newcastle upon Tyne: CARDO, School of Architecture, Planning and Landscape University of Newcastle upon Tyne.
- TIPPLE, A. G., MASTERS, G. A. & GARROD, G. D. 2000. An Assessment of the Decision to Extend Government-built Houses in Developing Countries. *Urban Studies*, 37, 1605-1617.
- TIPPLE, A. G. & KELLETT, P. 2003. Housing and Work in the Same Space: Spatial Implications of Home-Based Enterprises in India and Indonesia. *Paper presented at the 7th Conference of the Asian Planning Schools Association*, September, Hanoi, Hanoi Architectural University (HUA).
- TITUS, M. J. & BURGERS, P. P. M. 2009. *Rural Livelihoods, Resources and Coping with Crisis in Indonesia: A Comparative Study*, Amsterdam, Amsterdam University Press.
- TOGNOLI, J. 1987. Residential Environments. In: STOKOLS, D. & ALTMAN, I. (eds.) *Handbook of Environmental Psychology*. New York: Wiley Interscience.
- TURNER, J.F.C. 1976. *Housing by People; Towards Autonomy in Building Environment*, London, Marion Boyars Publishers.

- TURNER, J.F.C. 1972. Housing as a Verb. In: TURNER, J. F. C. & FICHTER, R (eds.) *Freedom to Build: Dweller Control of the Housing Process*. New York: Macmillan.
- TURNER, S. 1999. Surviving the Asian Crisis: Small-Scale Enterprises in Ujung Pandang, Indonesia. In: HAINSWORTH, G. B. (ed.) *Globalization and the Asian Economic Crisis: Indigenous Responses, Coping Strategies, and Governance Reform in Southeast Asia*. Vancouver: Centre for Southeast Asia Research, Institute of Asian Research.
- UNDP. 1999. Participatory Assessment and Planning for Sustainable Livelihoods www.undp.org/sl/Documents/Strategy_papers/Participatory_Assessment_for_SLSW.htm/PAPSL.htm. [Accessed 20 July 2005].
- UTOMO, Y. W. 2007. *Kotabaru, Jelajah ke Kota Taman Tua (Kotabaru, Browse to the Old City Park)* [Online]. <http://www.yogyes.com/id/yogyakarta-tourism-object/architectural-sight/kotabaru/>. [Accessed 19 March 2011].
- UZZELL, D. & RÄTHZEL, N. 2009. Transforming Environmental Psychology. *Journal of Environmental Psychology*, 29, 340-350.
- VERREST, H. & POST, J. 2007. Home-based Economic Activities, Livelihoods and Space in Paramaribo, Suriname. *International Development Planning Review*, 29.
- VERREST, H. 2007. *Home-Based Economic Activities and Carribbean Urban Livelihoods: Vulnerability, Ambition and Impact in Paramaribo and Port of Spain*, Amsterdam, Amsterdam University Press.
- WERNA, E. 2001. Shelter, Employment and the Informal City in the Context of the Present Economic Scene: Implications for Participatory Governance. *Habitat International*, 25, 209-227.
- WERNER, C. M., ALTMAN, I. & OXLEY, D. 1985. Temporal Aspects of Homes: Transactional Perspective. In: ALTMAN, I. & WERNER, C. M. (eds.) *Home Environments*. London: Plenum Press.
- WERNER, C. M., BROWN, B. B. & ALTMAN, I. 2002. Transactionally Oriented Research: Examples and Strategies. In: BECHTEL, R. B. & CHURCHMAN, A. (eds.) *Handbook of Environmental Psychology*. New York: John Wiley & Sons.
- WHITMAN, S. 2008. *World Poverty*, New York, Facts On File.
- WINARSO, H. 1988. *The Legal and Administrative Framework of Urban Development Planning in Indonesia: A Case Study of Yogyakarta*. unpublished master thesis-Asian Institute of Technology, Bangkok.
- WIRYOMARTONO, B. P. 1998. The Idea of Home Beyond Historicism: A Javanese Experience in Themes, Events and Metaphors of Town and City in Dealing with the Prospect and the Future of Historic Cities and Districts. *Paper presented at International Symposium and Workshops on Historic Cities in Islamic Societies*. 21-23 April. Yogyakarta.
- WISE, J. M. 2000. Home: Territory and Identity. *Cultural Studies*, 14, 295-310.
- WRATTEN, E. 1995. Conceptualizing Urban Poverty *Environment and Urbanization*, 7, 11-38.
- WYATT, L. T. I. 2009. *The Industrial Revolution*, Westport, Connecticut, Greenwood.
- YIN, R. K. 2003. *Case Study Research: Design and Methods*, London, Sage Publications.
- YUDP 1991. *Real Demand Study: Final Report*, Yogyakarta, Yogyakarta Urban Development Project, EWI-EESS and Hasfarm Dian Konsultan.
- ZEISEL, J. 2006. *Inquiry by Design : Environment/Behavior/Neuroscience in Architecture, Interiors, Landscape, and Planning*, New York, W.W. Norton & Company.
- ZUBE, H. E. & MOORE, T. G. 1991. *Advances in Environment, Behavior and Design*, New York, Plenum Press.

HBE-seg2006.sav [DataSet1] - SPSS Statistics Data Editor

File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help

1. starthere 1987.0

	starthere	Lamatanggal	luasrnh	luasrth	statusrum	Alteration	startHBE	bpkkejaluar	kejasbhapa	gajihbebin	UMRnyaa	gajinontbebin	costperbin	bijahan	dimanablar
1	1992	12	100	100	2	1	1997	2.		1500000	2.0		5433333	1	beringhajo
2	2006	3	100	100	2	1	2005	1.2		3000000	2.0	3000000	5000000	1	Pasar Beringh
3	1960	49	200	200	1	1	1960	2.		2500000	2.0		3000000	1	Wanung Jago
4	2004	5	130	150	1	1	2000	1.		1350000	2.0		1250753	2	
5	1997	12	36	36	1	1	1997	3.		140000	1.0		20000	1	Toko Satia
6	1970	39	49	49	1	1	2003	2.		150000	1.0		720000	1	Pasar Sentul
7	1970	39	56	56	1	1	2000	1.3		3000000	2.0	10000	500000	1	agen
8	1956	53	80	80	1	1	2005	1.2		600000	2.0	385000	300000	1	beringhajo
9	1987	22	35	35	1	1	1987	2.		150000	1.0		600000	1	Pasar Bering
10	1985	24	66	66	1	1	1993	2.		600000	2.0		4500000	1	beringhajo
11	1976	33	45	45	2	1	1976	2.		300000	1.0		10000	1	wanung skitar
12	1977	32	200	200	1	1	1976	2.		1500000	2.0		2250000	1	Pasar Ngssel
13	1962	27	97	97	1	1	2006	1.3		3500000	2.0	450000	2250000	1	beringhajo
14	1989	20	105	105	1	1	1990	2.		456000	2.0		456000	2	
15	1994	15	91	91	1	1	2006	1.3		750000	2.0	1500000	5250000	1	progo
16	1980	29	88	88	1	1	1980	1.3		9000000	2.0	1500000	30000000	2	disator
17	1983	26	50	50	1	1	2004	2.		4500000	2.0		4500000	1	beringhajo
18	1973	35	88	88	1	1	2000	2.		450000	1.0		1200000	1	beringhajo
19	1956	13	45	45	1	1	2004	1.3		240000	1.0	180000	1500000	1	hennitran
20	1986	23	25	25	1	1	2000	1.3		3000000	2.0	300000	1125000	1	Pasar Bering
21	1997	12	240	240	1	1	1987	2.		6000000	2.0		14375000	1	ji.mataram, pi
22	1976	33	260	360	1	1	1973	2.		600000	2.0		62500000	2	
23	1994	15	25	25	1	2	1986	2.		3000000	2.0		15000	1	revel
24	1980	19	125	125	1	2	1980	1.3		350000	1.0	300000	260000	1	Plejo dan wa
25	1964	45	99	99	1	2	2003	2.		625000	2.0		500000	1	Pasar Beringh
26	1989	20	300	300	1	2	1989	1.2		3150000	2.0	600000	2400000	1	beringhajo
27	1986	23	63	63	1	2	2006	2.		2100000	2.0		989000	1	Pasar Beringh
28	1972	37	80	80	1	2	1999	2.		810000	2.0		1150000	1	Toko sablon
29	1979	30	80	80	1	1	1979	2.		5000000	2.0		17400000	1	Pasar Beringh
30	1980	29	50	50	1	1	1980	1.3		6000000	2.0	225000	300000	1	wanung sekitr
31	1973	35	65	65	1	1	1976	1.2		950000	2.0	1500000	10000000	1	antares, satr
32	1956	53	54	54	1	1	2006	1.		3000000	2.0		2100000	1	wanung skitr
33	1991	18	28	28	1	1	1991	1.3		1500000	2.0	800000	1500000	1	Pasar Sentul
34	1961	48	200	200	1	1	2001	2.		4500000	2.0		3000000	1	Pasar Beringh
35	1961	48	135	150	1	2	2004	1.1		2250000	2.0	4000000	1350000	1	pom bensin
36	1987	12	125	125	1	2	1980	2.		1500000	2.0		498333	1	lakarta

Data View Variable View

Appendices

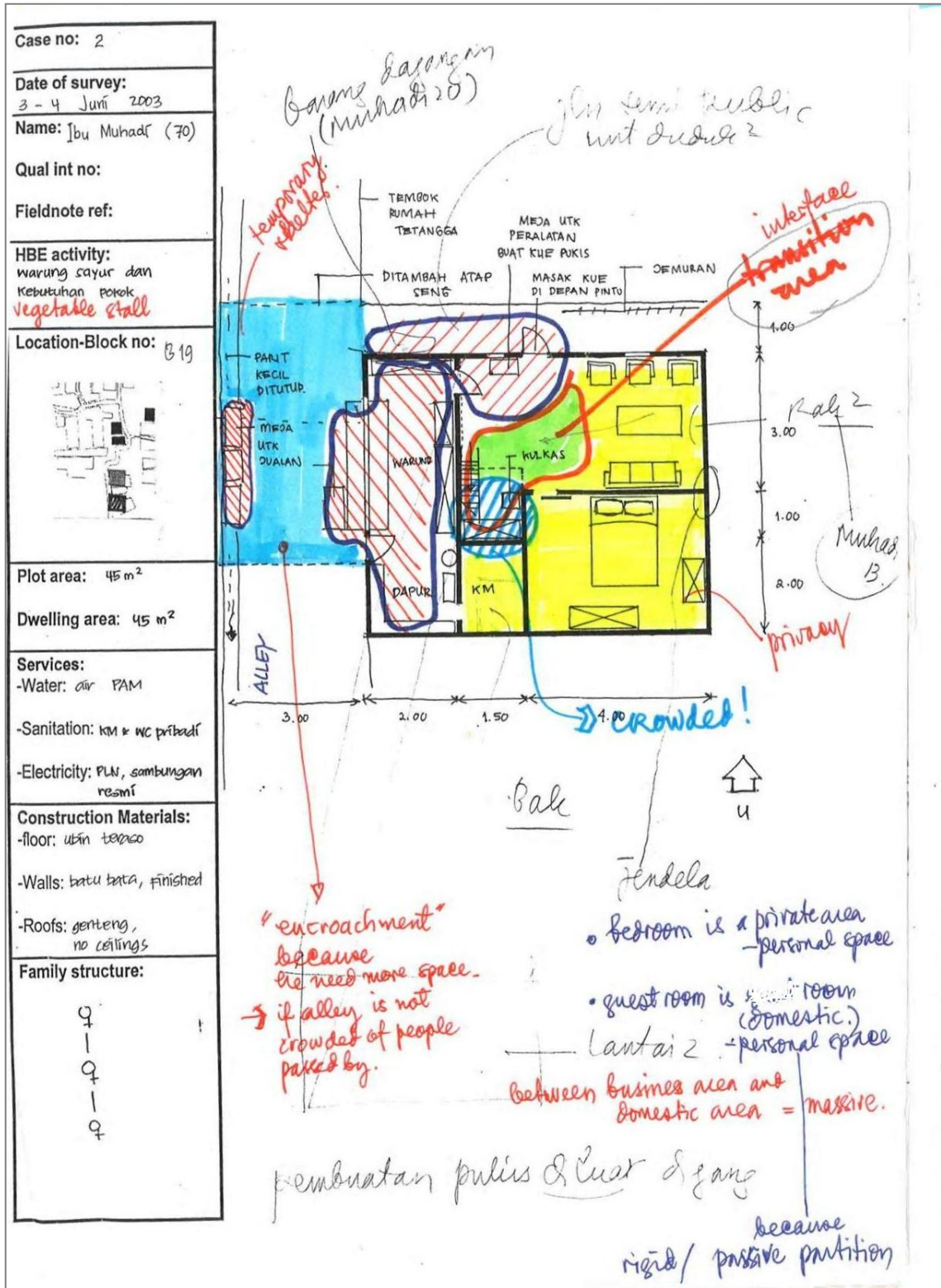
Appendices

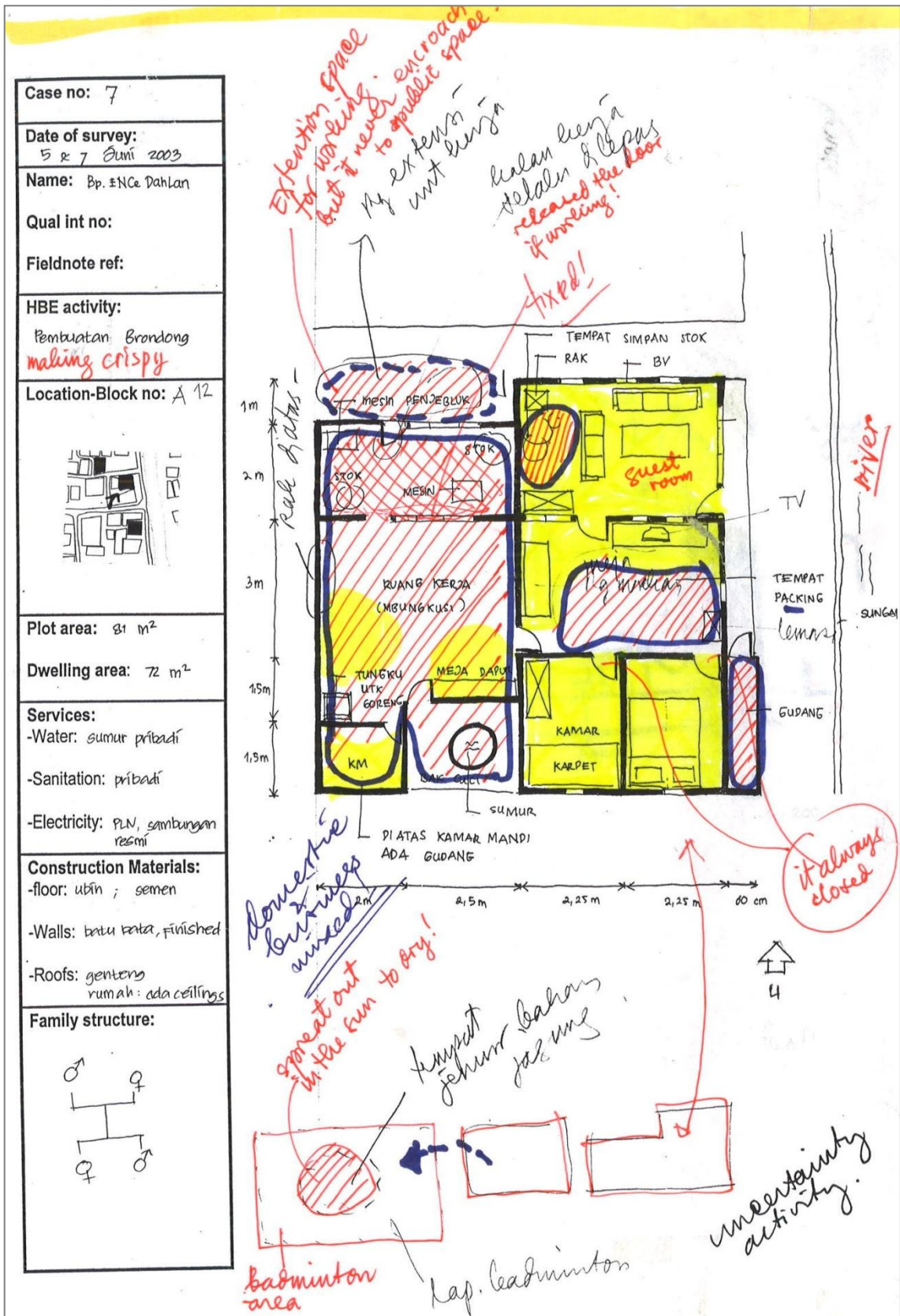
Appendix 1: Annotated Plan of Space Use: Case No.2 and No.7	296
Appendix 2: Notes of Interview (in Bahasa Indonesia): Case No.13	298
Appendix 3: Field Notes (in Bahasa Indonesia): Case No.2	299
Appendix 4: Field Notes (in English): Case No.4 and 20	300
Appendix 5: Transcript of FGD with Operators (Extract)	302
Appendix 6: Transcript of FGD with Local Government Staff (Extract)	304
Appendix 7: Questionnaire Sheet (in Bahasa Indonesia)	305
Appendix 8: Questionnaire Sheet (in English)	311

Appendix 1

Annotated Plan of Space Use:

Case No.2 and No. 7





Appendix 3
Field Notes (in Bahasa Indonesia):
Case No. 2

CATATAN LAPANGAN 02

Tanggal / Hari / Jam : 3 Juni 2003 / Selasa
Tempat / Lokasi : Rumah Ibu Muhadi
Responden / Sumber : Ibu Muhadi dan anak perempuannya
Umur / Pekerjaan : 70 th / Pedagang
Jenis Usaha : Warung sayur dan makanan
Obyek Wawancara : Perubahan Rumah dan Penggunaan Ruang pada Rumah sebagai Tempat Tinggal dan Tempat Usaha
Hasil Wawancara dan pengamatan :

Sudah sejak lama buka warung, merupakan warung yang buka pertama kali. Kemudian disusul warung yang lain seperti di depan ada warung roti, kemudian di sebelah juga ada warung lauk pauk. Modal awal menggunakan uang tabungan TASPEN, dan keuntungan tidak dapat dihitung secara pasti, karena begitu ada uang langsung dipakai untuk menambah barang dagangan. Sekarang relatif sepi, tidak terlalu banyak keuntungan karena sudah banyak saingan dengan adanya warung lain yang buka maupun orang jualan keliling. Padahal dulu ramai sekali ketika orang-orang belum membuka warung.

Status kepemilikan rumah adalah rumah milik sendiri, sekarang ini ditinggali oleh tiga orang yaitu Bu Hadi, anak perempuannya, serta cucu perempuannya yang masih duduk di kelas satu SD. Mempunyai dua orang anak, yang satu sudah punya rumah sendiri dan tinggal di Yogya dengan empat orang anak yang sudah bekerja. Sementara menantu yang satunya saat ini sedang bekerja di Kalimantan.

Belanja sayuran setiap hari ke Pasar Beringharjo karena sayuran yang dijual harus segar, kalau laku tidak laku. Ke pasar naik becak yang sudah jadi langganan, pulang pergi diantar; berangkat ke pasar jam 05.30. Sedangkan warung buka sejak pagi, karena yang beli adalah tetangga sendiri, kadang jam 4 pagi pun sudah ada yang beli, kalau malam tutupnya jam 9. Menurut pengamatan pewawancara, warung ini lumayan ramai karena pembeli datang setiap 3 menit sekali.

Ruang usaha yang digunakan pertama kali dulu seluas yang sekarang, tetap sempit dan terjadi luberan sampai di jalan depan rumah (meja untuk tempat sayuran segar dan *ngelir* menjemur tempe; untuk menghindari panas dan hujan ia memasang terpal melintang dari atap rumahnya sampai tembok SMU Santa Maria. Selain itu, di gang sebelah rumah juga dipakai untuk menyimpan tempe dan barang lain dalam karung-karung; juga untuk menjemur pakaian selain di depan warung. Perabot yang ada di warung (di dalam) adalah satu meja yang cukup besar, lemari berkaca yang besar, dan ada beberapa *jigen* tempat minyak. Warung langsung terhubung dengan dapur yang sempit dan dinding yang tidak bersih lagi, jadi menurut anak perempuan Bu Muhadi, kalau menunggu dan melayani pembeli bisa sekalian memasak. Pada dinding timur dapur ada lubang selebar 40-50 cm dengan tinggi ± 150 cm yang ternyata adalah pintu kamar mandi. Kamar mandinya sendiri berukuran 1,5 x 2 meter.

Masuk ke dalam rumah, terlihat hanya ada satu kamar yang dipakai untuk lemari pakaian Bu Muhadi dan anak perempuan serta cucunya, dan kamar tidur anak perempuan dengan cucunya; sementara Bu Muhadi sendiri sering tidur di luar kamar, di depan TV. Ada tangga menuju loteng (kadang-kadang dipakai untuk tidur) namun dipenuhi bermacam-macam *buntelan* barang. Ruang di bawah tangga diisi dengan lemari es dan lemari perabot dapur seperti piring dan gelas. Bu Muhadi mengaku sebagai orang kuno, sehingga rumahnya cukup kecil saja dan seadanya, namun ia tampak bersemangat ketika menceritakan tentang keberhasilan cucu-cucunya. Anak perempuannya setiap harinya membuat kue pukis untuk dititipkan di warung lain dan untuk memenuhi pesanan tertentu. Membuat kue pukis biasanya di depan pintu di gang kecil. Sedangkan untuk menjemur pakaian, memanfaatkan space di seberang jalan di depan rumahnya, jalan itu selebar 3 m.

owned

vegetable stall.

too many competitors.

financial investment from bank saving

private property

user

buy to B. market

clients are neighbours.

operating hours: 04:00 - 21:00

reason arrangement of rooms.

two storey used: business space.

Appendix 4

Field Notes (in English):

Case No.4 and No. 20

FIELD NOTES Case No.4

Respondent : Pak Pramono
Type of HBE : Producing small tables and frames
Date of Fieldwork : 3 June 2003

Result of interview and observation:

After a number of different jobs, at last Pak Pramono has focused on producing small folding tables for children. He has been engaged in this activity for three years (1988). He generally starts working at 8.00 and finishes at 15.00 (based on observation). However, he doesn't have set hours of work. It depends on his amount of orders. On average, each day he can make around 50 tables in average. This number increases if he has more orders. Based on an interview with his assistant, one table costs Rp. 6000. I bought a table from him for Rp 11.000, but if it was sold on the market, it would be priced at Rp.13000. Pak Pramono employs four assistants who are all relations (brother, nephew, etc.) to help them by giving them an occupation. They earn Rp. 35.000 per week from Pak Pramono and get a bonus for excess orders.

Pak Pramono's activity has not won any aid from the government, such as the Safety Net Programme that principally assists in increasing households' economic activities and reducing urban poverty. He and his family (a wife and two children who are still in kindergarten and primary school) live in a 3 x 6 m² house which has new concrete structure for the upper level. It is situated near the Code River. The original house was built of bamboo and it was improved and made into a permanent house due to government aid in constructing a retaining wall for the Code in 1997, that achieved through free provision of cement and other materials. This aid contributed a modest impetus to improve his house and his relatives chipped in to the initiative with both financial contributions and manpower. Now he can enjoy a better home, connected with the public water supply, although the upper floor walls are still made of bamboo. He has lived in this house since 1995.

Pak Pramono and his assistants work beside the only bed in his house. Several of his work products are stacked near the bed. His bedroom and working room are separated off by a curtain and cupboard. Even though his house is small, he has a TV, a VCD player and a radio tape recorder in a corner at the front of his part of the house.

Fieldwork situation:

Pak Pramono answered all the interview questions and explained everything in an open-hearted way. At the beginning he looked hesitant, but finally he was able to understand what I was doing and explained everything I asked. I did not use a tape recorder or camera in conducting the first meeting. As the interview continued all Pak Pramono's assistants were still working as usual. His wife was going out to the market, where she would take money for the sale of Pak Pramono's product. His wife was cooking when the interviews were conducted.

Provisional conclusions/comments/working hypothesis:

1. There are no specific hours of work; time is used flexibly so that the family can handle the job and time spent working depends on the amount of orders.
2. The workers are Pak Pramono's relatives, so it is simple to handle and manage them.
3. The approach to constructing his house is incremental, and depends on demands and finance availability.
4. An activity like this has good prospects of creating profit and can also be used for earning money and reducing urban poverty levels.

FIELD NOTES Case No.20

Respondent : Bu. Joko
Type of HBE : Selling Daily Food (*Warung makanan*)
Date of fieldwork : 21 June 2003

Result of interview and observation

Bu Djoko is a food seller who prepares and cooks the food in her kitchen. She has four children: they are Sony (graduated from Technical High School, Beny (graduated from Tourism High School), Vita (graduated from secondary school) and Aditya (Kindergarten student). The first and second children have been working in Tangerang. Her husband works in a shuttlecock factory located near this kampung. Pak Joko has lived in this house since 1960 (since he was young). The house is owned by his boss and is for the use of factory workers. Factory workers can live in this house free of charge; no rent is levied. Pak Joko earns Rp 100.000 basic pay per week (or Rp. 400.000 per month). However, an extra incentive or bonus will be paid if the shuttlecocks are for export to Lampung (Sumatra). He has been working for his boss for 26 years (Sunday is his day off). Bu Joko started her job as a street trader ("dawet" ice seller) before undertaking her current business (selling food from home). In addition, as a street trader, she also took on laundry work, washing clothes for neighbours. She also has house in Kulonprogo, even though her children feel comfortable living in this house due to its proximity to their places of activity. Her complaint as a street trader was about the difficulties of working in rainy conditions.

The house size is only 6 x 3 m² and was originally occupied by all family members, but now on three family members live there. The children are forbidden to stay outside or in their friends' homes. Pak Joko asked his boss for permission to renovate the house and to make a multi function window that can also convert into a display table for Bu Joko's commodities. Based on his boss's permission, he developed the structure from a bamboo house into a semi permanent house (upper walls: bamboo, lower walls: brick) by himself. Another room of this house is also used by other workers. There is a TV, VCD player and cabinet in this house.

Bu Joko initiated her small business with her own money Rp 100.000. She handles everything by herself, from cooking, attending the stall, and selling the food. If her commodities were sold out, she could earn a profit of Rp 25.000 to Rp 50.000 per day. She sometimes, however, only earns Rp 25.000 to Rp 30.000, which means she makes no profit. She always faces this situation or problem patiently and diligently. Her warung is always open, even when there are only a few costumers.

Her principle of life is "do not steal for living". She has borrowed money and she has often become frustrated due to her inability to return the money, but she has always tried to return it. She is patient in handling her work (HBE), but is not able to save any money from this job, even to finance her children's education costs. The food she sells is also prepared for her family's meals, even though her children sometime cook a different dish (such as instant noodles). The money from purchasers is kept under the table cover, but she is not afraid of losing it. With regard to Bu Joko's explanation for this choice of work, she felt that to be a street trader would provide more income than working at home, but working at home enables her to look after her family, especially her youngest child who is still in kindergarten.

Fieldwork situation:

It was raining when the interview was conducted. The interviews went smoothly even though Bu Joko spoke while cooking and serving customers. At that time all of her children were at home (include the children who work in Tangerang), so that her house appeared crowded.

Provisional summary/comments/working hypothesis:

1. The house looked crowded even at night, and when there were 6 persons in a 18 m² house.
2. Keeping the household and family by selling food at home is better than working outside even though the income is lower.
3. There is still some privacy due to the existence of a bedroom.
4. There is a correlation between employer and employee, especially in household status
5. There is a window that also functions as a table for business activities.

Appendix 5

Transcript of FGD with Operators

(Extract)

Date	: 20 October 2001	
Place	: Pak Bambang's house	
Participants	: 1. Pak Data	(warung kelontong seller, 38 years old)
	2. Bu Djoko	(warung makanan seller, 43 years old)
	3. Bu Sum	(Nasi kucing seller, 54 years old)
	4. Pak Suhadi	(meatball soup seller, 42 years old)
	5. Pak Bambang	(beauty salon, 45 years old)
	6. Bu Wati	(beauty salon, 37 years old)
	7. Bu Waltuyono	(flower handicraft makers. 47 years old)
	8. Bu Siti Rochayah	(warung sayuran seller, 41 years old)

This following is extracts of the **Focus Group Discussion**, which translated by myself.

Agam:	<i>I am here to facilitate the meeting and to listen to you. My question is why you conduct a home-based enterprise in this kampung?</i>
Discussion of the Participants (1) (extracts)	
Bu Watik:	<i>The house is not only to sleep; in my opinion [...] the house is also for business [...] why not?</i>
Bu Siti R:	<i>Yes it's true, but on the other hand in our house there is still space for business.... My house is small and [...] I still use the existing space to sell fresh vegetables [...] and indeed the house looks dirty but the important thing is how to generate income. The important thing for me and probably the other participants is lawful (halal) income.</i>
Bu Djoko:	<i>Now the price of basic necessities rises, while my husband does not contribute enough to cover the needs of the family, and [...] during the day, while my children are at school, well then I have had no activity at home, so I am selling ready meals.</i>
Pak Data:	<i>For me, since from the beginning was deliberately want to run a business at home because now hard to find a job, moreover I just graduated from high school. So I run the business of providing day-to-day needs of residents. Well enough to survive, mas.</i>
Bu Waltuyono:	<i>Yes I agree with Ms. Siti, what matters is getting a halal income. Do not steal; do not take the property of others.</i>
Bu Watik:	<i>We can be free to run the business at home because we do not have to rent elsewhere. One again, we are proud to have a business at home. We are not shy in the presence of this business.</i>
Pak Bambang:	<i>For me, because I am now unemployed, well, it ultimately can only help my wife in carrying out this salon. My wife, incidentally, has a talent in doing makeup for others. And from this activity [...] we would like to thank God (Alhamdulillah) that we were able to survive.</i>
Bu Sum:	<i>I actually wanted the house to be clean [...] But also because my house is small. So I just cook meals ready to eat at home. If the food is ready to sell, then I sell it around this kampung.</i>
Bu Waltuyono:	<i>I would like to add that I make handicrafts at home because I am still able to cook meals for my husband and children.</i>

Provisional conclusions and notes (1):

1. Reason for running the HBE is around the financial needs of the family (economic reason).
2. The house is important for generating income. They feel there is still space for business activities.
3. They are proud to have a business at home.
4. Skills are their asset (especially Bu Watik- beauty salon operator).
5. They want to generate a Halal income to survive.
6. The operator (especially the housewife) can still perform domestic work.

Agam: *Business activities in the house – there will obviously be a lot of people (buyers or suppliers) coming to your house, or a lot of merchandise in the home. What do you think about it?*

Discussion of the Participants (2) (extracts)

Bu Siti R: *In my opinion, it does not matter. In fact, that buyers came to buy is expected.*

Bu Waltuyono: *If there is sugar, there are ants. But they also cannot be free in our homes.*

Bu Sum: *I think we do not have to think about it. What we think about is how we get our income.*

Pak Bambang: *I really wanted a house not for business. I want my house to be like a normal house, like everyone else, so if there is any guest or arisan at my house, I could use my house so my house looks clean although small. But how?*

Pak Data: *I think we do not think about the cleanliness or comfort. What I'm thinking right now is how we can survive, because after the last [financial] crisis [...], all prices of basic commodities have become twice as expensive as previously.*

Bu Sum: *Indeed, sometimes, I'm thinking about it. But how? Finding the money for everyday life is much more important.*

Provisional conclusions and notes (2):

1. The presence of others in their house is not a nuisance to them and their families.
2. They aspire to keep the house clean, even though there is business activity therein.
3. Cleanliness and comfort is not a priority.

Appendix 6

Transcript of FGD with Local Government Staff

(Extract)

Date : 31 October 2001
Place : Sparta Restaurant
Participants: 1. Pak Hendro Adiman (staff of Public Works Department)
 2. Pak Iskandar (staff of Agency for City Development)
 3. Pak Eko Suryo (staff of Agency for City Development)
 4. Pak Endro (staff of Agency for City Planning)
 5. Pak Dorojatun (staff of Agency for City Planning)

This following is extracts of the **Focus Group Discussion** which translated by myself.

Agam:	<i>I am here to facilitate the meeting and to listen to you. My question is what is your opinion (from the government's point of view) about HBEs in Yogyakarta City kampung?</i>
Discussion of the Participants (extracts)	
Pak Hendro:	<i>I think home-based business appeared in the kampung of Yogyakarta (or generally in the towns and cities in Indonesia) because of market mechanisms (supply and demand). So there is a demand for certain goods from residents and some households supply the goods.</i>
Pak Eko Suryo:	<i>I think, as long as a home-based business activity is still on a small scale in terms of its spatial and economic aspects, they do not have much effect on settlements in the kampung. They are usually called small scale enterprises or very small scale enterprises.</i>
Pak Dorojatun:	<i>In fact, local government has made regulations but in reality it is always contrary to what is desired by residents of the city. For example, the regulation of housing with multi-functions. The possible regulation of housing is made not in accordance with the city residents' requirements.</i>
Pak Hendro:	<i>Yes, the problem (maybe) is that a local government cannot regulate their activities.</i>
Pak Endro:	<i>The problem is probably also because of the home ownership status of the residents, so they are free to do business and are free to develop their houses by themselves. I think that controlling their activities needs to be more specific in local legislation.</i>
Agam:	<i>So, what if the status of home ownership becomes a constraint to control them?</i>
Pak Endro:	<i>Yes. One of its constraints is the status of home ownership. There are still many other constraints that other participants might reveal.</i>
Pak Dorojatun:	<i>There is a supervisory personnel shortage in the field. In addition, another constraint is the government budget.</i>
Pak Hendro:	<i>I think it is not just that aspect. The characteristics of local government regulations are still too general while the problems of housing in the kampung, especially HBE, is very ... very small and sometimes there is no problem with their activities compared with the case of the Mall or supermarkets or medium-and large scale factories.</i>
Provisional conclusions and notes:	
1. Participants argued that one important factor in HBE activities is market mechanisms.	
2. Another factor is the status of owning their own houses, which means that households are free to use their property. Conversely, the status of a constraint for the government to control their business activities.	
3. Local government regulations have not been able to control and evaluate the activities of HBEs.	

Appendix 7
Questionnaire Sheet
(in Bahasa Indonesian)

(CASE)
16

School of Architecture, Planning and Landscape
University of Newcastle upon Tyne, UK

DAFTAR PERTANYAAN TENTANG USAHA DI
RUMAH DI KAMPUNG PRAWIRODIRJAN

BLOK: C
NOMER: 12

A. UMUM

1. Jenis usaha: warung makan
2. Tipe Usaha: a. Perdagangan
b. Pelayanan Jasa/Service
c. Industri kecil rumah tangga
3. Lokasi rumah di : a. Rukun Tetangga (RT) 11 b. Rukun Warga (RW) 04
4. Jenis kelamin responden: a. Laki-laki
b. Perempuan
5. Tingkat pendidikan responden: a. Lulus SD
b. Lulus SMP
c. Lulus SMA
d. Lulus Universitas
6. Berapa jumlah anggota keluarga yang tidur di rumah ini? 4 orang
7. Sudah berapa lama anda tinggal di kampung ini? 16 tahun bulan (1990)
8. Sudah berapa lama anda tinggal di rumah ini? 16 tahun bulan
9. Kapan anda memulai usaha di dalam rumah ini? Tahun 1997
10. Apa alasan utama mempunyai usaha di rumah? membantu ekonomi
keluarga - membantu suami - untuk nafkah -

B. ASPEK FISIK

11. Berapa luas rumah anda (m²)? 100
12. Berapa luas tanah anda (m²)? 100

13. Apa status rumah anda? a. Milik sendiri
 b. Sewa/kontrak
 c. lainnya Sebutkan:.....
14. Apa status tanah anda? a. Milik sendiri
 b. Milik instansi/yayasan
 c. Milik orang lain
15. Berapa luas area hanya untuk usaha di dalam rumah (m²) $7 \times 5 \text{ m}^2$ ✓
16. Berapa luas area hanya untuk usaha di luar rumah/halaman (m²)?
17. Berapa luas area hanya untuk gudang usaha (m²)?
18. Lebar jalan di depan rumah responden (m)

Bahan bangunan rumah (✓ bisa lebih dari satu):

19. Atap a. genting
 b. asbes
 c. seng
 d. lainnya Sebutkan:..... ✓
20. Rangka a. beton
 b. bata
 c. kayu
 d. bambu
 e. lainnya Sebutkan:.....
21. Dinding a. tembok
 b. bambu
 c. kayu
 d. lainnya Sebutkan:.....
22. Lantai a. tegel
 b. keramik
 c. plester
 d. tanah
 e. lainnya Sebutkan:..... ✓
23. Plafond a. asbes
 b. bambu
 c. tripleks
 d. plastik
 e. lainnya Sebutkan:.....

Fasilitas dan utilitas di rumah (√):

24. Air minum a. PDAM sendiri
 b. PDAM umum
 c. Sumur sendiri
 d. Sumur umum
 e. lainnya Sebutkan:.....
25. Sanitasi a. got
 b. septic tank
 c. sungai
 d. lainnya Sebutkan:.....
26. Listrik: a. PLN
 b. generator
 c. minyak tanah
 d. lainnya Sebutkan:.....
27. Limbah padat: a. halaman sendiri
 b. ke tong sampah
 c. lainnya Sebutkan:.....
28. Limbah cair a. selokan
 b. halaman sendiri
 c. sungai
 d. lainnya Sebutkan:.....
29. Pemadam kebakaran a. tidak ada
 b. ada sebutkan:.....

Kondisi rumah menurut penilaian surveyor (√):

	Sangat jelek (1)	Jelek (2)	Cukup (3)	Bagus (4)	Sangat bagus (5)
30. Sirkulasi udara	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Penerangan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Kebersihan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
33. Bau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
34. Kebisingan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
35. Kesumpekan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

36. Setelah terdapat usaha dirumah, apakah rumah ini pernah ada perbaikan atau perubahan?
a. Tidak
b. Ya

37. Apabila TIDAK, mengapa? *... karena rumah ini sewa -*

38. Apabila YA, sebutkan jenis perubahan/perbaikan: *2*

C. ASPEK SOSIAL DAN EKONOMI

39. Berapa orang yang tidur di rumah ini? (termasuk pembantu dan tenaga kerja)

40. Apakah memiliki pekerja di luar anggota keluarga? a. Tidak ada
b. Ya,

41. Bila Ya, berapa pekerja? orang

42. Apakah kepala keluarga memiliki pekerjaan lain di luar rumah? a. Tidak
b. Ya,

43. Bila Ya, dimana tempat kerjanya? *... stat pemda diy.*

44. Berapa penghasilan dari pekerjaan lain di luar rumah?

Rp per hari atau minggu atau bulan

45. Berapa rata-rata penghasilan usaha rumahan ini?

Rp per hari atau minggu atau bulan = *1,5 jt/bulan*

46. Berapa biaya awal ketika memulai usaha ini? Rp

47. Darimana sumber biaya tersebut? a. tabungan sendiri
b. pinjaman bank atau organisasi
c. lainnya

48. Darimana saja pelanggan usaha rumahan ini? a. dari kampung ini saja
b. dari luar kampung tapi dalam kota
c. dari luar kota Yogyakarta
d. tidak tahu

49. Berapa rata-rata pembeli/pelanggan? per hari minggu bulan

50. Berapa jam kerja sehari kegiatan usaha ini? Jam atau dari jam s/d pagi

51. Berapa hari seminggu kegiatan usaha ini? a. setiap hari
b. hari minggu tutup
c. haritutup

52. Apakah usaha ini tergantung supply bahan dari luar? a. Tidak
b. Ya, selalu
c. Ya, kadang-kadang

53. Apakah kegiatan usaha ini memerlukan wadah organisasi?
 Tidak, mengapa? *belum perlu*
 Ya, mengapa?

54. Apakah usaha ini pernah dikeluhkan oleh tetangga anda?
 Tidak
 Ya, mengapa? *2*

55. Bila Ya bagaimana mengatasi keluhan tersebut?
.....

56. Berapa rincian pengeluaran untuk usaha anda

a. bahan dagangan/mentah	Rp. <i>1.500.000</i>	per <input checked="" type="checkbox"/> hari <input type="checkbox"/> minggu <input type="checkbox"/> bulan <input type="checkbox"/> tahun
b. alat-alat pokok (mesin)	Rp. <i>—</i>	per <input type="checkbox"/> hari <input type="checkbox"/> minggu <input type="checkbox"/> bulan <input type="checkbox"/> tahun
c. gaji karyawan	Rp. <i>—</i>	per <input type="checkbox"/> hari <input type="checkbox"/> minggu <input type="checkbox"/> bulan
d. retribusi/pajak usaha	Rp. <i>400.000</i>	per <input type="checkbox"/> hari <input type="checkbox"/> minggu <input checked="" type="checkbox"/> bulan <input type="checkbox"/> tahun
e. lainnya : <i>sewa rumah</i>	Rp. <i>10 jt</i>	per <input type="checkbox"/> hari <input type="checkbox"/> minggu <input type="checkbox"/> bulan <input checked="" type="checkbox"/> tahun

cek!

suas ditanya

57. Berapa rincian pengeluaran untuk urusan keluarga anda

- a. makan dan minum Rp. 10.000 per hari minggu bulan
- b. pakaian, sepatu, seragam Rp. 200.000 per tahun
- c. rumah (sewa/perbaikan) Rp. 10 jt per minggu bulan tahun sewa
- d. pendidikan anak (SPP) Rp. 150.000 per bulan tahun
- e. transportasi Rp. 10.000 per hari minggu bulan tahun
- f. minyak tanah, gas Rp. 80.000 per hari minggu bulan tahun
- g. listrik Rp. 150.000 per bulan
- h. air minum Rp. — per bulan sumbu!
- i. iuran assainering Rp. — per bulan tahun
- j. kebersihan/sampah Rp. 25.000 per hari minggu bulan
- k. koran/majalah Rp. — per hari minggu bulan
- l. pajak bumi bangunan Rp. 24.000 per tahun
- m. pajak kendaraan Rp. 2 x 200.000 per tahun
- n. telepon Rp. 50.000 per hari minggu bulan
- o. keamanan/siskamling Rp. 15.000 per hari minggu bulan
- p. kesehatan rutin Rp. 50.000 per hari minggu bulan tahun
- q. bayar bunga pinjaman Rp. — per hari minggu bulan tahun
- r. bayar hutang Rp. — per hari minggu bulan tahun
- s. rekreasi keluarga Rp. — per bulan tahun
- t. lainnya:..... Rp. — per hari minggu bulan tahun

Catatan surveyor:
.....
.....

Surveyor: K. am
Tanggal: 27 sept 2016

ok
agam

Appendix 8

Questionnaire Sheet (in English)

School of Architecture, Planning and Landscape
University of Newcastle upon Tyne, UK

(case)

QUESTIONNAIRE OF HOME-BASED ENTERPRISES IN KAMPUNG PRAWIRODIRJAN

BLOCK:
NUMBER:

A. GENERAL INFORMATION

1. Kind of business:
2. Type of business
a. retail trade
b. servicing
c. manufacturing
3. House location
a. neighbourhood (RT): b. block (RW):
4. Sex of respondent
a. Male
b. Female
5. What is the highest level of education that you have completed?
a. elementary school
b. junior high school
c. senior high school
d. university
6. How many family members who sleep in this house? people
7. How long have you been in this *kampung*? year month
8. How long have you lived in this house? year month
9. When did you start handling HBEs in this house? Year
10. What is the main reason for running a business at home?
.....

B. PHYSICAL CHARACTERISTIC

11. How large total area of this house (m²)?
12. How large total plot area (m²)?

13. What is your housing tenure status?

- a. owned house
- b. rented house
- c. other

<input type="checkbox"/>
<input type="checkbox"/>	
<input type="checkbox"/>	

14. What is your plot tenure status?

- a. owned by respondent
- b. owned by agencies/foundations
- c. owned by others

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

15. How large business area inside the house (m²)?

16. How large business area outside the house/on the plot (m²)?

17. How large business storage area (m²)?

18. How wide alley in front of your house (m)?

House building materials (this may tick more than one):

19. Roof

- a. roof tile
- b. asbestos
- c. zinc
- d. other

<input type="checkbox"/>	Specify.....
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

20. Building frame

- a. concrete
- b. brick
- c. timber
- d. bamboo
- e. other

<input type="checkbox"/>	Specify
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

21. Wall

- a. brick wall
- b. bamboo
- c. timber
- d. other

<input type="checkbox"/>	Specify
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

22. Floor

- a. tiles
- b. ceramics
- c. plastering
- d. ground
- e. other

<input type="checkbox"/>	Specify
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

23. Ceiling

- a. asbestos
- b. bamboo
- c. plywood
- d. plastic
- e. other

<input type="checkbox"/>	Specify
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Facilities and utilities in this house (√):

24. Water supply a. supplied by PDAM
 b. public taps
 c. well's own
 d. public wells
 e. other Specify
25. Sanitation a. sewer
 b. septic tank
 c. river
 d. other Specify
26. Electricity a. electricity company (PLN)
 b. generator
 c. kerosene
 d. other Specify
27. Solid waste a. own plot
 b. garbage can
 c. other Specify
28. Liquid waste a. ditch
 b. own plot
 c. river
 d. other Specify
29. Fire extinguishers a. No
 b. Yes Specify.....

Housing Condition according to what is perceived by surveyor (√):

	Very bad (1)	Bad (2)	Enough (3)	Good (4)	Very good (5)
30. Air Circulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Smell	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Noise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Crowding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

36. After you have an HBE, have you ever made home improvement or changes?

- a. No
- b. Yes

37. If No, why?

38. If Yes, please specify type of improvements/changes:
.....

C. SOCIAL AND ECONOMIC CHARACTERISTICS

39. How many people sleep in this house? (including servants and workers, if any)

40. Do you have other workers who are not family members? a. No
b. Yes

41. If Yes, how many workers? people

42. Is the household head has another job outside the house? a. No
b. Yes

43. If Yes, what kind of job/where the place of work?

44. How much income received from other jobs outside the home?

Rp per day or week or month

45. How much the average income of this home-based business?

Rp per day or week or month

46. How much initial investment did you take for starting this business? Rp

47. What sources of that fund? a. own savings
b. bank loans or organisation
c. other

48. Where are your customers came from?

- a. from this neighbourhood only
- b. from outside the *kampung* but within the city
- c. from outside the city of Yogyakarta
- d. do not know

49. How many the averages of the customers? per day week month

50. How many hours a day working in this business activity? Hours or from.....to.....

51. How many days a week of this business activity? a. every day (7 days)
 b. Sunday closed
 c. day of closed

52. Is this business depends on the supply of materials from the outside?
 a. No
 b. Yes, always
 c. Yes, sometimes

53. Based on your opinion, do this activity requires organisation?
 No, why?
 Yes, why?

54. Is there any complaints from your neighbours?
 No
 Yes, why?

55. If Yes, how to cope with these complaints?

56. Expenditure details for business activities:
 a. merchandise/raw materials Rp.....per day week month year
 b. main equipment (machines) Rp.....per day week month year
 c. workers salaries Rp.....per day week month
 d. business tax Rp.....per day week month year
 e. other : Rp.....per day week month year

57. Expenditure details for domestic activities:

- | | |
|-------------------------------------|--|
| a. meals | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month |
| b. clothing, shoes, school uniforms | Rp.....per year |
| c. house (rental/repair) | Rp.....per <input type="checkbox"/> week <input type="checkbox"/> month <input type="checkbox"/> year |
| d. children's education | Rp.....per <input type="checkbox"/> month <input type="checkbox"/> year |
| e. transportation | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month <input type="checkbox"/> year |
| f. kerosene, gas | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month <input type="checkbox"/> year |
| g. electricity | Rp.....per month |
| h. water | Rp.....per month |
| i. sewer | Rp.....per <input type="checkbox"/> month <input type="checkbox"/> year |
| j. solid waste | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month |
| k. newspaper/magazines | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month |
| l. building tax | Rp.....per year |
| m. vehicle tax | Rp.....per year |
| n. phone | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month |
| o. neighbourhood security | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month |
| p. health | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month <input type="checkbox"/> year |
| q. pay interest on the loan | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month <input type="checkbox"/> year |
| r. pay debt | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month <input type="checkbox"/> year |
| s. family recreation | Rp.....per <input type="checkbox"/> month <input type="checkbox"/> year |
| t. other:..... | Rp.....per <input type="checkbox"/> day <input type="checkbox"/> week <input type="checkbox"/> month <input type="checkbox"/> year |

Surveyor notes:

.....

.....

Surveyor:

Date: