Upgrading an Informal Settlement: The Role of Tenure Security in Mahaiyawa, Kandy, Sri Lanka

by

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B. Sc. (Environment), The University of Guelph, 1998

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE (PLANNING)

in

THE FACULTY OF GRADUATE STUDIES

School of Community and Regional Planning

We accept this thesis as conforming to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

JULY 2000

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Abstract

The urban poor in many developing countries live in informal settlements which are becoming more congested due to the increasing population and urbanization. The infrastructure services and housing in these informal settlements is rapidly deteriorating and seriously affecting the health and well being of the inhabitants. Upgrading improves the living environment of these settlements. Tenure security is one, among many factors that influences upgrading. A sense of security is necessary for investment of time, resources and money to occur in upgrading. Once a sense of security is established, several other factors that may be independent of tenure security, influence upgrading.

This study determines the factors that affect physical upgrading (housing and infrastructure services) in the low-income settlement of Mahaiyawa, in Kandy, Sri Lanka. Mahaiyawa is the largest low-income settlement in Kandy, which is extremely congested and in dire need of upgrading. The impact of tenure security, as well as the other factors that influence upgrading, is examined. A comprehensive literature review regarding tenure security and upgrading was conducted prior to the three-month field research. Through participant observation and a mapping exercise, the physical and social aspects of the settlement were assessed. The key methodology for the study was interviews. Questions for the interviews were based on the literature review and previous studies conducted in Mahaiyawa. Twenty-two key-informant interviews and eighteen community interviews were conducted. A questionnaire was used to cross-check the community interviews. Based on the analysis of the interviews, recommendations regarding upgrading were provided.

The study revealed that the upgrading was taking place through the self-help approach, regardless of legal tenure. The prevalence of unauthorized units suggested that perceived security was critical for upgrading. No evictions, provision of urban services and identification cards, employment security and a sense of community established through a long residency, supported this sense of security. Access to financial resources dependent upon saving capacity, employment security and credit access, seemed to be the
most critical factor affecting upgrading after a sense of security was established. Other factors such as ethnicity, community participation, skill levels and availability of building materials, institutional resources, and power dynamics and politics, also affected upgrading.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF MAPS</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF PHOTOGRAPHS</td>
<td>viii</td>
</tr>
<tr>
<td>ABBREVIATIONS</td>
<td>ix</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>x</td>
</tr>
<tr>
<td>CHAPTER 1 : INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>1.1 City of Kandy: The Land Dilemma</td>
<td>2</td>
</tr>
<tr>
<td>1.2 The Case Study of Mahiyawa</td>
<td>6</td>
</tr>
<tr>
<td>1.2.1 Introduction and Significance</td>
<td>6</td>
</tr>
<tr>
<td>1.2.1 Rationale for Case Study</td>
<td>6</td>
</tr>
<tr>
<td>1.3 Problem Statement</td>
<td>7</td>
</tr>
<tr>
<td>1.3.1 Research Questions</td>
<td>8</td>
</tr>
<tr>
<td>1.3.2 Research Objectives and Implications</td>
<td>8</td>
</tr>
<tr>
<td>1.4 Research Methodology</td>
<td>9</td>
</tr>
<tr>
<td>1.4.1 Conceptual Framework</td>
<td>9</td>
</tr>
<tr>
<td>1.4.2 Scope of Study</td>
<td>11</td>
</tr>
<tr>
<td>1.4.3 Research Methodology and Framework</td>
<td>11</td>
</tr>
<tr>
<td>1.4.3.1 Phase 1: Base Information</td>
<td>11</td>
</tr>
<tr>
<td>1.4.3.2 Phase 2: Data Collection</td>
<td>12</td>
</tr>
<tr>
<td>1.4.3.3 Phase 3: Analysis and Recommendations</td>
<td>13</td>
</tr>
<tr>
<td>1.4.4 Limitations of the Study</td>
<td>14</td>
</tr>
<tr>
<td>1.5 Thesis Overview</td>
<td>15</td>
</tr>
<tr>
<td>CHAPTER 2 : THEORETICAL BACKGROUND</td>
<td>18</td>
</tr>
<tr>
<td>2.1 Slum Upgrading</td>
<td>18</td>
</tr>
<tr>
<td>2.1.1 Housing</td>
<td>19</td>
</tr>
<tr>
<td>2.1.2 Infrastructure</td>
<td>20</td>
</tr>
<tr>
<td>2.2 Methods of Upgrading</td>
<td>21</td>
</tr>
<tr>
<td>2.2.1 Self Help and Mutual Aid</td>
<td>21</td>
</tr>
<tr>
<td>2.2.2 Land Readjustment and Land Sharing</td>
<td>22</td>
</tr>
<tr>
<td>2.3 Tenure Security and Upgrading</td>
<td>23</td>
</tr>
<tr>
<td>2.3.1 Definition</td>
<td>23</td>
</tr>
<tr>
<td>2.3.2 Typology of Tenure</td>
<td>24</td>
</tr>
<tr>
<td>2.3.2.1 Legal Tenure</td>
<td>25</td>
</tr>
<tr>
<td>2.3.2.2 Perceived Tenure or Defacto Security</td>
<td>27</td>
</tr>
<tr>
<td>2.4 Other Factors that Influence Upgrading</td>
<td>29</td>
</tr>
<tr>
<td>2.4.1 Economic Factors</td>
<td>29</td>
</tr>
<tr>
<td>2.4.2 Lack of Skills and Resources</td>
<td>31</td>
</tr>
<tr>
<td>2.4.3 Power and Politics</td>
<td>31</td>
</tr>
<tr>
<td>2.4.4 Community Support and Participation</td>
<td>32</td>
</tr>
<tr>
<td>2.4.5 Cultural Aspects</td>
<td>33</td>
</tr>
<tr>
<td>2.5 Conclusion</td>
<td>33</td>
</tr>
<tr>
<td>CHAPTER 3 : TENURE AND HOUSING POLICIES: RESPONSES TO THE URBAN POOR</td>
<td>36</td>
</tr>
<tr>
<td>3.1 Land Tenure Systems in Sri Lanka</td>
<td>36</td>
</tr>
<tr>
<td>3.1.1 Pre-Colonial Period – The Rajakariya System</td>
<td>36</td>
</tr>
<tr>
<td>3.1.2 Post-Colonial Systems</td>
<td>37</td>
</tr>
<tr>
<td>3.2 Review of National Housing Policies for the Urban Poor</td>
<td>40</td>
</tr>
<tr>
<td>3.2.1 Pre-Independence</td>
<td>41</td>
</tr>
<tr>
<td>3.2.2 Post-Independence (1948-1969)</td>
<td>41</td>
</tr>
<tr>
<td>3.2.3 1970 – 1976</td>
<td>42</td>
</tr>
<tr>
<td>3.2.4 Post 1976</td>
<td>43</td>
</tr>
</tbody>
</table>
6.3.4 Lack of Institutional Coordination ................................................................. 102
6.3.5 Tenure Security ............................................................................................. 102
6.4 Strategy for Upgrading .................................................................................... 103
6.5 Recommendations .......................................................................................... 104
6.6 Conclusion ........................................................................................................ 107
REFERENCES ......................................................................................................... 108
APPENDIX 1: OBSERVATION GUIDE ..................................................................... 114
APPENDIX 2: GENERAL INTERVIEW GUIDE ..................................................... 115
APPENDIX 3: QUESTIONNAIRE ........................................................................... 117
APPENDIX 4: SUMMARY OF COMMUNITY INTERVIEWS ................................... 119
APPENDIX 5: SUMMARY OF QUESTIONNAIRE ................................................ 121
APPENDIX 6: KEY INFORMANT INTERVIEWS ....................................................... 123
List of Tables
Table 1.1 Land Use Patterns for Kandy, 1995 ................................................................. 3
Table 2.1 General Framework for the Types of Land Tenure .......................................... 24
Table 2.2 Credit and Tenure Options According to Levels of Security ............................. 30

List of Maps
Map 1.1 The Division of Kandy City into Municipal Council Wards ......................... 4
Map 1.2 Land Use Pattern of Kandy City ...................................................................... 5
Map 4.1 Mahaiyawa MC illustrating the Layout of Houses and Infrastructure Services 54
Map 5.1 The Authorized and Unauthorized Units in Mahaiyawa ................................. 75

List of Figures
Figure 1.1 Conceptual Framework for Thesis ................................................................. 10
Figure 1.2 Methodological Framework for Research ..................................................... 12
List of Photographs

Photo 4.1 Proposed Plan for Upgrading of Mahaiyawa .................................................. 61
Photo 4.2 An Elevated View of Mahaiyawa Showing the Intense Congestion ............... 63
Photo 4.3 Slumping House built on unstable slope ......................................................... 64
Photo 4.4 Variability of Building Materials used in Construction of Houses ............... 64
Photo 4.5 Communal Water Standpipe and Drain in Mahaiyawa .......................... 65
Photo 4.6 The Largest Common Latrine in Mahaiyawa .............................................. 66
Photo 4.7 House Located Adjacent to Drain, Raising serious Health Concerns ........ 67
Photo 4.8 A Typical Indoor Kitchen ............................................................................. 68
Photo 4.9 Kalaimagal Vidyalayam, the Tamil-medium School Located in Mahaiyawa .. 70
Photo 4.10 An Upgrading Initiative in Progress ............................................................. 70
Photo 5.1 Additions Made to Original Unit Raising Safety Concerns ....................... 77
Photo 5.2 Housing Adjacent to the Drains Impedes Maintenance and Upgrading .......... 78
Photo 5.3 Streetscape of Mahaiyawa MT .................................................................. 93
Photo 5.4 Haphazard Settlement Pattern in Mahaiyawa MC ...................................... 93
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP</td>
<td>Community Action Plan</td>
</tr>
<tr>
<td>CDC</td>
<td>Community Development Council</td>
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<tr>
<td>CDO</td>
<td>Community Development Officer</td>
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<tr>
<td>CLEO</td>
<td>Crown Lands Encroachments Ordinance</td>
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<tr>
<td>HTHP</td>
<td>Hundred Thousand Houses Program</td>
</tr>
<tr>
<td>LDO</td>
<td>Land Development Ordinance</td>
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<tr>
<td>KMC</td>
<td>Kandy Municipal Council</td>
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<tr>
<td>MHP</td>
<td>Million Houses Program</td>
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<tr>
<td>MC</td>
<td>Municipal Council</td>
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<td>MMC</td>
<td>Member for Municipal Council</td>
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<td>MT</td>
<td>Model Tenements</td>
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<tr>
<td>NGO</td>
<td>Non Governmental Organization</td>
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<tr>
<td>NHDA</td>
<td>National Housing Development Authority</td>
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<tr>
<td>SPA</td>
<td>Special Project Area</td>
</tr>
<tr>
<td>UBSP</td>
<td>Urban Basic Services Program</td>
</tr>
<tr>
<td>UDA</td>
<td>Urban Development Authority</td>
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</table>
Acknowledgements

I would like to thank the Canadian International Development Agency (CIDA) and the Canadian Bureau of International Education (CBIE) for awarding me a research grant to complete my research.

While in Kandy, I was supported by the University of Peradeniya, and would like to thank Dr. Sisira Pinnawala for his help and encouragement. I would also like to thank Dr. Aprodicio Laquian and Dr. Basil van Horen for their continued advice. Special thanks goes to my supervisor, Dr. Michael Leaf for his dedicated support. I would also like to extend my appreciation to the various key informants from several NGOs, as well as academics and previous researchers in Mahaiyawa for sharing their experiences and wisdom with me.

My appreciation also goes to the various government organizations such as the UDA, NHDA and especially to the Kandy Municipal Council, for supporting my research, as well as providing me with assistance and documentation.

Most importantly, I would like to thank the residents of Mahaiyawa. The community has been very warm and welcoming and has significantly contributed to my positive experience. Appreciation goes to Mr. T. Sivabalam, the previous Community Development Officer (CDO) for his explanation and insight on the community dynamic, and his help in organizing a workshop. A very special thanks, goes to the current CDO Officer, Mr. D. Thyagarajah and his family. Mr. D Thyagarajah was instrumental in helping me build trust and work with the community. He extensively assisted me with the mapping exercise and interviews. Without his enthusiasm and devoted assistance, I would have not been able to complete my research.

Finally, I would also like to thank the Ratnayake Family for hosting me, and for the love, kindness and support they gave me during my stay in Kandy.
This thesis is dedicated to the hope of the people of the slums
I visited a slum in Jaipur, India and a woman walked up to me and said:

“I am illiterate; my husband is an alcoholic. He gives me ten rupees (50 cents) to feed four children. What can I do with ten rupees; should I buy flour or wood or vegetables? He beats me when he gets drunk. He does not allow me to do anything outside the household. I would like to do something, something if not for me, at least for my children. I have no skills, resources or knowledge to do anything. Help me!”

Her brief description saddened me, yet intrigued and even inspired me. From that day on, I have always wanted to work in slum communities. This study is a journey into a slum culture which will always bring back this memory.
CHAPTER 1: INTRODUCTION

In many cities in developing countries, more than half of the population live in some form of unauthorized settlement without access to adequate shelter and services (Payne, 1997). Whether the urban poor live in *favelas* in Brazil, *gecekondu* in Turkey, *bidonvilles* in Algeria or *bustees* in Calcutta, they constantly face a threat of eviction as well as scarcity of water, absence of sewerage, inadequate transport facilities and other amenities (Suri, 1994). These spontaneous settlements are cramped, crowded and unsanitary and in constant need of improvement or upgrading.

There are several factors that influence physical upgrading of informal settlements\(^1\). Some of these include higher income, stable employment, access to credit, skills training, and tenure security. Tenure insecurity and the fear of eviction are considered to be serious impediments to house improvements in slum and squatter settlements. Therefore, tenure security and freedom from eviction are critical factors in the upgrading of informal settlements (Angel, 1983a).

Tenure security is the real or perceived assurance of people occupying a piece of property that they will not be arbitrarily removed or denied the use of that property. Security can be based on legal precepts (dejure land ownership, for example), or on political or administrative factors (defacto: ‘squatter’s rights’ based on organized political strength of people). It has been proposed that tenure security is an important element in people’s inclination to improve their dwellings and their communities through the upgrading process. Tenure security influences the pattern of physical development and can determine the manner in which an area adapts to change. For the poor, security of tenure is closely linked to their well being and long term development prospects (Menezes, 1988). Tenure security provides a sense of safety, which is critical to stimulate

---

\(^1\) Informal settlements provide shelter to the urban poor and include areas that are inadequate in terms of physical and social infrastructure. These areas are difficult to service, lack tenure security, there is no administrative recognition of their existence and mostly lack any sort of planning (Mosha, 1996). These include slums that can be within the legal framework, and squatter, extra-legal, non-formal, illegal, spontaneous and popular settlements, which exist outside the legal framework.
the improvement of one's dwelling. Once security is felt or perceived, it encourages investment and hence upgrading. Provision of rights to secure tenure is consequently a central consideration for the success of site and service projects or the upgrading of squatter settlements in developing countries (Dunkerley, 1983 and Payne, 1997). Provision of tenure security is most often taken for granted to be a precondition for self-help. However, security of tenure does not necessarily lead to upgrading and therefore, it is important to establish its role before embarking on any upgrading initiative. To establish the role of tenure security in upgrading, an assessment of its effects on investment (labour or capital) in house improvements and infrastructure would be necessary (Angel, 1983a). Since, tenure security may not be the only sufficient condition for upgrading, other factors need to be considered in tandem.

This study was undertaken in the informal settlement of Mahaiyawa, in Kandy, Sri Lanka during the months of May through June 1999. Mahaiyawa presented an ideal case of an informal settlement that had unclear tenure issues and was in serious need of upgrading. Therefore, examining the role of tenure security, as well as other factors that influence upgrading is critical for a future upgrading strategy for this settlement.

1.1 City of Kandy: The Land Dilemma

The City of Kandy was the capital of the last Sinhalese Kingdom before conquest of Sri Lanka by the British in 1815. Even after British occupation, it continued to be used as a main strategic center of provincial administration and the capital of the hill country (Gunadasa et al., 1998). Today, Kandy is a historic, cultural and religious center; it is the center of Buddhism and home of the sacred 'Temple of the Tooth'. It is a popular tourist attraction with its world famous Esala Perahera and has been designated a world heritage city by UNESCO. Kandy is considered to be the second largest metropolitan area in terms of population and economic output, and a regional center for

---

2 The 'Temple of the Tooth' houses Sri Lanka's most important religious relic—the sacred tooth of Buddha. Hence, it has become a center for pilgrimage.
3 The Kandy Esala Perahera is a 10 day festival leading to the full moon in the months of July and August which consists of a large possession of elephants, thousands of dancers, drummers and temple chieftains in honor of the Sacred Tooth Relic of Kandy. This is the most important and spectacular festival in Sri Lanka and draws worldwide visitors (Lonely Planet, 1997).
public administration, education, health care and commerce (UDA, 1998 and Nawfhal, 1988). Many people of different origins migrated to Kandy, transforming it into a multi-ethnic city.

Kandy’s natural geography has limited its growth. The municipal area occupies an extent of 2,485 hectares and caters to a population of approximately 140,000 people (UDA, 1998). Population density in Kandy is estimated to be approximately 5,578 people per square kilometer\(^4\). Two thirds of the city area (north, northeast, east and west) is bounded by the Mahaweli River and the south is bounded by the steep hills and unstable masses of the Hantana mountain range. The rest of the city is bounded by natural streams or hilltops (Nawfhal, 1996 and UDA, 1998). The Kandy Municipal Council Area is divided into 23 wards as shown in Map 1.1. Kandy’s land use pattern is summarized in Table 1.1 and Map 1.2. Most of the vacant land available within the municipal limits is on very steep slopes and is unsuitable for potential development. Developable land is extremely limited.

<table>
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<tr>
<th>Category</th>
<th>Extent (ha)</th>
<th>% of Total</th>
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<tr>
<td>Residential</td>
<td>1,159.3</td>
<td>46.6</td>
</tr>
<tr>
<td>Commercial</td>
<td>58.7</td>
<td>2.4</td>
</tr>
<tr>
<td>Industrial</td>
<td>9.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Buildings</td>
<td>34.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Religious</td>
<td>41.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Educational</td>
<td>60.2</td>
<td>2.4</td>
</tr>
<tr>
<td>Health</td>
<td>24.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Roads</td>
<td>172.9</td>
<td>7.0</td>
</tr>
<tr>
<td>Parks and Playgrounds</td>
<td>96.3</td>
<td>3.9</td>
</tr>
<tr>
<td>Vacant Lands</td>
<td>222.5</td>
<td>9.0</td>
</tr>
<tr>
<td>Paddy</td>
<td>66.7</td>
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<tr>
<td>Forest Lands</td>
<td>364.2</td>
<td>14.7</td>
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<tr>
<td>Water Bodies</td>
<td>174.5</td>
<td>7.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,485.5</td>
<td>100</td>
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\(^4\) This estimation is based on the assumption that the current population is 140,000 and the land area of Kandy city is 25.1 square kilometers.
Given the natural limitations of the land due to the topography, and the current level of population growth and development, the city lacks land for expanding commercial, institutional and residential use. The competition for land and property for commercial housing has become more distinct than any other urban function. Demand for houses or land in middle class housing areas and commercial areas is continuously increasing (Nawfhal, 1996). Therefore, emphasis lies on redevelopment of the town center as well as expansion outside the municipal area. It is believed that new household formation can be absorbed within the municipal council through doubling up,
construction of new units or additions on already occupied plots and a minimal amount of infill on vacant plots (UDA, 1998). Low-income settlements located within the core of the city, for instance Mahaiyawa, have become prime targets for commercial or residential development due increasing land values.

Map 1.2 Land Use Pattern of Kandy City

1.2 The Case Study of Mahaiyawa

1.2.1 Introduction and Significance

Mahaiyawa is one of 53 low-income settlements in the city of Kandy. The city government has targeted 18 settlements for community upgrading and redevelopment and Mahaiyawa is one of them. Mahaiyawa is located in Northwestern Kandy, on the southern edge of the Kandy cemetery, close to the commercial center of Kandy on land owned by the municipal government. It is divided into two sections namely the MC (Municipal Council) section and the MT (Model Tenements) section. The MC section comprises the spontaneous settlements that consist of the employees of the Municipal Council. The MT section comprises the Model Tenements, which are regularized in terms of tenure and services and have better quality housing and amenities (Pinnawala, 1998). This study will focus on the MC section of Mahaiyawa. From here on, Mahaiyawa will specifically refer to the MC section.

The low-income settlement of Mahaiyawa houses approximately 4200 people on 11 acres of land (Thyagarajah, 1998). Originally, the city council had allowed low-salaried city employees and their families to live on the site on a temporary basis. Through time and mainly due to natural increase, the settlement has become densely populated and congested. The housing comprises a wide range from dilapidated shanties made of mud walls and other makeshift materials to those built of brick and cement (Pinnawala, 1998). The excessive population has led to a breakdown in the services and amenities provided and consequently led to deterioration in the environment, and health of the residents. There is a definite and immediate need for upgrading of this settlement. Determining the implications of tenure security as well as the other factors that influence upgrading would significantly influence the upgrading process and is therefore critical.

1.2.1 Rationale for Case Study

Mahaiyawa is an ideal case study for several reasons. First, its prime location in the core area of the city has elevated its property value. Also, its location along the major arterial route of the Katugastota-Kandy highway has contributed to an increased
commercial value. The commercial value of the land would be in the range of about Rs.\textsuperscript{5} 300,000 to 400,000 per perch\textsuperscript{6} (Nawfhal, 1996). The area occupied by the low income settlement amounts to approximately 11 acres thus accruing a land value of over 2 billion rupees\textsuperscript{7}. Mahaiyawa is located on municipal land and therefore does not fall under the competing land market. However, the Municipal Council would like to put the land to more productive use and gain more capital from it. Given the scarcity of land, and its value, commercial development seems a promising option. Second, it is one of the largest and most densely populated low-income settlements in Kandy. Therefore using it as a case study would be tackling a worst-case scenario and would provide a valuable and fruitful learning exercise. Third, the residents of the settlement are crucial to the functioning of the city. They helped build the city and have maintained it for over a century. The residents of this settlement provide a vital role to the city as city labourers, petty traders, cleaners, washers, porters, office peons and casual labourers. Fourth, Mahaiyawa is one of the only two Indian Tamil enclaves in Kandy. It provides a cultural sense of place and identity for its residents. It has the only Tamil-medium elementary school, and has one of the first Hindu temples of the city

1.3 Problem Statement

Most of the literature supports the notion that tenure security is an important pre-requisite for the self-help approach. However, tenure security may or may not influence slum upgrading and therefore it is important to determine its impact. More importantly perceived security could even play a more significant role in spontaneous upgrading and therefore it is important to assess what leads to this perceived security. Finally, tenure security is only part of a bundle of attributes that affect slum upgrading. Therefore it is critical to assess the other factors, dependent or independent of tenure security, that influence upgrading. Mahaiyawa is an informal settlement that is in dire need of upgrading. \textit{This thesis seeks to determine the impacts of tenure security and other factors that influence upgrading of the informal settlement of Mahaiyawa.} Assessing the factors

\textsuperscript{5} At the time of writing, 1 CAD $ = 46 Sri Lankan Rupees.
\textsuperscript{6} A perch is 5.5 square yards or approximately 4.6 square meters.
\textsuperscript{7} The land is approximately 8000 perches and hence the lower limit value would be Rs. 2.4 billion. However not all the land would be valued at this since the slope gradient is significant and the road-front would have a higher value.
that influence will enable an appropriate upgrading strategy for this settlement and contribute to improved living conditions for its residents.

1.3.1 Research Questions

Based on the problem statement, the following questions were considered:

1. Is there any upgrading taking place in Mahaiyawa? What factors influence spontaneous or in-situ upgrading in Mahaiyawa?

2. What types of tenure exist in Mahaiyawa? How do these types of tenure influence upgrading? Is tenure the most critical factor in upgrading?

3. Is there evidence of defacto or perceived security? What factors influence perceived security? How does perceived security influence upgrading?

4. How do the other factors (other than tenure) influence slum upgrading?

These questions will focus on the physical aspects of upgrading specifically housing and infrastructure.

1.3.2 Research Objectives and Implications

The purpose of this project was to study land tenure security and its implications for the upgrading potential within the slum settlement of Mahaiyawa. This study was used:

- to determine the current upgrading strategies and all the potential factors that contributed to the upgrading;
- to identify the different forms of land tenure and tenure security including perceived security within the informal settlement of Mahaiyawa, and to determine the implications of these on spontaneous upgrading;
- to determine the causes of perceived security and provide implications of these on upgrading;
- to compile and gather a comprehensive set of background information on Mahaiyawa that will be used toward any development initiative;
- to achieve an understanding of community dynamics and to understand the general needs and problems of the community;
- to provide recommendations for upgrading based on an assessment of tenure security and the other factors that influence upgrading.
This study provides a compilation and a comprehensive analysis of the various actors and factors involved in Mahaiyawa which would be a critical basis for any upgrading initiative. Understanding the implications of tenure security may have a significant impact in determining the upgrading strategy and would lead to more efficient use of resources. Recommendations are provided regarding tenure and other upgrading issues, which would contribute to a more stable living environment for the residents of Mahaiyawa. This study could also be used to address some of the problems encountered in the other 52 informal settlements in Kandy and other similar communities elsewhere.

1.4 Research Methodology

This section addresses the methodology used in conducting the research. The first section outlines the conceptual framework. The second section discusses the scope of the study and defines key terms from the problem statement. The third section outlines the methodology used. The fourth section summarizes the application of the methodology and the last section, highlights some of the limitations of the research.

1.4.1 Conceptual Framework

Slum upgrading can take on various forms. This study will be limited to the physical upgrading of housing and infrastructure services. The methods of upgrading also need to be considered. There are several factors that influence upgrading. Tenure security is a fundamental variable to be considered for this study. Land tenure can be legal or illegal and can range from traditional forms such as promises or communal land to leasehold and freehold legal systems (Angel, 1983a). The different forms of tenure need to be understood in each specific context. Other variables that influence upgrading, which may be independent of tenure security also need to be assessed. Figure 1.1 summarizes the conceptual framework and the different variables. Most of these terms will be explained in the theoretical background in the next chapter.

Investment into one’s shelter assumes future acquisition of legitimacy and can be done without legal tenure. A perceived sense of security can be adequate to mobilize investment in resources. Defacto security is usually established based on hopes, expectations or speculation that a house is not likely to be destroyed and eventually will be legitimized (Angel, 1983a). This simple principle, which might even be subjective
since it may be based on promises, determines the fate of upgrading and thus requires serious consideration. This sense of security can be created through community cohesion, strength by numbers, provision of services or even quasi-legal occupation certificates. Governments can sometimes establish false hope by providing services and this can facilitate investment in housing. The current institutional framework and policies regarding housing the poor, and informal settlements also need to be considered. The political climate, as well as governance within the jurisdiction needs a closer evaluation with regard to tenure provision and upgrading. The success of the gradual approach to housing relies on a coalition between squatters and the forces in society which have an interest in granting them secure land tenure (Angel, 1983a). False promises for upgrading are not uncommon during election times and may hinder upgrading.

SLUM UPGRADEING
(Refers to spontaneous upgrading of physical aspects, such as housing and infrastructure)
- Methods of upgrading need to be considered

Tenure Security
To understand issues around tenure security, the following needs to be considered:
- forms or types of tenure
- de facto security
- institutional context and policies regarding tenure and upgrading

Other factors that Influence Upgrading
- economic factors – income levels, saving capacity
- skill levels
- access to resources
- community participation
- politics and leadership
- cultural issues

Figure 1.1 Conceptual Framework for Thesis

There are several other important factors that influence upgrading. Some of these factors, may be independent of tenure security, nonetheless, they need to be considered in tandem with tenure security. Access to credit, higher income and employment levels, good community organization and leadership and knowledge of skills to upgrade can increase the slum upgrading potential regardless of tenure security. Effective community
participation can mobilize resources, and improve living conditions. Community organization and good leadership can advocate for more resources and rights. Furthermore, provision of technical resources, skills and training on how to construct better dwellings as well as easier access to construction materials can enable upgrading. Finally, the cultural aspects such as values and traditions need to be considered with regard to upgrading.

1.4.2 Scope of Study

This study specifically focuses on slum upgrading of the informal settlement of Mahaiyawa. All the factors that influence upgrading are considered and a particular emphasis is placed on tenure security. A broader theoretical framework is considered to understand the general principles behind land tenure in squatter settlements. This includes an overview of tenure systems, the effects of tenure security on slum upgrading, as well as the other factors that influence slum upgrading. For the purpose of this study, slum upgrading will specifically focus on spontaneous or in-situ upgrading of housing and infrastructure services. To understand the specific issues regarding tenure security and upgrading, a comprehensive study of the community and its dynamics is also critical.

1.4.3 Research Methodology and Framework

The significance of Mahaiyawa as a case study has been discussed in section 1.2. A multi-method strategy was used to gather data, which involved a literature review, compilation of studies, settlement mapping, participant observation, key informant interviews, community interviews and a questionnaire. The methodology used in the research was divided into 3 phases, each of which will be explained in the following sections. Figure 1.2 summarizes the framework for the methodology.

1.4.3.1 Phase 1: Base Information

A comprehensive literature review was conducted regarding tenure security and slum upgrading prior to initiating the field research. This was done through a critical examination of the relevant theories and case studies. Based on this literature review, an observation guide, interview questions and a questionnaire were formulated (See Appendices). More area specific literature was collected at the University of Peradeniya library in Kandy.
1.4.3.2 Phase 2: Data Collection

Phase 2 was the most critical and challenging phase, which involved the data collection. A variety of activities were carried out in tandem as illustrated in Figure 1.2. The initial information was based on secondary data that consisted of a compilation of the relevant studies that had already been conducted. The data gathered included survey information, previous academic research, community initiatives, development initiatives and the documentation in the administrative files of the local authorities.

Participant observation and mapping were two exploratory research exercises that were used to build trust, understand community dynamics and the physical setting and infrastructure. Participant observation involved attending the meetings of various existing groups such as the women and youth groups. The proceedings of meetings, the general behaviour, community interaction and leaders were observed. There were no updated maps of the settlement and a more accurate representation of the ground truth was needed. Therefore, the mapping exercise was carried out. This involved walking through all the areas of the settlement and plotting each residence, noting the type of ownership as well as the physical infrastructure. This exercise helped me build trust with
the community, familiarized myself with the settlement and made it easier to determine the participants for the community interviews. It also helped me to see the range of housing options and created a non-threatening forum by which the residents could establish dialogue with me, and question my research. These two exercises followed the general principles in the observation guide (Appendix 1).

In tandem with the mapping exercise, key informant interviews were conducted. Twenty-two key informant interviews were conducted with various leaders, officials, community workers and academics. This helped determine the various biases and perspectives regarding the issues in question as well as provided an understanding of the institutional framework and politics within the settlement. Each interview was custom-tailored from the general interview guide in Appendix 2. Once trust was established within the community, community interviews were conducted. The criteria for selecting interviewees was based on physical characteristics such as location of housing unit, type of housing material, upgrading initiatives and residency period. The selected participants were widespread throughout the settlement and represented a fair survey. Eighteen interviews were conducted using the community interview guide in Appendix 2. The number of community interviews was determined by the repetition in the answers to the questions. Once the answers began to be repeated, it seemed pointless to continue interviewing more participants. To ensure consistency and to confirm information, a questionnaire survey (Appendix 3) was conducted during a workshop, which served as a crosscheck. This survey had 23 respondents and had similar questions to the community interviews.

1.4.3.3 Phase 3: Analysis and Recommendations

This was the final stage of the research that was carried out in Canada. It entailed collating and analyzing all the information from the secondary data, participant observation, mapping exercise, interviews and questionnaire. The research questions were answered using the analyzed data. Based on the results of the analysis, recommendations are provided regarding tenure issues and slum upgrading.
1.4.4 Limitations of the Study

There were several anticipated constraints before embarking upon the field work. Some of these constraints included: language, data access, community receptivity, and time. A significant impediment in conducting the research was the lack of community involvement or initiative for any development activity. There had previously been community organizations that contributed to improving the welfare of the community. However, the leaders of these groups had deceived the people through mismanagement and embezzlement of funds. Also, there were a lot of false political promises that were made to these people. The community has become very cynical and a lack of trust has developed. A significant portion of time was dedicated to establishing good rapport with the community, and building trust. This was done mainly through the mapping exercise. Once trust was established the community was more receptive toward my research.

Previous researchers only seemed to use the community for information and did not give feedback or address any community needs. Hence the community had become apprehensive to and frustrated by research. This negative perception had to be changed. To ensure a healthy working relationship, an information session was arranged where curious community members could question my research. Also the mapping exercise provided a non-threatening forum in which the residents could converse with me. A needs assessment workshop was carried out and based on this, garbage bins were donated and distributed throughout the settlement. The community felt that I had done something for them and had positive feelings toward my research.

Access to materials and information was another limitation to the study. The lack of records as well as complicated bureaucratic and administrative procedures made it difficult to access information. However, persistence and determination made it possible to gain access to the required information. My research time was limited to the evenings and weekends since most of the people were unavailable during the day. I also had to heavily rely on translators to communicate with the community since the language spoken was Tamil.

The institutions involved and the community itself, were highly political and hence it was difficult to get cooperation of various groups and individuals. For instance, people who belonged to one political party would not associate with people from another
political party. I had to constantly remind the community and various organizations that I was exclusive of any political affiliation and my research was strictly academic and would address the whole community's needs. There also existed an underlying elite leadership and a deep rooted caste system, which were difficult to determine initially and over time the issues and biases became clear. These internal conflicts mainly related to politics were the most frustrating and difficult impediments to my research.

1.5 Thesis Overview

Chapter One introduces the research area and case study, and provides an overall framework for the thesis. The problem statement, research questions, objectives and methodologies are discussed.

Chapter Two provides the theoretical background for the research and uses the literature to emphasize the relevant information regarding slum upgrading and the factors that influence it. Slum upgrading is defined and the various methods of upgrading are explained. Tenure security and its influence on upgrading is assessed. Other factors that influence upgrading are also discussed.

Chapter Three provides a review of the institutional context and responses to the shelter needs of the poor. Pre-colonial and post-colonial land tenure systems are discussed. This is followed by a review of the national housing policies for the urban poor. The chapter highlights the recent responses to the low-income settlements in Kandy.

Chapter Four provides a comprehensive assessment of the settlement of Mahaiyawa. Base-line information regarding the historical, social, cultural, economic, political, and physical aspects is provided. The housing and infrastructure services are explored in detail, followed by an overview of the existing tenure systems.

Chapter Five is the most critical chapter. It summarizes and analyzes the results of the study. The research questions are answered based on the methodology of key-informant and community interviews. The implication of tenure security on upgrading in Mahaiyawa is reflected upon. Various other factors that influence upgrading in Mahaiyawa are identified and explained.
Chapter Six summarizes the key findings and provides recommendations to mitigate the problems in Mahaiyawa. The problems in Mahaiyawa are drawn upon, followed by potential solutions. Finally, recommendations are provided that would assist in an upgrading strategy.
I first walked into Mahaiyawa at approximately 8:30 am on May, 5, 1999. The physical appearance was not as bad as I had expected. There seemed to be many permanent structures. I was a bit disappointed because it did not seem to have the typical characteristics of the dilapidated structures of a slum which I had gathered from my readings. Nonetheless I was also pleased by the fact the people were not living in ultimate poverty. However, weeks later this positive perception dramatically changed. I had only seen the more prosperous segments of the community. The more time I spent in the community, the more I learned about the problems, the congestion, the politics and the lack of resources. This settlement was extremely congested and between the numerous lanes of housing there was hardly any space for light or even air. I learned that every slum is unique and has its own set of characteristics that cannot be determined by an external first impression. I had to begin to find the different pieces of the puzzle and I could only hope that I would be able to put the puzzle together.

On one of my first field visits to Mahaiyawa, I met an old man. He kissed my elbow and I was told it meant a welcoming into the community. I am unsure of the meaning of this mysterious action but it is one of those one-time encounters that can change one’s life. This blessing definitely stayed with me because I encountered no problems during my research experience. On my field visits, I meandered among the gullies and the jagged landscape between stenches of open drains and the kind smiling faces of people. I saw a sparkle in the heart of this community. Their poor life has touched my heart and now I have become their hope for change. Everywhere I go, people are warm and hospitable. A smile appears on faces even though beneath the smile and in those deep dark eyes, one can only imagine the hardships. In spite of my repeated refusals for food and drink, I still get offered something. It is painful to partake food when you are aware that the giver might go hungry. However, refusal is also insulting because the offer is from the goodness of his or her heart. There is an act of giving which is happiness in itself, and that is the beauty of the people in the slums.
CHAPTER 2: THEORETICAL BACKGROUND

Upgrading of informal settlements is carried out so as to improve the inhabitants' socio-economic conditions and above all to improve the physical (built) environment (Kaitilla, 1991). Upgrading can have a range of components, which can include physical, social, cultural, economic and environmental aspects. This review is limited to the physical components of upgrading namely housing and infrastructure services. The World Bank recognizes that the “lack of security of tenure is one of the greatest known impediments to voluntary resource mobilization for housing” (Mayo, 1993; as cited in Werlin, 1999, p. 1532). Tenure security, which may be legal or perceived, may significantly influence upgrading. However, it is not the only factor that influences upgrading. There are several other factors that work in tandem, or independent of tenure security, that influence informal settlement upgrading. These include: economic factors, lack of skills and resources, political factors, community support and participation and cultural norms. These factors including tenure security are further explored in this chapter.

2.1 Slum Upgrading

In the early 1970s slum clearance was widespread and governments were destroying more low-income housing than they were building (Werlin, 1999). Slum clearance rarely solved the problem of low-income slum dwellers because the poor could not afford the new housing that was being built. Even if the slum dwellers were given subsidies to obtain new homes they sold their right to it and resettled in other slum areas, thus exacerbating the problem (Coit, 1998). During the 1970s there had been up to a 50% rise in the population of developing countries (Hauser et al., as cited in Werlin, 1999). It was during this period that upgrading was recognized as the least expensive approach to dealing with the urban poor. According to the World Bank, the estimated costs of upgrading projects averaged US$ 38 per household compared to US $ 1,000-2,000 for a core housing unit in a site and services project and more than US$ 10,000 for a low cost public house (Churchill, 1980; as cited in Werlin, 1999, p. 1524). It was justified that this approach would cause less social disruption, bear no costs on slum
clearance, would not disrupt social and ethnic support systems, and hinder densification in other slums (Werlin, 1999).

The writings of John F. C. Turner, based on his observations in Peru significantly influenced slum upgrading. His argument suggested that the solution to slums was not demolishing them but to improve their environment. He initially suggested minimal state intervention and more autonomy to the people, since they best knew their needs and could obtain resources more efficiently than the state. If the physical environment improved, most low-income settlement residents would gradually improve their housing and living conditions, especially when encouraged with security of tenure and access to credit (Werlin, 1999). He later suggested that the state should provide an enabling role by providing resources such as land, energy and tools (Mathey, 1992).

The successful results of the slum upgrading approach can be seen in many substantial projects such as the Kampung Improvement Program (KIP) in Jakarta and the Calcutta’s Bustee improvement Program (BIP). By 1979, KIP had benefited over 70% of Jakarta’s estimated slum population of about 3.3 million residents. It provided walkways, drains for sewerage and water. Within 14 years all the eligible kampungs had benefited (Kessides, 1997 and Viloria, 1991: as cited in Werlin 1999, p1524). By 1986, the BIP benefited about 3 million residents by reducing water borne diseases through improved water infrastructure. (Werlin, 1999). In many cities in developing countries, more than half the population live in some form of unauthorized settlement without access to adequate shelter and services (Payne, 1997). Slum upgrading continues to be one of the most important basis in improving the lives of poor in informal settlements. The physical aspects of upgrading, namely housing and infrastructure, will be discussed in the following section.

2.1.1 Housing

De Souza (1999) defines housing improvements as the evolution of the use of building materials from temporary to permanent components. Temporary materials are those used to build a shack at the initial stage with very scarce financial resources and building skills. These include materials such as plastic sheets, cardboard and poles. Permanent building materials include adobe, wood, bricks, tiles and cement (De Souza,
Building materials are the physical and tangible measures that indicate levels of house consolidation. The materials in three components of the house namely, the floor, roof and walls are usually observed when determining the level of improvement. Every settlement would have its own scale of measurement, which is dependent on the materials used as well as the climate. The type of housing should suit the needs of the family including their affordability and should not solely be based on architectural standards (Gilbert, 1989).

2.1.2 Infrastructure

“Urban residential physical infrastructures, in particular safe water and sanitation systems, are an important prerequisite to good housing and living conditions and to health.” (Choguill, 1999). In 1994, 280 million urban dwellers had inadequate water supply and 588 million urbanites lacked satisfactory sanitation facilities (Water Supply and Sanitation Collaborative Council, 1994; as cited in Choguill, 1999, p. 289). Provision of infrastructure is generally seen as a public sector activity. Investment in infrastructure is costly and governments assign low priority to such expenditure (Choguill, 1999). Deficiencies of infrastructure manifest themselves in pollution, disease and economic stagnation. Lack of infrastructure services impacts the urban poor in terms of poor health, low productivity, reduced income and poorer quality of life (Flood, 1997). The infrastructure components that need consideration when assessing the level of upgrading include: water supply, roads and walkways, drainage, electricity, waste disposal (human and solid), fire protection (Angel, 1983b), security services and street lighting. Water supply, roads and walkways and human and solid waste disposal were the most critical priorities according to a study conducted in six Asian cities in 1977 (Angel, 1983b).

Even though slum improvement through infrastructure improves health, comfort, and convenience (Mayo et al., 1986), it has some implications that need to be considered. Infrastructure improvements attract more people into a settlement and the value of the land and units increase. This would lead to higher rents for the original dwellers and possibly lead to their eviction (Angel, 1983b). The quality and type of infrastructure is dependent on the permanency of the residents as well as the financial resources available. Usually on-site infrastructure consists of lower cost, individual approaches such as pit
latrines, septic tanks and individual household wells (Choguill, 1999). Provision of temporary infrastructure services is problematic according to municipal engineers for several reasons. First, these can be destroyed through eviction at a later date and therefore are a waste of public resources. For instance, in Janata Colony in Bombay in 1976, the residents were evicted after three successive infrastructure improvements had been carried out. Second, high infrastructure standards are preferable but this is not financially feasible in low-income settlements (Angel, 1983b). Low infrastructure standards tend to rapidly deteriorate and could cause more problems (Werlin, 1999). The Kampung Improvement Programme, was a low standard program and its failure was frequent and affected the health of the people (Angel, 1983b). The level of infrastructure within a settlement will be dependent upon the available resources.

2.2 Methods of Upgrading

There is no single approach or specific methodology to upgrading informal settlements. The approaches to upgrading such as the self-help approach, land sharing and land readjustment will be explored due to their relevance to the case study. Sites and Services\(^8\) was a popular approach to upgrading, endorsed by the World Bank in the 1970s. It was eventually phased out due to the lack of cost recovery. The Sites and Services approach will not be considered due to its irrelevance to the case study.

2.2.1 Self Help and Mutual Aid

As many cases suggest, the poor, left to their own resources, will gradually mobilize their savings, labour, creative abilities and social networks to house themselves. However, they need to be given the freedom and opportunities to do so. This is dependent upon their priorities, which can be variable. Governments must recognize and legitimate the poor’s constructive efforts by removing obstacles and constraints to house improvements, and by providing essential public services (Angel, 1983a). Self-help is the use of a participating family’s skills, labour, organizational talents, and managerial skills in the construction and improvement of their own house (Bamberger et al. 1980 as

\(^8\) Sites and Services projects involved provision of tracks of land which were divided into plots and provided with basic supporting services. Titles to the plots were either sold or rented to those who wanted to build their own houses (Choguill, 1999).
cited in Laquian, 1983). The self-help approach is used for improvements to individual housing units. This tradition of the self-help approach was associated and popularized with the writing of John Turner. It has been highly supported in several development projects especially in the late eighties and early nineties. With the self-help approach people house themselves outside the formal market (Nientied and Van der Linden, 1988). Once some form of tenure legitimacy especially perceived security is achieved, people themselves take the initiatives to upgrade. Support can be provided to encourage these forms of upgrading through access to credit, skills training and provision of materials.

Mutual aid involves using the cooperation of all participating families in teamwork to construct project infrastructure or basic parts of a house (Laquian, 1983). Mutual aid is usually used for improvements to infrastructure within a community. Legal or formal tenure is more conducive to this approach. The Tondo project in the Philippines illustrated the use of mutual aid in a reblocking program. The reblocking program involved moving houses to their designated places in a new plan. Several families got together to help each other physically move housing structures. The Fundacion Salvadorena de Desarrollo y Vivienda Minima (FSDVM) was an agency in El Salvador that carried out projects using mutual aid concept. It enhanced community relationships, reduced labour and housing costs, fostered cooperative problem solving, instilled strong pride, and empowered the community. The community later constructed centers, parks, school and clinics through mutual aid (Laquian, 1983). The implementing development agency usually capitalizes on the mutual aid concept. In the case of Indonesia, gotong royong is a cultural norm that obligates individuals to provide community service and could be considered a form of mutual aid (Bowen, 1986).

2.2.2 Land Readjustment and Land Sharing

Land readjustment, also known as land consolidation or land pooling, facilitates the orderly development and servicing of fringe urban land, which is currently held by many owners who have small parcels. It can be undertaken by a government agency or even privately as a voluntary arrangement between landowners (Doebele, 1982 and Devas and Rakodi, 1983). Once the land is pooled, the area is serviced with roads and infrastructure. A portion of this land in sold by the implementing agency to finance the
provision of services. The land is then re-divided between the original owners. Landowners benefit from receiving serviced plots suitable for development or sale, which are of higher value than previously undeveloped land. This technique has been used extensively in Japan, South Korea, and Taiwan and is increasingly being adopted in Indonesia and India (Devas and Rakodi, 1993). The land pooling programs of Thailand and the Philippines, involved a subdivision of a parcel of land, to enable part of the plot to be developed, in return for the settlers receiving tenure security for an agreed share of the land or property (Payne, 1997). In some low-income neighborhoods land has been pooled and the ownership and authority is given to some self-created organization. This protects the community from land speculation as well as external threats from large developments (Doebele, 1983). This strategy is well established in Ethiopia and Colombia where it is used to combat external threats to tenure security (Payne, 1997).

Land sharing involves the development of land that is either illegally occupied or legally rented. Developers purchase rights to land acquired by squatters and build market-oriented projects on the sites. The profits are used to compensate the squatters and ensure that the new development receives official acceptability. Land sharing programs usually occur in urban informal settlements situated on prime commercial land. The urban poor are housed in apartment complexes, which are financed from the sale of the land they previously squatted on. In Bangkok, a land sharing scheme existed where slum-dwellers faced with eviction had organized and bargained for a share of the land they occupied, while allowing the landowners to obtain the profitable parts of the land for commercial development (Sazanami et al., 1992).

2.3 Tenure Security and Upgrading

2.3.1 Definition

The word ‘tenure’ is derived from a Latin term for ‘holding’ or ‘possessing’. The term originated from English feudalism after the Norman conquest of England in 1066. Payne (1997), defines land tenure as the mode by which land is held or owned or the set of relationships among people concerning the use of land and its product. A land tenure system encompasses all the types of tenure recognized by a national or local system of law, taken together. Security of tenure “implies confidence in the legal system or the
lack of worry about loss of one's rights (Bruce, 1998). Tenure systems are influenced by economic, social/cultural and political systems and are characterized by each country (Bruce, 1998). Urban land tenure can be of variable forms and is context specific. Further, it is important to understand the implications of providing tenure security and how these tenure forms can influence upgrading. This section provides an overview of the various tenure forms and the issues and impacts of providing tenure security.

2.3.2 Typology of Tenure

Based on reviews by Payne (1997) and Doebele (1983), a typology of tenure was formulated to provide an overview of the wide spectrum of tenure (Table 2.1). There may be overlap between the categories, as well as diversity within each category. Legal tenure implies occupancy within the realm of the law. Non formal tenure is not recognized within the legal framework and is commonly referred to as “squatting” (Doebele, 1983) or possession (De Souza, 1999). Customary land systems suggest an individual right of occupation and use, but only a community right of alienation. The tribes or ethnic communities retain their customary right to use and administer their traditional village land and allocate it according to the prevailing social customs (Baross, 1983 and Payne, 1997). Finally, a widely adopted and highly developed religious tenure system is that from Islam where land ownership is defined by the Ottoman Land Law of 1858 (Payne, 1997).

Table 2.1 General Framework for the Types of Land Tenure

<table>
<thead>
<tr>
<th>Legal</th>
<th>Non-Formal Tenure</th>
<th>Customary Tenure</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Leasehold – private or public</td>
<td>• Squatting • Illegal subdivisions • Permission to occupy • Land rental • Adverse possession</td>
<td>• Communal/Collective • Tribal • Indigenous</td>
<td>• Islamic</td>
</tr>
<tr>
<td>• Freehold – Private or public (crown, state)</td>
<td></td>
<td></td>
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</tbody>
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9 A squatter is defined as a person occupying a piece of land without right or title (UNCHS, 1982).
2.3.3 Implications of Tenure Security on Upgrading

Tenure security, either perceived or legal, is considered critical for successful upgrading since community residents must feel secure in their settlement if they are to invest the effort, money and time to make infrastructure improvements. The level of infrastructure improvement in an informal settlement is related to tenure security. In an informal settlement in Kisumu, Kenya, serious congestion, scarcity of water standpipes and poor state of roads were attributed to tenure insecurity (Olima and Obala, 1999). Tenure security is considered a prerequisite for the self-help approach to upgrading housing in informal settlements. It removes the fear of eviction and can mobilize public participation in terms of financial and labour contributions to the various upgrading tasks. Tenure security is not the only factor that influences upgrading. It usually acts in conjunction with the other factors that influence upgrading.

Tenure security can have a range of impacts on upgrading and these need to be considered. Tenure security can lead to a sense of community. This can be further capitalized upon for upgrading initiatives, through community participation or mutual aid. The struggle to achieve tenure security can induce social mobility, which can bring several benefits to low income groups. In the Ajusco foothills in Mexico City, illegal subdividing and land takeovers helped urbanize and develop the area. This was achieved through urban movements that enabled people to remain in unauthorized areas, gain concessions on land prices and apply pressure for urban services (Barriga, 1995). If the problem of tenure is not addressed, the upgrading process adds value to the land of the absentee landlords. Tenure security can have variable impacts on upgrading. It is therefore necessary to understand the underlying issues regarding tenure security so as to prevent further negative impacts on the urban poor and to determine an appropriate strategy for upgrading.

2.3.3.1 Legal Tenure

Legal title can be used as collateral to secure finances, it secures investment in consolidation and can easily be transacted. In some circumstances, where the probability of eviction is low and the prospects of obtaining legal tenure are reasonably high, people residing in informal settlements have invested considerable amounts of money and labour in improving their dwelling units. Legal tenure could impose certain obligations upon the
poor such as, taxation and restrictions on land use and is therefore not necessarily valued by the poor. In Cairo, title was offered to over 600,000 squatters and only 5% of the squatters, filed requests. In Lusaka, illegal occupants of land, had little interest in titles once services had been installed (Serageldin, 1990; as cited in Doebele, 1994, p. 48). In Sant Nagar, Delhi, illegal settlers were more concerned with protection of their rights from other claimants than with having formal title from the government (Joshi, 1991; as cited in Doebele, 1994, p.48). A study in Recife, Brazil suggests that new land invasion occurs so as to avoid land rents. In Ghana, the ground rents are so low that they do not even cover the cost of postage stamps and the administrative processes are too complicated and time consuming. In Karachi, only 10% of settlers in illegal settlements applied for leases offered by the government. The residents in these illegal settlements, felt secure enough and did not want to incur the costs of title transfer, and property taxes (Payne, 1997).

Provision of legal title can have several impacts on upgrading of low income settlements. Legalization of tenure is likely to provide incentives for illegal incursions into new land (Angel, 1983a). Since some areas are legitimized, expectations of land being legitimized in other areas, or adjacent areas is raised. This ripple effect becomes a serious issue for local governments in cities where there are numerous informal settlements. Provision of title leads to an increase in land value which has several impacts on low-income groups. If legal titles are granted, the poor may sell their land for profits and move out and settle in other areas. “Downward raiding\textsuperscript{10} occurs when higher income groups force out the more vulnerable groups through higher rents or through purchasing the land (Payne, 1997). Ultimately, the provision of titles will not lead to improvement of the settlement because the original residents may sell their land and move out and will be replaced by other residents. (UNCHS, 1982). Increase in land value would make government programs such as Site and Services or social housing unaffordable (Doebele, 1987).

\textsuperscript{10} Downward raiding is the process by which other low-income groups that might have slightly higher incomes or stable employment displace the settled poor groups. The displaced groups tend to get even more marginalized. Newcomers tend to be displaced since they have no employment and are poorer than most low-income groups.
Finally, conflict occurs when tenure is granted or, when communal land is formalized into titles. When land is allocated to the people by the state, there is usually lack of clarity and consensus with regard to the demarcation of sites which leads to conflict (Dunkerley, 1983). Issuing of tenure can be very complicated in dense informal settlements and hence in some cases it is allocated collectively or in blocks. In Kisumu, Kenya land previously demarcated as agricultural land is now being converted into residential zones and is causing significant land use conflicts. The freehold interests have given the owners the freedom to develop the land in whatever way they wish. As a result, illegal subdivisions and unplanned settlements have been increasing causing deficiencies in services. Conflicts are arising between the planned land use and the new uses (Olima and Obala, 1999). The advantages and disadvantages of legal tenure need to be determined per case basis and may or may not be ideal for a particular low-income community.

2.3.3.2 Perceived Tenure or Defacto Security

In informal settlements, the amount of investment in upgrading seems to be closely related to the perception of risk or removal, irrespective of the technicalities of legal title (Doebele, 1983). Perceived tenure commonly known as defacto security may develop over time. This is based on hopes, expectations or speculation that occupation of a piece of land will be tolerated and eventually legitimized (Angel, 1983a). A squatter may enjoy no legal rights of occupation, use or transfer, but can still feel physically secure, because of numerical strength or political support. John Turner emphasized the importance of perceived security of tenure in the consolidation process. Security of tenure is as much a state of mind as a reality and hence perceived security which can be caused by provision of services, ignorance from government authorities, land rental or illegitimate purchase can be very critical (Gilbert, 1989). This concept of defacto security is evident in most of the non-formal types of tenure.

The common case in many low-income areas is that defacto security is more important than legal tenure. According to Angel (1983a), increased defacto security appears to reduce the need of individual squatters to receive official titles. In central Java, house consolidation was more a function of resident perceptions than of strict legal categorization (Garr, 1996). In the studies conducted in two slum settlements in
Tanzania, almost all occupants living in squatter settlements paid rent and property taxes yet over 90% did not possess dejure tenure. About two thirds did not consider lack of legal security of tenure a deterrent to improving housing. Those who did consider it important, felt that it would clarify matters of ownership between neighbours and could be used as collateral. Most residents considered themselves as permanent residents and did not fear eviction. It was easier to obtain land informally then to go through the legal channels (Kaitilla, 1991). Perceived tenure in Comuneros II, a poor barrio on the periphery of Cali, Colombia led to improvement of infrastructure. Pirate developers subdivided lots and sold them off to residents. The new settlement was ‘illegal’ since it was illegally subdivided in contradiction to the laws but it was ‘legal’ to the residents because they paid for their plots. The residents were beyond city limits and felt they had secure possession of their land. Initially water was sought from wells and vendors. Eventually the residents mobilized and pooled resources to bring piped water (Choguill, 1999).

Several factors contribute to defacto security. A study conducted in Karachi in 1975 found hope for secure tenure to be strongly related to government actions especially those of infrastructure development. Infrastructure improvements legitimize the settlement by reducing the threat of eviction. The hope-giving items of water-supply, electricity, a sewage system and collection of taxes reflected better housing conditions in 250 squatter settlements (Angel, 1983b). On the contrary, this sense of security could be false, as in the case of New Delhi and Bombay where settlers have been forcibly relocated despite the previous provision of services (Payne, 1997). A sense of security could also be derived from a collective way of life. In Inanda, Durban, South Africa, the large numbers of people played a critical role in providing perceived security even with hostile government policies in place. The extremely large numbers of squatters made forced removal an unlikely process (Van Horen, Forthcoming). In Recife, Brazil, permission to occupy land provided a sense of security, even though this permission was illegitimate. Political support for, the land invasions and consolidation enhanced the sense of security (De Souza, 1999). Finally the government response to informal settlements can impact upgrading. In the Kanuku, Kinyango and Kitui villages in Nairobi, involvement of the local authorities in the housing programme led to a kind of
defacto recognition of the villages and reduced the risk of eviction. This presence of the local authority boosted the incentives for villagers to invest in their homes (Duchhart, 1989). Conversely, the lack of government intervention in an informal settlement in Hyderabad, India, was sufficient to provide some assurance of security (Garr, 1996).

2.4 Other Factors that Influence Upgrading

Ownership or perceived tenure does not necessarily contribute to the economic and physical capacity of households to improve housing. Several factors independent of, or in combination with tenure security, influence upgrading. These include: conditions of economic status of households such as savings capacity, employment or income levels, credit opportunities; access to building materials; skill levels; political linkages; community or external support including community participation; and cultural factors. The main factors will be briefly reviewed. Upgrading is also influenced by the pattern of public attitudes towards innovative strategies and the length of time the settlement has existed as well as the size and degree of organization in the neighbourhood (Olima and Obala, 1999).

2.4.1 Economic Factors

In conditions of absolute poverty, people are unlikely to be able to afford major house improvements regardless of the level of tenure security (Angel, 1983a). In Colombo, Sri Lanka it was found that residents were too poor to afford improvements without outside financial aid, even if they had ownership (Payne, 1997). A study by Ward, in Mexico City, illustrated that investments in housing improvements were directly related to income levels (Angel, 1983a). The 1977 program of the National Housing Authority of Thailand initiated a slum improvement program in Bangkok. It was found that perceived land tenure and household incomes led to improvement initiatives (Payne, 1997). A significant portion of the poor is employed in the petty commodity sector which does not provide a consistent income. Moreover, the meager earnings are usually spent toward food and rent, and little is saved. Personal savings are usually insufficient to make substantial investments in housing. In order to upgrade, the poor usually look for credit.
The need for most households is not large loans but rather small loans which will enable them to obtain a small plot, connect to basic services or improve the quality of their dwelling unit. Land tenure is usually not resolved in informal settlements and hence collateral cannot be used to access formal channels of credit. Table 2.2 describes the credit available for the various tenure options. However, having collateral is not necessary for access to credit. Loans can be obtained without collateral through government sponsored programs. For instance the Indian Housing Development Finance Corporation and the Grameen Bank in Bangladesh provide loans based on non-land collateral through third party guarantees and salary garnering. Certificates of occupancy may also be used to gain access to credit. (Payne, 1997). These government-sponsored loans are sometimes insufficient, and not accessible to everyone. Subsequently, households are forced to rely on informal credit systems or private 'loan sharks'. Informal credit systems are common in these settlements but they are largely dependent on networks of personal contacts. There is a reliance on loan sharks and this leads to indebtedness and conflicts (Payne, 1997).

Table 2.2 Credit and Tenure Options According to Levels of Security

<table>
<thead>
<tr>
<th>TENURE</th>
<th>Credit</th>
<th>Tenure Options</th>
<th>Freehold</th>
<th>Leasehold</th>
<th>Tenant - statutory</th>
<th>Tenant - Contract</th>
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<td>Domestic Savings</td>
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<td>Informal credit</td>
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<td>Loan 'sharks'</td>
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Source: Payne, 1997, p. 21

One of the most significant impediments to infrastructure provision and upgrading is cost. Illegality of the settlement makes it difficult to recover costs of infrastructure. Some poor, live in informal residential sites that are not recognized by urban authorities or sometimes even inaccessible to bring infrastructure technology (Choguill, 1999). Usually the services are demanded at no charge or subsidized costs. This places large

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11 Loan sharks charge exorbitantly high interest rates and exploit the poor.
burdens on municipal economies especially when there are many squatter communities. (UNCHS, 1982). Collection of revenues for services is also a complicated and difficult task since most services are public goods and there lacks efficient collection mechanism. If infrastructure lacks cost recovery, services tend to be cut or infrequent thus inconveniencing or creating further negative impacts (Mayo et al., 1986). If services are provided at no cost, dependence is created and the dwellers in these settlements become accustomed to government charity, and do not become responsible participants in the economy. The need for conservation is not realized, and this leads to the abuse of the resources.

2.4.2 Lack of Skills and Resources

The lack of physical materials, as well as construction skills can also hinder upgrading. In a squatter settlement in Tanzania, a shortage of acceptable and fashionable building materials impeded upgrading. Furthermore, the lack of qualitative housing improvement was exacerbated by a lack of adequate technical skills (Kaitilla, 1991). Price increases of labour or materials can have a major impact on the ability to consolidate. The cost of building materials is rising rapidly in many countries, due to monopoly practices as well as the lack of local production. For instance in Brazil, Mexico and Colombia the costs of cement, glass, bricks and steel have risen more rapidly than the salaries of most low-income workers. This impeded the consolidation process (Gilbert, 1989). Labour can be hired to assist in upgrading. Nevertheless, this significantly increases the cost and thus would only be affordable to the more prosperous groups.

2.4.3 Power and Politics

The attitude of government authorities and the level of political influence can determine the security of tenure and thus influence upgrading. If a government tolerates squatters and these squatters have political backing, they will feel secure and safe to upgrade (Gilbert, 1989). In major squatter settlement areas in Karachi such as Aurangi, protection of eviction is guaranteed by leaders, who in turn obtain protection from politicians and key people in the administration (Baross, 1983). However, a change in government or political power would threaten their status.
Spontaneous settlements become a target for political patronage and vote gathering, particularly at election time when the issue of legalization or service provision is discussed (Baross, 1983). In many Latin American cities, service provision is a function of political patronage. Those in the barrios, that promise to support a political group or personality, may receive water, telephones or roads as part of the deal (Gilbert, 1989). This could develop false hope and deceive the people.

2.4.4 Community Support and Participation

Friends and relatives sharing a plot usually provide basic support and contribute to self-help housing. The household support network provides resources of credit, used to purchase plots or materials, and skills (De Souza, 1999). Without substantial community support from organizations, churches and politicians, upgrading is difficult. Community support is needed to resolve questions of tenure, for mutual help, relocation, compensation, tax or fee collection, implementation and enforcement of requirements, and choosing the type and quality of services (Werlin, 1999). Community support benefits households by proving access to resources such as information, technical and legal assistance and eventually access to service provision such as water (De Souza, 1999). The Integral Improvement Programme in Barrio San Jorge, Argentina, illustrated that reconstructing the social capital in the poor urban settlement led to the provision of legal tenure of land and the provision of infrastructure services such as water and sanitation. Improving the social capital in this case meant capacity building by encouraging participation. This improved community reciprocity, representation and accountability (Schusterman and Hardoy, 1997). The Siddharth colony in Bombay India, with the help of an NGO, organized themselves to fight against a government eviction and engaged in an environmental improvement program, and a low cost housing program. Over 110 units were constructed through community participation (Baross, 1983).

The development of infrastructure in informal settlements is an important issue around which the community can be organized and strengthened. The success of this can be seen in several efforts. The Habitat Hyderabad programme housed and provided services to over 50 slums (Angel, 1983b). The unauthorized low-income community of
800,000 in the Orangi District of Karachi, Pakistan developed and built a sewer system. This was achieved by using simplified designs and self-building to reduce labour costs. In Colombo, Sri Lanka, a community contract system was introduced by the government where the community itself was the contractor and built toilet blocks, drains, roads, and refuse containers. The first community contract was building a water well in Wanathamulla, the largest squatter settlement in Colombo. The project was completed within two weeks. This system not only improved the quality of construction due to the increased sense of ownership and responsibility but also maintained the infrastructure. In Barrio Rafael Nunez, Colombia, through community participation, roads were built and a small water supply system was established (Choguill, 1999).

2.4.5 Cultural Aspects

Cultural norms can also be the dominant factors in influencing upgrading. An interesting case is that of the Goilalas in Port Moresby, Papua New Guinea. Loans were created to provide housing improvements, tenure security was granted, community participation was incorporated, yet all this failed. The residents in these settlements did not want to establish themselves permanently and spent their energy in festivals and other activities (Angel, 1983a).

2.5 Conclusion

Upgrading of informal settlements is constantly occurring and can take many forms. Upgrading shelter and infrastructure is necessary to improve the physical environment and maintain the well being of residents in informal settlements. Improvements to housing are variable and construction ranges from temporary to permanent materials. Upgrading infrastructure includes improvements of services such as water, sewerage, electricity and paths. The self-help approach uses family and neighbouring resources in the consolidation process. Mutual aid is dependent on community participation and cohesion; it is usually used for upgrading of infrastructure. Land sharing and readjustment programs involve commercial development of part of the land, and using the profits to improve the remainder of the land.

Security of tenure is not an exclusive influencing factor for upgrading but an important one, especially with regard to housing and infrastructure. There is much
evidence to suggest that perceived tenure security is more critical than legal security. This sense of security is established, based on expectations that units will not be destroyed. Consequently, investment of time, money and resources occurs. Several factors such as provision of services, lack of evictions and others contribute to this perceived sense of security, or defacto security. Ownership, public leaseholds, occupancy licenses and land sharing rank highly among the tenure options that positively influence physical services and housing. Yet, illegal subdivisions are among the most common form of tenure in developing countries, due to their flexibility and ability to incorporate informal mechanisms.

There are several factors that influence upgrading which may or may not be dependent on tenure security. Access to credit and having a stable income are critical for upgrading. Lack of skills to upgrade and lack of building materials impedes upgrading. Having political connections provides legitimacy, and a sense of assurance that unauthorized units will not be destroyed. Services and tenure are usually promised in exchange for political patronage. Involving the community ensures appropriate technology, meets community needs, uses community knowledge and skills, empowers the community, decreases labour costs, maintains the infrastructure, and leads to easier project implementation. Finally, cultural factors could also influence upgrading. There is a serious lack of shelter and services for the urban poor in most developing countries and understanding the issues around upgrading is an initial positive step toward addressing this need.
I visited a house that was converted during the day to a cobbler's workshop. The skill and effort in the hand-made shoes he produced was impressive. Yet, due to the community and market politics, he could not market his products locally. The cobbler also could not get credit to expand his business. Sending his products out of the city would be costly and impinge upon his earnings. The trade secret was being taught to a few promising youth. This was to be their legacy. I spoke to one of the youth who had completed his A level education. He said there were no jobs available, and he had to begin to make a living. Being a cobbler was a better opportunity than having none. Even education, does not necessarily buy a passport to escape the vicious cycle of poverty. During the night this workshop became a home for a family who had to bear the pungent smell of shoe glue.

"The poor have the aspirations of the bourgeoisie, the perseverance of pioneers, and the values of patriots. What they do not have is the opportunity to fulfil their aspirations" (Perlman 1976; as cited in Gilbert, 1989, p. 85).
CHAPTER 3: TENURE AND HOUSING POLICIES: RESPONSES TO THE URBAN POOR

To understand the specifics of the case study, it is important to examine the broader institutional and policy context regarding low-income settlements in Sri Lanka. The pre-colonial and post-colonial land tenure systems and policies that existed in Sri Lanka are briefly discussed. This is followed by a review of the national housing policies, and the various initiatives targeted toward helping the urban poor. Finally, the responses to low-income settlements in Kandy are discussed.

3.1 Land Tenure Systems in Sri Lanka

Land tenure forms the basis for development of urban land. Tenure is founded on socio-economic concepts and incorporates socio-cultural and political concerns. In Sri Lanka, the land tenure forms are varied and complex. Most of the forms of tenure have originated to cater to the needs of traditional societies and are related to agriculture and paddy land. Traditional tenure systems were primarily based on social relations between people and governed by customs. The traditional tenure systems were relatively simple compared to the current tenure systems, and were based on a kinship nexus. Complexities in the traditional tenure systems emerged with foreign invasion and the growth of the market economy. In modern societies, land is viewed as a resource and a factor of production and is dominated by the market mechanism. (Perera, 1996).

3.1.1 Pre-Colonial Period – The Rajakariya System

Before the influence of colonial rule, Sri Lanka, was predominantly a land of villages under overall supervision of kings and chieftains. Social life was guided by longstanding traditions, customs and norms evolved in association with the Buddhist religion. Theoretically, the king was the lord of the soil, but in practice the land had been cultivated communally for centuries on individual or joint family shares. This was done on a system of reciprocal labour exchange system in lieu of services rendered to the state for the well being of the society. The society was caste-based, and all castes were primarily subsistence cultivators or the caste vocations were restricted to supplementary pursuits. Specialization of skills occurred within the caste system (De Silva, 1992/1993).
“Rajakariya was the mechanism which combined land tenure and the caste services for the state and well being of the community” (De Silva, 1992/1993). The person whom the land was given to had to perform a certain service. This service passed on if the land was given to a new recipient. It prevented the rich from taking over the land of the poor, since they had to continue these services if they took over the land (Silva, 1983). Rajakariya was transformed through the Service Tenures Ordinance in 1870 whereby tenant’s wages were paid in land, and rent was paid in labour (Silva, 1983). The colonizers capitalized on the existing caste system and used it in their exploitation of the natural resources.

3.1.2 Post-Colonial Systems

The Portuguese, the Dutch and the British, over a period of three centuries molded the ancient systems that had developed in Sri Lanka. The systems of labour and land ownership, including tenure, were shaped by economic and secondary religious motives. The western powers were interested in obtaining goods such as cinnamon at a minimum cost to be traded at the Asian and European markets. The colonizers caused little disruption in the social fabric by introducing new systems of administration. These administrative systems made use of the old order (the caste system and the Rajakariya) by soliciting the co-operation of the local nobility as junior partners to share power with. This exploitation was realized and eventually abandoned by humanitarianism that emerged in Britain, in the early nineteenth century. However, the Rajakariya system was already transformed and the caste services were regimented. Honour, riches and authority were common competitive goals to all castes. The natives were conscious about money, and the private ownership of land and its transfer was introduced (De Silva, 1992/1993).

The Kandyan Kingdom was taken over by the British in 1815 and the suppression of a rebellion in 1817-1818 eliminated the potential threat from the native hierarchy. The Kandyan Convention was signed in 1815. This had provisions for the continuity of certain traditions and customs that prevailed in the Sinhalese Kingdom (Jayawardana, 1990). The Great National Rebellion created a sense of insecurity among the rulers because the Central Provinces harbored the liberation fighters who were trained in guerilla warfare.
The Colonial regime introduced the Crown Lands Encroachments Ordinance (CLEO) in 1840. This legislation was introduced to destroy the rural economy of the liberation fighters of the Central Provinces of Kandy and Wellasa, who owned and cultivated land based on customary tenure and practices. The ordinance declared that “all forest, waste, unoccupied or uncultivated land shall be presumed to be the property of the Crown until the contrary thereof be proved” (Jayawardana, 1990). Over 90% of Sri Lanka became Crown land, and even land with legitimate private ownership, was taken over. CLEO created much hardship to the native inhabitants around Kandy, where people occupied land on a service basis to the King (Bandara, 1998). This legislation went against the liberalism of the Kandyan Convention. A new tenure system unknown to the natives, and a system of plantation agriculture was superimposed (Jayawardana, 1990). This led to the creation of a unified administrative and judicial framework and the introduction of the tenurial systems based on Roman and Dutch Law (De Silva, 1992/1993). CLEO favored the European or Ceylonese capitalists, who had the economic resources to pay for the land.

The Waste Lands Ordinance No.1 of 1897 further impacted peasants. This statute took over rights of customary ownership, deprived peasants of their ancestral holdings and transferred them to impeachable Crown titles. This land would further be transferred to both foreign and native capitalists. The British also imported Tamil labour from South India and employed them on the estates. The Indian Tamils occupied some of the ancestral land of the native people. Landlessness and agrarian poverty began to emerge at the turn of the twentieth century as consequences of the colonial land policy (Jayawardana, 1990).

The First Land Commission of Sri Lanka was established in 1927 to address the question of land hunger among the peasants, and to introduce measures to offset the adverse impact of the CLEO and subsequent Waste Land Ordinances (Perera, 1996). The Land Commission was to reorient land policy towards the redistribution of Crown land among original inhabitants. The Land Development Ordinance (LDO) of 1935 legitimized the initiatives of the Land Commission. This legislation continues to be the statute under which the government carries out land alienation today (Jayawardana, 1990).
A considerable part of the land had been alienated to the landless. Under LDO, 1.3 million hectares were alienated and enacted for systematic development of State land. This land was alienated to individuals for specific forms of development either as protected holdings\textsuperscript{12} or unprotected holdings on a perpetual lease (Perera, 1996). The land returned to the peasants was considerably less than that land sold to the capitalists during the plantation era. (Jayawardana, 1990). The laws introduced by the British and other subsequent land reform programmes, created a massive shortage of land. Even in 1987, over 50 years after the LDO, the state owned more than 80% of the total landmass of the country, this intensified the situation of encroachers and spontaneous settlers due to the landlessness. (Tilakasiri, 1990). By 1979, nearly 6% of the total land area of the country was encroached upon by over 1 million people (Bandara, 1998). Vast amounts of land have been redistributed but the land still falls short of the demand, due to the increasing population. Land invasion and squatting have become common practices of land occupation and have become a significant problem in urban areas. In Colombo, over 50% of the residents currently live in informal settlements (Karunanayake, 1990 and Sirivardana, 1999).

The Survey Department from its inception around the time of CLEO, had been engaged in surveys and preparation of plans for the disposal of Crown Land to private individuals for development. The Crown land later became State land, which could be in the private or public\textsuperscript{13} domain. The State, even today, reserves the right to re-allocate this land, which it develops or sub-divides for private allocation as freehold or leasehold. Under the Crown Lands Ordinance (CLO) of 1947, State land is given on long term renewable leases for up to 99 years, on short term leases and special leases to individuals and organizations. Records of these lands are kept at the respective Kachcheries (Government Agent’s office), land registries and the survey departments. Private lands are leased for specific periods and are executed on notarial deeds which are registered at the District Land Registries after execution (Perera, 1996). Furthermore, the Land Acquisition Act of 1950 made the provision for the acquisition of lands and servitudes for public purposes (Silva, 1983). Based on the various statues, it is evident that the legal

\textsuperscript{12} In protected holdings the allottee could not be sued for any recovery of any charges due on the land.

\textsuperscript{13} State land in the public domain comprises land used either by public organizations or for community purposes. This land in the public domain was not offered in the market.
tenure forms of public and private (leasehold and freehold) have replaced customary tenure forms.

3.2 Review of National Housing Policies for the Urban Poor

Informal settlements consist of shanties, slum houses and tenements. The low-income settlements are often socially and physically segregated from the larger urban society. The creation of slum and squatter settlements is blamed on the malfunction of the urban housing market. The people who cannot secure a steady income cannot afford the rent on the market and therefore seek housing in the informal sector (Steinberg, 1982). There have been several housing policies aimed at either regularizing (providing tenure), or upgrading these settlements through provision of built units or support through loans and training. Housing policy can be influenced by several factors including foreign aid, politics or even administration. This section reviews and evaluates housing policies and programs in a chronological order and will determine their impact on urban low-income households. Sri Lankan housing policy development falls into four major periods: pre-independence, 1948-1969, 1970-1976 and post-1976. Each of these periods is discussed.

The government since independence (1948) has made significant efforts to relieve the housing problem in Sri Lanka. However, these initiatives were constrained by the lack of public sector resources in housing, limited capacity for the public sector delivery system and inability for beneficiaries to pay for housing solutions (Weerapana, 1986). The state’s housing programs aimed at the urban poor benefited the middle income group and the state officials due to reasons of political power and administrative constraints. “As long as the housing sector problem of the urban poor does not conflict with the dominant social interests, it does not exist in the eyes of the ruling elite.” (Payne, 1977, 216 as cited in Steinberg, 1982, 373).

What does housing mean to the urban poor? Housing is considered to be a bundle of attributes. For the urban poor, a primary and important attribute for housing is (locational) employment access to wage labour in the petty commodity or informal sector. Also, the land market determines the location of the housing for the poor. Since the liberalization of the economy, the demand for land in the city center has increased
creating an increase in land value. Therefore, securing either tenure or long term leases for slum dwellers in central areas competes with the investment market and usually loses. Contentious issues regarding land ownership and land tenure persist in housing the urban poor. Housing is also intricately tied to the rest of the economy both on a micro and macro level. Investment in housing requires households to mobilize resources beyond their own savings (from both the formal and informal sector). These attributes and others shape housing provision and need to be considered.

3.2.1 Pre-Independence

Before independence, housing was considered the state’s responsibility. The British, to house the city’s labour force, constructed slum tenements\textsuperscript{14} between 1900 and 1940. These tenements were situated in proximity to concentrated areas of employment such as administrative centers and factories. During the Second World War, there was a scarcity of housing and construction materials and this led to increases in rent. The Rent Restriction Act of 1941, provided tenants with protection from the excessive rents charged in houses and tenement gardens (Weerapana, 1986). This act had an impact on the maintenance of the tenements; the restricted profitable renting led to a continuous decay of these units (Steinberg, 1982). There were no incentives for the occupants of the tenements to improve them and they continued to deteriorate. These tenements still exist today and accommodate the urban poor; they were expanded and the areas between the units were filled in with squatters (Yap, 1993).

3.2.2 Post-Independence (1948-1969)

Housing policy development during the period from 1948 to 1969 was typical to the conventional responses in developing countries. Public housing was provided in a limited way through rental flats, subsidized loans for middle-income households, and the low-income groups were excluded from policy. After independence, from 1948 to about 1954, there were few or no public programs for the construction of housing for the urban poor. The Ten-Year Plan (1958) emphasized housing for the lowest income groups. The

\textsuperscript{14} The tenements were built in rows and each row consisted of about 10 units. The tenements represented the barrack style military housing of a single bedroom unit of about 15 square meters, a small veranda and a common living area with shared water and toilet facilities (Yap, 1993).
government viewed its responsibility to improve the shelter conditions of the poor as one of delivering completed solutions through direct interventions (Weerapana, 1986). These schemes did not account for the needs of the poor; important factors such as employment access were not even considered. Also the interventions had a middle-class orientation due to the existing financial, economic and administrative institutions. The high and middle state officials, office clerks and highly qualified industrial workers reaped the benefits of the subsidized housing programs (Steinberg, 1982).

The problem of shanties (squatters on private or public land) emerged after independence in 1948 when migration into the cities was high and housing markets could not support the increasing population. Therefore, the lowest income groups had only one alternative, to rent shanties or invade land and construct their own shelter. The shanties were made up of makeshift materials and occurred on city sidewalks, along riverbanks, railway tracks, empty city plots and marginal lands. The shanty inhabitants did not have any formal right to their use of land. However, they owned their houses and later received quasi-formality through house registration. (Steinberg, 1982). The growing demand for housing the middle class led to the burning down of slum units or expulsion without proper resettlement. “A special government appointed Committee on Housing in their Report of 1963 recommended that all slums and shanties should be ‘cleared’” (Sirivardana, 1999). The expelled slum dwellers crowded into other slum and shanty areas, thus exacerbating the already poor conditions, or were pushed to peripheral areas (Steinberg, 1982).

3.2.3 1970 – 1976

The ineffective public housing approach was still continued in this period but there were some significant changes in terms of addressing the needs of the low-income households. Since 1970, housing was under the communist minister, Keuneman, who incorporated the needs of the low-income groups through various policies and programs which aimed at optimal use of financial resources and income redistribution (Steinberg, 1982). The emphasis on shelter policy was placed on enacting radical social legislation on the ownership of houses (Gunaratna et al., 1991). The Ceiling of Housing Property Law of 1973 restricted individuals from owning more than one house per family plus one
for each dependent child under eighteen (Gunaratna et al., 1991). This severely restricted private property ownership and some slum units were vacated. The state planned to transfer the slum units to the ownership of their present user but did not begin this until 1980. A policy of giving small-scale construction loans was also introduced to promote private low-cost housing (Steinberg, 1982).

3.2.4 Post 1976

The shift from the traditional attitudes of building houses and evicting squatters to a positive attitude recognizing the right of the urban poor to live in the cities, through inclusive thinking on development strategy, occurred in the late 1970s. A combination of two events triggered rapid change in housing policy and practice. Several events catalyzed this reaction. The first was the recognition of the integral role of the poor in housing and settlement development through the Habitat Conference in 1976. Sri Lanka was following the type of housing policies recommended by the HABITAT conference (1976) and by international institutions such as the World Bank. These new housing policies involved the self-help approach, sites and services and slum upgrading (Steinberg, 1982). The second was the assumption of the office of a new political personality Ranasinghe Premadasa as the Minister of Housing, who had extraordinary political commitment and sensitivity to the needs of the poor (Sirivardana, 1999). The shelter initiatives for the low-income groups during this period are important and will be reviewed in detail.

3.2.4.1 Hundred Thousand Houses Program (1977-1983)

In 1977, the United National Party (UNP) assumed office and introduced the Hundred Thousand Houses Program (HTHP), as an economic strategy to reduce unemployment and stimulate economic development (Struyk and Turner, 1987). The HTHP aimed at constructing 100,000 units within the next 5 years. It had three main components namely: aided self-help, direct construction and housing loans (Gunaratna et al., 1991). There was a massive increase in the allocation of public resources for housing through the HTHP (Rs 35 million in 1976 to Rs 1,000 million in 1981). New specialized institutions such as the Urban Development Authority (UDA) and the National Housing development Authority (NHDA) were created to assist in implementation of the new
programs. The unreasonable social legislation on housing was relaxed. The HTHP did not adequately reach the desired target group (those living in slums and shanties) and failed to recognize the constraints on resources such as finance, materials and construction labour (Weerapana, 1986). The generally accepted belief of the state was that urban housing needed to be high rise and therefore direct construction was used instead of the self-help approach (Gunaratna et al., 1991). There were shortfalls on loan recovery and cost overruns. The HTHP had been introduced without an overall review of housing needs and demands. It did not meet the needs of the urban low-income groups.

In conjunction with the HTHP, there were a few programs that were set up mainly in response to the deteriorating living conditions and health status of the slum and shanty communities. A Slum and Shanty Division had been established in 1978 under the UDA. The activities of the division were mainly Colombo-based, at a small scale and on a project basis addressing the upgrading of housing and infrastructure services. Also a Common Amenities Board was set up to meet the infrastructure needs of the low-income communities. These programs were primarily reactive and addressed the needs of the poor mainly in Colombo. In 1978, 5,365 tenement houses had ownership provided to their tenants, free of charge. This was provided under an amendment to the law, which stated that all tenement houses in the country whose normal rent was Rs. 25 or below, would receive free ownership from the state (Sirivardana, 1999). In 1982, a UDA law was amended to ease restrictions on Special Project Areas (SPA). Specific areas declared as SPAs, would not have to conform to building regulations and hence accommodate and legitimize various self-upgrading strategies (Sirivardana, 1999).

3.2.4.2 Impacts of Economic Reform on Housing

Housing investment is the largest single form of fixed capital investment in most economies. In developing countries, the shelter sector usually ranges from 10 to 30 percent of household expenditure or 6 to 20% of GNP. As economies develop, the housing investment's share of GDP rises (Malpezzi, 1991). In Sri Lanka, in the 1980’s housing investment accounted for about 5-7% of the GDP (Manson and Struyk, 1984). This investment gets magnified in the urban areas where most developed areas are residential (Emmanuel, 1995). It is therefore important to assess the relationship of housing and economic policies.
The economic reforms of Premadasa (UNP) included cutting subsidies and targeting them for antipoverty purposes, liberalizing trade and investment, devaluing the currency and reducing unemployment. The World Bank and International Monetary Fund (IMF) supported these reforms since they favored the stabilization programs in response to external debt problems in developing countries. In 1986, the IMF supported the restructuring of the economy with a structural adjustment facility loan. The loan’s conditionality clauses were designed to reduce inflation, decrease government expenditure, improve balance of payments that were in deficit, and achieve further growth so that debt could be repaid. These macroeconomic changes influenced the course of housing policy reform since the government had to adjust its spending based on the loans (Pugh, 1995). The impacts of the conditional clauses of the IMF can be seen in the Million Houses Program where the government did not carry out direct construction or provide grants for housing. Instead, the government provided small loans and promoted self-help housing.

3.2.4.3 The Million Houses Program (1984-1989)

The revolutionary Million Houses Program (MHP) was launched in 1984 by the old government (UNP), after learning from the mistakes of the HTHP. This program was designed to support a million or more families to improve their shelter either through construction and upgrading or through the provision of better services. It consisted of six sub-programs with the urban and rural sub-programs being most common. It was radical because the role of the state was not that of a ‘provider’ but rather that of an ‘enabler’. It emphasized affordability of standards and costs, cost recovery, phasing out of interest subsidies, beneficiary autonomy, community participation and recognized incremental construction (Weerapana, 1982). The success of the MHP was more pronounced and received global attention. Many of its components, such as the Community Action Plan (CAP) methodology, are still used in development projects in Sri Lanka. This was also the first program that actually met the needs of the urban poor through shanty upgrading and sites and services projects. Toward the end of the program, only one third of the target figure had been reached. Nonetheless, the program was still considered very successful due to its participatory approach (Editorial, 1995).
The role of the state was critical in the success of the MHP. The conventional approach to housing was the ‘provider-based approach’, in which the government played the role of defining the standards, drafting and enforcing regulations, decision-making and even direct construction. In most cases the potential user was not even consulted. The new approach of the state’s role in housing was to support, strengthen and complement the mainstream. The state would thus support individuals and communities, through provision of plot and loans, ease constraints (lower standards), and train participants and staff. The state would only intervene when individuals could not solve their own problems. The beneficiaries would be the doers and decision-makers and would be responsible for their own shelter. This new paradigm realized the duality of housing sectors (formal and informal sectors) and supported the informal sector and was therefore successful (Gunaratna et al., 1991).

3.2.4.4 The 1.5 Million Houses Program (1990-1995)

The 1.5 Million Houses Program (1.5 MHP) succeeded the MHP and had similar concepts in place such as a support based housing program with households as active participants throughout the process and even acting as contractors. It was a more refined articulation of the various subprograms in the MHP and maintained the basis of the MHP. It also was extended to cover the estate sector, the Mahaweli settlers, and to rebuild dwellings in the areas that had been destroyed by rain. The 1.5 MHP was connected to the Janasaviya antipoverty program, which provided income support and savings schemes for welfare, and for employment. This meant that the NHDA (state) had to undertake internal reforms, changing from a building agency to a manager of loan finance and community development programs (Pugh, 1995). The 1.5 MHP program and the Janasaviya program worked well till 1994 but only achieved a fifth of the desired target (Editorial, 1995). The political support for the 1.5 MHP died with the change of government in 1994. This consequently led to its collapse (Sirivardana, 1999).

3.2.4.6 1995- Present

The new government (Peoples Alliance) is strongly advocating devolution and a new federal government (Fernando, 1998). Its focus has been on economic development through implementing free trade zones and on resolving the ethnic conflict. Housing
does not seem to be a priority even though it may be a precursor for economic
development.

The price of land and building costs (including labour) has risen to exorbitant
levels. For instance, in commercial centers as well as in the more exclusive residential
areas in Colombo, the land prices have escalated over 3200% from those of 1978. Steady
overseas migration of skilled construction labour has caused a shortage and escalated
labour costs. The incomes of an average earner have not kept up with the pace of
inflation and cost of living. Therefore housing has virtually become unaffordable to the
average income earner in Colombo (Editorial, 1995). This exacerbates the situation of
the urban poor and leads to more congestion and crowding in the informal settlements.

3.3 Recent Responses to Low Income Settlements in Kandy

The city of Kandy has 53 low-income areas mainly dispersed around the town
center, and in lower-density settlements distributed toward the southeast. The low-
income groups occupy most of the marginal lands in and around the city. These include
the very steep hill slopes and the reservations along the road, stream and railway lines.
Based on surveys conducted between 1990 and 1993 there were approximately 14,000
people living in shanties in the Kandy Urban Area (Ranarajah, 1999). The increasing
population and the lack of sufficient land has congested these low-income settlements
and is leading to the overuse of facilities. The low-income settlements that are located
within the city have become prime targets for commercial or residential development due
to increasing land value. Also, their removal is encouraged since they depreciate land
value and are perceived as areas of social hazards. There have been several initiatives to
respond to the needs of the low-income groups. This falls under the purview of the
Health Department of the Kandy Municipal Council (KMC). This section will review
some initiatives towards addressing the problems in low-income settlements in Kandy.

In the early eighties there were a few resettlement programs involving squatters
living in environmentally sensitive sites such as riparian zones. Also a few land
regularization programs were carried out. In 1985, the Onwards Urban Housing Program
was initiated by the Housing Ministry and implemented through the NHDA. Loans
were provided to the urban poor for housing improvements.
In 1990, the Village Re-awakening Program was implemented in the KMC area as part of the MHP. One of the projects under this program was the improvement of the Nagastenne settlement. This settlement was located on a hill slope without any amenities. With the assistance of the KMC, 185 units were upgraded through the provision of loans, materials, and support. Another project associated with this program relocated some residents along a major trunk road and provided loans for upgrading (Ranarajah, 1999).

From the MHP, some key methodologies and project implementation strategies emerged that seemed to dominate settlement upgrading in Kandy. The first, was the formation of a Community Development Council (CDC). Under the MHP, the CDCs were formed by settlement groups consisting of 50 to 125 families (Lankatilleke, 1989). The CDCs were an elected body with a president, secretary, treasurer and five to six committee members. They were to serve as an instrument in organizing the community, carrying out project planning, implementation and other operational activities, as well as a channel for dialogue between the urban local authorities such as the KMC and the community (BPI, 1995 and NHDA, 1985). The second was the community contract\textsuperscript{15} system. The community contract system provided employment, ensured better quality and efficient completion of work, and the profit went back to the CDC account for other improvements in the community (Lankatilleke, 1989).

Finally, the CAP methodology from the MHP was used. This was a methodology and tool developed for community capacity building and for improving the efficiency of the housing delivery process. It used a community workshop as a method of awareness creation and conscientization of the target community (BPI, 1995). Field officers from the NHDA or development workers involved in community development would interact with the target community and mobilize them to understand, investigate and analyze the social reality, and the causes and ways to solve their problems, and come up with a workable plan for immediate action. The methodology involved a participatory interaction process carried out in a two-day workshop followed by an issue-specific

\textsuperscript{15} A community contract is a process whereby the community becomes the contractor to the government and builds common amenities or infrastructure for itself.
workshop. Thirty to forty community members were selected by the CDC to participate in the CAP workshop of which 50% were women (BPI, 1995).

Under the 1.5 MHP, several areas in Kandy were declared SPAs. In the Kandy Municipal area, under-developed and low-income communities were identified for special programs such as housing, infrastructure development, credit and savings schemes, health and nutrition programs and general awareness programs. The improvements were carried out systematically through the CDCs. CDCs could undertake contracts in their own settlement of up to Rs 100,000 for each project. Larger contracts could be broken down in phases of Rs. 100,000 increments. An example of a CDC project was the Menikkumbura re-settlement project, which was implemented according to community participation principles and was very successful. The unauthorized squatter settlement of Menikkumbura was identified by the KMC for resettlement. Through the formation of a CDC, land was obtained, services such as water and electricity were installed, housing loans were established and upgrading took place. Through the community contract systems, marshy land was reclaimed and a community center was built. In addition to these, small scale savings schemes were introduced and health education was provided (Ranarajah, 1999).

The Urban Basic Services Program (UBSP) was implemented from 1991 to 1993 with the assistance of NHDA and UNICEF to provide basic amenities in 18 low-income areas. To implement this program, there was a need for specially trained personnel. Community Development Officers (CDO) were members from the community who were employed by the KMC and provided training to carry out the UBSP. The CDOs reported to the Council on their progress and problems every month. Under the UBSP, housing development loans were provided, land was regularized with some relocation and basic amenities such as toilets, water standpipes and access roads, were provided. This program also facilitated social development by providing funds for community centers, vocational training centers, libraries and preschools, and health education programs. Also a self-financing loans scheme was initiated for women’s groups which led to the formation of a sustained savings and credit system that further enhanced income generating opportunities for women. The CAP methodology from the MHP program played a critical role in the implementation of the UBSP in Kandy. Sevanatha, non-
governmental resource training center on human development, assisted with the CAP methodology. There were several problems encountered with the UBSP, the most dominant of which was land regularization. Most low-income settlements were on sites that were unsuitable. Therefore, relocation had to occur which was both expensive and difficult due to the lack of land resources (Ranarajah, 1999).

Funding for most development projects ran out by the mid 1990s. Some projects continued under the various savings and credit programs while other minor projects were sustained by the KMC. The NHDA has been trying to secure funding from the Asian Development Bank to continue some upgrading projects. Most funding agencies now require cost recovery programs for infrastructure and services. This is difficult to achieve especially when most of the previous initiatives have not incorporated these. The UBSP and the community contract system contributed significantly to the physical and social development of the settlements. However with the lack of maintenance and funds, and the increasing population, the installed infrastructure is rapidly deteriorating. Following the national trend, there seems to be little focus on housing and infrastructure development in Kandy. There are a few minor interventions by NGOs but these are insufficient to have a sustained impact on the problems of low-income communities.

3.4 Conclusion

Colonization capitalized upon the existing customary tenure system based on castes and Rajakariya, which was a form of service tenure. The western influence eroded the customary tenure systems and eventually introduced the tenure systems based on Roman law (public and private leasehold/freehold). The CLEO had the most significant impact upon the peasants, and until today the problem of landlessness persists which has given rise to significant land encroachments and squatting.

Through the review of housing policy, it is evident that housing for the urban poor can be achieved by considering their needs and providing state support. From independence to the early 1980s, there was little support for housing the low-income groups. The political conditions since 1977, favored antipoverty, egalitarian and housing reforms alongside macroeconomic reform. Some adjustments had to be made in housing programs to relate social policy development to the pattern of economic growth.
was imposed by international aid agencies such as the IMF and the World Bank. Provision of low cost housing, enactment of rent control legislation, tenurial reforms, granting of land rights and provision of basic services are some of the steps the government has taken to provide shelter for the urban poor. The MHP and the 1.5 MHP were the only programs that were successful in meeting the needs of the urban poor. In Kandy, methodologies from the MHP were used in the UBSP and the Village Re-Awakening programs. There have not been significant housing programs since the 1.5 MHP due to the political agenda and change of government.

The role of the state and the various policies have impacted housing for the urban poor especially in the 1980s. These have formulated critical lessons, which would influence future policy. The ideologies and methodologies such as community participation and support-based development from the MHP and 1.5 MHP should be carried forward into future policy. Housing the urban poor has no quick fixes, and requires immense state support and efficient administration. Also, the access to employment is an important factor usually overlooked in housing policy. Understanding the needs of the poor is critical because this influences housing programs in terms of suitability and affordability.
The contrasts in Mahaiyawa are extreme.

I visited a dwelling in Mahaiyawa, which surprised me. It was a double storied unit that was fully furnished and even had a water supply on the second floor. I later found out that this person was related to the local politician. I walked out of this house through a narrow gully. This gully was filled with pools of water along an open drain. People were bathing, washing and cleaning along this space. A little child was urinating into the drain. This whole experience was ironic, yet part of reality.

I interviewed a household that had a relatively stable and substantial income. The house was well built, with a private water connection and even a bathroom. The residents had a wide range of electronic items including a stereo system, a television, a VCR, a gas range and a telephone. The house was well furnished and had a few rooms including bedrooms, a kitchen and a sitting room. I later conducted another interview with a very poor family who lived in one of the least consolidated houses in Mahaiyawa. Their house of a single small room made of mud, and the roof was made of pieces of cardboard, plastic and a few odd pieces of metal sheets. This room was filled with the stench of urine. The head of the household was very drunk and he kept interrupting my interview with silly comments. This couple had lost one of their young children to disease and the other three did not look healthy. The children were dressed in rags and had layers of dirt and dust on them. One of their sons, who was about four and looked seriously undernourished, was playing with a sharp hacksaw. The sight of this made me cringe. Despite their problems, the mother of these children had a smile and showed her tobacco stained teeth.
CHAPTER 4: ASSESSMENT OF THE SETTLEMENT OF MAHAIYAWA

This section provides a comprehensive assessment of the settlement of Mahaiyawa, which includes the historical, political, physical, social and cultural aspects of the community. The types of tenure within the settlement are discussed. This information was compiled from my personal observations, some key informant interviews and records available from the various local authorities. The Health Department of the KMC conducted the most comprehensive survey of the community in 1998 and some of the data from the survey have been used for this chapter.

4.1 Baseline Information

Map 4.1 outlines the physical layout, location of housing units and some of the urban services in Mahaiyawa.

4.1.1 Geography and Demography

Mahaiyawa is a low-income settlement located in Northwestern Kandy, off Cemetery Road, between The Home for the Elders, Trinity Cricket Grounds and the Municipal Cemetery. It is close to the downtown core and has served primarily as a residential area for KMC workers. The settlement is on a slope with a high elevation in some areas. The estimated land area is 11 acres which is occupied by an estimated population of 4200 made up of 900 families (Thyagarajah, 1998).

4.1.2 Historical Background and Growth

The origin of this settlement dates back to around 1865, when the British colonial government brought Tamil laborers from South India to work for the KMC. The Tamils who settled in Mahaiyawa were mostly employed as 'barrel boys', who emptied the bucket-style toilets in the city. They were also responsible for the maintenance and cleanliness of Kandy City. Through time, some housing was provided for the labourers. This consisted of barracks-style row housing, with single rooms and shared amenities. Later, individual shanties were built by the people themselves. Mahaiyawa has grown primarily by natural increase rather than in-migration with the exception of an increase in
population during the 1983 communal riots\textsuperscript{16}. This area was not threatened and hence many relatives of the Tamil dwellers fled to this area for protection and eventually settled here. Up to five generations can be traced living in the community and each family has an affiliation of previous or current employment with the KMC. Most housing units have been extended over time, through incremental upgrading. Any vacant land or land between the units has been occupied by relatives, and family growth via marriage.

\textbf{4.1.3 Ethnicity, Religion and Stature}

Over 90\% of the population within this community is Tamil. This community is one of two enclaves of Tamils in the city of Kandy. The remainder of the community is made up of Muslims and Sinhalese. During the 1983 insurrection, Mahaiyawa was not affected due to the protectionism of the community. As an ethnic majority of Tamils, the community is cohesive and protective to external threats. Since the make up of the community is predominantly Indian Tamils, there was no ethnic conflict within the community.

The community has several religious groups, which include Hindus (90\%), Muslims and Buddhists (2.5\%) and Christians (7.5\%) (Thyagarajah, 1998). There are 3 Hindu temples in the community. One of them is a historical landmark that is 150 years old. Different sections of the community pay homage to the different temples. Therefore, even within the same religious group there seems to be some underlying divisions. There is also an old church located at the top of the hill, overlooking the settlement. This church is not commonly used for services since most of the residents visit the church in the town. The church has a significant portion of land around it. The ownership of religious premises is unclear but would most likely fall under the category of religious or customary tenure.

The remnant of the caste system from South India still has some influence in Mahaiyawa. Within the community there seems to be an elite set of Tamils who have prospered possibly due to political affiliation. There is also another set of Tamils who

\textsuperscript{16} In 1983, there were communal riots in Kandy and the Sinhalese mobs and gangs indulged in killing, burning and looting against the Tamils and their property all over the island (Lonely Planet, 1998). This ethnic conflict has existed for over 200 years and has been a process of re-writing history and interpreting socio-economic conditions.
tend to have employment of lower status. Externally, the community is perceived as an ethnic minority and the nature of work of the people emphasizes their lower stature. They are discriminated against by just being from this settlement and denied social mobility and access to the mainstream of life in the city. About 25 years ago, the residents from Mahaiyawa were not allowed to enter Hindu temples, eating establishments, and residences in Kandy. This is not the case today but the community continues to suffer from an in-built psychological fear and hesitation that hinders their social development (Thambirajah, 1992).

4.1.4 Occupations

Most of the residents in Mahaiyawa work for the KMC. The KMC offices are located 5-7 minutes walking distance away. The various departments that employ these residents include the conservancy sector, the health department, the cemetery, and the works department. Some residents from Mahaiyawa also participate in scavenging and garbage collection. There is a significant resident population of pensioners who used to work in the KMC. Income is supplemented by casual labor within the city. Proximity to both the city center and the KMC offices is important to the community. Within the community there are a few self-employed people as well as some home-based businesses. These include cobbler, movie rental shops, a computer/document shop, a barber and grocery/stationary shops. There is also evidence of high unemployment especially among the youth. The average household monthly income is between Rs. 2000-3000 (Thyagarajah, 1998). This income does not go too far since it needs to feed a large household and some of it may be spent on social ills such as alcohol. Even though many families fell below the poverty line, only a few received any assistance from the Janasaviya antipoverty program of the early 1990s.

4.1.5 Politics and Decision Making

There are two major political parties within Mahaiyawa namely the United National Party (the former government party) and the Peoples Alliance (present government) which includes many smaller parties. The Ceylon Workers Congress (CWC) is a Trade Union, which is active in the community. The CWC is part of the Peoples Alliance at the national level and is the current opposition for the UNP. The
residents in Mahaiyawa comprise a significant voting population and hence a source of political power and legitimacy. They could be victimized at the time of elections with false promises from politicians. Politics plays an important role in the daily function of the community and in access to resources and upgrading. This will be analyzed in chapter 5.

The immediate solutions to the problems related to Mahaiyawa lie in the purview of the KMC. The KMC owns the land and is in direct control over any intervention or land transaction. The Government Agent has the responsibility to remove illegal residents, however this has never been done. The Member of the Municipal Council (MMC) is an elected representative for the ward. The MMC is responsible for advocating on behalf of the community at council meetings and any decision making involving the community. The CDO liaisons with the community and the Health Department of the KMC and deals with issues that affect health. The CDO is important to the community since he/she addresses the day to day concerns of the community, runs development workshops, reports problems regarding the infrastructure and maintains records for the community. Improvements to slum and squatter areas also fall under the portfolio of NHDA. Planning of low-income projects falls under the UDA, Kandy. Any upgrading initiative would involve these three government bodies, who rarely communicate. This complicated bureaucracy impedes access to resources and development of the community. Also institutions like the NHDA in Kandy have serious resource constraints such as lack of trained technical staff and data management.

4.1.6 Community Dynamics and Groups

The community is divided by religious and political affiliation. The current dominant group is affiliated with the UNP (the previous government and the current opposition), which has most of the internal leadership positions and the most political backing. Community residents affiliated with the UNP receive support from the MMC who advocates on their behalf and gains political patronage in return. The CWC also has some supporters that are located in the northwestern section of the community that receive certain privileges such as employment. Support and assistance are provided to
followers of certain religious groups. For instance, a temple society might provide some financial assistance to a Hindu resident in crisis.

Although castes officially have been officially eliminated, they still exist within the community. There is segregation between the higher class Tamils and the lower class Tamil castes (ambalakar or kudianawar). This is usually manifested through material factors such as housing size and quality. The higher caste Tamils have more social connections and better income earning opportunities, ultimately dominating over the resources allocated to the community. They even suppress participation of other residents and can be very exclusionary.

Like many low-income communities, Mahaiyawa has many social ills and problems. Alcoholism, illicit drug use, gambling, spousal abuse, excessive chewing of betel nut, are a few to mention. The children within the community are exposed to this social environment which may affect their future development. In fact, it was not uncommon to see children violently hitting each other and using foul language.

Despite the divisions due to politics, caste and religion, the community as a unit is protective against external influences. These people have suffered and endured a lot together for over 135 years; this has created a sense of security and belonging which responds well to crisis situations. The 1983 insurrection did not affect this community adversely. Instead, this community reached out and provided protection and refuge for other low-income groups in need. This extension of help was provided to other Tamils in need. Hence, the Tamil identity, creates a sense of cohesion, and protective response to external forces.

There used to be several community groups addressing development issues. The community groups disintegrated due to internal conflicts and poor leadership. The leaders of some of the groups embezzled funds of their groups, and lost the trust of the community. A few leaders of the groups were the sources of informal credit for the community. Their actions were similar to that of ‘loan sharks’ who charge exorbitant interest rates. Nonetheless, they were highly respected in the community because they usually provided these funds at a time of crisis. Poor leadership, false political promises and failed interventions, have factionalized the community. There is a lack of trust in the community leadership and government, and the community has become very cynical and
skeptical. This makes it extremely difficult for any developmental intervention to take place.

There are a few groups in Mahaiyawa, but none with the exception of one addresses the development needs of the community. The Mahaiyawa Rural Development Society is the only development-oriented group that was very active in the early 80's but is almost non-functional now due to poor leadership. There is a youth group, that primarily promotes games at the community center. The women's group concentrates on women's issues such as nutrition and childcare and provides small loans for self-entrepreneurs. The KMC sponsors the women and youth groups. These groups only cater to a select few, mostly the elite of the community. There are three temple societies that maintain the temples and organize socio-cultural activities during religious festivals. There is a church group, which also organizes activities during religious festivals. The majority of the groups in Mahaiyawa are sports teams. There is 1 soccer team, 2 field hockey teams and 15 cricket teams. These groups are recreation oriented and carry out limited development activities. There are a few trade unions, such as the CWC, and some pension societies that deal with labour issues.

4.1.7 Development Initiatives

In 1983, Mahaiyawa Development and Community Relations Society wrote to the Prime Minister of Sri Lanka requesting transfer of houses to the occupants. The 1978 amendment law, that provided tenure to tenements paying rent less than Rs 25, was invoked in this letter. Although in Mahaiyawa no rent was paid, the justification for requesting ownership was 118 years of dedicated service to the KMC. There was no response to this request (MDCRS, 1983). Also, in the late 1970s and early 1980s, Sathyodaya (an NGO) carried out some nutrition and health programs and some skills training for the youth. Community based groups such as the Mahaiyawa Rural Development Society advocated for several development needs of the community.

In 1988, the Chief Medical Officer of Health of the KMC recommended that minimum sanitary requirements be met in order to avoid health hazards and further impacts. The following needed consideration: light, ventilation, toilets, waste water and storm water disposal and space per capita to avoid overcrowding. It was also noted that a
majority of the residents did not pay rent and those who did pay rent were denied facilities (CMOH, 1988). Despite the recognition of the problems and recommendations, not much was done.

The 1990s had some spillover effects from the MHP. The CDCs were formed and the CAP methodology was used to address the needs of the people in Mahaiyawa. UNICEF contributed to some programs regarding childcare and sanitation between 1991 and 1993 under the UBSP of the 1.5 MHP. Within Mahaiyawa the UBSP led to some infrastructure upgrading such as construction of toilets and provision of potties for young children, and some health education programs regarding nutrition, sanitation and childcare. The NHDA and the KMC used the CAP methodology to implement some of the programs. The CDOs ran workshops to address the needs of the community and to involve government and other agencies. Through the CDC, development initiatives took place that included construction of a children’s library and a pre-school, building of a wall to stop soil erosion, and income generating activities for women. Also in 1990, the KMC undertook initiatives that included repair of the main drain and improvements in the school area (Mohamed, 1999). The success of these initiatives was evident, but fell short due to resource and financial constraints, and changes in administration. Currently, there are no such initiatives. The KMC provides loans to some employees who have worked for 3 or more years for the KMC. These loans are provided in distress situations and also for upgrading houses.

Based on a political directive from the Minister for Home Affairs, The Ministry of Urban Housing and Development and NHDA is proposing some rehabilitation of the Mahaiyawa line rooms and relocation of some households to Pallekele. The proposed project would be from 2000-05 (Gunadasa et al. 1998). This would ease some of the congestion and enable upgrading to take place. Photo 4.1 illustrates this plan and highlights the key players. This plan is placed on a billboard at the entrance of the settlement. The KMC would be responsible for resource contributions and releasing the land. The implementation of the project and the funding would be handled by the NHDA. The planning of the project would be carried out by the UDA. The proposed rehabilitation of Mahaiyawa would involve a land-sharing program. The land along the

17 These line rooms were the barrack-style rooms built for the MC labourers in the early 1940s.
major arterial road, has a high commercial value. This road-front property would be
developed for commercial purposes, and would help finance upgrading of the settlement. The line rooms and unauthorized units would be replaced by three and four story walk up apartments. The upgrading would be done in several phases to small sections of the community so as to minimize disruption. The community has not been consulted, and the logistics including the financial aspects of the plan have not been worked out. Also, the Municipal Council is not in support of this plan.

Photo 4.1 Proposed Plan for Upgrading of Mahaiyawa

The billboard is written in Sinhala. It translates to: The Ministry of Urban Housing Development. NHDA-KMC- Kandy. Urban Housing Project. Resource Contributors: KMC, NHDA, UDA. The new sketch shows the different layout of walk-up apartments and the black blocks illustrate the commercial development.

18 The billboard is written in Sinhala. It translates to: The Ministry of Urban Housing Development. NHDA-KMC- Kandy. Urban Housing Project. Resource Contributors: KMC, NHDA, UDA. The new sketch shows the different layout of walk-up apartments and the black blocks illustrate the commercial development.
4.2 Housing, Infrastructure and Services

4.2.1 Housing

The initial housing in Mahaiyawa primarily consisted of the over-crowded barracks-style line rooms with minimal communal amenities. These units lacked lighting, ventilation, water supply, toilets and drainage. Over the years, these have deteriorated due to an increase in the resident population and overcrowding (Thambyrajah, 1992). The settlement has been complemented with additions to the original structures of the line rooms and construction of new rows of rooms and other semi-permanent structures on any vacant piece of land. This new form of development consists of haphazard unauthorized huts, with a few basic services.

The number of units based on my personal observation in June 1999 was 627 units on less than 11 acres of land. The number of dwellings varies with a continuously increasing trend. The density is higher in the core than on the steep-sloped periphery. Some of the houses are divided and occupied by up to 5 families. The average occupancy per unit is 7. The housing congestion for the settlement can be seen in photo 4.2. Due to the lack of land, the houses are constructed on unstable land with a steep gradient. The torrential monsoon rains impact the shelters located on the steep slopes. A few houses have slumped over the years (Photo 4.3), and heavy rains have even destroyed some houses. There is no space for animal husbandry or vegetable gardens and there are few trees within the main core of the settlement.

In Mahaiyawa the houses are constructed from a wide range of materials. The highest level of consolidation uses the most expensive and most permanent materials, such as concrete blocks, cement, asbestos sheets and roof tiles. Corrugated iron/steel sheets are the most common roofing materials due to their relatively low cost. Other roofing material includes asbestos and Sri Lankan roof tiles that are made from sand and clay. Most floors are made from cement and some are made from mud. Most of the units have permanent walls made from concrete blocks or red bricks. Prior to this, walls would be made of mud or wood. Photo 4.4 illustrates the different housing materials found in Mahaiyawa. Most of the houses in Mahaiyawa are relatively sturdy and built with permanent materials such as concrete. The houses usually have one to three rooms.
including the kitchen and can have 1 to 5 families per unit. The furnishings and appliances within each household are determined by the household income. These range from none at all, to sofas and television sets.

Photo 4.2 An Elevated View of Mahaiyawa Showing the Intense Congestion

4.2.2 Water

Most water comes from communal water standpipes (Photo 4.5) and less than 8% of the houses have private water connections. The majority of the population is dependent on 2 wells and 22 common standpipes. There are more commercial shops than water standpipes. The local authorities claim that there is adequate water supply. Despite this official claim, the residents complained that the supply is intermittent and in need of improvement. Some residents have water barrels outside their houses to deal with the irregular supply. The KMC is phasing out the standpipes and encouraging people to pay for the water. This may seem practical and would lead to more efficient water use but the implications of such activity need serious consideration especially with regard to sanitation and health. There are 6 bathing areas, which are insufficient for such a large population base. Many people use the wells and open drains as washing areas.
Photo 4.3 Slumping House built on unstable slope

Photo 4.4 Variability of Building Materials used in Construction of Houses
4.2.3 Waste disposal

Solid waste is a major problem in Mahaiyawa. There is a lack of awareness with regard to efficient disposal. Garbage pits had been constructed; due to the scarcity of land and lack of regulation, houses have been built over these. Most garbage is dumped in the drains, further clogging them, or is left scattered in small piles all over the settlement. The KMC hires some members of the community, to clean the drains and pick up the garbage. This service seems inefficient, due to lack of specific collection points. In mid-June of 1999, 40 garbage bins were donated, to serve as central collection points and to reduce the garbage being dumped in the drains.
There are about 80 common toilets (Photo 4.6) in Mahaiyawa to serve a population of 4200. This works out to 50 persons per latrine, which is rather insufficient. There are very few in-house latrines. It is the responsibility of the KMC to have the public toilets cleaned and to empty out the septic tanks. This is a challenging task, considering the increased volume due to overpopulation. There have been repeated cases of sewage overflow and leakage of the septic tanks. The people in the community have assumed that the cleaning responsibility is solely that of the Municipal Council and therefore never put in any initiative in maintaining these facilities. Due to the scarcity of land, some dwelling units are built in very close proximity or even share walls with the toilets, thus raising some health concerns.

Open sewers were reconstructed in the early nineties. Due to the rapid population growth and the extensive congestion, these open sewers have deteriorated and become garbage disposal areas and bathing areas. The children use drains as toilets, and the flow of wastewater is clogged by the garbage. The drains become breeding grounds for mosquitoes and flies. This raises serious health concerns especially for the houses located over and adjacent to the drains (Photo 4.7). Some education programs regarding better sanitation, as well as upgrading of the drains are essential.

Photo 4.6 The Largest Common Latrine in Mahaiyawa
4.2.4 Other amenities

Most of the residents use fuel wood for cooking, in traditional built stoves or firewood hearths. Cooking predominantly takes place indoors in a section of the same room that the family sleeps in (Photo 4.7). There are only a few houses with separate kitchens. The areas outside the units run into the streets which are narrow and dirty, and are not conducive to preparation of food. The kitchens within the household lack good ventilation and pose a serious threat to health.
There are a few paved paths within the settlements, some of which have not been maintained and have become impassable. Transportation of goods to higher elevated areas is a problem. Also, the lack of adequate paved paths has led to the creation of several secondary paths which cause erosion and prevent vegetation growth. The community is accessible to other areas of the city through local transportation or on foot.

Some of the areas have street lighting. Many housing units have electricity. Some units still depend on kerosene lamps or run illegal ‘jumper’ wires from the main lines. During my visits, I came across a family whose child was severely burnt due to a kerosene lamp accident.

Mahaiyawa has a centrally located community center that can accommodate about 50 people. It does not provide sufficient resources, apart from a physical space for social functions. It is primarily used by the youth of the community to play games such as ping-pong, chess, and carom. It also is used for workshops and funerals, and can be rented for private functions. The KMC hires a caretaker to maintain it.

Photo 4.8 A Typical Indoor Kitchen
4.2.5 Healthcare and Education

There is a childcare and maternity clinic across the street in Poornawate. However, there are no medical facilities, either in the form of a dispensary or clinic within the community. The Health Department of the KMC provides some health information programs regarding nutrition and childcare. Attendance at these workshops is usually low. The community is about 1.5 km from the Kandy General Hospital and there are several private clinics in the nearby vicinity. The private practitioners are only accessible to those with higher incomes. Health costs could impose a significant burden on the household income.

In the 1930s, the Salvation Army established a small school in the community catering up to grade 3 and later to grade 5. Very few of the labourers’ children attended this school. It was not until 1965 that the government took over the school and named it Kalaimagal Vidyalayam or ‘Goddess of Education’ (Photo 4.9) (Thambyrajah, 1992). This is the only Tamil-medium, primary school in Kandy that accommodates over 700 children. It lacks a playground, physical infrastructure such as classrooms, science labs and workshops, and the critical human resource of teachers. It occupies about one acre of the land in Mahaiyawa and is located on the prime commercial corridor. There are limited opportunities for the children to get a secondary or post secondary education. Most reputable secondary schools have high fees, and require some administrative connection or political influence for admittance, irrespective of the aptitude of the student. Furthermore, the residents of Mahaiyawa are generally looked down upon due to their occupation and ethnicity. This affects the opportunities for the youth. Those who do obtain a better education opportunity tend to move away from the community. Therefore, very little benefits of education accrue to the community.
Photo 4.9 Kalaimagal Vidyalayam, the Tamil-medium School Located in Mahaiyawa

Photo 4.10 An Upgrading Initiative in Progress
4.3 Land Tenure

The historical land systems in Kandy or Sri Lanka would not be applicable to Mahaiyawa, since the residents were imported from Southern India over a century ago and allowed to settle on land that was already under the British rule. By that time, the British had already transformed the Rajakariya system into that of Roman Law. The land in Mahaiyawa is owned by the KMC and is provided on a service basis to its employees. There was no formal or written arrangement for land occupation in Mahaiyawa until 1986. In 1986, 245 thirty-year leases were provided to KMC employees. My 1999 survey indicated 253 leases. According to Municipal council records in 1988, there were 330 unauthorized settlers in Mahaiyawa. My count in 1999, indicated 374 unauthorized units without formal or legal documentation regarding land occupation. These unauthorized units have developed a sense of security. This defacto security which is not recognized by the law, is based on perceptions that the unauthorized unit will not be destroyed or removed. Regardless of the lack of legal tenure people are still upgrading as shown in Photo 4.10. It is therefore necessary to determine what underlies this current upgrading.

4.4 Conclusion

Mahaiyawa originated as a labour settlement during the British administration in Sri Lanka. The community is one of only two Tamil enclaves in the city and this identity instills a sense of protectionism in the community. Internally the community is divided by caste, political and religious factions. The majority of the community is employed by the KMC and they have maintained and cleaned the city for over a hundred years. The community lacks a sense of cohesion and good leadership; this impedes development initiatives.

The Mahaiyawa community has grown through natural births and migration of relatives into the community, and has exceeded the capacity of the resources and land. There have been a few development initiatives in the early 1990s, addressing especially infrastructure needs. Most urban services such as water, electricity, drainage and waste disposal are provided to the community by the KMC. Due to excessive growth, the community is severely congested and amenities are inadequate. This cannot be further
ignored, because the impacts are detrimental to the health and well being of the thousands of people in the community. Social ills such as gambling, alcohol use, spousal abuse and drug use are on the rise due to the extremely poor living conditions and the lack of hope and change. There are some serious issues that need to be addressed regarding tenure, congestion and housing. Since the residents are employees of the KMC and residents in the city of Kandy, their well being falls under the purview of the Municipal Council. The KMC is attempting to address community needs but is constrained by financial resources. Upgrading initiatives would be difficult due to the intense congestion and the lack of community support, however it is essential.
Even when there are signs of hope and change, misfortunes occur, yet hope is never lost.

I was interviewing member of a family and they related their story of how their son was burnt in a kerosene lamp accident. The family had saved up some money and was upgrading its house. Then, the accident happened and the boy had severe burns, but he survived. However, half his face and most of his body was scarred. I used to see him playing with his friends and always wondered what had happened to him. It would cost a fortune for plastic surgery and the family could not afford this. The house consisted of a single room about 4 meters by 3 meters and was half upgraded. The walls had been made of brick, they were not entirely finished and the roof was made of old rusted metal sheets. I was conducting my interview while they were preparing their evening meal and I almost suffocated due to the smoke. There was no ventilation and my eyes were burning and watering. I endured this but it made me reflect on how this family lived through this, every single day. They had saved for many years in hopes that their dwelling would be improved and then the misfortune occurred. It was their goal to possibly raise money so that their son could undergo surgery.

From the early eighties to the early nineties there was a very good community leader. He had sacrificed his whole life for the betterment of the community and advocated very strongly for meeting the poor’s needs. Then one day, he fell ill and had a nervous breakdown. I bumped into him several times and he would talk to himself, mumbling and walking around in his tattered clothes. I came across a lot of the letters he had written advocating on behalf of the poor and I heard many stories of his dedication. He seemed to be the only true leader in the community. It was a misfortune for the community to lose such a person to mental illness.
CHAPTER 5: RESULTS AND ANALYSIS

The results of the methodology from Chapter 1 are summarized followed by a critical analysis. The issues of upgrading (housing and infrastructure services) and tenure security form the basis of the analysis in this chapter and are supported by the information in the preceding chapters. This chapter addresses the research questions outlined in section 1.3.1 and compiles and analyzes the findings.

5.1 Summary of Results

Map 5.1 illustrates the legal (253) and non-authorized (374) units in Mahaiyawa that were determined through the mapping exercise. The 18 community interviews are summarized in Appendix 4, and these were cross-checked with a questionnaire that is summarized in Appendix 5. Finally, the key informant interviews with the government officials, community development workers and leaders, and academics, are summarized in Appendix 6. The results will be used and reflected upon in the following analysis.

5.2 Upgrading

Upgrading involves improving the socio-economic and the physical conditions of the living environment. The emphasis on upgrading is on the physical aspects of housing and infrastructure services. The residents in a community must feel secure in their residential circumstances if they are to invest the effort, money and time to make upgrading improvements in either housing or infrastructure (Choguill, 1999). This section analyzes some of the upgrading initiatives taking place in Mahaiyawa.
5.2.1 Housing

Shelter is a basic human need that is critical for livelihood and well being. Upgrading of housing is not a static process and continues until the housing unit is built from permanent materials such as concrete blocks and cement. In Mahaiyawa, a significant proportion of the housing, including the unauthorized units, is constructed from permanent materials such as concrete and bricks. This ensures longevity and protection from the monsoon rains. This investment in permanent materials indicates the sense of security.

In Mahaiyawa, there is clear evidence of spontaneous and in-situ upgrading taking place with regard to housing. During my three months of research in Mahaiyawa, there were more than 15 housing units that were undergoing some form of improvement. These ranged from extending a room to building a whole new unit. The physical construction of the unauthorized units is a form of upgrading in itself. These illegal units had to be constructed either through self-help or hired labour and could have been done overnight or incrementally.

According to UDA law, most low-income settlements should have a minimum of 6 perches of land per unit. Mahaiyawa is extremely congested, since it has only 2 perches per unit. The congestion is so extreme that the health department has ruled that it is prohibited to deliver babies at home due to the lack of good ventilation and space. What causes this congestion? It should be recognized that the residents in Mahaiyawa are neither land invaders nor squatters. They were moved here to provide services for the KMC, and the settlement has grown through natural births or through relatives moving into the area. What are the implications of this congestion on upgrading? With the lack of space, most of the construction is occurring vertically. This could be dangerous (Photo 5.1) since many of the units lack strong foundations and the residents may not have the appropriate skills to build multi-story units.
5.2.2 Infrastructure

Infrastructure is important in maintaining a clean environment and good health in a community. Infrastructure improvements tend to be capital intensive, and some need technical expertise. Most infrastructure services in Mahaiyawa (Section 4.2) are communal. Their provision and upgrading falls under the purview of the KMC. The leaseholders make payments to the KMC and demand these infrastructure services in return. There are more illegal households who use these services without paying for
them. Therefore, the infrastructure services provided are insufficient to meet the needs of the community. Furthermore, the extreme congestion and the haphazard settlement growth make it difficult to repair and install infrastructure. Some of the housing units are built over the drains or in very close proximity to the drains thus making access to the drains difficult or virtually impossible (Photo 5.2). The most significant infrastructure improvements occurred through the UBSP in the early 1990s. This included construction of toilets and drains, and slope stabilization. According to some community interviewees, the provision of infrastructure increased congestion. However, there is little evidence to support this, because 1988 KMC records reported that there were already 330 unauthorized units, and the major infrastructure was not provided till the early 1990s. Mahaiyawa also lacks a sense of community ownership and responsibility in maintaining the infrastructure. The lack of adequate infrastructure is a serious impediment to the socio-economic development of Mahaiyawa. The infrastructure needs to be repaired, upgraded and maintained.

Photo 5.2 Housing Adjacent to the Drains Impedes Maintenance and Upgrading
5.3 Forms of Tenure

5.3.1 Leasehold Tenure

The tenure in Mahaiyawa prior to 1987 was primarily service based. Either land, housing, or both was provided to those who were employed by the KMC. In 1987, 30-year leases were provided only to households occupying the line rooms as inferred from Map 5.1. The unauthorized units were not evicted because many of these units housed employees of the KMC who had political support and there was a stated but unwritten ‘no eviction’ policy. The KMC could not charge rent from the unauthorized units because it did not officially recognize them. Charging rent would legitimize the existence of the unauthorized units.

There were several reasons why the leases were granted to the occupants of the line rooms. First, many community residents were claiming ownership. As a solution to this problem, the KMC decided to grant 30-year leases and the tenure issues would be resolved in due course. Second, the leases helped the KMC to generate some revenue, which could be used toward the communal infrastructure improvements. Third, with the provision of leases, the individual units could apply for their own amenities such as electricity and water taps. This would generate more revenue which can be reinvested to provide more services to the community. The residents in the unauthorized units did not object to the provision of leases to those in the line rooms because they would still receive the same amenities and would not have to pay the annual lease rate of Rs. 120. A few residents claimed that rent was paid to the KMC; however, the KMC had no such records. Therefore, the only official tenure was the leasehold.

The lease did not provide much benefit to the householder apart from the official recognition of the unit and increased sense of security. The lease did not serve as a title or deed, and therefore could not be transferred or used as collateral. The conditions on the lease suggested that the housing units could not be sublet or sub-leased. Since the lease was non-transferable, the housing unit could not officially be transacted and therefore it could not be sold on the market. There was neither evidence of any unofficial transactions nor evidence of any slum landlords. Finally, the lease did not protect the resident from being evicted. According to the lease agreement, the KMC can provide 3
months notice to the leaseholders, and ask them to move out without any form of compensation.

5.3.2 Defacto Security

In Mahaiyawa, the residents in the unauthorized units developed a sense of perceived or defacto security. This is based on hopes, expectations or speculation that occupation of a piece of land will be tolerated and eventually legitimized (Angel, 1983a). The law does not recognize defacto or perceived security. Personal risk aversion, and the perceptions that a unit will not be removed or destroyed shape defacto security. Defacto security could be tenuous and could subconsciously arise. Day to day activities as well as being part of a community could instill this sense of security. Every individual’s sense of security would be unique and be established at different times. A range of factors that could be mutually exclusive creates this sense of security. This sense of security is not static and changes according to circumstances. The following describes the factors that contributed and supported this defacto security in Mahaiyawa.

- Based on the interviews, there were virtually no evictions. This was supported by the unwritten but stated policy of ‘no evictions’ advocated by the UNP, which was in power for 17 years, from 1977 to 1994. Also, due to the political ties of the residents, it was difficult to regulate or evict illegal settlers. The expectation of the lack of action of the local authorities with regard to removal of unauthorized units contributed to a sense of security. The residents felt safe to invest and upgrade in their units. However, they did not feel confident to sell their units.

- The NHDA, the UDA and the KMC provided several identification cards to the unauthorized residents and frequently surveyed the residents. Provision of these identification cards was misinterpreted as occupancy permits. The people who owned the green cards from the NHDA were confident that they would either gain access to a housing unit if a development initiative took place, or they would get a piece of land should they be relocated. However, according to the NHDA, these identification cards did not imply benefits or ownership and were strictly used to identify the unauthorized structures in the Mahaiyawa. The issuing of the cards was very sporadic, and some residents had up to three cards. Residents had their own
interpretation of what the cards meant to them. Even though these cards were strictly used for identification purposes, they were misinterpreted as some form of legitimacy and contributed to the perception of security.

- Provision of urban infrastructure services such as garbage removal, water supply and cleaning of drains and toilets by the KMC also conferred legitimacy. These services were meant for the legitimate occupants. However, provision of services to everyone led to the perception that the illegal occupancy was recognized; instead of getting bulldozed they were provided with basic amenities.

- Many of the residents in Mahaiyawa, even those in unauthorized units, were employed by the KMC or had some form of previous affiliation to the KMC. The KMC was dependent on the people for their labour and services, and the people were dependent on the KMC for land to live on and infrastructure services. This patron-client relationship and the employment contributed to a sense of stability. Some residents also had long standing connections with officials in the KMC. This supported their illegitimate occupancy and unauthorized upgrading.

- Mahaiyawa has existed for over 135 years and the community members have been through many hardships together. Based on the interviews, the average residency period per household was 70 years. This suggests that units are passed down from generation to generation. The long residency period, and sharing of community amenities, instilled a sense of place and identity. A community resident may see a neighbour upgrading his or her own unit and not be evicted. Based on this, the community resident would upgrade his or her unit. There is some form of indirect support provided by the community that strengthens the actions of individuals. Finally, the strength and support based on the number of people living within the community also provides a form of security.

5.4 Implications of Tenure Security on Upgrading

The perspectives from the interviews with previous researchers and academics, supported the idea that tenure security would influence upgrading by providing a sense of identity and peace of mind. Tenure security can influence the pattern of physical
development and upgrading and hence it is necessary to assess it in the forms present in Mahaiyawa.

5.4.1 Legal Tenure

Based on the community interviews and questionnaire, ownership was not considered an important prerequisite for upgrading. Upgrading was occurring regardless of legal title. The leasehold tenure was the only dejure tenure evident in Mahaiyawa. The residents with leases felt safe and comfortable upgrading their units, even though the leases were for a short time period of 30 years and had stipulations regarding upgrading. The lease specifically stated that the Municipal Council’s prior approval in writing was required for any structural alterations, improvements or renovations. Many households with leases felt that it was necessary to inform the KMC regarding their upgrading. The KMC usually approved any request since it was obliged to keep its employees satisfied and it was felt that it was the responsibility of the residents to maintain their units. This formal procedure turned out to be an obligation rather than a check for housing standards. Not all the residents sought permission to upgrade. Having the leases contributed to a sense of security, but it was not essential for upgrading.

Legal tenure in the form of leases has few benefits to upgrading. The leasehold tenure is not more conducive to the self-help approach to upgrading than defacto security. In Mahaiyawa, residents who are capable of hiring labour do so, and those who aren’t must do the upgrading themselves. Mutual aid is more practical for settlements that have been regularized and those that have community cohesion and a sense of ownership. Since the settlement is only partially regularized and highly polarized due to politics, mutual aid is unlikely to work. Mutual aid would be possible only if there was some capacity building and community empowerment, where community participation would be emphasized. Also, the lease does not improve the opportunity for credit access, since it cannot be used as collateral for bank loans.

The annual rent from the lease of Rs. 120 is negligible, considering each household’s average monthly income ranges from Rs. 2000-3000. This low rent is charged because most of the residents are employees of the KMC and the housing and land is considered a subsidized service-based tenure. This rent is not sufficient to meet
the infrastructure demand of both the legal and unauthorized units, and imposes an economic burden on the KMC. The KMC has been providing services at no cost and has thus created community dependency. Raising the rents is politically controversial and the KMC has no methods of charging user fees. Hence, the infrastructure services continue to deteriorate. When the leases come up for renewal, it is extremely difficult for governments to refuse renewal. A 'lock-in' effect occurs which may be advantageous to the low-income dweller but economically inefficient for the government (Doebele, 1983).

5.4.2 Defacto Security

Many of the unauthorized settlers were upgrading their units irrespective of legal title or permission. Upgrading initiatives require a significant investment of resources and would only be carried out upon an informed decision based on the perception of the risk of removal. Mahaiyawa has many factors that support this sense of security and therefore the risk of destruction or removal of units is reduced. Once tenure at the community level appears to be secure, titles are not essential and the willingness to pay for the titles in weakened (Angel, 1983a). The community interviews support the preceding hypothesis. Numerous residents felt that they had lived in Mahaiyawa for a long time and needed to live in more comfort and better accommodation. As inferred from Map 5.1, more units in Mahaiyawa are unauthorized than legitimate. The construction of each unauthorized unit is considered as upgrading. Therefore, based on the prevalence of unauthorized units, I argue that perceived security plays a more significant role in upgrading than legal tenure.

Defacto security has some advantages and disadvantages with regard to upgrading. Once a sense of security is established, it initiates the consolidation process mainly through the self-help approach or through hired labour. The upgrading process may be incremental or immediate, depending on the resources available. Defacto security does not provide opportunities for credit. The cards provided to the residents that support the sense of security could be used to gain access to more land. Each unit in Mahaiyawa is generally occupied by more than one family and therefore neighbouring plots or vacant pieces of land are invaded and built on. The original household unit has some of its members living in a 'new' unit. In due course, an identification card is
provided. Should the settlement be regularized, this ‘new’ unit would claim ownership. This practice is most prevalent with the elite in Mahaiyawa since they have both more access to financial resources to consolidate new units and political backing. However, the lack of land has limited this practice. The sense of security can change depending on the circumstances and can have adverse impacts on investment of resources. For instance, a change in political power would threaten those who had previous political support for their unauthorized unit.

5.4.3 Dejure tenure versus Defacto security

Would provision of leases to the whole settlement lead to upgrading? I argue that it most likely would not. The leasehold tenure does not provide any substantial benefits over defacto security. The only benefit it provides is legitimacy for upgrading. Even this is restricted by the lease agreement. There might be a greater potential that ownership is bestowed on the leaseholder at the end of the lease term, but this is not warranted. In fact, the households with leases have to pay their lease rents and receive the same services as those who pay nothing. Also, one interviewee complained that even though he had legal tenure, and the financial resources to upgrade, he could not upgrade, because he was in dispute with his neighbour over territory. His neighbour had some connections to the MMC, and he felt intimidated by this. Many other factors need to be considered when upgrading in spite of having legal tenure.

Would provision of titles lead to slum upgrading? A comment form a city official suggested that such an action would be rewarding the people of Mahaiyawa with cheap or free land after they have violated the law (Pinnawala, 1998). The officials’ perspectives from the interviews suggest that it would not, due to the excessive congestion. I would agree that the congestion would complicate tenure provision. Each unit is occupied by more than one family. Providing ownership would cause a great deal of dispute over boundaries. Further, the provision of titles may lead to an increase in illegal incursions and downward raiding. Based on the interviews, the most significant obstacle to upgrading was the lack financial resources. A deed would enable access to credit and hence access to financial resources. The provision of ownership may instill a greater sense of responsibility in the immediate environment and would deter the establishment
of unauthorized units. In-house infrastructure services would only be available to those who can afford them and the poorer groups would be excluded from this. Moreover, provision of ownership is more likely to lead to the sale of land, especially with the increasing land value in Mahaiyawa. The main criticism received from the officials' perspectives was that provision of ownership would render opportunities for the people to sell their land and relocate, thus exacerbating the problem rather than solving it. Regardless, provision of ownership would be highly political and controversial and is unlikely to happen.

5.5 Other Factors Affecting Upgrading

Based on the key informant interviews and community interviews, several factors other than tenure influence upgrading. These include:

5.5.1 Financial Resources

Many residents felt that having hard cash was necessary for upgrading. In fact, having money was the most critical factor affecting upgrading in Mahaiyawa. Access to financial resources would enable residents to purchase better materials for construction, hire labour and improve their living conditions. With the increasing cost of labour and the purchase of the more permanent materials, an upgrading initiative would impose a significant burden on the financial resources of the household. In Mahaiyawa, there were several units that were only partially completed because the funds ran out. Some units take many years to complete upgrading in order to distribute the economic burden. To understand the issues related to financial resources, it is important to access the sources of funding, sources of income, expenditure, savings capacity and employment stability.

Loans are available for housing consolidation to employees who have served 3 or more years at the KMC. The residents not employed by the KMC can obtain loans from the NDHA. Many residents complained that the loans provided were insufficient for upgrading due to the increasing cost of materials and the high cost of labour. This led may low-income families to borrow money from the 'loan sharks', thus increasing the residents' indebtedness. A few relatives of the householders had obtained employment in the Middle East and sent back money that was used for upgrading. A mutual loan system exists in Mahaiyawa for small-entrepreneurs and is supported and run by the CDO of the
KMC. However, these loans are only limited to a select group and are geared toward supplementing household income. The poorest residents and the unemployed have no access to credit and rely on the informal credit systems that charge high interest rates. The loans from the moneylenders are usually taken to supplement other loans and at times of crisis. The repayment of loans from informal credit systems is slow and often leads to conflict.

In Mahaiyawa, the residents earn their income from employment at the KMC, through self-employment in the community, and through casual labour or the petty commodity sector in the city. Surveys by Thyagarajah (1988) and Mohamed (1999) suggest that the average monthly household income is Rs. 2000-3000. This figure seems to be underestimated since most households have more than one working member and income is supplemented by odd jobs. Regardless of the underestimation, each household has significant expenses. A good portion of the income is spent on illicit drugs, alcohol and gambling. Another significant portion is spent on repaying high interest credit, and the remainder is spent on food (Mohamed, 1999). There are few incentives and opportunities for savings. Only those employed by the KMC have some form of employment stability. This group generally earns a good income and has access to the loans from the KMC. Due to the increasing population, there is now a saturation of employees who can work for the KMC. Therefore, employment by the KMC does not necessarily mean security. Many other residents are dependent on unstable incomes and cannot contribute to a steady flow of financial resources that can be used for upgrading.

The KMC’s aim was to provide individual connections for water to the residences and thus gain user fees. There were several disadvantages to this. First, this service would only cater to the people who already had good incomes, and the poorest groups who were subsidized by the more affluent groups would be severely affected. Second, the physical installation of such connections would cause many conflicts and would be complicated given the haphazard layout of units in Mahaiyawa. Finally, provision of individual service connections might have generated more revenue but would have led to more consumption and hence affected the water reserves of the city.
5.5.2 Community Participation

Within Mahaiyawa there is evidence of a lack of community participation which hinders upgrading. There is some participation from neighboring families in the construction of housing units. However, most residents in Mahaiyawa are self-interested and cannot be mobilized to provide mutual aid in installing infrastructure services. One of the main reasons why the community lacks interest and participation in government upgrading efforts is that they are excluded from the planning and decision making. Most of the initiatives provided are prescriptive and the community is not consulted, nor are their needs assessed.

In Mahaiyawa there is also a lack of cooperation, and a lack of a sense of responsibility and ownership, both of which impede the installation and maintenance of infrastructure. Interviews with the KMC officials suggest that the residents did not cooperate when maintenance activities were attempted. For instance, if the drains were being repaired, the residents were requested not to use water for a certain time period, but they never complied. There was a serious need for garbage pits in Mahaiyawa. When the KMC wanted to install garbage pits in the community, there were protests and disputes regarding the location of these pits. Subsequently, garbage still lies around in little piles, scattered around the settlement. The community is dependent on the KMC for infrastructure installation and maintenance. There is no sense of ownership and this infrastructure is abused. It was difficult to deduce what caused the disruption in the sense of community. The most likely reason is the lack of trust for leadership as well as the pervasiveness of politics. The community has lost its sense of hope that any future positive interventions will change their conditions. The residents have thus become very cynical and skeptical. Many NGOs were consulted regarding possible interventions but they all suggested that the community was divided and highly political and it would be difficult to carry out upgrading initiatives.

5.5.3 Ethnicity

The ethnicity of the community in Mahaiyawa is an important factor that influences upgrading. The residents in Mahaiyawa should receive urban services like any other citizen in Kandy. However, because Mahaiyawa is primarily a Tamil enclave, and
the fact that most residents have occupations of city cleaners and maintenance workers, the community receives little attention and the provision of services is insufficient. Kandy has predominantly been a Sinhalese dominated city and there seems to be some institutionalized racism against the Tamils. Even though the national conflict is against the Jaffna Tamils rather than the Indian Tamils, it acts as a deterrent for providing ownership to this community. Many residents feel that due to their ethnicity and stature, their settlement does not receive much upgrading. Many other low-income areas with dominant Sinhalese populations receive more attention and better services. These residents have provided services to the city of Kandy for over a century, yet they do not have any rights or ownership. It was not until 1988 that these residents received civil rights and only then could they vote and qualify for pensions. Within the KMC, there are several high positions held by Tamils, however the caste segregation comes into play and only an elite set of Tamils reap the benefits.

5.5.4 Skill levels and Building Materials

In Mahaiyawa, upgrading of units was constantly taking place regardless of the skill level. Many units were being constructed using self-help and in many cases hired labour was used. On one of my visits, an entire cricket team was helping one of its members construct his house. There had not been any serious cases of any houses collapsing, apart from those built on steep slopes. The houses that did slump were usually made of semi-permanent materials such as bamboo framing and mud. The lack of availability of land has led to the vertical upgrading of units, which requires more investment in infrastructure for the foundations. Infrastructure upgrading may not require a high level of technical skill, but it is labour and capital intensive and requires cooperation from many households. There are no training programs that would help residents with increasing their skill levels in construction. Training should be provided by the NHDA, but it lacks both technical and financial resources. If the government provided such a training program it would enhance the legitimacy of the unauthorized units.

Residents felt that building materials were necessary for upgrading. Many houses were partially upgraded, and due to financial constraints, the roofing was not installed.
Since upgrading was technically unofficial, building materials could not be purchased in bulk to reduce costs. The residents in Mahaiyawa had to purchase and transport building materials from local retail hardware stores, which would impose a significant economic burden upon the household. Furthermore, the cost of hired labour was increasing. Consequently, upgrading a house requires a significant investment of resources.

5.5.5 Institutional Agendas and Resources

The local authorities, such as the NHDA and the KMC, lack the physical and financial resources to maintain and provide infrastructure services to the community. Mahaiyawa serves as the residential quarters for many of the employees of the KMC. Despite this, the KMC does not provide adequate services and is not responsive to the needs of its employees. The KMC provides some services to Mahaiyawa but due to the lack of community responsibility and excessive congestion, these services seem dysfunctional and inadequate. Providing services without user charges leads to their overuse, abuse and dependence. Since the KMC charges rent for the leases, it is responsible for providing services to the legal units. However, it is difficult to restrict the unauthorized units from using the common amenities. According to the KMC there are no plans to increase the infrastructure services in Mahaiyawa, but they will provide maintenance at the same levels. Currently, the infrastructure is collapsing due to overuse, which is having adverse effects on the health of the community. Housing the poor is not a major priority for the KMC. Its focus is on promoting the image of the city, encouraging tourism and economic development.

There is also lack of coordination between the various government agencies, which impedes upgrading initiatives. One agency may invent some policies regarding upgrading. Notwithstanding, these cannot be implemented because they impinge upon the jurisdiction of another governmental organization. In Mahaiyawa, the land was owned by the KMC, yet the NHDA gave authority to some residents to improve or construct new units. Such an action creates animosity between the institutions. Also the provision of identification cards from the various government institutions confused the residents and complicated the administrative procedures.
5.5.6 Power and Politics

In Mahaiyawa, political affiliations play a significant role in the upgrading. The MMC (Member for Municipal Council) has a network of relatives who dominate the positions of authority within the community. In fact, the MMC position, even though it was elected, was passed down within the same family due to the political dominance of the leadership. Most of the other leadership is also politically affiliated. For instance, the temple society leader is also the trade union leader. Furthermore, the leaders are the elite of the community. This can be inferred from their housing, which is spacious and well consolidated. These leaders profiteer, through providing special favors and informal finance to the community. This biased power structure is a disservice to the poorest groups who cannot gain opportunities to improve their lifestyles. Supporters of the dominant political group or those with direct ties to the local leadership were more confident when upgrading their units. Those without political connections were apprehensive about upgrading.

Until 1988, the residents in Mahaiyawa had no civil rights and could not vote. Within a decade, the area consisted of over 1300 voters and became a concentrated area for political mobilization. The politicians who promised state intervention in the form of providing land, housing and basic services could easily build power bases in the community and have control in municipal and urban councils. The politicians would provide favors in return for political patronage. At the time of election, several promises of provision of built units, better infrastructure and even ownership were made to the residents of Mahaiyawa. These developed false hope because nothing materialized. The residents in Mahaiyawa have become immune to the political rhetoric and will only believe the promises when they see them fulfilled. Section 5.4.7 describes an excellent example of the political influence on upgrading in Mahaiyawa.

5.5.7 Future Upgrading Scheme

Based on the directive from the Minister for Home Affairs, a land sharing option is being considered for Mahaiyawa as discussed in section 4.1.7. This Minister is currently the Member of Parliament for Kandy District and this scheme was probably a ploy to maintain his political position in the 2000 election. Several residents in
Mahaiyawa had been asked whether they wanted to be relocated to the already purchased 15 hectare site in Palekelle, where each family would be given 10 perches of land. Many of the poor households, tired of their suppressed social mobility, willingly volunteered to relocate. 118 families have been identified to be relocated as soon as the bureaucratic procedures are completed. This relocation would have several impacts on the residents willing to move; it will disrupt their social dynamic and affect their sense of community safety. The relocation site is not close to the city and would affect employment opportunities for these residents, especially those dependant on the petty commodity sector in the city. This relocation was also politically contentious because 25% of the votes would be lost to another locality.

This scheme seems too radical and would likely fail for several reasons. First, the residents have not been consulted or involved in the planning process. Without community participation, the implementation of the scheme would likely fail. Second, this scheme is not supported by the Municipal Council, which makes the implementation difficult and complicated since the KMC are the landowners. The reason for the lack of support from the KMC is strictly political. The scheme is proposed by the national government party (PA) which is the opposition to the party supported by the KMC (UNP). Should the scheme be successful, the UNP would likely lose face, and hence votes. Also, the PA has more authority in the national hierarchy. Third, the financial aspects of the scheme have not been finalized. Each resident is expected to pay a significant amount, which is not affordable to most residents. This will likely encourage downward raiding and the poorest residents will lose their defacto right to the land. Fourth, the excessive congestion and the current settlement pattern has not been considered in this new scheme. There was inadequate surveying done prior to the planning of the scheme. In fact, there was no up-to-date map showing the distribution and location of units. The new scheme does not account for the multiple families per unit or the unauthorized units. Each housing unit in Mahaiyawa has usually more than one family residing in it. One family might agree to relocate and the other two in the same unit might not. The scheme would transform the horizontal congestion problem vertically. The congestion would increase, since the more affluent groups who can afford these units will not be denied access. This will further disintegrate the already fragile
social fabric of the community. The land sharing option could work if the planning of the scheme was done more critically, with consideration of the residents’ needs and their consultation.

Regardless of this grand scheme, units in Mahaiyawa were still being upgraded. The community has become immune to political promises, and ignores them. While conducting my research, there was some initial construction regarding this scheme. It seemed rather unorganized and slow. The initial construction for the walk-up apartments had very little impact on the current upgrading since the community has heard many such initiatives but nothing has materialized. Four families had been relocated within Mahaiyawa and provided with temporary shelter in order to facilitate the first phase of the project. Only one interviewee was concerned about investing in upgrading because of this new construction.

5.6 The other side of the road: Mahaiyawa MT

Mahaiyawa MT (Model Tenements) is separated from Mahaiyawa MC only by a road (see Map 5.1), but it provides a good example of the impact of provision of tenure on upgrading. The residents in Mahaiyawa MT received tenure in 1980, based on the 1978 amendment law that granted ownership to tenements paying less than Rs. 25 in rent. This was a directive initiated by the Minister of Housing, Mr. R. Premadasa, who later became the Prime Minister. The settlement provides an interesting contrast to Mahaiyawa MC. Walking through MT (Photo 5.3), one can see a noticeable difference in the cleanliness and general appearance as compared to its neighbour MC (Photo 5.4). There was no garbage to be seen, the drains were not clogged, and there were no common toilets or water standpipes. The houses were built with more sturdy materials, and they well consolidated, painted and individually serviced with water and toilets. MT had paved paths and an orderly form of housing as opposed to the haphazard arrangement in MC. Mahaiyawa MT suggests that provision of legal tenure, with the right socio-political climate, could lead to upgrading.
Photo 5.3 Streetscape of Mahaiyawa MT

Photo 5.4 Haphazard Settlement Pattern in Mahaiyawa MC
There were a few contributing factors that legitimized the tenure of the residents in Mahaiyawa MT. First, the land was owned by the national government, not the KMC, and hence was more easily obtained through a national policy. Second, the population living in this area was a more affluent class of Muslims, with good leadership and community organization. They had good advocacy and strong political backing. Third, the settlement was not too crowded and congested in 1980, and therefore could be divided among the residents. There were several disputes in resolving property boundaries but these were resolved in due course. The ownership provided access to funding, which led to improvements in shelter and infrastructure.

Would such a scheme improve the conditions in Mahaiyawa? Mahaiyawa MC does not meet the same criteria as MT. The Mahaiyawa Development and Community Relation Society’s request for ownership triggered by the provision of ownership to MT, received no response. This was probably due to the subsequent political turmoil that occurred during the insurrection later that year. Also, the land in Mahaiyawa was that of the KMC, and it considered the settlement as the labour quarters for its employees. Hence, it could not be regularized. After the communal riots in 1983, the population in Mahaiyawa increased, causing severe congestion. Mahaiyawa MC could not obtain ownership, as the MT section had, due to lack of sufficient organization and political clout, and also because the community was predominantly an ethnic minority.

5.7 Conclusion

In Mahaiyawa, ownership is somewhat important but upgrading is still taking place irrespective of legal tenure. Some units have 30-year leases with the KMC but this only ensures a sense of security and does not contribute in other ways to upgrading. Based on the dominance of unauthorized units in Mahaiyawa, there is a high prevalence of perceived security. This is caused by the provision of services, lack of eviction, the long residency period, political support and employment security. The upgrading of the infrastructure has been undertaken by the Municipal Council and at present, is not affected by the tenure situation. Provision of land tenure would be politically contentious and complicated due to the high density and limited land resources. Providing land tenure will not solve the housing problem, nor will it exclusively lead to slum upgrading.
The main issues facing the community include heavy congestion within each household unit and the shortage of urban infrastructure services.

Upgrading occurs after a sense of security is created, and is based on affordability rather than having legal ownership. Access to credit seems to be the key impediment to improvements. Upgrading of housing usually occurs via government-sponsored loans or through an external remittance from a family member. There are several other factors that influence upgrading in Mahaiyawa, including community participation, level of skills and availability of materials, ethnicity, politics and power dynamics, and institutional constraints. Due to land scarcity in the city, there is tremendous pressure for the commercial development of this land. This had expedited some political endeavors, which may be detrimental to the future of the community. The people of this community have dedicated their lives to the growth and development of the city and their inherent value should be acknowledged and their needs considered. Without any intervention, in-situ upgrading will continue to occur, and the growth and problems in Mahaiyawa will persist. It is therefore necessary to consider some form of upgrading initiative, which would maximize community participation. Through this analysis several of the impediments to upgrading have been highlighted, and these should form the basis for upgrading initiatives.
Toward the end of my research and after a long day of walking around in Mahaiyawa, I sat down on a ledge close to the community centre, facing the road and some open space. I was deep in thought and consumed by the sounds and happenings around me. I heard the laughter and screaming of children as they ran around playing, the blaring radios, the screaming women hitting and nagging their children. There were women sitting in front of their houses picking lice out of each other's hair. They were consumed in gossip and ignored their whining children. A little girl walked by, barely clothed, snot running down her nose, squealing yet no one would even bother comforting her. A women held a bucket over her son's head, poured water over him, and started to give him a good scrubbing. There was something about the lifestyle here that just fascinated and amazed me. It was very vibrant, social, and everyone was smiling and laughing. Yet, this happiness was a façade for their sad lives; drunken men, abused wives, sick children. I sat there absorbing all this being fascinated, amused and melancholic. A drunken man walked by, fell to the ground and just remained there. Everyone was laughing at him and the kids began hitting and teasing him. But I noticed the face of this wife, she was hurt and ashamed. People resumed what they were doing as if nothing had happened. Maybe that was their way of dealing with things, not to acknowledge it and just continue with routines. To live and hope for better but not to expect it. I felt a bit nostalgic but I also felt that this is their culture and way of life, which I may never understand, but should respect.

On my last day there, I walked the streets and the gullies of Mahaiyawa, went to the church at the top of the hill overlooking the settlement and took a deep breath. I was silent and was afraid that if I would say anything my emotions would overcome me. This community, its troubles, its celebrations, its life became a part of me. It taught me about struggle, hope, courage, sorrow and life. It is my hope that this study will make a difference!
CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

This chapter provides a brief overview of the research findings. The research questions are revisited and answered. The constraints regarding upgrading are highlighted and potential solutions are proposed. A discussion regarding upgrading is pursued. Finally, recommendations are provided for improving the conditions in Mahaiyawa.

6.1 Brief Overview

The increasing land values as well as the commercialization of the core of cities is threatening the livelihood and existence of the urban poor in informal settlements. These informal settlements, in cities are becoming more congested and are in dire need of upgrading. There are several factors that influence upgrading informal settlements. One important factor that influences upgrading is tenure security. Determining its impact can significantly influence the upgrading strategy. However, tenure security may neither be the most critical factor nor the only exclusive factor that influences upgrading. It is important to assess the various other factors that influence upgrading of informal settlements. Mahaiyawa is the largest and one of the oldest low-income settlements in Kandy, located on prime commercial land. The settlement is currently very congested, and the government is considering upgrading. Mahaiyawa provides an ideal case study, because it represents an extreme case in Kandy and upgrading is being considered. Therefore, assessing the influence of tenure security as well as other factors that influence upgrading would be beneficial.

6.2 Revisiting the Research Questions

To emphasize the key findings, this section summarizes the research questions from section 1.3.1.

Within Mahaiyawa, there was clear evidence of upgrading of housing. Upgrading was taking place through the self-help approach, where family members and neighbours assisted residents in making improvements to their units, or labour was hired. The types of improvements ranged from adding a small room, using more permanent materials to
replace temporary materials, or even constructing a new unit. There were several factors that influenced this spontaneous upgrading. Legal tenure did not influence upgrading too much; however, having strong perceived security was considered important for upgrading. Financial resources, which included access to credit, employment security, and saving capacity, were the greatest impediment to upgrading once a sense of security was established. The fact that the community was an ethnic minority influenced the resources and opportunities available for upgrading. The lack of community participation, and the lack of sense of community ownership and responsibility, also impeded upgrading. The level of skills was not a critical factor in upgrading since labour could be hired. The lack of institutional resources and coordination influenced the upgrading especially of infrastructure services. Politics played a significant role in upgrading as well as providing legitimacy for the unauthorized units. Power dynamics, in terms of leadership, impeded the development of the poorest groups. There was a proposed relocation and land-sharing plan for upgrading which was based on a political promise. The implementation of this plan is contentious and may not be ideal for the community.

Two forms of tenure exist within Mahaiyawa. The first is a 30-year leasehold provided by the KMC to 253 residents in line rooms. The second type of tenure, which is more dominant, is based on the perception of the risk of removal, commonly referred to in the literature, as defacto security. In Mahaiyawa, there were 374 units that had residents who had a perceived sense of security. Defacto security can be tenuous, variable and temporary within a community. Defacto security was instilled through no evictions, provision of identification cards which were misinterpreted as occupancy permits, provision of urban services, employment security, and a sense of community created through the extended residency period. The sense of perceived security was considered more important than legal ownership with regard to in-situ upgrading. Investment in upgrading occurred based on an informed decision or an expectation that the resources invested will not be destroyed. Such expectations and calculations are formed through the various factors mentioned, which lead to this sense of security. Once the household feels secure to upgrade, the other factors that influence upgrading come into play. In Mahaiyawa, access to hard cash was a critical factor affecting upgrading.
6.3 The Major Constraints to Upgrading

The current status in Mahaiyawa is unacceptable, since it affects the well being and livelihood of the residents. The inadequate basic amenities, the congestion, and the lack of resources are affecting the physical and mental health, and the social environment in Mahaiyawa. The residents in Mahaiyawa are very pessimistic and have no hope for positive change. Their opportunities for improving their lifestyles and living environments are limited. To increase their social mobility and progress it is essential to meet their basic needs of shelter and access to basic services such as water. The government has decided that some form of upgrading should take place. This would involve a relocation program and a land sharing option. This ‘future upgrading scheme’ as outlined in section 5.4.7 has been formulated based on a political directive. This scheme does not assess the needs of the community, or include community participation. Through the analysis, several constraints and dilemmas were highlighted that would need to be addressed with respect to any upgrading strategy. These are reflected upon and reexamined as a pre-text to the upgrading strategy and recommendations.

6.3.1 Congestion

The settlement has primarily grown through natural births and in-migration due to kinship ties. There are 4200 people occupying 627 units on 11 acres of land. There is severe congestion between the units and there is little land available for even social activities. The average occupancy per unit is 7; each unit has little or no ventilation. The infrastructure services are inadequate due to the increase in population. Whatever infrastructure services exist are rapidly deteriorating due to overuse and lack of maintenance. This congestion is directly impacting the health of the residents in Mahaiyawa. What can be done to mitigate the effects of this congestion?

The most difficult dilemma is to stop the residents from erecting unauthorized units and allowing their relatives to move into the settlement. This self help approach of upgrading, is difficult to regulate and police, and may not be a possible option from a legal or authoritative perspective due to the political support given to the illegal occupancy. Self-regulation of the community to limit growth can be created through a
sense of community ownership. Many residents are aware that the congestion contributes to most problems in the settlement. Nevertheless, they are not in the capacity to control this, due to the lack of coordination and community organization. With strong commitment from all residents it may be possible to reduce the number of new huts being established. The settlement cannot necessarily be contained unless there is regulation from both the KMC and the community itself. The relocation of some residents would ease congestion but it has to be ensured that once these residents move out, the emptied units are not reoccupied. This relocation has to offer attractive packages to residents and provide land with equal market value. The residents should not be coerced into moving out, but should willingly want to relocate. With the lack of land space, the only way to ease congestion within the units would be to upgrade vertically. This is a temporary solution to the current problem, but it is the option currently being used by the community.

6.3.2 Lack of Financial Resources

From an institutional perspective, there is a lack of financial resources for investing in improvements for both housing and infrastructure. Any upgrading strategy in Mahaiyawa would involve the users paying part, or most of the cost. Hence the needs of the users should be given more consideration, and any upgrading strategy should be based on the affordability of the users. What can be done to mitigate the financial constraints?

Occupancy permits could be provided to the residents. These could be honored by certain financial institutions, where the government (NHDA) can be used as a guarantor. In Botswana, settlements were given 'temporary occupancy permits' or 'certificates of rights' which provided security of tenure and were eligible for building material loans from the local authority (Mosha, 1996). The settlement could also establish a savings and credit union with the assistance of the NHDA and thus provide soft loans with better terms than the loans from the informal credit systems. Finally, requests for foreign aid could be made with special regard to infrastructure improvements.
6.3.3 Lack of Community Cohesion and Participation

As indicated throughout the analysis, the community is highly polarized internally, due to politics. The community lacks good leadership, participation, ownership and responsibility. This impedes upgrading initiatives and also makes it difficult for any possible interventions. For instance, mutual aid cannot be relied upon, to fix or install new services since the community cannot cooperate. Moreover, the lack of community cohesion also makes it difficult for the community to advocate their needs and be involved in the decision making process. There is serious need for capacity building and community empowerment. What can be done to build the community and increase participation?

In previous years, there was a strong sense of community and there were organizations like the Mahaiyawa Rural Development Society that advocated the needs of the residents. These groups were successful due to the lack of political involvement. The biased leadership and politics has torn the community. The literature as well as the common trend in development, especially with regard to upgrading, is to exclude politics from community development objectives. This political impediments in Mahaiyawa can be used to benefit the community. The case in Oukaise, South Africa demonstrated that managing politics could work to the benefit of a community. The leadership in the community was able to use political strategies and tactics to obtain a wide range of resources from water supply to schools and clinics (Pikholz, 1997). Therefore, good leadership is critical. Mahaiyawa lacks this. During my research, there seemed to be certain people that I encountered who had good ideas, and enthusiasm for change. Furthermore, there is potential for the unemployed youth, to be trained and organized to build the community and carry out an upgrading strategy.

The successful CAP methodology and the concepts behind the CDCs from the MHP can be used enhance community capacity and involve the community in their own development. There is potential for NGOs such as the Institute for Social Development, Upcountry Participatory Development Centre and the Centre for Development Alternatives to be involved in capacity building. However, the political affiliation of these NGOs, needs to be considered. The ideal situation would be to employ a
professional facilitator that has no political associations or to seek funding and help from an international NGO such as Habitat for Humanity, International.

6.3.4 Lack of Institutional Coordination

Mahaiyawa presents a complicated situation with regard to development and upgrading. The KMC is the landowner, the NHDA is responsible for housing the poor, and the UDA is responsible for the planning and development of upgrading initiatives. This distributed authority makes it difficult to plan and implement any major upgrading initiative. The KMC has taken over the responsibilities of infrastructure provision and maintenance but provides insufficient services due to lack of community support and financial constraints. The upgrading of housing still remains a major concern. Since the KMC is the landowner, and the residents in the Mahaiyawa are primarily employees of the KMC, the KMC should have the ultimate decision and initiative for upgrading. The KMC should either appoint a coordinating committee to address the specific needs of Mahaiyawa, or it should hand over the responsibility, including the ownership, to the NHDA.

6.3.5 Tenure Security

Based on the analysis, perceived security is more critical for upgrading, than leasehold tenure or ownership. The provision of legal titles will ensure more access to credit. However, this will not guarantee that the residents will improve their dwelling since they may sell their units and land. The status quo is not acceptable due to the excessive congestion and its impacts on the health and well being of the residents. Therefore some form of regularization which has the middle ground between the two extremes (ownership or maintaining the status quo) should be provided.

Occupancy permit officially registers the occupants, and provides opportunities for credit, thus leading to upgrading. The transfer and transaction of occupancy permits is dependant on government policy. There has to be some efficient surveying and registration for such an endeavor to materialize. Considering the horrendous congestion within the settlement and within each unit, this would be very complicated and would lead to many conflicts. Furthermore, the provision of occupancy permits will not address the infrastructure needs, unless a sense of community is created.
Another option that can be considered is providing tenure in ‘blocks’. This form of tenure is effective especially in highly dense settlements, where provision of individual titles would lead to severe conflict. The grouping of people offers new opportunities for resource generation and bargaining power (Baross, 1983). The provision of tenure in communal blocks would create opportunities for credit, enhance upgrading through mutual aid, prevent downward raiding, possibly accommodate land readjustment, and prevent new migrants from settling.

6.4 Strategy for Upgrading

There is no single approach to upgrading. Settlement upgrading can involve various components ranging from improvements to infrastructure, to construction of built units. Within Mahaiyawa, it is important to consider the constraints from the preceding section when determining the upgrading strategy. Critical to any upgrading strategy is the involvement of the community not only in the implementation but also in the design and planning of the strategy. A participatory approach would be essential for any development activity, which should involve all members of the community. It is also important to ensure that each component of upgrading follows certain guiding principles. McAuslan (1992) suggests some principles that would guide any program in improving and upgrading its institutional and legal arrangements. These include equity, flexibility, environmental consciousness, participation, simplicity, efficiency and administrative fairness. These principles could be applied to for instance, infrastructure provision. The infrastructure services should be flexible, to accommodate change and growth, and should be designed to minimize damage to the environment. The community should be involved when installing the infrastructure and they should understand how it works, so as to ensure future maintenance and longevity. The technology used in the infrastructure should be affordable and economically efficient; it should potentially recover its own costs. Finally, the infrastructure needs to be monitored and well administered.

In Mahaiyawa, spontaneous upgrading is already occurring. This upgrading is based on the self-help approach. My research indicates that the construction is carried out using permanent materials and is occurring vertically due to the lack of space. Since there is a lack of governmental financial resources, the existing upgrading initiatives
should be capitalized upon to improve the rest of the settlement. Basically, this would encompass incorporating methods from the informal sector into the formal sector. Resolving the constraints of access to credit, providing skills and training in construction, and providing some legitimacy, would encourage the current upgrading initiatives. Provision of communal tenure via blocks, or clusters of units, would allow the residents to receive loans and thus improve housing and infrastructure conditions. There is also an imperative need for community capacity building and empowerment. Several participatory approaches have been used in upgrading of other low-income settlements in Kandy, and the MHP. These have been successful and should be drawn upon. Establishing a sense of community ownership would help maintain the infrastructure as well as the physical environment of the community. An arrangement by the KMC can be made for a land sharing option for the road-front property. This land sharing option has worked in some low-income settlements in Colombo, and even in Kandy (Senanayake, 1991). This can help finance the urgent infrastructure needs of the community. The infrastructure should be upgraded incrementally and should maximize community participation. Finally, such an upgrading initiative should be managed or implemented through a non-politically affiliated NGO or an International organization. This would reduce the bureaucracy, as well as establish an effective communication with the various government institutions and the community.

6.5 Recommendations

Based on my experiences and research in Mahaiyawa, I propose the following recommendations. These recommendations are not solutions to the problems. Rather, they are suggestions for measures that can be taken to mitigate the current problems in Mahaiyawa. The recommendations will consider the implications of tenure security on upgrading and the other factors that influence upgrading in Mahaiyawa.

- Before any upgrading initiatives are implemented or even conceived, it is fundamental to improve the community dynamic, and establish a sense of community, and ownership in Mahaiyawa. Capacity building and empowerment can be implemented through NGOs such the Institute for Social Development, Upcountry Participatory Development Centre and the Centre for Development Alternatives.
Also, the MHP had a participatory approach to upgrading and empowered the community through the CAP methodology; this can also be used in Mahaiyawa. There are many unemployed youth, who can be trained as leaders and help improve the community. Any upgrading strategy should be formulated with consultation of the community. This will ensure a more sustainable initiative and will ease maintenance and implementation.

- The current situation in Mahaiyawa is affecting the health of the community. Health of the residents will continue to deteriorate if nothing is done. Therefore, a strategy has to be developed to reduce congestion. The relocation option is a short-term solution that would be appropriate to ease the current congestion. It needs to be carried out strategically and with consent of the residents. The residents to be relocated should be offered property equal to the market value of the land they are occupying, and assistance in the form of soft loans and infrastructure services.

- The defacto security is adequate to encourage upgrading. However, the various constraints especially access to credit needs to be addressed. The leasehold tenure in Mahaiyawa contributes to a sense of security but does not provide access to credit and hence do not directly contribute to upgrading. Provision of titles is contentious, since it allows the land to be sold on the market and will therefore not necessarily lead to upgrading. Any tenure system established should be kept simple and should be clearly understood by the residents (Dale, 1997). I recommend that the tenure be provided in blocks, where a group of residents can be given communal ownership of the land. This would be highly appropriate in a high-density settlement like Mahaiyawa since dividing land would be disputatious. It would allow the residents to improve their units via mutual aid, and also accommodate land-pooling programs. Such ownership encourages cooperation among neighbours, is more conducive to community building and thus contributes toward maintaining the environment and infrastructure services. The communal ownership would allow for larger capital to be borrowed which can be used toward housing, as well as infrastructure improvements. Finally, this collective tenure arrangement would prevent new residents (relatives) from moving into the settlement.
There is a need for more financial resources in order to purchase materials and hire labour for upgrading of housing. The NHDA and the KMC are already providing loans for upgrading but these are usually insufficient. A more proactive strategy would be to set up a vocational center that teaches construction skills as well as manufacture or purchase materials for construction at cheaper rates. This can address housing problems in Mahaiyawa and other low-income areas, provide employment, as well as reduce the cost of upgrading.

The road-front property should be developed for commercial purposes, as this would help finance the deteriorated and inadequate infrastructure services.

The infrastructure needs immediate attention. Upgrading should be carried out using community participation, which would ensure ownership, maintenance and longevity. An incremental approach should be considered, so as to be able to build on and develop existing capacities (Singh and Steinberg, 1996). Environmental issues such as stabilizing slopes also need to be considered.

A non-political NGO, or more preferably, an international aid organization, which has neither a political nor an ethnic bias, should be called upon to assist in upgrading the settlement. This external organization would be more effective in implementation since it would reduce the scope for political patronage and extortion. The external organization would also be able to coordinate with the three government agencies and the community, and remain impartial.

There is already in-situ upgrading based occurring in Mahaiyawa which is based on the self-help approach. This informal upgrading should be incorporated into the formal systems. The methodologies and principles used in the MHP would be ideal and very beneficial if applied to upgrading in Mahaiyawa. The government should provide a supportive role or enabling strategies to the community, and set policies to accommodate the needs of the community.

There needs to be better record and data keeping, and surveying of the settlement of Mahaiyawa. This would encourage efficiency, in planning and forecasting. Should any upgrading take place, a needs assessment would be essential, and the affordability of the residents is important.
6.6 Conclusion

Mahaiyawa is one of the pioneering settlements of the city and has grown mainly through natural births and kinship ties. The residents have lived in Mahaiyawa for up to five generations and served in maintaining and cleaning the city, yet they do not have any ownership or rights to their land or housing. The status quo in Mahaiyawa is unacceptable since the lives of thousands of people are affected by the unsanitary and congested living conditions. The community has been divided and distraught by politics and has no hope of a positive future. There is a fundamental need for some form of upgrading especially to address the infrastructure and housing problems affecting the health of the community. Tenure security in the form of perceived security is an important factor that influences upgrading in Mahaiyawa. However, with regard to upgrading, access to financial resources seems to take precedence over legal tenure. Employment security, ethnicity, construction skills, political affiliations and institutional resources contribute to upgrading. All upgrading initiatives in Mahaiyawa should be based on a participatory approach, address the needs of the community, increase opportunities for access to credit, provide support in construction and acquisition of materials, and legitimize occupancy. The value of this community to the City of Kandy needs to be recognized and respected and some form of upgrading initiative is urgent.
REFERENCES


Community Medical Officer of Health (CMOH), 1988. Reports at the Kandy Municipal Council files.


Appendix 1: Observation Guide

Physical Conditions to be observed:

Housing:
- type of materials houses are built of
- lot sizes
- extensions or added portions on houses
- arrangement (physical location)

Infrastructure:
- types of paths or roads
- transportation service
- water supply
- solid waste management systems
- sewage and waste water systems
- electricity/fuel wood
- public toilets
- communication technology

Other:
- vegetable or food gardens
- animals kept and their pens
- vegetation

Socio-Cultural Factors to be observed:

Specific Activities, such as community assemblies and municipal council meetings:
- Leadership – formal and natural
- Identifiable interest groups and their roles
- Formal and informal power relations, especially in relation to gender, status, ethnicity, political interest, age.
- Who runs the household, who are the decision-makers? What is the decision making process?
- What issues gain most interest and discussion and what issues gain least discussion?
- Does everyone participate? Is there good mediation or is the meeting dominated by one or two individuals?
- What is the atmosphere like? Is there tension

Festivals, religious rituals, cultural events:
- What is the significance?
- Observing the community dynamics – Who are the leaders, who is important, what is respectful in terms of property or ritual
Appendix 2: General Interview Guide

For Local Government Officials
1. Can you briefly describe the land tenure system in Sri Lanka. Describe the current policies and problem. What is legal or illegal in terms of land occupation? How are the policies enforced or changed?
2. Can you give a historical background on the formation of the slum community of Mahaiyawa?
3. What has been the growth of Mahaiyawa?
4. What kinds of services are provided to this community?
5. What upgrading or consolidation efforts have taken place in Mahaiyawa?
6. What are the current land tenure systems in Mahaiyawa? Does anyone have tenure or partial tenure?
7. Can you explain a little about the community dynamics in Mahaiyawa. Who are the leaders, how do the people interact, how does the community function?
8. To your knowledge are there any informal land negotiations or other forms of land transfer, slum landlordism etc.?
9. What are the future plans of this settlement?
10. Do you think that land tenure has any relationship to slum upgrading? Elaborate.
11. What is the perception of the community towards government (municipality)?

For Community Leader and Community Development Workers
1. Can you give me a historical account of the community. How and when it started and how has it grown since?
2. Tell me a little about the community dynamic. Who are the leaders, what are the rules? Is there any tension between various groups?
3. Are there any organizations such as NGOs or community groups that carry out any slum upgrading?
4. Describe the tenure systems in the community?
5. How is land acquired or occupied?
6. How much has the community grown and is it still growing? Where do the people come from and why do they come?
7. What is required to consolidate ones dwelling or improve housing.
8. How grounded is the community? How secure does it feel?
9. What is the government’s role in the provision of services? Do the people have faith in the government?
For Community Residents

1. Tell me a little about yourself. What do you do?
2. Where do you work, how far is it? How long have you worked there?
3. How long have you lived here?
4. Why did you move here?
5. Do you pay rent for your lot or house or do you lease it? How do you perceive your land ownership?
6. What is your sense of security of the land your home is on?
7. Do you feel you have adequate services in this settlement? If not, what is lacking?
8. Are you aware of any community efforts or are you part of any efforts that improve services (infrastructure) within the community?
9. What do you need in order to upgrade your dwelling?

For Academics and Previous Researchers

1. What kind of studies have you carried out in Mahaiyawa and do any of them relate to land tenure or slum upgrading?
2. Can you briefly describe the land tenure system in Sri Lanka. Describe the current policies and programs. What is legal and illegal in terms of land occupancy? How are policies enforced or changed?
3. Can you give a historical background on the formation of the slum community of Mahaiyawa?
4. How has it changed recently? How has it grown?
5. What kind of services to your knowledge is provided in Mahaiyawa and by whom?
6. What slum upgrading or consolidation efforts have taken place in Mahaiyawa?
7. Can you explain a little, about the community dynamics in Mahaiyawa? Who are the leaders, how do the people interact, how does the community function?
8. Can you describe the different forms of tenure evident in Mahaiyawa? Do you have any knowledge of land negotiations or procedures of the land trade within the settlement.
9. What do you think influences slum upgrading particularly in Mahaiyawa?
10. What are the benefits of land tenure?
11. Do you think land tenure security has any relationship with slum upgrading? Elaborate.
12. Do you think provision of land tenure will lead to self upgrading of the community or this is unnecessary and other measures can be taken?
Appendix 3: Questionnaire

1. What is your occupation? __________ Where do you work? __________

2. How long have you been living in Mahaiyawa? _______ Years

3. How many people are living in your house? __________

4. How many rooms are there in your home including the kitchen? __________

5. Does your home have toilet, bathroom or water facilities? ___Yes ___No

6. What facilities/services do you get from the Municipal Council? __________

7. Is your house ___leased or ___unauthorized?

8. If your house is unauthorized, would you like to upgrade your house? ___Yes ___No

9. Do you pay rent for your house? ___Yes ___No
   If Yes, Whom do you pay this to? ___The Municipal Council
   ___To individuals
   ___No rents is paid

10. What building materials are used to build your house?

    **Roof**
    ___Iron/Steel Sheets
    ___Asbestos
    ___Tile

    **Floor**
    ___Mud/earth
    ___Cement

    **Walls**
    ___Brick
    ___Wood

11. Have you ever renovated or upgraded your house? ___Yes ___No

12. What do you think you need to upgrade your house? ____________________

13. Have you ever been evicted or threatened of an eviction? ___Evicted
    ___Threatened
    ___Neither

14. Additional comments, questions or concerns? __________________________
Appendix 4: Summary of Community Interviews

The eighteen interviewees were selected on the basis of physical characteristics of their units such as location, type of housing material, levels of upgrading, and length of residency.

**Employment**
- Every household interviewed had some affiliation with the KMC. At least one family member had previous or current employment with the KMC. The residents interviewed worked for the Health Department, the Works Department, in the Conservancy sector or as general labourers for the KMC. There were some residents who were pensioners and relied on their pension or children for support.
- Some households had a family member working in the Middle East who supplemented or supported their families.
- There were also some residents who were self-employed in Mahaiyawa such as the cobblers and the convenience store owners.

**Residency period in Mahaiyawa**
- The residency period was a criterion for selecting interview candidates. The residency period ranged from the shortest residency period of 2 years to a maximum of 135 years. Most of the residents interviewed, had lived in Mahaiyawa for a considerable amount of time (70 years).

**Housing**
- Building materials used in construction was a criterion for selecting interview candidates. Materials ranged from the cheapest and least permanent materials of mud walls, mud floors and tin roofs to better consolidated houses made of asbestos roofs, brick walls and cement floors. Based on the interviews and observations the most prevalent materials used in housing were brick walls and cement floors and tin roofs. Asbestos or fiberglass sheets were becoming more popular.
- Based on the interviews the number of occupants ranged from 3 to 15 with an average of 7 occupants per unit.
- The rooms per unit ranged from 1 to 5 with the average of 2 rooms per unit.
- The interviewees felt that the settlement was too congested and the government should maintain and provide housing.
- Finally, many interviewees complained of the unstable slopes and the loss and damage of housing due to the heavy rain.
Infrastructure and Services

- Very few households had their own latrines and water connection. A majority of the residents used common amenities.
- Most households had their own private electricity connections. A few had no electricity or illegally tapped it from the main lines.
- The KMC was responsible for maintaining the infrastructure such as drains, toilets and water standpipes. Hired staff of the KMC cleaned the drains and toilets. Also the KMC emptied the septic tanks and provided garbage collection services.
- The interviewees felt that the garbage collection and cleaning of the drains and toilets was inadequate. They felt there should be more programs regarding better sanitation.
- The interviewees also felt that they lacked a playground and good health facilities.

Tenure Security

- Some residents had a 30 years lease and paid Rs. 120 per annum. Others occupied an unauthorized unit.
- There were a few cases where the residents claimed they paid a monthly rent to the KMC and did not have a lease. According to the KMC no such rent was received.
- There were identification cards distributed to unauthorized units. The NHDA used a green card for identification of an unauthorized unit. The UDA distributed pink cards and the Municipal Council used yellow cards. The residents perceived these cards as some form of legitimacy. There was a case where a household purchased one of these cards from another resident.
- There were no cases of evictions and only one interviewee had received a threat of an eviction and obligingly relocated his unit within the same settlement.
- The Government Agent had asked two interviewees if they wanted to be relocated to another site (Palekelle).
- There were a few households willing to relocate if an alternate site was available.

Slum Upgrading

- Most residents had carried out some of upgrading and felt safe to upgrade regardless of ownership. A few residents felt safe to upgrade because other residents were upgrading. Also it was felt that upgrading was necessary to live more comfortably.
- Hired labour or self-help was mostly used in upgrading.
- Most interviewees considered money as most important for upgrading. Building materials such as roofing were also considered important to upgrading. Only two interviewees considered ownership of property important for upgrading. There were a few residents who felt that political support would be necessary for upgrading. One interviewee was apprehensive about upgrading because of the new proposed plan of walk-up apartments. Finally, one interview considered labour important for upgrading.
Appendix 5: Summary of Questionnaire

This methodology was used to confirm findings from the observations and community interviews. The questionnaire (Appendix 3) was translated and filled out by participants from two cricket teams, a youth group, a women’s group and members from the Mahaiyawa Rural Development Society. The survey was conducted during an information session/participatory workshop with the aid of a translator. There were 23 respondents and not all questions were answered by each respondent.

1. **Occupations:**

<table>
<thead>
<tr>
<th></th>
<th>Place of Employment/Work:</th>
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<tbody>
<tr>
<td>Self-employed</td>
<td>Mahaiyawa</td>
</tr>
<tr>
<td>Housewife</td>
<td>KMC</td>
</tr>
<tr>
<td>Retired Pensioner</td>
<td>Hotel Suise</td>
</tr>
<tr>
<td>Waiter</td>
<td>KMC</td>
</tr>
<tr>
<td>Laborer</td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>16</td>
</tr>
</tbody>
</table>

   (some of these were students or unemployed individuals)

2. **Length of time the respondent’s family has lived in Mahaiyawa**

   There was a range from a minimum of 17 years to a maximum of over 100 years. The average length occupancy was 33 years. It should be noted that this cohort was a more recent generation and the residency period would be underestimated.

3. **Number of occupants per unit**

   There was a range from 2 to 10 occupants and the average number of occupants per unit was 6.

4. **Number of rooms in house including kitchen**

   This ranged from 1 to 5. The average number of rooms including the kitchen was 2.

5. **Houses with toilet, bathroom and water facilities**

   Only 3 houses out of 23 had these facilities. The rest used the communal facilities.

6. **Services provided by the Municipal Council**

   Health services, water supply, land to put up housing unit, power supply, library, garbage disposal and latrines.

7. **Leased or unauthorized houses**

   21 houses were leased and 2 were unauthorized

8. **If the respondents house was unauthorized would he/she want to upgrade or improve his/her dwelling**

<p>| |</p>
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<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>No response</td>
</tr>
</tbody>
</table>
9. Methods of payment for units:
   To Municipal Council 19
   To individuals 0
   No rents are paid 2
   No responses 2

10. Building Materials for Houses:
    | Roofs       | Floor:    | Walls:     |
    |            |           |           |
    | Iron/Steel Sheets 12 | Mud/Earth 5 | Mud/Earth 4 |
    | Asbestos     4      | Cement    18 | Brick     16 |
    | Tiles        7      |           | Wood      3 |

11. Housing units upgraded or renovated:
    Yes 14
    No 8
    No response 1

12. What is needed to upgrade one's unit?
The most common responses were money (10) and permission from the Municipal Council (10). Ownership of land (3) and more space (3) were also suggested.

13. Evictions and threats for evictions
    Threatened 13
    Evicted 0
    Neither 10

14. Additional Comments
The respondents complained about the following issues:
- Excessive congestion
- Lack of adequate toilet and bathroom facilities. Facilities need to be cleaned
- Lack of space for building units, need for more land elsewhere
- Improvement of health services
- Lack of assistance to upgrade; governments should assist in upgrading
Appendix 6: Key Informant Interviews

Twenty-two key informant interviews were conducted based on the interview questions listed in Appendix 2. These key informant interviews have been divided into the following three categories and the key points have been summarized thematically.

1. Academic Perspectives
These interviews were conducted to solicit ideas regarding slum upgrading and tenure security from various academics who have had some experience in working with low income communities as well as previous researchers who have conducted studies in Mahaiyawa.

Community Dynamics and Community Groups
- Community is divided and highly polarized.
- The community is looked down upon due occupation (cleaners) and are considered the untouchables or the lower caste.
- Over the years, there has been mixing of the castes through marriage.
- The educated people tend to leave the community.
- The community groups, youth groups and sport teams are self-interested or politically affiliated.

Politics and Power
- Tamils had no civil rights till 1988 and they got no pensions and were deprived of benefits.
- Mahaiyawa consists of over 1300 voters and becomes a concentrated area for political mobility. The politicians provide favors to its supporters by supporting their illegitimate stay.
- The UNP has been in power for 17 years (1977-1994) and has many supporters from Mahaiyawa. The UNP had an unwritten but stated policy of no eviction.

Tenure Perspectives
- Most academics believed that tenure security influences slum upgrading. Tenure security is critical because it provides a sense of identity and provides peace of mind.
- Defacto tenure security would lead to upgrading in non-polarized situations. However in Mahaiyawa, there is too much contention and polarization and the perceived security is unstable and impedes consolidation

What is needed for Slum Improvement/Upgrading?
- The general consensus was that provision of tenure and ownership would lead to upgrading. However other factors also need to be considered when upgrading.
- Access to credit or finance was considered important for upgrading.
- A needs assessment of the community is necessary, as well as community participation.
- Some interviewees suggested that upgrading should have certain standards so a to maintain a good level of health.
• The community should be provided with resources, training and support.

Comments on Relocation and Proposed Upgrading Plan
• Need for community participation and consent.
• A more critical assessment is required of the settlement and the needs of the community.
• Similar schemes have failed in Colombo.

Suggested Interventions for Improving Current Situation
• The community is polarized. There needs to be more community building and integration, empowerment and egalitarian participation.
• Transparent process which can be carried out by an external organization (International NGO) which has no political affiliation or ethnic bias.
• Relocation packages that would encompass land of equal values and provide soft loans for upgrading.

2. Perspectives from Community Leaders and Community Development Workers
These interviews were conducted with residents who had played or are playing an active role in the community. These interviews covered a wide range of perspectives from Temple society leaders to Community workers. The focus of these interviews was to solicit the community dynamic as well as the hierarchical structure within the community.

History and Growth of Mahaiyawa
• The people were brought from India to work for the Municipal Council between the 1850 and 1870. Some of the people in Mahaiyawa were brought as drummers for the King and were later employed by the MC.
• In 1997, the temple celebrated its 150th anniversary.
• Mahaiyawa has primarily grown through natural increase (people born over the years). There was a slight increase in population caused by the insurrection in 1983. Also the installation of infrastructure is believed to have caused an increase in population.

Community Dynamics
• No problems regarding ethnicity within the community and it represents a safe place for the Tamils. Government does not seem responsive to the problems of the community since they are an ethnic minority.
• Community lacks initiative and unity. There are a lot of internal conflicts mostly caused by politics.
• Some tension between the legal occupants who pay for services and the illegal occupants who do not pay for the same services.

Problems in Mahaiyawa
• Poor sanitation and lack of adequate facilities such as toilets and water supply (intermittent). Health problems related to poor sanitation such as bowel diseases.
• Landslides
• Lack of adequate housing and too much congestion.
• Sale and use of illicit drugs and alcohol.
• Early marriages.
• Lack of adequate facilities and services at the school (science lab, books, teachers).
• The MC was resented for not taking care of its labourers.

Power and Politics
• Political factions divide the community. A lot of the leadership in the community is politically affiliated with the most dominant group being affiliated with the UNP. The dominant leadership within the community has familial relations. Basically, a hierarchy of one family dominates the community.
• A household with links to the dominant political group or leaders would feel safe to upgrade but one without any connections would not feel secure enough to upgrade.
• The MC has the right to remove unauthorized houses but due to political influence of the leaders and ministers, they have not done so. This negligence has led to the congestion.
• The government was not trusted and resented. Help only came to the residents at the time of an election.

Tenure
• Provision of legal title will not solve the problems because there is too much congestion. If tenure is provided the people will sell their land and invade some other land.
• The 30-year leases were provided because many residents were claiming ownership and to deal with this contentious issue, a system of leasehold tenure was introduced.
• Residents are provided with cards from the NHDA, the UDA and the MC. Those with green cards from the NHDA claimed that they had permission to upgrade. Some residents obtained permission to improve their units from the NHDA even though they are aware that the KMC owns the land.
• Some residents are occupying land in Mahaiyawa for the economic benefits in case it gets regularized with tenure. On the other hand, some people own land outside of Mahaiyawa in case they do get evicted.
• Some residents are willing to relocate to another area provided they are well compensated and provided with land ownership and good services.
• The residents have been told of several housing schemes but nothing has materialized. The new proposed scheme of walk-up apartments is unaffordable.
• The national government and not the Municipal Council owned the land in the MT section. The ownership was transferred to MT residents under the national policy in 1980.

What is needed for Slum Improvement/Upgrading?
• Most interviewees thought that ownership was most critical for slum upgrading.
• Hard cash was also considered second in importance.
• Construction skills.
• It was also suggested that built housing be provided.
• A peaceful environment was also perceived as important for slum upgrading.
• Relocation of some residents and assistance with planning individual units for the remainder.
• Upgrading currently takes place because the residents have secure employment with the MC and also there have been no evictions.

3. Official Perspectives
These interviews were conducted with several government officials from the Municipal Council, UDA and NHDA. The aim was to solicit the responsibilities and future plans for Mahaiyawa. Also these interviews were conducted to gain insight into the bureaucratic procedures as well as understanding the institutional framework.

Services provided by the Municipal Council
• Construction and maintenance of drains, standpipes and toilets (UBSP).
• Garbage collection, cleaning of toilets, emptying of septic tanks.
• Repairs and maintenance to roads, community center, pre-school and library
• Building of retaining walls to prevent soil erosion.
• Health education and family planning. A maternal childcare clinic is provided
• There was a lack of funds to carry out upgrading especially for the unauthorized settlers (a majority of the population) and therefore there was no intention of increasing services. The MC would continue to try and repair and maintain the already deteriorated services.

Problems in Mahaiyawa.
• The Municipal Council quarters were built in the 1920s for its employees. Most residents have some affiliation based on current or previous employment with the KMC. Mahaiyawa is supposed to provide housing to its current employees. However, due to the services provided, the social safety network and the close proximity to the city center the previous employees have not moved out. This contributes to the congestion, which has several implications. Firstly, the excessive congestion is not good for the physical health and mental well being of the community. Secondly, it is difficult to install and repair infrastructure due to the lack of space and proximity of housing units. For instance, some houses are built over drains and if these get blocked, it is difficult to clear. Thirdly, the homes are so congested that delivering of babies at home is now prohibited.
• There is a serious lack of community responsibility, ownership and cooperation. This makes it difficult to carry out repairs to infrastructure if people do not cooperate. Also when garbage pits were to be built for the people, many residents complained that they did not want these near their homes. Yet heaps of garbage would be sitting outside their homes.
• Growth of unauthorized houses is highly politically and cannot be prevented.
• Alcohol and drug problems are prevalent.
• High drop out rates from school and early marriages.
• High unemployment for youth.
Power and Politics

- The leadership in Mahaiyawa is politically affiliated. For instance, the temple president is also the trade union leader. Also, the leaders are the more prominent and elite in the community and profit through providing informal finance to the community.
- Due to political influence, it is difficult to regulate or evict illegal settlers.
- There are limited financial resources in the government institutions and hence the low-income communities usually get ignored.
- The ethnic conflict in Sri Lanka is an undercurrent that prevents the release of land to this community consisting of an ethnic minority.
- Ownership was not vested upon the people because government policy was not to dispose off land. Permission needed to be granted from the President. However, there was an unwritten but stated policy of no eviction by the UNP for 17 years.
- The proposed upgrading scheme of walk-up apartments was drawn up based on political will. The politician behind the new upgrading scheme is the current MP for Kandy district and the proposed scheme is probably a ploy to maintain his political position in the 2000 election.
- Politics plays a significant role in upgrading initiatives. Any successful scheme would likely bring more support to a political party. The proposed apartment scheme is from the PA; the relocation of 118 units is from the CWC. These two political groups are the opposition to the UNP, which is the political group of the KMC. Hence, the KMC is not supportive and is opposed to the initiatives of the other two groups. Also, the PA and CWC have more hierarchical authority.
- Relocation of residents is very controversial since 25% of the votes would be lost to another locality.

Tenure

- Tenure was provided to the employees of the KMC in 1987. This was only given to the line room occupants even though some people living in the unauthorized huts were employees of the Municipal Council. One of the reasons for providing tenure was to generate revenue, which would be used toward infrastructure. Rs 120 a year was deducted from salaries of employees. Also, leases were provided so that individual households could qualify for basic amenities in their own units.
- Provision of tenure has positive and negative impacts. The positive impact for providing tenure is that it would potentially improve housing. The negative effect of providing tenure is that it would give opportunities for the people to sell their land and relocate. It was suggested that tenure be provided with stipulations on selling land.

Slum Improvement/Upgrading

- Most officials felt that legal tenure was related to upgrading. However, Mahaiyawa was too congested to provide tenure. Provision of tenure would not lead to upgrading.
- Financial resources (access to credit and a stable income) and skill levels or technical assistance were other important aspects that needed to be considered for slum upgrading.
The lease stated that repair and maintenance of the units was the responsibility of the MC and yet the MC perceived that it was the householder's responsibility to repair and maintain their housing unit. Hence most of the upgrading efforts focused on infrastructure improvement. The line rooms have not been repaired since they have built from the early part of the century.

There was a perception that built housing and infrastructure provided to the people would be ideal for Mahaiyawa and this would solve the problems of poor sanitation. However there was no mention of how this would be financially possible.

The low-income areas are identified as special project areas and regulation for these areas is relaxed and hence standards are not implicated. According to the UDA, the minimum plot size in low-income areas should be 6 perches per unit but in Mahaiyawa it is around 2 perches per unit.

Loans were provided to KMC employees who had worked for 3 or more years at the MC.

118 families have been identified and have consented to be relocated to a 15ha site in Palekelle. Serviced sites and tenure will be provided to these residents and also loans will be provided so that the people can establish their dwelling. Upon leaving Mahaiyawa, each family would destroy their unit. This scheme was in the process of being approved. However a major complication was overlooked. In Mahaiyawa, each unit consists of more than one family. In any unit, one family might agree to relocate and another may not. Such a scheme would disrupt the social dynamic of the community and affect the community safety. The relocation site is not in close proximity to the city and would affect employment opportunities, especially for the residents' dependant on the informal sector.

The walk-up apartment scheme has failed in Maligawa, Colombo. A suggestion was to help residents upgrade their own units vertically in blocks of a few houses instead of the apartment scheme.

According to the NHDA, the possession of a green NHDA card does not guarantee that the household will receive an apartment should the housing scheme proceed. However the people's perception is the contrary.