Homeowners’ Architectural Responses to Crime in Dar Es Salaam

Its impacts and implications to urban architecture, urban design and urban management

LUDIGIJA BONIFACE BULAMILE

KTH 2009

Doctoral Thesis in Built Environment Analysis
Stockholm, Sweden 2009
Ludigija Boniface Bulamile

HOMEOWNERS’ ARCHITECTURAL RESPONSES TO CRIME IN DAR ES SALAAM.
Its impacts and implications to urban architecture, urban design and urban management

This research project was supported by the Swedish International Development Cooperation Agency (Sida) and Ardhi University in Dar es Salaam.
Dedicated to:

Delilah, who encouraged, supported and kept the family together

and

Erick, Esther and Jackson who endured my absence for the four years.

All prayed for me before the Lord for the success of the study.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF FIGURES</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>VIII</td>
</tr>
<tr>
<td>ACRONYMS</td>
<td>VIII</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>X</td>
</tr>
<tr>
<td>PREFACE</td>
<td>XI</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>XIII</td>
</tr>
</tbody>
</table>

## PART I: THE RESEARCH ISSUE, CONCEPTS AND THEORIES, RESEARCH METHODOLOGY AND DESIGN

### ONE

**RESEARCH ISSUE**

1.1 Urban safety and security  
1.2 Urban crimes and urban security  
1.3 Problem Statement  
1.4 Research aim and objectives  
1.5 Research questions  
1.6 Delimitation of the study  
1.7 Research Relevance  
1.8 Thesis Structure

### TWO

**SITUATING THE STUDY**

2.1 Dar es Salaam  
2.3 Planned Public Housing  
2.5 Land Delivery System  
2.6 Urbanization of Dar es Salaam  
2.7 Crimes in Dar es Salaam  
2.8 Explaining the of Crime Increase  
2.9 Crime Prevention Strategies  
2.9.1 Urban order and crime prevention (1919-1945)  
2.9.2 Crime prevention (1945-1961)  
2.9.3 Prevention of crime after independence  
2.9.4 The Sungusungu phenomenon  
2.9.5 Dar es Salaam Safer Cities Project  
2.9.6 Safer cities and Sungusungu initiatives in Dar es Salaam
## PART II: EMPIRICAL EVIDENCE FROM THE CASE STUDIES

### FIVE

**MIKOCHENI B**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>History of Mikocheni B</td>
<td>95</td>
</tr>
<tr>
<td>5.2</td>
<td>Housing and Environmental Conditions</td>
<td>98</td>
</tr>
<tr>
<td>5.3</td>
<td>Crime in Mikocheni B</td>
<td>101</td>
</tr>
<tr>
<td>5.4</td>
<td>Homeowners’ Responses to Crime</td>
<td>102</td>
</tr>
<tr>
<td>5.5</td>
<td>Homeowners’ Concerns on Built the Environment, Architecture and Social Interaction</td>
<td>110</td>
</tr>
<tr>
<td>5.6</td>
<td>Building code and wall fences</td>
<td>113</td>
</tr>
<tr>
<td>5.7</td>
<td>The police crime data</td>
<td>114</td>
</tr>
<tr>
<td>5.8.1</td>
<td>Crime, fear of crime and policing</td>
<td>115</td>
</tr>
<tr>
<td>5.8.2</td>
<td>Security, safety and privacy</td>
<td>115</td>
</tr>
<tr>
<td>5.8.3</td>
<td>Types, design and heights of wall fences versus township rules</td>
<td>116</td>
</tr>
<tr>
<td>5.8.4</td>
<td>Quality of built environment and relationships between neighbours</td>
<td>116</td>
</tr>
<tr>
<td>5.8.5</td>
<td>The implications to architecture, residential planning and urban management</td>
<td>116</td>
</tr>
</tbody>
</table>

### SIX

**ILALA KASULU**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>History of Ilala Kasulu</td>
<td>118</td>
</tr>
<tr>
<td>6.2</td>
<td>Housing and environmental conditions</td>
<td>121</td>
</tr>
<tr>
<td>6.3</td>
<td>Crime in Ilala Kasulu</td>
<td>123</td>
</tr>
<tr>
<td>6.4</td>
<td>Homeowners’ responses to crimes</td>
<td>125</td>
</tr>
<tr>
<td>6.5</td>
<td>Homeowners concerns on the built environment, architecture and social interaction</td>
<td>126</td>
</tr>
<tr>
<td>6.6</td>
<td>The building code and the wall fences</td>
<td>129</td>
</tr>
<tr>
<td>6.7</td>
<td>The police crime data</td>
<td>129</td>
</tr>
<tr>
<td>6.8</td>
<td>Summary of emerging issues</td>
<td>130</td>
</tr>
<tr>
<td>6.8.1</td>
<td>Crime, fear of crime and policing</td>
<td>130</td>
</tr>
<tr>
<td>6.8.2</td>
<td>Security, safety and privacy</td>
<td>130</td>
</tr>
<tr>
<td>6.8.4</td>
<td>Quality of Built Environment and Relationships Between Neighbours</td>
<td>131</td>
</tr>
<tr>
<td>6.8.5</td>
<td>The Implications to Architecture, Residential Planning and Urban Management</td>
<td>131</td>
</tr>
</tbody>
</table>

### SEVEN

**CHANG’OMBE HOUSING AREA**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>History Chang’ombe Housing Area</td>
<td>132</td>
</tr>
<tr>
<td>7.2</td>
<td>Housing and Environmental Conditions</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td></td>
<td>135</td>
</tr>
</tbody>
</table>
## 7.3 Crime Increase in Chang’ombe Housing Area

138

## 7.4 Homeowners’ Responses to Crime

142

## 7.5 Homeowners’ Concerns on the Built Environment, Architecture and Social Interaction

147

## 7.5 Building code and Wall Fences

149

## 7.8 Summary of Emerging Issues

152

### 7.8.1 Crime, fear of crime and policing

152

### 7.8.2 Security, safety and privacy

153

### 7.8.3 Types, design and heights of wall fences versus Township Rules

153

### 7.8.4 Quality of built environment and relationships between neighbours

154

## PART III: RESULTS

156

## EIGHT

158

### CROSS-CASE ANALYSES AND SUMMARY OF ISSUES

158

#### 8.1 Planning and development

158

##### 8.1.1 History

158

##### 8.1.2 House types, ownership and tenure

163

##### 8.1.3 Layout of houses

164

#### 8.2 The crime situation

164

##### 8.2.1 History of crimes

164

##### 8.2.3 Fear of crime an issue of concern

168

#### 8.4 Types of wall fences, doors and window barricades

174

#### 8.5 Designs of perimeter wall Fences: hardening the objects of crime?

176

#### 8.8 Effectiveness of responses to reducing crimes

178

#### 8.9 Summary of the results from the three cases

179

## NINE

182

### IMPACTS AND IMPLICATIONS FOR ARCHITECTURE, URBAN DESIGN AND MANAGEMENT

182

#### 9.1 The statement of the problem

182

#### 9.2 The objectives of the study

182

#### 9.3 The method

183

#### 9.5 How homeowners respond and the impacts of the responses

184

##### 9.5.1 How homeowners respond

184

##### 9.5.2 Impacts of the responses

189

#### 9.6 Conclusions, recommendations and areas for further research

205

##### 9.6.1 Conclusion

205

##### 9.6.2 Recommendations for urban architecture, urban design and urban management

210
9.6.3 Areas for further research

Crime and fear of crime in informal settlements: How do the residents and or homeowners’ respond? 214

Does defensible space theory work in gated communities? 215

REFERENCES 216

APPENDICES 224

APPENDIX I: RESEARCH PERMIT FOR MIKOCHENI B 225
APPENDIX II: RESEARCH PERMIT FOR ILALA KASULU 225
APPENDIX II: RESEARCH PERMIT FOR ILALA KASULU 226
APPENDIX III: RESEARCH PERMIT FOR CHANG’OMBIE HOUSING AREA 226
APPENDIX III: RESEARCH PERMIT FOR CHANG’OMBIE HOUSING AREA 227
APPENDIX IV: INSTRUMENTALIZATION OF THE RESEARCH OBJECTIVES AND QUESTIONS 228
APPENDIX V: INTERVIEW GUIDE 230
APPENDIX VI: FINDINGS FROM THE CASE STUDY AREAS OF MIKOCHENI B, ILALA KASULU AND CHANG’OMBIE 232
List of Figures

1.1. A Street in Kawe Beach
1.2. A Street in Mikocheni B
1.3. Houses along Manyoni Street in Ilala Kasulu
1.4. Houses along Tanga Street in Ilala Kasulu
1.5. A View of a Street in Mikocheni B
1.6. A barricaded wall fence along Manyoni Street in Ilala Kasulu
1.7. Views of a ventilated perimeter wall fences in Chang’ombe Housing Area
1.8. Views of a ventilated perimeter wall fences in Chang’ombe Housing Area
2.1. A map of Tanzania
2.2. Dar es Salaam City Map
2.3. A bird’s eye view of Kariakoo in 1969
2.4. A bird’s eye view of Kariakoo in 2004
2.5. Swahili House types along Zinga Street in Magomeni in 1969
2.6. Magomeni Quarters Housing Estate in 1969
2.7. A bird’s eye view of Temeke Quarters built between 1940s and 1950s
2.8. A close-up of NHC Swahili house type in 1969
2.9. Some of the NHC Swahili type houses with their wall-fenced yards
2.10. Swahili type house showing the two verandahs for outdoor relaxation, 2008
2.11. Swahili type house showing the two verandahs for outdoor relaxation, 2008
3.1. The Decision to Commit a Crime (according to D. Cornish and R. V. Clarke)
3.2. The Chemistry of Crime: routine Activity Theory and the basic triangle (according to Felson)
3.3. Conceptual relationship between social disparity, environmental conditions, architecture, crime and fear of it and the opportunities for crime
3.4. Conceptual and operational components of the responses to crimes of burglar by homeowners
3.5. A Security guard or concierge station in an entrance lobby
4.1. Dar es Salaam City Map showing the 3 Case study areas in relation to the CBD
4.2. Research Design and Process
5.1. Part of a layout plan of Mikocheni B as planned under the Sites and Services Scheme in 1974
5.2. Aerial View of part of Mikocheni B in 2005
5.3. A perimeter wall fence designed and built to allow visual and air movement – in Mikocheni B
5.4. A perimeter wall fence with its ventilation spaces sealed by palm leaves
5.5. A typical house in Mikocheni B
5.6. A 2-storey house in Mikocheni B
5.7. A ventilated perimeter wall fence
5.8. An entrance gate sealed with palm leaves to obstruct view into the house compound
5.9. A street in Mikocheni B flanked on both sides with walls of different designs
5.10. A Perimeter wall fence with its ventilation spaces sealed
5.11. Typical wall fences in Mikocheni
5.12. Other types of perimeter wall fences in Mikocheni B
5.13. Other types of perimeter wall fences in Mikocheni B
5.14. Burglar bars fabricated and installed to close off interior bar hall.
5.15. Burglar bars fabricated and installed to close off the servery counter
5.16. Streets in Mikocheni B flanked by high perimeter wall fences
5.17. Streets in Mikocheni B flanked by high perimeter wall fences
5.18. A combination of hedges and wall fences in Mikocheni B
5.19. Steel barricaded on the perimeter wall fence
5.20. Steel barricades on windows
5.21. A Street in Mikocheni B encroached by perimeter walls on both sides
5.22. A Street flanked by perimeter walls on each side
5.23. Streets in Mikocheni B flooded by water during the rain season
5.24. Streets in Mikocheni B flooded by water during the rain season
6.1. Part plan of Ilala Kasulu
6.2. An aerial view of part of Ilala Kasulu
6.3. A narrow dark corridor in house no.4 after addition of rooms on the side setback of the plot
6.4. Houses along Chunya Road with openings into the pedestrian pathway
6.5. Backyard of a house along Lindi Street
6.6. Part of the yard on the side of the house along Lindi Street
6.7. Houses along Kasulu Road with windows and doors seem from the road
6.8. Houses along Bukoba Road with openings facing the road
6.9. A short wall fence around a house along Lindi Street allowing visual communication to the street
6.10. Houses along Lindi Street with windows and doors opening onto the pedestrian pathways
6.11. A house along Tanga Road with verandah open to the road
6.12. Houses on the both sides along Mtwarra Street with openings overlooking into the street
6.13. A backyard of house along Lindi Street
6.14. Short iron picket fence around a house along Tanga Street
6.15. A secure backyard of a house along Chunya Road
6.16. A food kiosk overlooking and opening into Bukoba Street
6.17. Houses along Lindi Street
6.18. Houses flanking Chunya Road with opening overlooking the road
6.19. Short and open wall fences around houses along Manyoni Street
6.20. A house rebuilt after the Swahili house type dilapidation
6.21. A picket fence around a business premise
6.22. Remaining trees along Tanga Street
6.23. Remaining trees along Tanga Street
7.1. Part of a layout plan of Chang’ombe Housing Area as laid out in 1950s
7.2. Aerial view of Chang’ombe Housing Area in 2005
7.3. A recently renovated former NHC semi-detached house
7.4. Part of layout plan of a section of Chang’ombe Housing Area showing the wall fences around houses.
7.5. A 3-storey house in the Uhindini area in Chang’ombe Housing Area
7.6. A detached house in the Uhindini area in Chang’ombe Housing Area
7.7. A high perimeter wall fence securing a newly reconstructed 2-storey NHC row house
7.8. A portion of the NHC row house sold to an individual
7.9. A combination of wall fence and soft hedge around detached house in Uhindini Area in Chang’ombe
7.10. A wall fence around the 3-storey house in Uhindini area in Chang’ombe
7.11. Inside of the compound of a house formerly Uhindini area in Chang’ombe
7.12. A narrow passage between main house a chicken house forming part of the perimeter wall fence
7.13. Outside of the gate of high perimeter fence house in Chang’ombe
7.15. A perimeter hedge in Chang’ombe
7.16. A metal gate and soft hedge
7.17. One of the houses in Uhindini Area in Chang’ombe Housing Area
7.18. A soft hedge with palm leaves fencing a house in Uhindini area, Chang’ombe
7.19. A verandah secured by steel barricades in Uhindini area in Chang’ombe
7.20. A newly built perimeter wall fence in Chang’ombe housing Area
7.21. A perimeter wall fence topped with razor wire
7.22. Newly built very high perimeter wall fences
7.23. Newly built very high perimeter wall fences
7.24. A newly built ventilated perimeter wall fence in Chang’ombe Housing Area
7.25. Cement blocks in waiting for the building of a perimeter wall fence
7.26. A medical store forming part of the perimeter wall fence in Chang’ombe Housing Area
7.27. A series of kiosks forming part of the perimeter wall fence
7.28. One of the NHC row houses in preparation for perimeter wall construction
7.29. Some of the NHC row houses now with new perimeter wall fences
7.30. A space defined by perimeter wall fences
7.31. A high wall fence behind Mtaa leader's house
7.32. Mtaa Leader and Research Assistants during the interview at the back of the house
7.33. A new perimeter wall around part of the NHC row houses  
7.34. A perimeter wall fence surrounding NHC offices in Chang’ombe
8.1. Part plan of Ilala Kasulu showing 4 blocks between Chunya and Lindi Streets in 1920s  
8.2. Part plan of Ilala Kasulu showing how it has been built in 2005  
8.3. Part plan of Chang’ombe Housing Area as planned in 1950s  
8.4. Aerial View of part of Chang’ombe Housing as seen in 2005  
8.5. A 6-room Swahili House extended to become 8-room house  
8.6. Part plan of Mikocheni B as planned in 1974  
8.7. Aerial view of part of Mikocheni B as seen in 2005  
8.8. Perimeters wall fences initially designed to allow view now sealed to obstruct view  
8.9. Perimeters wall fences initially designed to allow view now sealed to obstruct view  
8.10. A newly built high perimeter wall fence in Chang’ombe Housing Area  
8.11. Summary of homeowner’ responses from Mikocheni B and Chang’ombe Housing Area  
8.12. Summary of homeowner’ responses from Ilala Kasulu  
8.13 – 8.19 Types of perimeter wall fences  
8.20 A house in Chang’ombe with a barricaded verandah for security and privacy
9.1. Summary of issues emerging from the 3 cases (Mikocheni B, Ilala Kasulu and Chang’ombe)  
9.2. A wall fence enclosing an un-built plot  
9.3. A photo showing a house whose ventilation has been affected by wall fence, necessitating the use of air condition  
9.4. A Street with rubbish left in it unattended  
9.5. A Street encroached by walls  
9.6. Houses with openings overlooking into streets  
9.7. Houses with openings overlooking into streets  
9.8. Manyoni Street with houses facing the streets having short wall fences that allow view of the street  
9.9 Backyards of Swahili houses in Ilala Kasulu showing the uses of yards  
9.10. Backyards of Swahili houses in Ilala Kasulu showing the uses of yards  
9.11. A food kiosk overlooking Bukoba Street ready to receive customers  
9.12. A Street encroached by high wall fences in floods during the rain season  
9.13. Houses along Arusha Street with doors and windows overlooking into the street

List of Tables
5.0. Phase One of the Sites and Services Project in Tanzania  
7.0. Number of reported crimes (thefts and burglary) in Chang’ombe (Jan. 2003 -June 2007)  
8.0. Cross case analyses: summary of main issues, urban design and policy issues

Acronyms
ARU Ardhi University  
BBA Built Environment Analysis  
BOT Bank of Tanzania  
CD Cassette Deck  
CPTED Crime Prevention Through Environmental Design  
CPT Crime Pattern Choice Theory  
EAH East African Harbours  
EAP&T East African Posts and Telecommunication  
EAR East African Railways  
HNO House Number  
KTH Kungs Tekniskan Hogskolan  
MC Municipal Council  
MLHHSD Ministry of Lands, Housing and Human Settlement Development  
NASACO National Shipping Agencies and Company  
NHC National Housing Corporation  
RAT Routine Activity Theory
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCT</td>
<td>Rational Choice Theory</td>
</tr>
<tr>
<td>SAREC</td>
<td>Swedish Academic Research Cooperation</td>
</tr>
<tr>
<td>SBD</td>
<td>Secured By Design</td>
</tr>
<tr>
<td>SIDA</td>
<td>Swedish International Development Agency</td>
</tr>
<tr>
<td>TCC</td>
<td>Tanzania Cigarette Company</td>
</tr>
<tr>
<td>TPDC</td>
<td>Tanzania Petroleum Development Corporation</td>
</tr>
<tr>
<td>TV</td>
<td>Television</td>
</tr>
<tr>
<td>UDSM</td>
<td>University of Dar es Salaam</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>URT</td>
<td>United Republic of Tanzania</td>
</tr>
<tr>
<td>VIVA</td>
<td>Value, Inertia, Visibility, Access</td>
</tr>
</tbody>
</table>
Abstract

This study is about Homeowner’s architectural responses to crime in Dar es Salaam Tanzania: its impacts and implications to urban architecture, urban design and urban management. The study examines the processes through which homeowners respond to crimes of burglary, home robbery and fear of it using architectural or physical elements. Three cases in Dar es Salaam have been studied. The cases are residential areas of Mikocheni B, Ilala Kasulu and Chang’ombe Housing. The findings from the three cases are compared and the common findings are illuminated and discussed using criminology, economic and social theories and concepts.

The results of the study show that, homeowners physically and architecturally modify their home environments for many reasons. Homeowners do so by building or erecting wall fences around their houses and install or barricade doors and windows using metal bars. From the study, the notable main reasons are security and protection from burglary, thefts, home robbery and visual and physical privacy. Others include property marking, disputes and misunderstandings between neighbours and property encroachment by neighbours. In the study, it has been established that, the actions by the homeowners in responding to crime have impacts and implications on the built environment. The impacts are: affects the visual experience of the built form by limiting view to houses; keeps neighbours apart thus limiting social interaction among residents; segregating public spaces and thus making them empty without people; encroaching on the streets; reducing surveilability of streets and neighbouring dwellings; create the impression of ‘private appearance’ therefore stigmizing the residential neighbourhoods, all of which increase the vulnerability of areas as well as enhancing the ‘subjective’ feeling of fear in the areas. Furthermore, the responses pose risks to residents when fire evacuation from homes is required, including the effects that affect the environmental comfort conditions of homes and the overall built environment.

Despite of the impacts to the built environment, the study has shown that, homeowners still erect wall fences and barricade their homes due to fear arising from previous crimes. On the basis of the impacts, a new approach to planning of residential housing areas is recommended in which the question of security against crime is included as design factor particularly in urban design. Either an approach to architectural design of houses and the layout of houses that considers crime as an important factor in addition to ‘target hardening’ approach is recommended to increase visibility and surveilability of built environments. The study concludes by highlighting five implications to urban architecture, urban design and urban management at planning and architectural design, considerations which may be of impacts towards improving built environment and management of the urban residential arena. The study ends by outlining and recommending areas of further research.

Key words: crime, fear of crime, crime prevention, privacy, security/safety, architecture, urban planning and design, urban management.
Preface

The interest to study this phenomenon of ‘crime responses, its impacts and implications to urban architecture, urban design and urban management’ arose through experience of living in Dar es Salaam. I first came to Dar es Salaam in 1974 and lived in Upanga on Minde Street. At this time the city was small, clean and peaceful. The level of criminality was very low. The population of Dar es Salaam was also small. The popular residential areas were Upanga, Kariakoo, Ilala, Kinondoni, Magomeni, Temekte, Chang’ombe, Kurasini and Ubungo. Manzese, Buguruni, Keko and Mburahati were the flourishing informal areas. In 1977, I moved from Upanga to Magomeni on Ifunda Street house no 29 sharing borders with Mzimuni Primary School. Just as in Upanga, the area appeared clean, peaceful with the population not as big. The two areas looked open with houses built with front entrance verandahs overlooking into the streets. Opposite houses aligned on the streets had their verandahs in communication (people seated on the two verandahs could see each other and exchange some talk). Now, time has gone by and the situation is not like that any more. Perimeter walls with all windows and doors barricaded with metal bars surround all houses in these areas.

In 1987, I moved and stayed in Mikocheni where many building plots were yet to be built and occupied. In the area, streets were not paved and without any street lighting. Many of the houses that were built in this area were typically fenced with soft hedges that were nicely trimmed to maintain a height of 1.2 to 1.5 metres high. Also the houses had a myriad of burglarproof metals on doors and windows, features that were not common in Upanga and Magomeni. Immediately as I moved in the area, burglary and theft of items from the parked car occurred. Later in the month, I learned that burglary; thefts and home robberies were a common phenomenon in the area. As I write the thesis, most of the soft hedges in Mikocheni have been replaced with different kinds of perimeter wall fences.

I did not stay long in the area, for in 1988, I moved to Sinza A area, a place that was and is near to my employer Ardh University. Here, the situation appeared more peaceful than it was in Mikocheni, even though burglary, thefts and home robberies occurred occasionally. As a general feeling and understanding, based on media reports and work mates living in different parts of Dar es Salaam, the situation regarding burglary, thefts and home robberies was being reported in many part of Dar es Salaam, serve for areas of Masaki, Oyster Bay and Upanga where many of the official residences of key government officials were located. In these areas, security guardianship from the police was a familiar sight. Soon after the residences were sold to individuals, changes of the overall built form of such areas are happening too similar to Mikocheni, from being open and spacious with a lot of green and well kept lawns and no wall fences to walled and barricaded homes as I write the preface.
Having experienced burglary in the houses I stayed both in Mikocheni and Sinza, I developed an interest to understand and record such happenings whenever they are reported. The records of these incidences were complemented further when I finally moved away from Sinza to another residential area, Makongo Juu, when burglary into the house I moved in occurred. An interest to read about crime incidences as related to the built environment also grew. With my profession as an architect, having studied urban design, and having practiced architecture for over a decade, with my over 30 years of living in Dar es Salaam, I felt a need to study or carry out a research on a subject that seemed to link crime and the built environment. My living in Dar es Salaam for this long has taken me through the changes occurring in residential areas in terms of spatial formation transformation. And, with the financial support from the Swedish International Development Cooperation Agency and Ardhi University, the interest and desire have culminated into this thesis.
Acknowledgements

This academic research has been made possible by the support of many individuals and institutions. However, it is regrettably so that it is impossible to mention every one of these individuals and institutions. I wish however to pay particular gratitude to professor Rolf Johansson, Associate professors Tumsifu Jonas Nnka and Inger Britt Werner, my supervisors for their candid guidance, critiques and advice throughout the research. In this guiding path, I cannot forget professor Emeritus Dick Urban Vestbro who went as far as saying that, “unless I changed from the practice oriented stance that I had at the beginning of the research, it would be impossible to accomplish a knowledge based problem research”. This critique by Vestbro was very difficult to swallow and made me more vigilant in trying to deal with a research that is solely a knowledge research issue as opposed to practice and actual real life solution seeking research undertaking that I was more conversant with and used to do at the beginning of the research.

Through sustained communication, dialogue and sometimes seemingly bitter arguments for a period of four years, all four galvanised my ambition to pursue this doctoral research undertaking to this end. I specifically acknowledge their efforts to enable me secure funding from SIDA for the four years since their recommendations for my progress in the research had a bearing on continued funding. Without their approval and recommendations, the funding would have been terminated. In this list of advisers, I cannot forget the many individuals who served as opponents in the many seminars that I presented in the BBA. To mention one in particular is Assistant Prof. Dr. Tigran Haas who was one of my many seminar opponents and also served as my final seminar opponent. I deeply appreciate his final comments on the work and his suggested additional list of references that he thought would help to improve my work.

I am greatly indebted to SIDA and Sida/SAREC for the financial support, which has made this research financially possible. In this I greatly appreciate the coordination and support in the hands of Prof. Dick Urban Vestbro and Prof. Mengisen Kaseva that contributed greatly in reaching this final stage of my studies. Also and in this case, Ms Mwantuke was very understanding and helpful in the release of funds whenever fieldwork undertaking and travel needs to Stockholm were required. I really appreciate her quick and rapid response in ensuring that I got this necessary support from Sida/SAREC as soon as it was required.

I also like to express my thanks to the UCLAS (ARU) administration, particularly Profs. Idris Kikula, Manoris Meshack, Msafiri Jackson, Idris Mshoro and Mengisen Kaseva and Dr. Hidaya Kayuza for their support throughout the study period (2004 – 2009). Additionally, I acknowledge the consultations offered by the following academic staff: Prof. Willbard Kombe, Dr. John Lupala, Dr. Huba Nguluma, Dr. Othmar S. Mng’ong’o, Dr. Cyriacus R. S Lwamayanga, Dr. Liberatus K. Mrema
and Dr. Ezekiel Z. Moshi. In this group, I also like to thank all members of staff in the School of Architecture and Design (SADE) and Department of Architecture led by the Dean and Head of Department, as they shouldered all the academic workload without my replacement. I very much appreciate their sacrifice and foreberance that enable the School and Department to continue with the academic obligations as required. Special and unfettered appreciations are due to Arch. Anthony P. Mosha, who without compromise handled all the management activities of the Architecture Department Consultancy Firm without my helping hand. With him, all the consultancy projects in the firm were executed efficiently and in accordance with the professional code of ethics. To the research assistants, Livin Lyaruu, Ally Simbano, Mpoki A. Mwakyusa, Salum Shomari, Ms Kasisiwra and Leonard Madaha who were of great help in capturing the interview stories from the respondents. They also helped in the production of sketches and illustrations. Salum Shomari, Ms Kasisiwa and Leonard Madaha also helped in setting out the stages for the interviews by assuring interviewees that the undertaking was for non-other than academic endeavours.

The Mtaa leaders and local officials in the study areas: Ms Kasisiwa in Mikocheni, Mzee Semkuruto and Salum Shomari in Chang’ombe and Leonard Madaha in Ilala were very understanding and helpful in ensuring that I did not get any problem or difficult during the fieldwork interviews, exploratory surveys and photo taking. I owe these leaders a lot only hoping that God the Almighty blesses them for the good work. The respondents in the studies areas are greatly appreciated, for without them accepting to be interviewed, the study would not have been possible. Praise is also directed to my PhD colleagues (Komu, Mushumbusi, Ntiyakunze, Tatu, Nancy, Lucian and Ulotu) at the Ardhi University in Tanzania and the Royal Institute of Technology (KTH) in Sweden whom we shared the best and bad experiences particularly after bitter moments of attacks from experienced seminar opponents.

My heartfelt gratitude and love goes to my wife Delilah, who with infinite patience, love and courage endured my absence in the times that I had to be away for literature and coursework in Sweden. When I was in Tanzania, she also endured my absence while I spent most of the time in the fieldwork and in the office at Ardhi University. For the four years in a row, she played both as a mother and father shouldering all the responsibilities in maintaining the family and ensuring that the children and the whole family were okay and carrying out their daily obligations normally. My profound appreciations are due to our children, Erick, Bahati, Esther and Jackson for understanding the reasons for my absence.
Finally, thank you once more all I have mentioned here and those I did not mention. I pray that God the Almighty is always with you and will continue to bless you. For those who helped me in any way, I exonerate all of you from all the shortcoming of this work, believing that whatever shortfalls appearing in this work are entirely mine.

Ludigija Boniface Bulamile
Stockholm, 2009
PART I: THE RESEARCH ISSUE, CONCEPTS AND THEORIES, RESEARCH METHODOLOGY AND DESIGN
One

Research issue

This chapter introduces the research issues and problem. It starts with situating the research in its broader theme and context, after which the research problem is presented, together with the objectives, specific objectives and the research questions. The limitations and relevance of the research are also outlined. The last part of the chapter outlines the structure of the thesis.

1.1 Urban safety and security

“Urban safety and security” which constitutes the subject of this research encompasses a wide range of concerns and issues. The issues range from basic needs (such as: food, health and shelter), through protection from crime and impacts of technological and natural hazards, to collective security needs (such as: protection from urban terrorism). However, only a few of these concerns and issues have been, can be, addressed from human settlements perspective, mainly through urban design, planning, management and governance policies (UN-Habitat, 2007:1).

In this research “crime and violence” is singled out from the many concerns and issues highlighted above. These threats may either stem from or may probably be exacerbated by the process of urban growth and from the interaction of social, economic and institutional behaviours within cities as well as with natural environmental processes. They may also have impacts, which in turn may affect each other and generate feedbacks that may determine subsequent responses to all of them. The problem of crime and violence in cities has long been recognized as a growing and serious problem in all parts of the world. Studies of this phenomenon have encompassed the following issues: distribution and incidence across countries and levels of development, distribution and incidence of the impact of crime and violence across different categories of people, specifically by gender, race and age, location of violence, by city size, types of violence, perpetrators and victims, economic and financial costs of violence, and diverse theories of causation from ecological model of violence, through more psychocultural explanations, to broader macro-economic and developmental frameworks (Moser, 2004;
Sanin and Jaramillo, 2004; Esser, 2004; Halabi, 2004; McIlwaine and Moser, 2004; Hume, 2004; Eversole, et al, 2004; Winton, 2004; Lemanski, 2004; Rodgers, 2004, Liebermann and Coulson, 2004; Roy et al, 2004 Garret and Ahmed, 2004; Meth, 2004; Winton, 2004; Suarez and Lombardo, 2004; Jacobi, 2004). Many of these studies are from countries developed and middle income countries whose urban development conditions are different from many of the countries in Africa, particularly Africa South of the Sahara, Tanzania being among them.

There are many dimensions of urban crime and violence. What is predominating in the discussion is its widespread existence in countries in many regions and at different levels of development. While there may be considerable variations across countries, the problem is probably shared among the countries of the world. A recent comparative assessment of homicide across continents shows that the highest rates are found in developing countries and particularly in sub-Saharan Africa, Latin America and the Caribbean. Studies by the International Crime Victimization Survey report that Africa’s cities have the highest burglary and assault rates and the second highest rates of robberies. While crime seems to correlate with national income, there are important exceptions. For example, Russia and the United States, which also have particularly high murder rates in cities with concentrated poverty (UN-Habitat, 2007:8).

1.2 Urban crimes and urban security

“Urban crime and fear of it are situated within a culture of violence (Robertshaw R., Louw A. and Mtani A., 2001). Internationally, urban crime rates are soaring, particularly in cities of the developing world. Fear of crime is often associated with fear for one’s personal safety, especially when alone and at dark. Fear of crime may keep people off the streets, and other public areas. It may thus constitute a barrier to participation in the public life of cities” (Wekerle and Whitzman, 1995:2-3).

Although the observation is based on studies in planned cities of the industrialized world, it may also be considered applicable in cities in non-industrialized countries like Tanzania. The discussion in the preceding section speaks of Dar es Salaam as one of the cities in the developing world where crime rates are high and still increasing.

Robertshaw, et al. (2001) in the study (victim survey) of crimes in Dar es Salaam, identified among others, physical environmental factors that lead to crime. Accordingly, these physical environmental factors are a result of poor urban design and management of urbanisation process, inadequate urban services, and failure to incorporate security related issues in urban management policies. In their study, Robertshaw, et al also identified the primary consequences of increased rate of crime and fear
of crime to the public and residential area especially at dark, among them is the emergence of architecture of fear and stigmatization of neighbourhoods or, communities.

Robertshaw et al, further indicated that the increase in crime and fear of crime has impacted more on the poor than other social groups, has increased the overall costs of insecurity and led to the emergence of private security companies. On the other hand, the government has intensified efforts to address crime through reinforced repression (e.g., increased police manpower, increased terms of imprisonment sentences, “zero tolerance” on culprits, etc) or through decentralized measures including delegation of police responsibility either to local authorities or civil societies or both.

This research focuses on the private responses or actions (architectural and/or physical) by homeowners or residents on and around their properties or residences as a result of crimes of burglary or home robberies and fear of these crimes. It also (analyses) explores and explains the impacts of the responses or actions to the built environment. The research uses environmental criminology and crime prevention theories to discuss/evaluate the people’s actions as they respond to issues of crime.

The planning in Dar es Salaam and other urban centres in Tanzania envisages planning and development of residential area plans according to the neighbourhood concept. The smallest planning unit is the “ten-cell unit” that comprises ten residential houses. A number of the ten-cell units make a housing cluster while a number of clusters constitute a neighbourhood, accommodating public facilities like nursery school, primary school, dispensary, public open space and a neighbourhood park.

The third larger level of a planning unit is a “community”; made up of several neighbourhoods. It includes a community centre that is made up of public facilities like community hall, secondary school, religious buildings, a health centre and community playgrounds. The fourth planning level is the district plan that combines several communities into a district. Districts are planned to accommodate much larger public services and workplaces, recreational facilities and a district hospital.

Fig. 1.1: A Street in Kawe Beach. Note the high walls on both sides,

Fig. 1.2: A street in Mikocheni B. Note the wall topped with plant shrubs to exclude the view.
This concept is aimed at building social groups and communities that function harmoniously as entities sharing common facilities and services. Although implementation of the plans have not been that successful especially in the provision of the common facilities in the public areas, regulations are in place to ensure the residential developments are implemented with this idea to achieve social coherence and unity.

In the recent years a large part of urban housing development in Tanzania does not seem to follow/emulate the neighbourhood concept. The use of high fencing walls around residential properties excludes the streets from the plot while also excluding the neighbouring plots or houses from each other. Fencing walls around residential property prevent direct visual access to the property resulting into what is termed: “gated plots” or “gated dwellings” (see Figs.1.1 and 1.2 above). It is argued that these nearly “impenetrable forts” have impacts on the urban form in terms of urban environment, aesthetic quality of urban architecture, social interactions, urban safety and safety of residents in their homes.

Fig. 1.3: Manyoni in Ilala Kasulu, houses are connected side by side by walls or gates to form a continuous façade facing the street.

Fig. 1.4: A street in Ilala Kasulu. Houses’ facades and verandahs directly face the street.

1.3 Problem Statement

Dar es Salaam has been experiencing changing residential environments from the open interactive (sociable) residential environments to solitary/lonely (unsociable) residential environments in which residential streets and public open spaces appear to be left out, confined and constrained by high walls on both sides (refer Figs. 1.5 and 1.6 below as opposed to Figs. 1.3 and 1.4 above). In these environments, it is also hard to see the houses and the areas look empty with no or few people are seen around in the streets.
Dar es Salaam is not alone in Tanzania to experience such a trend. Many urban centres are going through this as the rigours of survival in the urban congruencies endure on. It is believed, this phenomenon is caused by the increase of crimes particularly burglary, thefts and home robberies; and the fear of it among others in the urban congruencies. As from the 1970s, it has been observed that, an increasing use of perimeter wall fences, and barricading of residential dwellings has been taking place at unprecedented rate and still goes on. Areas like Msasani, Oyster Bay that used to exhibit openness in large plots are also fencing out the others. In fact, nearly all residents in residential areas that are planned seem to be doing the same (refer Figs. 1.7 and 1.8 below).
This phenomenon is adding a new layer in the built environment that may have not been foreseen in the planning process, the implications of which, in terms of architecture, environmental conditions, social interaction and urban management are not explicitly studied in the Dar es Salaam context, where the provision of housing is carried out individually without public financing facilitating the process. A need for research in this context that systematically focuses on the analyses of this phenomenon and its implications to the built environment is relevant and required in order to inform planning policy, architecture and urban planning and design, and urban management.

Studies in the subject of crime in relation with built environment and its reduction have been carried out in the developed world in the US, Europe and Australia (Jacobs, 1961, Newman, 1973, Coleman, 1985, Randall, 1999). These studies were carried out in public housing and large housing estates. Of recent, studies in this subject are common in the developing world particularly South America, Asia and few in Africa south of the Sahara, in particular South Africa, Nigeria and Ghana. Most of these studies however, have mostly dealt with the application of crime prevention theories and strategies for the study of variously named “gated communities” in the United States, Europe, South America and Australia (Blakely and Snyder, 1997, Landman, 2004, Schneider and Kitchen, 2002, 2007). In Africa, few of such studies appear to have been carried out and mostly in South Africa (Landman, 2004, Lemanske, 2004) and Nigeria (Mukoro, 1996).

Tanzania and Dar es Salaam city in particular have social, cultural and economic contexts that appear to be quite different from the conditions and contexts where much of the studies in this area of crime versus the built environment have been carried out. Most of the studies above were based on public housing and large housing estates, which do not exist in Dar es Salaam. Either, the mode of living in residential neighbourhoods labelled “gated communities” where most researches now focus is uncommon in Tanzania if not non-existent. Housing provision in Tanzania is mostly done individually and privately. Although the planning of the residential areas in urban centres is done by the state through the Ministry of Lands, Planning and Human Settlement Development and Urban Planning Authorities, the provision of houses is rarely done by the public but by individuals themselves. This means that the rate at which an individual can complete building the house would depend on the individual’s savings. As no funding facility is available, housing constructions usually take long to complete. Development of housing in this manner leaves a lot to be desired, as some of the important factors of good housing are not considered. Such factors may include security and safety of the people to live in those individually conceived housing and the resulting neighbourhoods. This has led individual developers to consider the issues of security also as an individual undertaking to be dealt with individually.
Literature review has identified Jacobs (1961) and Newman (1972) as the pioneers on crime prevention strategies. The two authors had their findings from studying people in the city and public housing in the US. A similar study was done by Alice Coleman (1985) in Britain also in the context of public housing. Other researchers have written about these views, but most of them focus their attention on the application of the theories/concepts into the discussion of gated communities. Little research if any has been done with the focus on the application of the same to individually developed plots. Moreover, no similar study has been done in the context of Tanzania.

With the foregoing, it can be said that, an empirical study focusing on the analysis of the architectural responses and its implications to architecture experience, social interaction and urban planning and management theories and practice is required. This is with the intent to contribute towards the discussion in addressing residential security, safety and built environment (urban design). The studies on crime prevention through environmental design by Newman (1972), Coleman (1985) and Randall Atlas (1999) were done in the contexts of the developed world. They were carried out in public housing and large housing estates built by large estate developers in the US, Britain and France. The situation is not similar in Tanzania, and Dar es Salaam in particular where the typology of housing development, culture, economic conditions and urban governance among other factors are different. Can any of the lessons from the studies done in the developed world be transferable to Tanzania?

1.4 Research aim and objectives

The main aim and objective of the research is to explore (document and understand) the homeowners’ “architectural and/or physical responses” to crime of (burglary, thefts, home robberies, residential street assaults), and examine and understand the impacts and implications of the responses to the physical built and spatial environment with reference to the character and quality of urban architecture, urban planning and management, and social interaction processes within the neighbourhoods. Can the implications of this phenomenon inform (or feed to existing knowledge) about architecture of the built form, residential neighbourhood planning and urban land management in Tanzania?

In order to address the foregoing research objective, three specific objectives are outlined. One being to explore, explain and document how urban homeowners react and respond to crime and fear of it (crimes of burglary, thefts, home robberies and residential street assaults). Secondly, to examine, explain and document the outcomes of the responses and impacts on the built environment (in terms of quality of architecture, urban fabric and use of street) vis a vis social relations between residents in the gated dwellings with those outside in the streets in as far as social interaction and community
spirit are concerned, and thirdly, to establish, explain and document the implications of the responses for architecture and urban planning and management theory and practice.

1.5 Research questions
Given these objectives, the research seeks to answer the following questions: How do/have homeowners in urban areas responded to crimes directed to their homes/houses? What is the typology of these physical (architectural) responses? How do these physical built responses affect/impact (social and economic) on the character/make-up (morphology) and the quality of the built environment, in terms of architecture, urban form, safety and social interaction? How do these physical barriers affect the social behaviour of the residents of those living in the barricaded homes (gated dwellings) and those outside the barricaded (gated dwellings)? How do they relate to each other; perceive or understand one another within their gates and with those outside neighbours? And what do these phenomena mean (inform) to the architecture, urban planning and management profession in general?

1.6 Delimitation of the study
Robertshaw et al, (2001) identified among others physical environmental factors leading to crime increase and the fear of crime. These physical environmental factors are a manifestation of urban planning, architectural and urban design. Environmental criminologists also have cited factors leading to crime occurrence, one of which is environmental factor (Felson and Clarke, 1989:1).

This research is concerned with architecture and planning of people’s urban built environment. There are many factors that may lead to emergence of crime situations. Each of these factors may require a research of its kind to understand how the factor influences crime situations. This research is limited to the physical or architectural responses that are a result of crimes of burglary; thefts, home robberies and street mugging that occur or take place in dwellings or residential communities. The research does not cover crimes like corruption, money laundering, and the like. The responses that are covered in this research have implications to architectural experience, urban planning, urban management, and the way residents in the urban settings relate and interact.

The study analyzes the physical consequences (architectural and urban design, planning and management issues) of the responses of homeowners to crime focussing on burglary and residential robbery in Dar es Salaam. The study is also limited to residential developments, which are a result of individual efforts without the involvement of large-scale real estate developers. These residential developments are usually financed individually, and built over a long period of time.
1.7 Research Relevance

This research is carried out under the auspices of the Built Environment Analysis research field. The Built Environment Analysis field deals with the study of relations between people, society and the built environment. The aim of the study is to develop knowledge for architectural design, physical planning and urban management. The important perspective for this research is to see that the built environment is an expression of social, cultural and ecological goals. It is pertinent therefore that the issue of the impact of crime to the built environment is studied and understood with the purpose leading to the reflection of its impacts and feedback to the professions of architecture, urban planning and design and urban management. This study is intended to inform the architectural, urban planning and urban management practices of another parameter for consideration in the architectural design, planning and urban management.

The knowledge generated shall add to the knowledge base required by architects, planners, urban designers and government authorities as well as concerned with urban management in the administration and planning of residential neighbourhoods and consequently, planning of urban centres and cities. 

The study is a contribution to the growing body of research by modifying existing theories based on the contexts of developed world to the context of the developing world like Dar es Salaam situation and develop methods for addressing the consequences / outcomes of or resulting from individual efforts to respond to crime and fear of it.

1.8 Thesis Structure

The thesis has nine chapters in three parts arranged sequentially to make it easier for the reader to follow the presentation and arguments therein. Part One has four chapters, Part Two has three chapters and Part Three has two chapters. Chapter Two situates the research issues in the context, describing a short history of Dar es Salaam, its urbanization scenarios, housing provision, housing finance system and real estate environment. It then outlines the crime situation and the strategies used to fight crime. Then it questions the possibility of Environmental and Urban Design approaches in the creation of urban environments that are free from crime. At the end of the chapter, a summary of what is to be understood from the chapter is given.

Chapter Three is a chapter that discusses the theories relevant for the research. It highlights in summary the basic understanding of theory, concepts and conceptual frame. In detail it deals with the theories that seem relevant for the discussion of the findings and issues evolving from the research.
Chapter Four discusses the research methodology. In detail it describes how the research was carried out, how the data and relevant information were collected, and how they were analysed. This chapter discusses the factors relevant for evaluating validity and reliability, of the results and the conclusion arising from the study. At the end the chapter illuminates upon the issues of generalisation in the study.

The second part of the thesis is about the empirical study. It has three chapters, each chapter presenting the findings of one of the cases. In this part, Chapter Five presents the empirical findings from Mikocheni B and the emerging issues from this case. Chapter Six is about the empirical findings from Ilala Kasulu Case and lastly, Chapter Seven, the last in this part, presents the empirical findings and emerging issues from Chang’ombe Housing Area.

The third part of the thesis also has two chapters. In the first chapter of this part, Chapter Eight, a comparison of the three cases is made. Here, the emerging issues or findings from the three cases are compared and summed up into either common or similar issues or findings. The common issues from each case study area are also compared with similar findings by other researchers in other different contexts in order to establish a general consensus. The differing findings are discussed in respect of their own peculiarities. Chapter Nine discusses the emerging findings with reference to the theoretical discussion that is presented in Chapter Three. The last part of this chapter presents reflections of the author regarding the research in terms of the methodology, theories and suggestions for future research within the area of urban security using architecture and urban planning as vehicles for analysing the built environment.
Situating the study

This chapter outlines and illuminates the background and context upon which the research is based. It starts with introducing Dar es Salaam and its historical and colonial past followed by its urbanization process and planning scenarios from the colonial era to independence, illuminating different steps taken to prevent the rural-urban population influx. It then discusses the crime increase in the town and city explaining the possible reasons for the increase. Then it describes the different options adopted by the two administrations (i.e., colonial urban administration and the administration after independence) in dealing with the urban crimes. Thereafter the reader is taken through the issues of housing provision for the urban dwellers. This section dwells on different housing provision scenarios (public and otherwise including provision of urban formal land for housing construction). The last part of the chapter discusses the issue of housing finance and the development of real estate environment in the country and dar es Salaam in particular as a possible way of providing secure and safety housing for the urban dwellers of Dar es Salaam. Throughout the chapter, some weaknesses have been noted, that forms the reasons for the research.

2.1. Dar es Salaam

Dar es Salaam in Tanzania, founded in the 1860s, is the commercial and port city of Tanzania (See Figs. 2.1 and 2.2). With an estimated population of over 3.0 million (Dar es Salaam City Profile, 2002), the city has about 75% of its population in informal settlements. Such a scenario have been a result of the earlier colonial planning policies that segregated the residential areas into zones on the basis of race among others, that include the failure of the “the government’s provider model” to supply and provide housing and surveyed plots, rapid urban population increase as a result of the “lifting of the restrictions limiting african natives to reside and live in towns”; and annexation of rural villages in the fringes of the city into urban areas of Dar es Salaam.

The British continued this policy of segregating residential areas when they took over the administration of the capital and the rule of Tanganyika from the German in 1919, becoming a policy
that prevailed until independence in 1961. European, Indian and African communities occupied the
three zones respectively. According to Kironde (1995), the African population predominated, making
up 75 percent of the total urban population throughout the colonial period, followed by the Indian
population, which constituted 20 percent.

However, Kironde adds, “it was the minority European inhabitants constituting 2.5 percent who
occupied the largest share of the residential space to the east of the town centre, close to the Indian
Ocean and in sprawling suburbs which emerged to the north of the town during the 1940s and 1950s.
These dominantly European suburbs demanded and received significantly more of the urban services
and resources including police resource for their protection than the African and Indian residential
areas. This continued to be the case even after African and Indian growth rates picked up
substantially from around 1940” (in Burton, 2003:66).

Up to the mid-1940s, the colonial government in Tanganyika believed that Africans in general should
stay out of urban areas or if need be, stay in urban areas for short periods only but should in any
cases live separately from the more affluent urban populations (i.e., Indians and Europeans). “The
poor of the poorest were not allowed in the urban areas in total and various laws were put in place to
empower the colonial administration to remove people from urban areas particularly Dar es salaam
and repatriate them to their rural homes” (Kironde, 1995: 84-85).
2.2 Planning of Dar es Salaam

The Germans in their plan divided Dar es Salaam into three zones, I, II, and III. The allocation of the zones was based on race, allocating the bigger part, Zone I (along the harbour front and eastern part of the city) exclusively for European settlement and only European type of buildings were allowed; the central part of the town and Upanga as Zone II (where other buildings are also allowed, so long as they are built of solid materials and do not fall into the category of native huts) to be occupied by Asians, in particular Indians; and the rest of Dar es salaam to the periphery as Zone III (in which no types of buildings were specified, allowing room for construction of the simplest huts) to be occupied by the native Africans (Kironde, 1995:130). In between Zone II and Zone III as separating green belt was provided to serve as a buffer or a filter through which the native Africans have to go through in order to enter the town centre. In the course of time, Zone I was extended to include Oyster Bay and Masaki to the north-eastern part along the beach and to the harbour front. The African residential zone to the west of Dar es Salaam that was initially limited to Kariakoo and was further extended to include Ilala in the 1930s (ibid).

After the British takeover of Tanganyika in 1919, the planning that separated or segregated residential areas was adopted and the segregation of residential areas was later taken on board as the planning instrument. This policy existed until independence in 1961. “While segregation is usually presented in the context of health and differential standards of living, it is also important to see it as a tool of domination. It is in the rarest of social organizations that ruler and ruled mingle together. Usually, the rulers segregate themselves, and are able thereby, to physically and ideologically domineer upon the ruled” (Kironde, 1995:125). Therefore, racial segregation as a product of colonial domination manifests itself in Dar es Salaam with “the creation of the Government area, which was essentially European; the Commercial area which was partly European, but mainly Indian; and the Niegerviertel (Native Village) which was manly African (ibid).

Fig. 2.3: A bird’s eye view of part of Kariakoo as observed in 1969 from the Cooperative Building. Note the built density of Swahili houses as compared the multi-storey buildings in Fig. 1.5. (Source: Dick Urban Vestbro, 1969)

Fig. 2.4: A bird’s eye view of part of Kariakoo as observed in 2004 from Peacock Hotel. Note the change of single storey houses into high-rise buildings. (Source: Dick Urban Vestbro, 2004)
The Government area, consisting of both government offices and officials’ residences, were planned with straight, wide boulevards, well lavished in verdue, linking it to the old Majid town to the west, a fashionable planning in Europe at the time. Individual plots were quite large; buildings mainly two storied; and a large portion of the land was given over to the planting of an experimental botanical gardens which were not only of considerable scientific and economic value, but also formed a great attraction to residents and visitors alike (Kironde, 1995:131).

The Indian bazaar (part of the former Majid town), which is characteristically a high-density area in relation to the European Area, was laid out in a gridiron pattern plan. A similar gridiron plan composed of even smaller plots typical of European 19th century working class quarters was prepared for the native area further to the west in Zone III. In this native area, buildings of any kind of materials was allowed, and the type of structures put up ranged from the grand thatched Swahili type houses to the more simple structures. This policy of racial segregation continued to operate until the time of independence in 1961.

Although the colonial policy of urban planning and allocation of urban land on the basis of race in Dar es Salaam was abolished after independence in 1961, the character of the three zones of land use was carried on board in the planning process of the post colonial residential areas. Characteristically, Zone I was characterised by large plot layouts that formed low-density residential types. Zone II layouts were usually of medium density plot sizes producing medium density residential types; while Zone III was characterised by small plot layouts that produced high-density residential areas for the natives’ and/ or low income. The planning philosophy after independence used these characteristics to produce three types of residential types as follows: High-density residential layouts for the low-income dwellers; medium density layouts for the middle-income dwellers, and low density and...
spacious residential layouts for the high-income dwellers. It is these residential layout types that are in use in Dar es Salaam today with a common layout pattern in gridiron system.

Kironde (1995) confirms this assertion in his thesis when he says: Ecologically, the city changed after independence. The previous land use pattern had been based on racial segregation. With internal self-government, the first Africans moved into Oyster Bay (a then predominantly European residential area in 1959). Later on, many of these were allocated plots for private construction in this area and the predominantly Indian area of Upanga. Racial barriers were broken but differentiation between senior African administrators and politicians and the more ordinary Africans was taking place” (Kironde, 1995:313). The residential plot sizes were then used in producing residential types to suit low-income urban dwellers, medium-income and the high-income category (ibid).

2.3 Planned Public Housing

A British consultant Sir Alexander Gibbs prepared the first Dar es Salaam master plan in 1948. In the master plan, guidelines for development of the town were laid out and Dar es Salaam was declared a Municipality in 1949 (URT, 1994:68). In the master plan, new land use patterns had emerged for industries, open spaces and transport. An attempt to eliminate overcrowding with shanties and slums around the industrial areas by the Africans was made for the first time in 1950. For the first time, the British colonial administration admitted the inevitability for Africans to reside in Dar es Salaam, therefore their housing was necessary in order to avoid the dangers of overcrowding, slum dwellings and inadequate sanitation as a result of low working wages, underemployment and the city’s rising population (Illiffe, 1979:254).

Fig. 2.6: Magomeni Quarters Housing Estate built during the colonial period to cater for Africans in government employment. Note the simplicity of the designs. (Photo by Vestbro, 1969)

Fig. 2.7: A bird’s eye view of a Temeke Quarters built in the late 1940s and early 1950s. Most houses are Swahili type single storied. Note the openness between the houses. (Photo by Vestbro, 1969)
The first low cost housing schemes to accommodate Africans were built in Ilala (Ilala Quarters), Magomeni (Magomeni Quarters), Kinondoni (Kinondoni Quarters), Temeke (Temeke Quarters) and Kigamboni (Kigamboni Quarters). The choices of the sites for the housing schemes were related to industrial and workplace areas. For instance, Temeke site was chosen for workers to serve in the planned Pugu industrial area, Kinondoni for the workers to serve in the Oyster Bay and Msasani high income area, Magomeni and Ilala to relieve the pressure for housing in Kariakoo while Kigamboni was for dockworkers (ibid). Subsequent master plans were prepared in 1968 and 1979 and several sites were earmarked for formal settlements as efforts to encourage housing ownership and eliminate informal settlements. The master plans however, did not achieve much in stopping the informal settlements, due to the same dependence on donor support for their implementation.

After independence in 1961, the independent state, Tanganyika embarked on provision of public housing under the National Housing Corporation that was formed in 1962. These efforts were heavily dependent on subsidies from the government (government subvention), and grants and loans from donor funding agencies and very little from its own sources (URT, 2007:3). The quantity of housing produced thus depended on these factors. Thus the houses produced could not meet the demand. By the year 2006, the National Housing Corporation has only managed to build 4,056 residential dwellings in Dar es Salaam and only 10,790 in the whole country (ibid).
The NHC was reconstituted through the Act of Parliament No.2 of 1990. The objective was to enable the new National Housing Corporation play a more significant role in the housing sector under the market settings. The act mandated the NHC to operate commercially, thus, changing the initial objective of providing affordable social housing into the only public Real Estate Developer. Between 1990 and 2007, NHC constructed 762. The under-performance is attributed to withdrawal of government subsidy; low affordability levels of majority of house seekers and the lack of housing finance facility. Other reasons may be National Housing Corporation’s inability arising from lack of human resources (i.e., managerial and technical manpower resources).

The other effort towards providing for urban housing was the mobilization of public institutions and government departments to provide housing for their employees (URT, 2007:5). However, this was also not very successful for similar reasons of government subsidy and donor dependence. By the 1980s, the capacity of these public institutions and companies to construct more houses had waned mainly due to financial constraints that were caused by economic difficulties and nearly all of them have ran bankrupt, thus their impacts in the provision of housing had become minimal (ibid).

While all these efforts by the government were in action, the inform provision of housing to the urban majority was taking place at an unprecedented speed. This was due to the inability of the government to control the rural-urban population influx coupled with the inability to provide affordable or social housing to meet the increasing housing needs.
2.4 Housing Financing System and Real Estate Environment

Efforts towards this end have ended up without success. After independence in 1961, the government in 1964 established the “Revolving Housing Loan Fund” to finance construction, renovation or purchase of houses for its employees (URT, 2007: 8). The RHLF targeted all levels of civil servants in both rural and urban areas. This fund was abolished to give way for the establishment of the Tanzania Housing Bank in 1972. It was once again reintroduced through staff Circular No. 8 of 1992 after the bankruptcy of the Tanzania Housing Bank. Since its re-establishment, the fund has managed to provide an average of 250 mortgages against the target of 500 per year. In addition the loan amounts provided is not enough to enable someone to fully build a complete house. Moreover, the fund is persistently faced with inadequate budget allocation from the Treasury (ibid).

Tanzania Housing Bank was established by the Act of Parliament No. 34 of 1972 following the dissolution of the Tanganyika (Tanzania Mainland before unification with Zanzibar) Permanent Housing Finance Company (TPHFC) Limited of 1960. It became operational in 1973 (URT, 2007:7) as the only formal housing finance institution. The objectives of the bank included mobilization of savings for housing development; provision of technical and financial assistance for owner-occupied housing; and the provision of finance for the development of commercial and industrial buildings (ibid).

At its establishment, it issued three types of mortgage loan that included, unsubsidized mortgage issued from its own funds and two tiers of subsidized loans from the Special Forces Fund and the Workers and Farmers Housing Development Fund. Until its demise in 1995 when it was liquidated because of insolvency, it had issued about 16,400 mortgages. The insolvency of the bank was attributed to a number of factors, among them being: weak capital base; high default rate caused by difficulties in loan enforcement; dependence on short-term borrowing to finance long-term lending; poor record keeping of borrowers; poor collateral, and mal-administration and corruption (ibid).

Now, as I write this thesis in 2008, Tanzania has no serious housing finance system.

As a result of this lack of strong housing finance system in the country, individual developers of houses rely on individual savings to finance housing construction. This makes construction of houses to be a long time investment that sometimes takes a long period of time to complete, depending on the income of the individual. Experience has shown that, house construction to the majority in the urban context could take up to 10 years or more to complete. At times, one may decide to move in the house before it is complete due to pressing needs of housing accommodation. This scenario has been made even more difficult by the country’s lack of “Real Estate Environment” that would encourage real estate development by individual real estate entrepreneurs, at large scale to cater for mass rental housing, office and commercial premises. In 1971, the Acquisition of Building Act...
prohibited commercial real estate investment. Foreign real estate developers, e.g., Baobabs Estates Development were thrown out of the country. From then onwards, the economy did not attract privately owned multi-family developments for a long time. Socialism lamed real estate investment; only in 2000s that private sector started getting involved in real estate development.

2.5 Land Delivery System
As a means to achieve housing provision by individual developers, while avoiding the proliferation of informal land development, formal planned land has to be availed by the planning authorities particularly in urban areas. In urban areas, easy of access to legal land is a prerequisite for accessing legal housing. In a country like Tanzania where the formal land market is under the control of the Government, the land delivery system has been insufficient. Some of the main characteristics of this inefficiency include: acute shortage of planned, surveyed and serviced plots and slow and cumbersome procedures for planning, surveying, allocation and registration of land by the local authorities and central government (URT, 2007: 8). These are caused by government’s lack of resources (in financial and manpower) to acquire, plan, survey and service the land to meet demand (ibid). This shortage of formal land is one of the factors that have caused a problem of increased growth of informal or unplanned settlements in Dar es Salaam.

A number of attempts by the government to provide for planned lands have been tried. Notable among these are: the sites and services schemes (1970s – 1980s) that covered Sinza, Kijitonyama, Mikocheni and Tabata; Survey of plots in Mbezi Beach in 1978 and Tegeta in 1984; and survey of plots in Mbagala and Kinyerezi; and the 20,000 plots project in 2002. All these efforts were however hampered by the government’s lack of funds for compensation, except for the last one, the 20,000-plots project that has been funded by a loan from the World Bank.

2.6 Urbanization of Dar es Salaam
Urbanization of Dar es Salaam has occurred against a backdrop of socio-economic and political change. During the colonial administration, restrictions were imposed against Africans to reside in the town and at independence the restrictions were lifted by the new administration. Further to the lifting of the colonial restrictions that declared the unemployed as “undesirable” in the town after independence, “the socialization and nationalization processes of the Arusha Declaration in the mid 1960s and 1970s in which sisal estates were until then the country’s number one labour employer and foreign exchange earner, with other private sectors, that expanded the parastatal sector with formation of new industrial and commercial firms, lured people from rural areas into Dar es Salaam and other urban centres (Safer City Programme, 2000:9). In addition, the ensuing villagisation
exercise in 1973-1974 only helped to send people escaping into urban areas to escape from the “Ujamaa” village governments which were to function under the Ujamaa Village Act, 1975 (Safer City Programme, 2000:10).

The liberalization of the economy in the 1980s through trade, industrialization and an upsurge in investments added in fueling the influx of already burgeoning population of Dar es Salaam. This was followed up in between 1990 to 1999 by the privatization drive, all of which helped to attract more people from the rural areas to immigrate into urban centres, increasing the pressure on employment, urban housing and the urban services. Characteristically, the rural-urban migration of these periods (1980s-1990s) were the “machingas” hawkers, or the petty traders operating in Dar es Salaam, becoming the most conspicuous symbol of “rural urban youth” migration (ibid). These socio-economic and political conditions are believed to be the contributing factors for the rural urban migration notably beginning mid 1960’s to early 1990’s (Robertshaw et al, 2001:11). The trend has set Dar es Salaam on the socio-economic and environmental picture as outlined here: Dar es Salaam population has dramatically increased from 1.36 million in 1988 to 2,497,940 million in 2002 giving an annual rate of 4.3%; (at the time of this study), Dar es Salaam population is estimated to be above 3.0 million people.

In order to the check the population influx into the city, the government tried to institute measures similar to those used by the colonial administration, which at the end failed to contain the situation, partly due to political sentiments arising from the independence euphoria, hence finding it difficult to enforce. Some initiatives to restrain urban population growth by restricting rural–urban migration were tried. The initiatives aimed at repatriation of urban immigrants from the urban centres into rural areas where they originated (Kombe and Kreibich, 2000:15). These measures however, failed to achieve much because those repatriated were coming back immediately. Some of these initiatives include: operation Rwegasira (1975), operation ngwiruzi (1983) and operation ondoa onba onba, (beggars’ repatriation, 1994) (Kironde 1995:86). All these operations were carried out with a belief that, confining the unemployed to rural areas would serve to avert the problem of poverty and unemployment in urban areas (ibid).

As a result of all these, in 1998 22% of Dar es Salaam population was unemployed, while 24% of population lived with no regular income – the machinga group. About 19% of population was employed under public sector, and about 24% was employed under informal sector, while those engaged in agricultural/pastoral activities in the greenbelt area account for about 11% of Dar es Salaam population. According to Kombe (1995) and Lupala (2002), between 70 – 75% of Dar es Salaam population live in unplanned settlements (informal areas), which lack or have inadequate social services and infrastructure posing environmental problems to residents and local authorities.
The above outlined socio-economic and cultural environmental picture is argued by Robertshaw et al (2001), to have created among other things, increasing levels of urban criminality, delinquency and violence. Robertshaw supports the argument using police statistics that show that, by the end of 1995, Dar es Salaam accounted for 25% of all crimes reported to the police throughout the country. In 1997, this figure rose to about 27% (26.92%). Since 2001, there have been no other studies in this regard. The author is of the view that the situation regarding crime increase appears to be the same or even higher. For example, in the year 2005 and 2006, a wave of high-level crime gangs terrorized banks and other financial institutions changes) in the country. Many of such incidences occurred in Dar es Salaam. This involved large amounts of money robbed from banks by armed gangs. Most of these happened in broad daylight. Likewise in the residential areas of Dar es Salaam, a similar wave of banditry involving large groups of armed gangs (mostly youths) terrorized small businesses in the residential neighbourhoods. This picture persists to this day. Although efforts by the government to fight such crimes in Dar es Salaam and elsewhere in the country have been enhanced, reports abound in the media about crime incidences in various parts of the city.

2.7 Crimes in Dar es Salaam

The increase of crime that has occurred in Western societies since the eighteenth century has been associated with the breakdown of communal social structures in the face of both industrialisation and urbanization (Burton, 2005:126). Scholars of crime in sub-Saharan Africa and other developing countries have turned to related arguments to explain the apparent escalation of crime rates there since the colonial period (ibid). In sub-Saharan Africa, economic “development” led to the proliferation of commodities and creation of new patterns of consumption, new needs and desires (Burton, 2005:127). Urban growth, meanwhile, provided an environment in which the opportunities and temptations for theft multiplied considerably at the same time as an impoverished urban class emerged in the midst of relative plenty” (ibid). Paterson highlighted both these phenomena in his 1939 report on prisons in East Africa (ibid).

Crime in Dar es Salaam has been increasing since after the First World War. Immediately after the war in 1919, the British were faced with a high incidence of urban lawlessness in the territorial capital. Burton (2003: 67), relates this with the collapse of the authority that occurred in the town during the transition from German to British rule as elements among the town’s inhabitants could have been responding to the opportunities arising from a British administration being unfamiliar with the local conditions. “By the end of the war, crimes in the town against property had become an everyday phenomenon throughout the town. In the Uhindini area, the situation in 1918 had degenerated to an extent that at one point a serious outbreak of looting had taken place” (ibid).
The increase of crime in Dar es Salaam Township during the colonial period has also been seen to be a result of criminalization of some economic and social activities, which were practised by the native Africans for making a living. Notable among these are those activities that seemed legal to Africans like hawking of goods, street begging and sale of food items that were declared illegal by the colonial urban administrators, for reasons of establishing urban order and health requirements (Burton, 2005). Accordingly, “in the attempt to assert urban order customary pursuits were criminalised; as were many subsistence activities adopted by Africans in the often harsh urban environment”, examples being “strict laws prohibiting the customary usage of alcohol, and municipal regulations restricting the number of people engaging in petty trade” (Burton, 2005:118). For the African population, the legal restrictions aimed at such victimless crimes commanded little acceptance. Indeed, even the crimes that one might characterise as illegitimate, for example theft, may not have been universally considered so among some sections of the population who were perplexed-and perhaps aggravated – by the unequal distribution of resources in colonial society” (ibid).

A crime victimization survey study carried out in Dar es Salaam in 2000 showed that, crime had been increasing in between 1990 and 1999 (Robertshaw, et al, 2001). According to the survey study, “about 43% of the respondents admitted to have been victims of burglary and thefts between 1995 and 2000, while 32% said they had been mugged. About 61% of the interviewed said they felt unsafe in their homes at dark” (ibid), and that burglary affected more people in newly established suburbs.

2.8 Explaining the of Crime Increase

Other causes of crime increase in Dar es Salaam particularly after independence are related to the global scene. It is a fact that the city has not been the exception to the on-going global phenomenon with most of its people urbanized in almost all of their socio-economic, political and cultural activities (Dar es Salaam Safer City Programme, 2000). With the development of the global technology and communication system, developed through market economic system, the city has incessantly been “part of the international urban criminality entrenched on urban poverty, rural-to-urban migration, environmental deprivation, scarcity and mismanagement of its social services and infrastructure, especially amongst the poor and the marginalized majority groups” (ibid).

With 70-75% of its residents living in unplanned areas (environments lacking many of the urban amenities and services), many of whom are unemployed and many others doing unproductive informal or petty businesses (the machingas), crime prevention in terms of knowing and respecting the laws, particularly, City by-laws, has remained a fairy tale to the majority. As a matter of fact, the
term “Bongo”

country or “Ruksaland” of Dar es Salaam portrays a culture of struggle for survival, or living in luxurious lifestyle, sometimes through criminality in form of the aforesaid - robberies, burglaries, mugging, swindling, cheating, thefts, corruption or bribery, drug abuse and alcoholism, prostitution, etc.

According to the Safer City Programme report (2000:19-23), the explanations on the causes of crime increase under such an environment has been linked to the following: socio-economic explanations; unemployment; conspicuous and liberalism consumption habits (conspicuous consumeristic culture); squalor and disorderly homes; moral degeneration, traditional healers and/or witchcraft, and limitation of law enforcement agencies and corruption in system (DSCP, 2000).

2.9 Crime Prevention Strategies

The Tanganyika Police Force was established by the British colonial administration in 1916 as a response to the increasing lawlessness in the town, which eventually became the nucleus of the territorial police force. The force set out to recruit and train an African rank and file in the established force. At the time of its establishment, crime in the town was spiralling up the scale. By 1950, the total strength of the Dar es Salaam police force had risen to 395. Over the remainder of the decade (1950-1959), a time when crime was on the increase and the territorial force was being expanded, the number of police stationed in Dar es Salaam grew only modestly, reaching just 413 by 1959. In the following year (1960), the municipal police force was expanded by over 50 per cent, and at independence there were 633 police stationed in Dar es Salaam (Burton, 2003:68). By the final decade of the colonial rule in 1961, the territorial police force had grown significantly, reaching 6,143 men and women serving in the force.

2.9.1 Urban order and crime prevention (1919-1945)

Soon after the imposition of British rule and the establishment of the police force a network of fixed police patrols were established throughout Dar es Salaam, initially helping to stem the high incidences of housebreaking and theft in the years immediately following WWI. “The presence of uniformed police in the streets deters the timid criminal” (Commissioner of Police, in 1924 report, in Burton, 2003:71). By 1926, though, the effectiveness of these patrols was significantly diminished and a system of random night patrols was introduced; the movement of police in pairs by night at

1 “Bongo” is a colloquial term used to explain the struggle for survival in the city of Dar es Salaam. It means that, for one to survive in the city, one has to use brain.

2 “Ruksaland” is a term coined to describe a period in the country (1985 – 1995), in which “every thing” was allowed in order for one to survive. It literally means, “everything allowed for survival”.

25
unexpected intervals and directions and with delays between patrols was reported to have had an influence on the movements of the thieving fraternity and restricts their activities at night (Burton, 2003:71). Over the next few years the patrols were further developed with, “the most beneficial results to the protection of property and the confusion of night prowlers”(ibid).

In addition to patrols, a number of other measures were taken in the fight against crime. A system of rewards for civilian assistance to the police was one such initiative. Rewards were being paid to members of public for information that led to arrest of suspects. The Police Administration constantly impressed upon both Political Officers the desirability of gaining the confidence of the natives by the liberal distribution of rewards for services rendered to the police.

In the meantime, a network of police informers was established, who were paid according to the value of their information. These informers consisted of mostly ex-criminals or other natives well acquainted with the haunts of criminals. The establishment of Fingerprints Bureau in the early 1920s facilitated the capture (and conviction) of defenders. Similarly, the creation of a Criminal Investigation Department in 1932 improved detection rates for the more serious crimes committed in the township. In 1934, the 15 detectives working in the department handled 137 cases, the bulk of which originated in Dar es Salaam. Their workload was dominated by crimes against property, but CID officers were also involved in action against urban undesirables and infractions against the liquor laws (Burton, 2003).

In tandem with the racial segregation of the residential environments according to race, the resources devoted towards policing and crime prevention in the town favoured its European population throughout the colonial period (Kironde, 1995:204, Burton, 2003:73). For example in 1935, when the predominantly European residential zone had thirty-four policemen patrolling it at night, Uhindini, as zone II was colloquially known, and had just 28 patrolmen and the African areas a mere 17 (ibid). This is even though the size of Dar es Salaam’s Indian and African communities at this time were in excess of 9,000 and 20,000 respectively, while the town’s European inhabitants did not number more than 1,400 (Kironde, 1995:201 and Burton, 2003: 73). The two zones by Indian and African communities were mostly affected by the increasing crime on property. “If the Indian quarter was inadequately policed in the inter-war period, in the African areas of the town the police presence were so thin as to be almost non-existent. The 1924 police report indicated that patrols were restricted to the European and commercial areas” (ibid). In addition, the growth of the Ilala suburb that by then was home to 1,600 Africans had not been followed by the extension of policing (Burton, 2003:73). The District Commissioner stressed the urgent need for a police post to be established in Ilala. Police patrols were finally extended the area three year later. As a result of the lack of street lighting in Ilala, and the lack of police supervision, the residents of the area were being seriously molested. Even with
the nighttime police presence and patrols that were introduced in 1933, Ilala continued to be used as a daytime retreat by “undesirables” (Burton, 2003:74)

The fact that these non-European areas were so thinly policed represented just a failure to enforce colonial order, but also the recognition by the administration that this order was unattainable with the resources it had at its disposal. The Dar es Salaam force was understaffed, and hence incapable of providing either the protection against crime demanded by its inhabitants, or the systematic enforcement of legislation aimed at asserting comprehensive colonial control and crime prevention in the town and its diverse communities. Under such conditions, choices had to be made regarding the neighbourhoods to be policed and over which legislation was to be enforced. It was the predominantly European residential areas that received the benefits (such as they were) of a greater police presence. The rest of the areas particularly Zone III was left unsupervised.

2.9.2 Crime prevention (1945-1961)

Following a series of complaints from the commissioner of Police for increase of the police budget, it was the years after 1945 which saw the true emergence of a modern police force in Tanganyika: one which was not only better equipped and organized, but also numerically stronger. In part this resulted from the successful drive to attract educated recruits in the late 1940s. With a growing proportion of literate officers it was possible to adopt more widely the use of certain basic policing techniques – such as the keeping of notebooks and the routine collection of statements – which up till then had perforce been somewhat neglected (Burton, 2003:75). Meanwhile, the dramatic increase in detected crime after the war had a significant impact on central government, and increasing resources were made available to the department of police in an attempt to combat this trend (though the consequent improvement in detection rates was partly responsible for it). While these may not have matched the amounts that senior officers felt were necessary, the injection of such funds nevertheless resulted in an unprecedented expansion in the scale, frequency and sophistication of policing in Dar es Salaam in the 1950s (ibid).

Urban police Stations proliferated in the final years of colonial rule (1950-1960). The Commissioner of Police complained in 1952 that there was in the town only one Police Station worth of the name, the Central Police Station. This prompted building news police stations in Chang’ombe, Kilwa Road, Oyster Bay, and one at Msimbazi, and one opened later in Temeke in the following year (1953). Police posts were also established at Ilala and Kawe. At police post at Magomeni was established in the mid-1950s and upgraded later in 1961. A new building to house the Msimbazi Police Station was built in 1958.
To complement the proliferation of the police stations, other techniques in policing were adopted, vis a vis, motorized patrols along with a wireless communication system that connected the patrols to each other and to the various stations. By 1955, most parts of the town were patrolled in rotation by police officers in Bedford vans, Land Rovers, on motorcycles, bicycles and on foot. In 1957, dog patrols were also introduced in order to help in the apprehension of offenders. In addition, undercover operations were also introduced for the purpose of apprehending petty criminals like pickpockets. All these efforts were supplemented by cooperation between the police, European district officials, and establishment of the “special constables” for use in an auxiliary policing role (Burton, 2003).

According to Burton (2003) even with the emergence of the so called modern police force in Tanganyika after 1945, a force that was not only considered better equipped and organized and numerically stronger, crime prevention by police was rendered ineffective due to the growth of the town (ever increasing new residential communities, housing Africans, Asians and Europeans stretching from Temeke in the south to Oyster Bay and Kinondoni in the north and Magomeni in the west). The growth of the capital could have prevented the police force from providing adequate protection or control of its expanding population. Dar es Salaam police force may have been understaffed, and hence incapable of providing either the protection against crime required by its inhabitants, or the systematic enforcement of the unjust colonial legislations aimed at asserting comprehensive colonial control of the town and its diverse communities. This could have possibly made the criminal and the would-be-thieves to have ample time to fulfil their mission, to the dismay of the colonial police administration. Highlighting the inadequacy of the police force and its inability to patrol and control the expanding area of Dar es Salaam, the Assistant Commissioner of Police said in 1954: “The establishment of personnel in respect of Dar es Salaam is totally inadequate, patrols are too large and until such time as more personnel become available they can not be shortened” (Burton, 2003: 80). Some parts of Dar es Salaam were considered out of limit to patrolling policemen, as noted in the minutes of a 1948 meeting of the Ilala Ward Council that recorded the complaint that “all one side of Ilala is so dark that even the police won’t walk there at night”. A secretariat minute from 1950 also noted similar sentiments noting: “even the police themselves dislike having to patrol “Magomeni, Keko, and Magaburi” (ibid).

2.9.3 Prevention of crime after independence

In the preceding section, I have noted the incapacity of the colonial police force to exert the control and the prevention of crime in the ever-increasing expanse of Dar es Salaam. This inability of the police force to prevent crime was carried over to new independence administration. By 2008 the police personnel is inadequate to provide the required patrol services to many parts of Dar es Salaam,
particularly the low-income areas and much of the informal settlements. Visible police patrols are mainly common in areas such as Oyster Bay, Masaki and other places where many government leaders live. Crime in Dar es Salaam has been escalating in proportion to the sprawl of the City. The situation in terms of crime against property (i.e., burglary) has not changed much by the 1990s, and in fact has been increasing. A study carried out in Dar es Salaam by Robertshaw et. al, (2000), shows that, “between 1990 and 1995, a total of 573,668 crime incidents were reported to the police in Dar es Salaam. In 1995 alone, 126,401 crimes were reported to the police – the highest for the period. The figure represents an estimated 346 crime incidences reported daily or 14 crime incidences reported hourly” (Robertshaw, et al. 2001)). According to Robertshaw et al. (2001:13), “about 43% of the interviewed respondents stated that they had been victims of burglary between 1995 and 2000, while 32% stated that they had been mugged. About 61% of the interviewed stated that they felt unsafe in their homes at dark”.

The study further noted that burglary affected more people living in newly established suburbs compared to those living elsewhere in Dar es Salaam. Studying the “Implications of landed and tied-up capital on urban development: the unfinished and unoccupied buildings of Dar es Salaam in Tanzania” Halla and Mang’waru established that, “Some developers are hesitant to move into their houses because of fear from lack of safety and security of their effects and lives given the sparse habitation. A similar explanation holds for potential tenants” (Halla and Mang’waru, 2003:8). Generally people with higher incomes and those owning houses and cars are probably more at risk. In 78% of incidences, victims reported that someone was at home when the burglary was committed (Robertshaw et al, 2001:14).

This increase of criminality particularly crimes on property (i.e., burglary, thefts, home robberies) and street mugging in Dar es Salaam is considered to have changed the way people view the city. The city probably no longer fits the description: “The Harbour of Peace”. The usual picture of the early 1960s of seeing verandahs opening into residential streets with neighbours socialising may not be a familiar site today in some areas (Figures 2.5, 2.8, 2.10 & 2.11).

Dar es Salaam is probably more worrisome at night than in the 1960s and early 1970s. One may not trust anyone approaching from behind or front at night in residential areas. Urban residents are striving to cope with the crime and fear of it. The increase of criminality may have affected the behaviour of the urban residents, from the way they build their houses up to how they relate as neighbours. With the inability of the police force to patrol the areas of Dar es Salaam with the purpose of averting residential crimes, residents have ended up taking the matter in their own hands. The following sections discuss the Sungusungu phenomenon, which arose out of need for security (when the State through its police force and the legal agencies) was not able to provide.
2.9.4 The Sungusungu phenomenon

Sungusungu is an organized group of people the United Republic of Tanzania operating with the authority and under the protection of the government for law enforcement on protection of people and their property. The groups are known by the name of Sungusungu or Wasalama or any other name but do not include members of the police force, national service, defence forces, prisons or immigration services.

Sungusungu is legally recognized through the people’s militia laws (miscellaneous Amendment) Act 1989 (No. 9 of 1989). According to the Act, one of the major objective function of Sungusungu is to protect people and their property within the United Republic of Tanzania. In order to fulfil this mandate, the Act has granted members of Sungusungu with: powers to arrest without warrant of arrest; arrest on reasonable suspicion for having committed or about to commit a crime; and powers of search and seizure of any property found in possession which forms material evidence of crime committed, or about to be committed. The powers vested to Sungusungu are comparable to police officers of the rank of police constable. The Act does not elaborate Police Constables powers of arrest, but the powers are derived from the common law as enshrined in the Tanzania Criminal Procedure Act No. 9 of 1985 (DSCP, 2000).

Sungusungu / Wasalama traditional defence group were originally rural defence groups formed by people volunteering to fight cattle rustlers, banditry and murders resulting from cattle rustling or beliefs in witchcraft in Tabora, Shinyanga and Mwanza regions in 1981 and later in Kagera, Mara and Singida regions in 1982. The Safer city Programme report (2000) gives the causes for the rise and spread of Sungusungu/Wasalama in the mid 1970s (in rural areas) and early 1990’s (in urban areas) as many and multiple and being caused by socio-economic and political factors such as: economic hardships in the mid 1970s; inadequacy of the law enforcing agencies; the training of the police was not community oriented to community policing, but state oriented to deal mostly with state matters, waiting for people to bring their problems to them through the few police posts which were ill equipped and sparsely situated. The cumbersome legal procedures in terms of investigations and prosecutions by the police with the ultimate decisions on convictions/acquittals and sentencing by courts, made some people resort to measures such as mob justice, sometimes setting suspects ablaze. The rural populace however, allege that the government system has become corrupt, particularly the agents of the State that deal with establishment of order (i.e., the police and the courts).

This period was also intertwined with the degeneration of ethics in the public service, which in turn bred loss of respect to authority, with law and order being under attack (DSCP, 2000). To curb the side of lawlessness the government adopted some unorthodox approach, which infringed on the
basic freedoms but acted as a shock treatment to restore rational values. Sungusungu was the reaction from the members of the public, beginning in rural areas. The ruling Chama cha Mapinduzi (CCM) Party, then the only political party in the country (1971) came up with a policy, which called upon people to fill in the gap between law enforcers and the alarming rate of crime wave and magnitude in the country. The government later adopted the policy. Part of the policy states as follows: “the basis of development of defence and security in Tanzania, is on the Tanzanians themselves, and in particular every patriotic Tanzanian. The country has no ability to employ a big paid force to manage its defence and security” (Dar es Salaam Safer City Project report, 2000:43). The emergence of People’s militia and Sungusungu in the mid-1970s was therefore a heed to the call in both rural and urban areas; and a wake up call to the government to do something about the crime increase in the country and the urban areas.

The emergence of urban and rural neighbourhood watch groups, i.e., Sungusungu and the involvement of the people in exposing crime suspects did help reduce crime incidents substantially in 1990/1991; dropping the rate of crime incidences from “12.7% in 1990 to 9.2% in 1991, a drop of 3.5% in one year” (ibid). Regarding crime detection, the following successes were recorded: Shs. 377million property worth was recovered from Shs. 1.3 billion property worth stolen from house breaking crime incidences; a total of Shs. 1.7 billion was reported stolen public funds out of which a total of Shs. 26.7 million was recovered, and 467 were arrested for receiving bribes in 421 cases, during which Shs. 1.3billion was intercepted by police being paid to the said culprits (Dar es Salaam Safer City Project report, 2000: 47-48).

2.9.5 Dar es Salaam Safer Cities Project

Safer Cities Dar es Salaam Project is an initiative aimed at strengthening the capacity of local authorities in managing and sustaining urban safety and security by preventing and reducing crime and violence in the communities at Ward and Subward (Mtaa) levels in the three municipalities of Kinondoni, Ilala and Temeke which make up the Dar es Salaam City/Region. It is part of the UN Habitat Agenda adopted in the Habitat II Conference in Istanbul (1996). The Agenda recognises that “governments, at all appropriate level, including local authorities have the responsibility to ensure access to safety”.

The programme was initiated at the City and Municipal Authorities because: urban safety and security is one of the basic functions of the Local Authorities as per Article; Local Authorities are strategically placed to initiate and co-ordinate local action between citizenry (as grass root stakeholders) and secondary stakeholders in crime prevention/reduction initiatives; the City and Municipal authorities
are working towards supporting viable socio-economic development for its residents through poverty reduction programmes with crime prevention/reduction initiatives as one of its priorities.

The programme objective activities aimed at: strengthening the capacity of local authorities (city and municipal) in reducing delinquency, violence and security at Ward and Subward (Mtāa) level and supporting and upgrade “preventing policing” on law and city by-law enforcement through the proposed City Auxiliary Police, community policing (by the National Police Force) and community/neighbourhood security groups (such as Sungusungu, etc).

2.9.6 Safer cities and Sungusungu initiatives in Dar es Salaam

In the endeavour to accomplish the objectives, Safer Cities learnt of Sungusungu experiences in the orientation, sensitization exercise and in evaluation and enhancement of safety and security initiatives at Ward and Subward levels. Both exercises revealed, among other issues, that Sungusungu was recognised by most of the residents as the only system workable and affordable to the marginalised majority who are mostly affected by the consequences of crime and violence and/or the fear thereof, in their communities.

2.9.7 Community/Neighbourhood policing

The experience of the people in organizing themselves for community safety through institutions like the People’s Militia, Sungusungu and security neighbourhood watch groups could provide a base for Community/Neighbourhood policing where Police Officers at Ward Level (“Police Kata”) in the wards could adopt community/neighbourhood policing which calls for the following, as among others: initial response to violations of law; regular patrols on community areas; visiting residences, particularly elderly who live alone, youths, women etc; on such visits police should ask questions, emergency contacts and hearing requests from people they visit to meet in the communities, and police interact with residents and engage in community safety activities as well as supporting victims of crime.

Community (or public safety) extends beyond crime to include disorders vandalism and public noise. Police alone cannot solve all these problems of crime and disorders; public agencies and people need to play their part. Community safety word has to get to the heart of the problem by planning, learning and investing in “what works”. Mainstream departments such as Housing Street lighting, education and social services should target some of their resources to ensure solutions are found to long running problems of safety and security in communities. Information on “what works” needs to be available on where it matters on the ground. At the national level the strategy should be on crime
reduction by taking a role in tracking and evaluation process. Government departments should identify what they can do to raise the profile of community safety and contribute to finding solutions. Causes of end solutions to community safety problems have to be looked into with evidence of problem analysis, monitoring and evaluation.

Safer Cities Dar es Salaam Project has one objective of strengthening the capacity of the three local municipalities in managing urban safety and security issues, develop and implement partnership crime prevention strategy through the proven and promising initiatives workable and affordable by communities. Sungusungu or neighbourhood watch groups, as a system is one of the tested and proven partnership strategies, which is already recognized by law and found workable and affordable to the marginalized poor majority, given the administrative and political commitment, will and drive by leaders and residents from the grass root level to the national level. Successful local crime prevention coalitions involving Sungusungu/neighbourhood watch groups and community policing through the Dar es Salaam City Auxiliary Police in cooperation and co-ordination with the national police force at all levels in strengthening the capacity of Dar es Salaam Local Authorities in building a conducive environment for urban safety.

2.10 Can urban design secure residential neighbourhood?

Most of us share a general, intuitive understanding of the qualities we would like to have in the neighbourhood around us. It is not complicated. A sense of privacy – we are left alone when we want to be alone. Friendly people who know you, and whom you greet and occasionally talk to. Safety—safety from violence, from theft. Safety of children. Safety at night. A beautiful place—one that lifts your heart when you walk around or look out of the window. A place to sit in public that is really a wonderful place. Streets and public places where everyone feels at home, instead of ones where no one feels at home. A uniqueness of the neighbourhood, so we know it both when we are home and when we get home. ……This is a dream, one might say, of every developer. A developer with a conscience, who dreams of building neighbourhoods, who hope and wishes to build something for people that has these qualities. Christopher Alexander, 2008 (in Hass T., 2008).

Throughout the presentation above, evidence of the insufficiency of the approaches and endeavours is apparent. What is it that the residents of Dar es Salaam really need from their residential neighbourhoods where they live? The answer to this question seems to be exactly that given in the quote above; and this may be found from “environmental and urban design approaches and techniques”.

33
Experience based on written literature and documentations about Dar es Salaam (regarding its planning and design) indicate no evidence of the application of environmental or urban design techniques to evolve residential neighbourhoods that meet Alexander’s quality of neighbourhoods. It is from this point of departure that this study is based. Can environmental manipulation and urban design augment the management and social endeavour in the control or reduction of crime in residential neighbourhoods? What are the reasons behind the residents’ tendencies to exclude themselves from their residential streets? These questions and many others are answered in the course of this study. The goal of the study being to establish whether there are any necessary requirements and processes that help to create environments that are liveable, safe and secure from crimes.

2.11 Summary
In this chapter I have tried to illuminate the short history context of Dar es Salaam through its various stages of growth and the city’s planning, from its colonial era through to the current status. By reading through this briefing, one would understand that, there was pressure from the Africans to reside in the city since the colonial period. From its inception the city has been seen to be a place with opportunities for employment. The colonial powers (both the Germans and the British) tried all they could to ensure that only few could be allowed in the city to serve in the few jobs that were available at a time. For those allowed in the city, their areas of residences was only in Zone III, a specially set aside area for the native Africans. One also understands through reading this chapter that, the urban services that go with urban development (i.e., water, roads, street lighting, etc.), including the police patrol services were limited to Zone I, and Zone II, while sparingly being provided to Zone III. This left the Zone III area virtually un-serviced, rendering the areas to be crime prone residential areas.

In the chapter one is also informed that the planning machinery in Tanzania has adapted the zoning system and problem of crime in the residential spaces that were created by the colonial administration during the colonial period. Those areas that were occupied by the Europeans were now living places for the high income, mostly people in the government service and rich business tycoons. Moreover, planning have adapted the zoning of residential areas using: low-density, medium-density and high-density, which have their roots in the colonial racial segregated zoning philosophy. At the same time the plans that are currently in use are mostly copies or imitations of the Greek gridiron layouts (typical layouts used by the colonial planners), which are not flexible in creating residences that have common spaces that can serve to unify residents and thus enhancing the forging of community spirit.

From the chapter, it is also seen that Tanzania does not have any strong formal “housing financing facilities”. Individuals on the basis of own savings mainly build houses and usually at slow pace. This
makes its difficult to plan and provide mass housing for the many of the housing needs. This also lends it difficult to develop or provide well-considered and designed mass housing schemes where crime prevention strategies are integrated into the housing design. The only public Real Estate Developer, the National Housing Corporation, is too weak to handle the issue of affordable housing provision. In addition the NHC is understaffed in terms of managerial and technical manpower to handle the planning and the architectural design processes that take into account “crime prevention and creation of social capital” within their housing estates. The few private real estate developers, which are coming up in the scene, are market and commercial oriented, thus lacking the will and capacity to provide housing for the majority.

One also understands from this chapter that, after independence, the new government in power adopted the police force, which was ill trained for crime prevention. The police force that was trained for enforcement of colonial order, was very much feared by the urbanites, being seen as agents of the colonial power, and lacking the human quality of the police force. With the size of the force being limited in number, it could not suffice the demand in patrolling the increasing expanse of Dar es Salaam. Thus control and prevention of crime was not achieved, especially in the native African residential areas. This incapacity of police to control and prevent crime and protect the people was even more serious as the city continued to grow in size and population. Owing to the inability of the police to provide the required protection against crime and maintenance of peace in the residential areas, particularly property crimes, residents in the city assumed the role of protecting themselves and their properties. Among the actions that residents have taken include institution of the “Sungusungu watch groups” and the increasing use of wall fencing and barricades to residences. Although Sungusungu was initially rural based, it was openly taken on board in the urban areas because there was no any other action to resort to. With the introduction of the Dar es Salaam Safer City Project Sungusungu is seen as a possible force and arrangement with people’s mandate to provide the policing of urban residential areas for the protection of the residents and their properties. However, this can be enhanced if residential neighbourhoods can be conceived, planned and designed with the notion of “crime prevention” and building of community spirit within the residential areas. Borrowing from the developed world where there has been used a concept of crime prevention through environment /urban design concept that utilizes “Defensible Space” principles, residential environments may be freed from crime with full of life in them.
Three

Concepts and theories

In this chapter, I first present the key concepts used in the research. This is followed by a presentation of theories, and approaches that have been and are being applied in the industrialised world, to explain and analyse crimes and how to deal with crimes through urban or environmental design interventions. Whether such theories and concepts are fit to be applied in the context of Tanzania and Dar es Salaam in particular is an issue for discussion in this research. The intention is to use these theories, concepts and approaches in studying and analyzing the responses by homeowners in dealing with urban crimes (burglary, residential street mugging and robbery) and crime prevention in the context of Tanzania using Dar es Salaam as the case study city. The first part of the chapter tries to highlight what the authors in philosophy of science say about theory and concepts. This discussion then culminates into a discussion of what seems to be the theories that I consider relevant for this research.

3.1 Theory, phenomenon and concept

In science, terms are described or defined by using stipulative or conceptual definitions. Authors in philosophy of science have defined the term theory using two terms that are comparable in meaning. Lundequist (1999:30) defines theory as “a collection of concepts, which together provide an understanding of how a phenomenon is built up and how it can be used”. He provides a more stringent definition saying: “theory is a system in which a number of concepts and propositions have been systematically ordered”. Chalmers (1999) and Nachmias and Nachmias (1997:35-36), describe scientific theories as “abstractions representing certain aspects of the empirical world”. The three scientists agree that: “scientific theories are concerned with “how” and “why” of the empirical phenomena, not with “what” should be. They help to explain and predict about a phenomenon” (Chalmers, 1999 in Lupala 2002:9), Lundequist, 1999:29-30, Nachmias and Nachmias, 1997:35-36). They are concerned with what should be when used to predict about a phenomenon.

While thinking involves the use of language, which is a system of communication composed of symbols and a set of rules permitting various combinations of symbols, one of the most significant
symbols in language that is related to research is the concept. Science begins by forming concepts to describe the empirical world. “A concept is an abstraction representing an object, a property of an object or a certain phenomenon.” Concepts serve a number of important functions in social science research. Concepts are abstracted from sense impressions and are used to convey and transmit perceptions and information. Concepts do not actually exist as empirical phenomena: a concept is rather a symbol of the phenomenon (Nachmias and Nachmias, 1992:27-28). As a symbol of a phenomenon, the concept function as a means of communication (Johansson, R. 2004:6).

Johansson (2004:6) asserts that, concepts also introduce a perspective: a way of looking at empirical phenomena. Through scientific concepts the empirical world is given an order and coherence that could not be perceived before conceptualization. Another function of concept is as a means of classification and generalization. Scientists categorize, structure, order, and generalize their experience and observations in terms of concepts. Concepts serve as components of theories and thus of explanation, predictions, and understanding.

In this research, theory definition by Lundequist (1999), Nachmias and Nachmias (1997), Johansson (2004) and Lind (1998) satisfies the quest of the usage intentioned. And theory behind the research is hinged upon criminological theories that are explained in section 2.2 below and two crime prevention strategies described in section 2.3 further below. The researcher also adopts the use of the terms “phenomenon” and “concept” as defined by Nachmias and Nachmias (1997), Lind (1998), Lundquist (1999), Chalmers (1999), Lupala (2002), and Johansson (2004).

The phenomenon for this research is “the observed tendency by homeowners or residents of the use of wall-fences and barricading of doors and windows in residential buildings in urban areas of Tanzania. It is believed that, the phenomenon comes out of processes that are induced or caused by crime increase and the fear of it”. It is considered by many people that, this tendency is a response by the homeowners or residents in dealing with crime and the fear of it. Among the tasks of this research is to explain how and why this is initiated and carried out. The main objective being to explore and explain the processes of responding to crimes of burglary, home robberies and street mugging in residential neighbourhoods and to explain the outcomes and impacts of the responses to the built environment in terms of architecture, planning and social interactions. Others are to identify and classify the various architectural/physical features resulting from the processes and examine their impacts to the built environment (in terms of quality of architecture, and overall built fabric as a social interaction arena). The last task is to establish the implications of the responses or the tendency for architecture and urban planning.
3.2 Operational concepts

This section presents operational concepts that are used in this research. In the discussion, I present six operational concepts that are pertinent and they include: crime; fear of crime; crime prevention; privacy, security and safety; urban planning and design; and architecture.

3.2.1 Crime

In dealing with crime as a historical phenomenon, scholars of Western societies have sought to relate crime and the control of crime to specific economic, social and political contexts, acknowledging that crime is something defined by law, and that the law was changed and shaped by human institutions”. Clive Emsley, 2002 p. 202 in Burton, 2005 p. 116.

There is no permanent criminal class at war with the peace of the community but rather a series of separate acts by individuals, whose need or conscience is for the moment in conflict with the provision of the law. Alexander Paterson, 1939, p.1, TNA/2706, in Burton, 2005 p. 116.

Fundamentally, the term “crime” can be defined as “an antisocial act that violates a law and for which a punishment can be imposed by the state or in the state’s name (UN-HABITAT Report, 2004:59). It is the breach of a rule or (cursive) law for which a punishment may ultimately be prescribed by some governing authority or force (Webster’s New Twentieth Century Dictionary unabridged Second Edition, 1977:1425). Informal relationships and sanctions have been deemed insufficient to create and maintain a desired social order, resulting in formalized systems of social control by the government, or more broadly, the State. With the institutional and legal machinery at their disposal, agents of the State are able to compel individuals to conform to behavioural codes and punish those that do not. Various mechanisms are employed to regulate behaviour, including rules codified into laws, policing people to ensure they comply with those laws, and other policies and practices designed to prevent crime. In addition there are remedies and sanctions, and collectively these constitute a criminal justice system. Not all breaches of the law, however, are considered crimes, for example, breaches of contract and other civil offenses. The label of “crime” and the accompanying social stigma are normally reserved for those activities that are injurious to the general population or the State, including some that cause serious loss or damage to individuals. The label is intended to assert hegemony of dominant population, or to reflect a consensus of condemnation for the identified behaviour and to justify a punishment imposed by the State, in the event that an accused person is tried and convicted of a crime. Usually, the perpetrator of the crime is a natural person, but in some jurisdictions and in some moral environments, legal persons are also considered to have the capability of committing crimes. The State also commonly commits crimes, although this is underrepresented in the justice system.
In eighteenth- and nineteenth-century England, laws that appear to have protected the interests of a particular class were not necessarily accepted by those they discriminated against, who in breaking them felt no sense of wrongdoing” (Burton, 2005:116). This kind of differentiation of crime along the lines of classes has relevance in a colonial context. In Dar es Salaam, and elsewhere in the colonial empires, laws were made by outsiders and imposed upon the colonized, their legitimacy sometimes resting solely on the threat of force. "In urban centres in particular, Africans were subject to local laws designed to impose municipal order along the lines of that prevailing in European towns and cities, communities that were a part of the industrialized and more affluent societies of the west” (ibid).

The methodical study of the reasons, anticipation, power and severe reactions to crime is known and called criminology. For these intentions, the explanation of crime depends on the speculative posture taken. The life of crime could be sighted from either an official or normative point of view. A legalistic description comprises general law or the ruling codified in the laws endorsed by the superior government or the State. Consequently, a crime is any blameworthy act or oversight banned by law and penalized by the state.

Normatively, crime is analysed as abnormal behaviour, which goes against the existing norms, exclusively, cultural standards recommending how humans ought to conduct themselves. This approach is judged in relation to the multifarious realities adjacent to the idea of crime and request to recognise how shifting social, political, psychosomatic, and economic circumstances may have an effect on the current definitions of crime and the structure of the official, law enforcement, and penal reactions made by the state. The resulting range of punishable acts is extraordinary and varies across jurisdiction and cultures.

The constitutional certainties across jurisdictions and cultures are solutions and often controversial. For instance, as cultures revolutionize and the political atmosphere changes, behaviour may be criminalized or decriminalized, which will eventually on the long run have an effect on the statistical crime rates, establish the distribution of assets for the enforcement of such laws, and manipulate public judgment.

Crime and violence are related issues, although many crimes may not entail violence (such as theft and drug related offences) and some acts of violence may not be crimes (such as those committed pursuance to law or those not formally reported). However, there are significant overlaps between crime and violence, such as in the cases of murders, armed robberies and assaults, including sexual assaults.
Burglary is the most common property crime connected to local built environment. It is generally understood to be an unlawful entry into someone else’s property with an intention to commit a crime. Like other crimes, the elements of that constitute burglary differ across the world. For example, in some localities, theft from cars would not be considered burglary. While burglary in many other countries is an act or crime of breaking into a house, with an intent to commit theft or other felony, in USA, burglary include the breaking and entering of any building by day as well as by night, with the intention of committing crime. In other places the required elements of a burglary includes forced entry or the taking of property, whereas other jurisdictions do not have these requirements.

Robbery is a forcible and felonious taking of another’s property from his/her person or in his/her immediate presence by use of violence or intimidation. Robbery may be defined as the taking of property by use of violence or threat thereof. It is primarily a contact crime. Robbery is often classified as both violent crime and a property crime in many jurisdictions. Consequently, it is more likely to be reported to police than lesser crimes. Robbery is a major security threat and a special concern in developing countries. This is because it not only results in injury and property loss to victims, but also increases the “fear of crime”. Thus residential robbery in this research means any robbery that happens in residential houses. Mugging is a category of robbery that happens in the streets and it is an assault of a person from behind by strangling him/her with an arm thrown around his/her neck especially with intent to steal from or rob him/her.

3.2.2 Fear of crime and violence

Fear denotes an unpleasant, often strong emotion caused by anticipation or awareness of danger. It is the most general term and implies anxiety and usually loss of courage, a reason for alarm or to have a reverential awe. Fear is a feeling of anxiety and agitation caused by the presence or nearness of danger, evil, pain etc (Webster’s Ninth New Collegiate Dictionary, 1991:453) Fear has been defined as “the institutional, cultural and psychological repercussions of crime and violence” and is identified as an outcome of destabilisation, exclusion and uncertainty (Moser, 2004:4). The cultures of fear of crime and violence are widespread, both in the developed and developing world. It should be noted here that fear of crime is different from the perception of crime, which is the recognition and knowledge that crime occurs. “Fear is a passion of our nature that excites us to provide for our security, on the approach of evil” (ibid). The term fear of crime in this research is a concept used to describe a condition or feeling of anxiety and agitation that is caused by the expectation of crime or danger associated with crimes of burglary, home robbery, thefts in homes and residential street mugging. In this study the criminal activity is usually burglary, thefts in homes, street mugging and residential robbery.
3.2.3 Crime prevention

The word “prevention” is defined by Webster’s New Twentieth Century Dictionary unabridged Second edition (1977:1426) as: an act of going before; anticipation; the act of hindering or preventing; a means of preventing; hindrance, an obstacle or prepossess. In this research, I use the term “crime prevention” to describe all concepts designed as “acts or actions or processes” to hinder anticipated crimes (and in this case burglary or residential robbery).

In this study, the term “crime prevention” also refers “to all efforts and actions (whether architectural/physical or planning) done by individuals or public at large to fend off crimes of burglary, thefts, street mugging and residential robbery, before it happens, thereby revamping the confidence of residents in the control of their environment”. Acts of reducing opportunities or temptations that entice and tempt crimes are also considered as among crime prevention strategies.

Crime Prevention “begins with the process of being aware that a crime can occur, anticipating its form, location, time and victim, and taking action to reduce the chances of its happening”. There are three elements the criminal must possess for a crime to occur: Desire, Ability and Opportunity. Eliminating just one of these elements results in no crime-taking place. We always have no control over the first two elements, thus whether the criminals have the desires or abilities to commit the crime is solely up to them. However, one can have great control, if one eliminates, the third element: opportunity. Crime prevention calls for using instinct, common sense, and action to eliminate or greatly reduce the criminal's opportunity. A large share of the responsibility of reducing criminal opportunity lies with us. That is not however to say that if one is a victim of crime it is his/her fault and the fault of the criminal. Certainly not! But the fact remains that we all have a personal part to play regarding crime prevention.

3.2.4 Privacy, security and safety

The term “privacy” is used frequently in ordinary language as well as in philosophical, political and legal discussions, yet there is no single definition or analysis or meaning of the term. The concept of privacy has broad historical roots in sociological and anthropological discussions about how extensively it is valued and preserved in various cultures. Moreover, the concept has historical origins in well known philosophical discussions, most notably Aristotle's distinction between the public sphere of political activity and the private sphere associated with family and domestic life. Yet historical use of the term is not uniform, and there remains confusion over the meaning, value and scope of the concept of privacy.
As such, the definitions of privacy vary widely according to context and environment. In many countries, the concept has been fused with data protection, which interprets privacy in terms of management of personal information. Outside this context, privacy protection is often seen as a way of drawing the line at “how far society can intrude into a person’s affairs”. The lack of a single definition should not imply that the issue lacks importance.

Robert Ellis Smith (1974), editor of the Privacy Journal, defined privacy as “the desire by each of us for physical space where we can be free of interruption, intrusion, embarrassment, or accountability and the attempt to control the time and manner of disclosures of personal information about ourselves”. According to Edward Bloustein, privacy is an interest of the human personality. It protects the inviolate personality, the individual’s independence, dignity and integrity. Accordingly, Ruth Gavison (1980: 347) says, “there are three elements of privacy: secrecy, anonymity and solitude: It is a state which can be lost, whether through the choice of the person in that state or through the action of another person”. But the Calcutt Committee in the UK (1997) was satisfied that it would be possible to define it legally and adopted this definition in its report on privacy: “The right of the individual to be protected against intrusion into his/her personal life or affairs, or those of his family, by direct physical means or by publication of information”.

Discussing the “concept of crowding”, Vestbro illuminated the many aspects of “privacy”. One of the many aspects is that arising from Mitchell’s findings that: “lack of privacy is mainly a question of sharing one’s dwelling with other households and not so much dependent on the number of people in a dwelling or the amount of floor area per person” (Vestbro, 1875:167). Here the discussion was relating this with crowding in Swahili houses in Magomeni. The second aspect highlighted by Vestbro is that based on social context, defining “privacy” as something else: for instance that each individual has a room of his own, that there are separate toilets, or that the maid lives away from the (upper class) family” quoted from Rosov, 1961. Vestbro also mentioned the attempted definition of privacy by WHO: 1961, that states as follows: “There is the privacy of seclusion in individual rooms. There is the privacy of vision, of restricting the possibility of looking into a dwelling unit through the door and the windows, and there is the privacy of sound” (Vestbro, 1975:167).

The definition by Proshansky et al. (1970), who assume that any human being requires a minimum amount of physical space to exist and survive and that this space is determined not only by the need to satisfy one’s hunger, thirst, sex, and other biological drives, but also one’s needs for affiliation, achievement, success and other complex social moves. Proshansky et al. Further suggested that the: “inner determinants of territorial behaviour in the individual is his desires to maintain or achieve privacy. Territoriality thus becomes one mechanism whereby he increase the range of options open to him and maximize his freedom of choice in the given situation” (Proshansky, et al. 1970, as quoted by
Vestbro, 1975:167). Based on these, Proshansky et al. asserted that, “privacy” should be defined according to four key concepts. They are “solitude”, which means that a person is free from the observation of others; “intimacy”, referring to personal relationships within a dyad or larger group; “anonymity”, which is a state in which the individual seeks and achieves freedom from identification and surveillance in public settings; and “reserve”, which is the state of privacy allowing a person not to reveal certain aspects of himself (Vestbro, 1975:167). Even though the discussion by Vestbro was related to overcrowding and privacy in the Swahili house type dwelling units, the four concepts by Proshansky et al. can be applied to define the necessary privacy required in residential neighbourhoods.

In this study, while I agree and accept nearly all the above presented definitions, I prefer to define ‘privacy’ as means towards achieving security of information contained within the home both of persons and of property and it means ‘something that gives or assures protection and safeguards against external influences infringing on the well-being of the home, the occupants and the properties therein’. In this context, the concept of privacy is important as it allows one to restrict others’ access to residents and homes, and enables and enhances personal expression and development of relationships with others. The concept provides protection against over-reaching social control by others through their access to information or their control over decision-making.

### 3.2.5 Urban planning and design

The term “planning” is used in many professional disciplines and is in itself a discipline of some kind. It is not enough to use the term without qualifying it adequately. The discipline of distributing urban or suburban functions over a space, in terms of land use activity patterns of people in the physical setting is called urban land use planning. This includes the provision for physical facilities and services and improvements to the land, which are made to accommodate these activity patterns. Often urban or suburban functions addressed in planning are broad, encompassing land use; transportation; housing; open space and recreation; public and human services; and conservation of environmental and heritage resources. Within the urban planning, a branch of architecture deals with the micro-level design and organization of urban space and activities. However, city planning deals with the macro-level determination and drawing up of plans for the future physical arrangement and condition of a community.
Urban and regional planning, deals with management of changes of the natural and built environment at various levels including: neighbourhood, community, municipal, city and regional. Whereas other professions like architecture and urban design deal in more detail with a smaller scale of development, regional planning deals with a still larger scale development and at a less detailed level.

In this research the term “planning” means urban land use planning and it is the collective work of distribution of urban functions over a space.

### 3.2.6 Architecture

The term architecture can be used to mean a process, a profession or documentation. As a process, architecture is the activity of designing and constructing building and other physical structures by a person or a machine, primarily to provide socially purposeful shelter. A wider definition often includes the design of the total built environment, from the macro level of how a building integrates with its surrounding man made landscape to the micro level of architectural or construction details and, sometimes, furniture. Wider still, architecture is the activity of designing any kind of system.

As a profession, architecture is the role of those persons or machines providing architectural services. The discipline dealing with the principles of design and construction and ornamentation of fine buildings is ‘architecture’. It is the profession of designing buildings and environments with consideration for their aesthetic effects. Architecture is the art and science of designing buildings and structures. And, as documentation, usually based on drawings, architecture defines the structure and/or behaviour of a building or any other kind of system that is to be or has been constructed.

Architects have as their primary object providing for the spatial and shelter needs of people in groups of some kind (families, schools, churches, businesses, etc.) by the creative organisation of materials and components in a land- or city-scape, dealing with mass, spaces, form, volume, texture, structure, light, shadow, materials, programme, and pragmatic elements such as cost, construction limitations and technology, to achieve an end which is functional, economical, practical and often with artistic and aesthetic aspects. This distinguishes architecture from engineering design, which has as its primary object the creative manipulation of materials and forms using mathematical and scientific principles.
Separate from the design process, architecture is also experienced through the senses, which therefore gives rise to aural, visual, olfactory, and tactile architecture. As people move through a space, architecture is experienced as a time sequence. Even though our culture considers architecture to be a visual experience, the other senses play a role in how we experience both natural and built environments. Attitudes towards the senses depend on culture. The design process and the sensory experience of a space are distinctly separate views, each with its own language and assumptions.

Architectural works are perceived as cultural and political symbols and works of art. Historical civilizations are often known primarily through their architectural achievements. Such buildings as the pyramids of Egypt and the Roman Colosseum are cultural symbols, and are an important link in public consciousness, even when scholars have discovered much about a past civilization through other means. Cities, regions and cultures continue to identify themselves with (and are known by) their architectural monuments.

The word ‘architecture’ comes from the Latin _architura_ and that from Greek (_architectu_), "master builder", from the combination of (_archi_), "chief" or "leader" and (_tekton_), a "builder" or "carpenter". While the primary application of the word "architecture" pertains to the built environment, by extension, the term has come to denote the art and discipline of creating an actual (or inferring an implied or apparent) plan of any complex object or system. The term can be used to connote the implied architecture of mathematics or of abstract things such as music, the apparent architecture of natural things, such as geological formations or the structure of biological cells, or explicitly planned architectures of human-made things such as software, computers, enterprises, and databases, in addition to buildings. In every usage, an architecture may be seen as a subjective mapping from a human perspective (that of the user in the case of abstract or physical artifacts) to the elements or components of some kind of structure or system, which preserves the relationships among the elements or components.

Architectural history studies the evolution and history of architecture across the world through a consideration of various influences- artistic, socio-cultural, political, economic and technological. In general, the question is one of relating meaning (intangible functions, purposes, symbols) with the built environment (material tables, windows, roofs, paths) through the necessities of life (food, work, communion etc.) within the historical context.

In this research, the science or art of designing or planning buildings, houses, churches, public, and business buildings are all examples of architecture. In this study, the term architecture is used to mean architecture in the residential environments when we walk through visualizing, hearing, and feeling through the senses.
3.3. **Theories on crime prevention strategies**

**Criminological Theories**

Criminological theory has long seemed irrelevant to those who have to deal with offenders in the real world. This irrelevance stems from attributing the causes of crime to distant factors, such as child-rearing practices, genetic make-up and psychological processes. These are mostly beyond the reach of everyday practice, and their combination is extremely complicated for those who want to understand crime, much less do something about it (Felson, M. and Clarke Ronald V., 1989:1).

In the paper titled: *Opportunity Makes the Thief; Practical Theory for Crime Prevention*, Felson and Clarke (1989), show that “understanding crime causation is not necessarily burdensome”, and that “understanding is relevant to the routine prevention work undertaken by police and others”. In the paper, the duo posits that, opportunity makes the thief is much more than just an old saying and has important implications for crime policy and practice” (1989:1).

Still Felson and Clarke assert, “Individual behavior is a product of an interaction between the person and the environmental setting (italic is author’s). They also say that most criminological theories pay attention only to the first, asking why certain people might be more criminally inclined or less so. This neglects the second, the important features of each environmental setting that help to translate criminal inclinations into actions”(1989:1).

“This preoccupation with criminal inclinations”, they argue, “has produced a lop-sided picture of crime” which has been corrected by environmental criminologists, by showing how some environmental settings provide many more opportunities than others. To show their critics who downplay opportunities or temptations as true causes of crime, Felson and Clarke notes that, “no crime can occur without the physical opportunities to carry it out. Whatever one’s criminal inclinations, one cannot commit a crime without overcoming its physical requirements. Since crime opportunities are necessary conditions for crime to occur, this makes them causes in a strongest sense of the word”. Felson and Clarke goes on arguing that, “many people from uncaring or broken homes have never committed crimes, and many people from good families in comfortable circumstances have become active offenders”. They therefore conclude that “no theory about individuals can claim that it has found the necessary conditions for a person to commit crime. …… no single cause of crime is sufficient to guarantee its occurrence, yet opportunity above all others is necessary and therefore has as much or more claim to being a “root cause”” (1989:1).

According to this theory of crime, environmental settings rest on a single principle: the easy or tempting opportunities entice people into criminal action. This principle is found in each of the “new opportunity theories of crime, that include the rational choice theory, routine activity theory and crime pattern theory. Although the three theories differ in orientation and purpose, they have many common assumptions. They at the end lead to the inescapable conclusion that opportunity is a cause of crime.
Opportunities may at least be as important as individual factors and may be more tangible and relevant to everyday life. These theories are understandable as well as helpful for formulating practical crime control policies.

Opportunity theories relate changes in the nature and amount of crime to changes in the “opportunity structure” of crime. One well known study in this shows how the growth in ownership of light-weight electronic goods such as VCRs, together with the increase of untended houses in the day due to increased female participation in the labour force, easily account for the rise of residential burglary in the United States during the 1960s, and the 1970s (Clarke, 1989:2). The primary cause of crime is therefore seen to be self-interest instead of – as in most other criminological theories – psychological or social disadvantage (ibid). This may well be related to a period in Tanzania when there was nothing substantial to steal in homes or residences due to scarcity of valuable items that are prone to theft like electronic gadgets especially during the period when Tanzania restricted people from importing such goods. Even though for the very poor, there is always something to steal.

The features of the three theories outlined are presented, as they seem to be applicable to what is being experienced in Dar es Salaam Tanzania. The analysis of the research findings will be done in tandem with the three opportunity theories.

3.3.1 Rational choice theory/perspective

The rational choice theory focuses upon the offender’s decision making. Its main assumption is that offending is purposive behaviour, designed to benefit the offender in some way (Felson, and Clarke, 1989:7). Whereas traditional criminology tended to see criminals driven by their conditioning and environment, more recent economic based theories portray them as rational decision makers who base their decisions to commit crimes on an analysis of the risks of the venture compared with the expected profits. That is, the criminal does cost-benefit analysis (Becker 1968 in Geason and Wilson, 1988:4). Rational choice theory holds that, most offending results from a choice made by the offender who is seeking an economic, sexual or other benefit. These benefits may include domination of others (as wife or child abuse), indulgence in alcohol or drug abuse, or such mundane pleasures as having a bit of fun and excitement or achieving status in the peer group (Cornish and Clarke 1986 in Clarke, 1989:2). This theory can be presented in its conceptual form in Figure 3.1.
The figure illustrates the variety of rational decisions that a criminal would make in the course of taking a decision to commit a crime. Clarke and Cornish, who originally authored this rational choice model, tried to understand the questions that a burglar might ask: Which house offers the best target? Do the neighbours watch out for one another? How hard will it be to gain entrance? What sorts of goods are inside the house?

According to this model, free will is assumed, but there are certain background and situational factors that might predispose someone toward crime. **Background factors** would include psychological characteristics, like how intelligent the person is; social factors like family background; and demographic factors, like what kind of neighbourhood the criminal comes from. **Situational factors** would include persuasion by peers, arguments with spouse, or whether the person has consumed alcohol or drugs, along with a whole host of other possible situational, or urge-inducing, factors. Here, motive is listed as need for money or status, but in this classical view of crime, there is really no need to think about motive. All that is required are some generalized need: the desire to get ahead, to show off, excitement, etc.

---

**Fig. 3.1: The Decision to Commit a Crime. Source: Adapted from D. Cornish and R.V. Clarke (Eds.) 1986**
Previous learning and experience refers to direct or vicarious experience with crime. The offender would be comparing the target to others he has been successful within the past, or if he is new at it, he would be comparing the target with what have been successful with in the past. This factor also refers to the criminal’s self-perception of his/her own skills, ability to elude law enforcement, and get rid of the stuff afterwards.

Blocked opportunity is a concept from strain theory and would probably not be used by a rational choice theorist, but it is the criminal’s assessment of what legitimate avenues are available for satisfying needs. The decision to be made is whether work, gambling, borrowing, or avenues other than crime, for example, can make the same amount of money. The amount of efforts fits into this as the amount of time spent considering and evaluating whether the rewards (and costs) of crime outweigh alternative avenues for satisfying the same needs.

Readiness to commit crime is best understood as the offender “psyching” up. Again, strain theory offers a good perspective on this as withdrawal of legitimacy or belief in an unjust world, but “neutralization” captures the essence of the idea. The offender engages in self-talk, maximizing the belief that he/she deserves to rob the house (“That house and everything in it is mine”), and minimizing the belief that others deserve to have stuff (“Those people don’t deserve to have all those things”).

3.3.2 Routine activity theory/approach
Routine Activity Theory (RAT) is one of the main theories of environmental criminology. Developed by criminologists Lawrence Cohen and Marcus Felson, routine activity approach started as an explanation of predatory crimes. It assumed that for such crimes to occur there must be a convergence in time and space of three minimal elements: a likely offender, a suitable target, and the absence of a capable guardian against crime (refer Fig.3.2 below). The approach took the likely offender as given and focused on the other elements. The guardian was not usually a police officer or security guard but rather anybody whose presence or proximity would discourage a crime from happening. Thus a housewife or doorman, a neighbour or co-worker would tend, simply by being present, to serve as guardian. Guardianship is often inadvertent, yet still is a powerful impact against crime. Most important, when guardians are absent, a target is especially subject to the risk of criminal attack.
In the routine activity approach, the term target is preferred over victim, who might be completely absent from the scene of the crime. Thus the owner of a TV is normally away when a burglar takes it. The TV is the target and it is the absence of the owner and other guardians that makes the theft easier. Targets of crime can be a person or an object, whose position in space or time puts it at more or less risk of criminal attack.

Four main elements influence a target’s risk of criminal attack, as summed up by the acronym VIVA:

- **Value**, **Inertia**, **Visibility** and **Access**.

All four of these dimensions are considered from an offender’s viewpoint. “Offenders will only be interested in targets that they have *value*, for whatever reason. Thus the latest popular CD hit will be stolen more from record stores than a Beethoven CD of roughly equal monetary value, since most offenders would like to have the former but not the latter or *its sale is fast because of demand* (author’s emphasis). **Inertia** is simply the weight of the item. Thus small electronic goods are stolen more than weighty items, unless these latter are wheeled or motorized to overcome their weight. **Visibility** refers to the exposure of theft targets to offenders, as when someone flashes money in public or puts valuable goods by the window. **Access** refers to street patterns, placement of goods near the door, or other features of everyday life making it easy for offenders to get to targets” (Felson and Clarke, 1989: 3).
For the usual predatory crime to occur, a likely offender must find a suitable target in the absence of a capable guardian. This means that crime can increase without more offenders if there are more targets, or if offenders can get to targets with no guardians present. It also means that community life can change to produce more crime opportunities without any increase in criminal motivation (Felson, and Clarke, 1989:4-5).

Using this thinking and a variety of data, the routine activity theory still offers the best explanation for rise in burglary in the United States and Western Europe during the 1960’s and 1970s. Included in this explanation is the finding that the best predictor of annual burglary rates is the weight of the smallest television set sold each year. Another important component of the explanation is that far more homes in this period were left unguarded in the day as more women entered the full-time paid work. In fact, the most general explanation of crime rate trends is an indicator of the dispersion of activities away from family and household settings. As people spend more time among strangers and away from their own homes, their risk of personal and property victimization rises.

3.3.3 Crime pattern theory
Local crime patterns can tell us much about how people interact with their physical environment, producing more crime opportunity or less. Crime pattern theory, a central component of environmental criminology, considers how people and things involved in crime move about in space and time. Fitting well with the routine activity theory, this theory has three main concepts: nodes, paths, and edges. “Nodes” which is a term from transportation, refers to where people travel to and fro. Such places not only can generate crime within, but also nearby. For example a tough bar may generate more crime outside the premises than inside. Thus the word “node” conveys a sense of movement and hence carries extra meaning about crime opportunities.

Each offender searches for crime targets around personal activity nodes (such as home, school and entertainment area) and the paths among them. In addition, the paths that people take in their everyday activities are closely related to where they fall victim to crime. This is why crime pattern theory pays so much attention to the geographical distribution of crime and the daily rhythm of activity.
The third concept of crime pattern theory, *edges*, refers to the boundaries of areas where people live, work, shop or seek entertainment. Some crimes are more likely to occur at the *edges* – such as racial attacks, robberies, or shoplifting – because people from different neighbourhoods who do not know each other come together at edges. The distinction between insiders and outsiders helps underscore the importance of *edges*, since insiders usually commit crimes closer to their own neighbourhoods, while outsiders find it safer to offend at the *edges*, then to retreat to their own areas. Most importantly, crime pattern theorists and other environmental criminologists have shown that the design and management of town, city, and business areas can produce major shifts in crime rates. For example, it is possible to reduce crime by calming traffic and orienting windows so people can better supervise their own streets (Felson, and Clarke, 1989:6-7).

![Fig. 3.3: Conceptual relationship between social disparity, environmental conditions, architecture, urban planning and design, and urban management, built responses to crime, crimes and fear of crimes and the opportunities for crime.](image-url)
### Conceptual Framework For Studying The Responses (Opportunity Reduction)

**Conceptual level**

<table>
<thead>
<tr>
<th>Responses to Crimes or Opportunity Reduction Measures</th>
</tr>
</thead>
</table>

**Conceptual components**

- **Architectural/Built physical responses**
- **Un-built physical responses**
- **Non-physical responses**

**Conceptual definitions**

- **Wall fences and barricades**
- **Armed guards**
- **Psychological**

**Operational definition**

- **Wall fences, Wire fences, Hedge fences,**
- **Doors’/windows’**
- **Firearms,**
- **Security dogs,**
- **Security guards,**
- **Police Patrols,**
- **Beliefs,**
- **Charms**
- **Witchcraft**

**Methods for study**

- **Field observation,**
- **Measurements,**
- **Photography,**
- **Interviews,**
- **Literature review,**
- **Interviews,**
- **Observation,**
- **Photography**
- **Literature review,**
- **Review of documents**

---

Fig. 3.4. Conceptual and operational components of the responses to crimes of burglary by homeowners in Dar es Salaam. *Source: Author, 2007*
3.3.4 Theoretical Framework for Crime Prevention

Combating crime is often associated with increased policing, more severe punishment of criminals, social and educational programs, and programs for poverty eradication. In the last decades in Europe and America there has been an increasing interest in the potential of the built environment to contribute to crime reduction if not prevention. In research and practical policies it is nowadays often recognized in the developed world that the design of buildings, streets, parks and other public places can deter criminal activity and enhance urban safety (Wekerle and Whitzman, 1995:12).

3.4.1 Defensible space theory

In her book “The Death and Life of Great American Cities” Jacobs stresses three qualities of a city street equipped to handle strangers, and to make a safety asset, in itself, out of the presence of strangers, as the streets of successful city neighbourhoods do: “there must be clear demarcation between what is public space and what is private space. Secondly, she stresses the roles of residents—“the eyes of the street”. This role dwells on the extent to which they are vigilant, which in turn is influenced by two factors, namely: the community spirit, and part of design of the buildings and their environment”. She stresses that “there must be eyes upon the street, eyes belonging to those we might call the natural proprietors of the streets. The buildings on a street equipped to handle strangers and to insure safety of both residents and strangers, must be oriented to the street. They cannot turn their backs or blank sides on it and leave it blind” (Jacobs, 1961:35). Jacobs further posits the third quality as, “the sidewalk must have users on it fairly continuously, both to add to the number of effectives eyes on the street and to induce the people in buildings along the street to watch the sidewalks in sufficient numbers”.

In 1972, Newman developed a more detailed but similar approach to the subject matter. He proposed four major categories for discussion of defensible space theory. These include: the capacity of the physical environment to create perceived zones of territorial influence, the capacity of physical design to provide surveillance opportunities for residents and their agents; the capacity of physical design to influence the perception of a project's uniqueness, isolation and stigma, and the influence of geographical juxtaposition with “safe zones on the security of adjacent areas” (1973:3-4).

Defensible space is a term for the range of mechanisms, real and symbolic barriers, strongly defined areas of influence, and improved opportunities for surveillance, that combine to bring an environment under the control of its residents. A defensible space is a living residential environment, which can be employed by inhabitants for the enhancement of their lives, while providing security for their families, neighbours, and friend. It is a model for residential environments, which inhibit crime by creating the physical expression of a social fabric that defends itself (1973:3).
Newman describes how each aspect of design can affect the behaviour of two significant groups of individuals – possible offenders and possible witnesses and victims. He concludes that an area will be relatively well defended if it is visible to possible witnesses. Secondly, it is important that the community spirit be developed so that neighbours are encouraged to guard neutral territory. In addition, design should be made in such a way that a constant stream of potential witnesses is present (ibid). Newman further posits that, “a single-family house, therefore, should be designed and positioned so that the main entry to the dwelling faces onto the public street. This front portion of the house should be designated and designed as the primary area of public access to the unit and its grounds” (1980:171).

In creating communities of interest, Newman (1980) further posits that, “the collective public areas of a housing development be designed to serve the needs of the residents. It is far easier to tailor these collective areas to the needs of residents if residents sharing similar needs are grouped together, to exclusion of families with different life-styles and correspondingly different needs”.

Secondly, the site and buildings be designed so that the grounds and interior common circulation areas be defined as belonging to specific groups of residents. This should be accomplished in the most clear and unequivocal way possible: each building entry should provide access to a particular group of units and to that group only, access to that building entry should be across grounds that are clearly defined as belonging to that building and its group of residents.

The third design principle requires the assignment of the nonprivate areas of buildings and grounds to as small a group of residents as possible. Interior and exterior areas that cannot be made private by being assigned to individual families should be assigned to small groups of families to make them semiprivate as opposed to public.

3.4.2 Criticisms of defensible space theory

Many authors have criticized Newman’s Defensible Space Theory as well as the broader Crime Prevention Through Environmental Design (CPTED) model. Many theorists believe and assert that Newman’s components are poorly defined and that his theory is unrealistic. Some theorists also believe that there is little reliable evidence to prove the effectiveness of these methods. Others argue that Newman’s ideas do not reduce crime, but simply displace it.

One of the main criticisms of Newman’s work is that his concept of territoriality is neither clearly defined nor realistic. Newman requests that residents observe and monitor public places within their
environment for those who do not belong (Newman, 1973:78-80). Bill Hillier cites archaeological and anthropological evidence, which, he claims, discredits the theory that humans are “territorial” (Webb, 1984:177-8). Hillier claims territoriality assumes that people need to mark out and defend their territories (Hillier, 2004:31-32). Ellis contends that what Newman calls “territoriality” cannot be explained “purely in terms of a set of responses to characteristics of the built form” (Webb, 1984:178 in Cozens, 2001:). Mawby (1977) is also critical of Jacobs’s and Newman’s suggestion that “as the number of those ‘on the street’ increases, so does the efficiency of policing by the public and therefore offence rates fall” (in Cozens, 2001:146). Mawby notes that larger numbers of people may increase the number of possible witnesses, but it may also increase the number of potential victims and offenders and make offenders less readily discernible.

The second criticism of Newman’s work is in regards to street layout. Newman advised streets leading into a residential area be minimized in order to slow down the flow of traffic and cut off possible escape routes (Newman, 1973). Many critics scrutinize Newman’s concept of changing the street layout of an area to limit through traffic, arguing that, Newman assumes offenders are coming into the area from other locations and are unfamiliar with this location. Studies show, however, that many criminals operate in areas close to their own residence (Murray, 1983:118). Burglars often have an intimate knowledge of their victim’s residences. They often pick out their intended targets during routine travel to and from home. This allows them to watch the residence regularly and determine patterns of travel used by the occupants.

The social surveillance portion of Newman’s theory has also been a subject of criticism. Social surveillance relies on the assumption that its appearance, such as visible closed circuit cameras or citizens on patrol, is enough to deter criminals Newman, 1973:78). Criminals are usually quite aware of exactly how much surveillance is actually occurring. An offender’s calculations when deciding whether or not to commit a crime are based on the real risk of apprehension, not on symbolic barriers or the appearance of social cohesion (Murray, 1983:118). In other words, criminals are not dissuaded by the mere appearance of video cameras, citizen’s patrol groups and other surveillance techniques. Their actions will only be halted if the surveillance techniques are proven to be effective in catching criminal activities.

The next major criticism of Newman is that his studies were poorly conducted. Also, if the studies were conducted properly they did not show significant results. Critics say that Newman’s principles of defensible space do not stand up empirically. The data is weak, and in many cases, “statistically non-significant” (Webb, 1984:177).
Studies which attempt to test the social surveillance and social cohesion rationales have “resulted in contradictory findings.” Moreover, “the behavior changes predicted by the community building rationales (e.g., increased social cohesion) have consistently failed to appear” (Murray, 1983:110-111). The data used by Newman is criticized because it lacks comparisons with previous trends and control groups in order to compare the changes made to an area. Consequently, the changes the studies observe cannot be distinguished from trends that may be affecting the area as a whole. Therefore, the data recovered may not be associated with the changes in design that are implemented.

The next criticism is whether or not crime will simply be moved to another location where similar programs are not being conducted. Critics suggest that criminals will simply move to another location in order to commit their crimes in what is referred to as “displacement phenomenon.” These critics do not take into account possible transportation issues these suspects may have. Also, as stated earlier, most criminals like to have an intimate knowledge of their surroundings in order to feel more comfortable in committing their crimes (Cozens, 2001:). Critics also state there are other types of displacement that may occur. One of these methods, “tactical displacement”, occurs when a criminal changes his methods of committing a crime in order to avoid being caught. Another, known as temporal displacement, occurs when a criminal changes the time of day he would commit a crime in order to avoid detection.

Due to the above-mentioned criticisms and an ever-changing environment, Newman made some modifications to his original theory. None of the changes were drastic, but all were significant because they took advantage of social changes and advancing technologies.

Newman added the concept of reducing the fear of crime in the later years of his theory. Advocates of his theory hypothesized that the built environment could reduce the fear of crime. The rationale was that fear of crime affects everyone. When people have an unreasonably high level of fear, it is good to reduce it, even if the actual crime rate stays the same (Murray, 1983).

Another addition to Newman’s theory was the installation of streetlights. Instead of focusing primarily on environmental changes, Newman began including the topic of streetlights as a major aspect of his discussions. Streetlights became a major focus in reducing the levels of fear in the communities. Newman realized that, even with the physical changes, improvements needed to be made in the areas of community organizing efforts, better policing, and improved police-community relations.
There are many critics of Newman’s theory of *Defensible Space*. Newman took into consideration some of these criticisms and technological advancements in order to improve his theory. Overall, his theory has only been altered slightly and continues to be the backbone of environmental considerations for low-income housing.

### 3.4.3 Secured by design (SBD)

With all the criticism that have been levelled against Newman’s theory, ‘Defensible Space’ in the guise of CPTED in America, Canada, Australia, Holland and Secured By Design (SBD) in Britain, still appears to be a useful strategy for reducing crimes of opportunity. In Britain, the first project of discussion is the Mozart Estate project in the late 1980’s in which Secured by design initiative was used. The Mozart Estate project was a 25 million dollar project in which several blocks of flats were turned into two and three bedroom houses with their own gardens. “The research used in the Mozart regeneration project, as well as CPTED in the USA and, of course, the underpinning theory of ‘defensible space’, was to become known as ‘Secured by design (SBD)’ (Cozens, 2001).

The SBD initiative, which is directly influenced by Newman’s ideas, was launched in 1989 and since that time, many homes have been constructed to SBD standards. Included in the design were suggestions of local law enforcement officers to housing developers concerning new house-building projects. (Cozens, 2001) The SBD has been adopted for all new social housing projects.

Armitage (1999), studying the SBD housing estates in West Yorkshire acknowledges the link of SBD with ‘defensible Space’. She argues that community interaction; social cohesion and informal control can ensure that offenders do not feel comfortable and anonymous “through maximizing what Newman in 1973 referred to as defensible space and territoriality” (in Cozens, 2001:156). The three SBD evaluations that have been conducted, all have reported positive results due to reduced crime levels. In 2000, a debate was also held at Scotland Yard concerning “Crime and the Environment”. The fact that SBD works was an accepted opinion of the debate, but, determining and understanding why it works was still an important research objective. (in Cozens, 2001:156).
Newman’s theory of Defensible Space may have lost much of its popularity since the 1980’s but still proves to be a valuable asset in environmental crime prevention. Housing development projects in the United States and abroad continuously look to Newman’s ideas when considering changes needed in order to reduce crime. Also, current theorists in the field of Environmental Criminology still look at Newman’s theory as a foundation in which to build their own ideas. In his book, Newman claims “This book is about an alternative, about a means for restructuring the residential environments of our cities so they can again become liveable and controlled not by police, but by a community of people sharing a common terrain” (Newman, 1973:2).

3.4.4 Crime prevention through environmental design (CPTED)
Almost all environmental crime theories originate from C. Ray Jeffery’s Crime Prevention Through Environmental Design (1971), Oscar Newman’s Defensible Space (1972) and research done at the Westinghouse Corporation in the late 1970’s. Since then many theorists have refined these theories to create their own. Two theories in particular stand out; Tim Crowe’s Crime Prevention Through Environmental Design (1991) and Wilson and Kelling’s “Broken Windows” (1982), HUD, (1995)

The first theorist, Tim Crowe, improved the CPTED concept by adding several CPTED evaluation considerations. These considerations came in the form of a list of questions falling under the following 3 basic categories. The first category was “All human space has some designated purpose”. The second was “All human space has social, cultural, legal, or physical definitions that prescribe the desired and acceptable behaviors”. The final consideration was “All human space is designed to support and control the desired behaviors”. Crowe attempts to redefine CPTED in order to keep up with the increased prevalence of drugs and violent crime in public housing (HUD, 1995).

Crime Prevention Through Environmental Design (CPTED) has become a well-known concept for the design and management of urban space to reduce the incidence and fear of crime (Wekerle and Whitzman, (1995). A further defining characteristic of CPTED prevention and situational prevention is their basis in the academic criminological theories of the 1980s. In particular, they derive theoretical support from the three criminological perspectives/theories – opportunity theories namely rational choice theory, routine activity theory and crime pattern theory. CPTED is also based on two main assumptions: “that offenders commit crime when there are not many people around, where they are unlikely to be seen, and where they can easily and quickly get in and out. The second assumption is that crime is related to daily routines and activities in the area, such flow of traffic and pedestrians (or lack of flow) on nights and weekends” (1995:12).
The goal of CPTED model is to reduce “opportunities” for individuals to engage in unwanted or criminal behaviour. CPTED involves detailed situational analysis to identify local patterns and the micro-environmental conditions that might be creating opportunities for crime. The CPTED’s six environmental strategies are natural access control, natural surveillance, creating a sense of territoriality, management strategies, maintenance upkeep, and legitimate activity support. Natural access control is designed to limit easy access to a crime target and to create a perception of risk in offenders. Natural surveillance is directed primarily toward keeping intruders under observation. Territoriality suggests that physical design can create or extend the user’s sphere of influence so that users develop a sense of proprietorship or ownership in the security of the environment (Randall, 1999:7-8).

Major factors for CPTED include clear divisions into private, semi-private, communal, semi-public and public space; a mixture of urban functions so that around-the-clock uses occur; design of neighbourhoods for clear overview and avoidance of dark corners, and grid-like street communication patterns instead of tree-like urban structures with many dead end streets (cul-de-sac), which are used only by a few (Newman, 1973; Chrisna du Plessis, 1999, Randall Atlas 1999).

3.4.5 The “Broken Window Theory”

The second theory, and perhaps the most influential of theories to be brought within the confines of CPTED, is Wilson and Kelling’s “Broken Windows”. The theory contends that physical deterioration gives rise to safety concerns and a withdrawal from the community can occur. Further delinquency and vandalism occurs, along with increased deterioration and community withdrawal. Finally, potential offenders from elsewhere may then be attracted by the vulnerability of the area. (Cozens, 2001) Wilson and Kelling contend that fixing the problem right away eliminates the build-up of problems, which in turn, keeps potential offenders from being attracted to the area.
3.4.6 Situational crime prevention

Situational Crime Prevention is another theory that bases part of its research in the model developed by Newman. However, it focuses more on reducing the opportunity for crime by increasing the efforts and risks an offender must make, and also by reducing the rewards gained by the Criminal activity (Murray, 1983). While CPTED focuses mainly on natural design features, Situational Crime Prevention emphasizes a holistic prevention approach (HUD, 1995 in Craig Turner, ).

Situational crime prevention has been defined as “the use of measures directed at highly specific forms of crime, which involve the management, design or manipulation of the immediate environment in as systematic and permanent a way as possible (Hough et al in Geason and Wilson, 1988:5). It is sometimes referred to as “primary prevention” or “opportunity reduction”. Situational Crime Prevention includes “target hardening” that implies use of locks, screens, steel doors, shatterproof glass, fences, barbed wire, gated communities and privatization of public spaces. Its approach focuses on reducing opportunities for crime through environmental change.

A situational approach to crime prevention has rational choice theory as its basis. It rests on the assumptions that offenders freely and actively choose to commit crimes, that the decision to commit the crime is made in response to the immediate circumstances and immediate situation in which an offence is contemplated, and the motivation to offend is not constant or beyond control, i.e., it is dependent on a calculation of costs and rewards rather than being the result of inheriting or acquiring a disposition to offend (Bennett 1986 in Geason, and Wilson, 1988:5).

Bennett argues (in Geason and Wilson, 1988:5), that, the decision to offend in the first place is socially or psychologically determined, but that the final decision – whether or not to offend against a target – is situationally determined. This means that situational factors are unlikely to motivate the unmotivated to offend, but they will influence the decision of someone who is motivated to offending. Situational Crime Prevention is divided into three main approaches: increasing the effort needed to commit crime; increasing the risk associated with crime; reducing the rewards of crime and removing the excuses for criminal behaviour (Randall, 1999:8).

CPTED and Situational crime prevention approaches are to a high degree excluding each other. High fences and gated communities contribute for instance to more fear outside the private realm, which in turn make people use communal and public spaces less, thereby reducing the chance for intervention when crimes occur (Newman, 1974; Coleman 1979; du Plessis, 1999). At the dwelling level, high walls exclude the streets from the buildings, obstructing the visibility from the dwellings, prevent access for a helping hand and above all, reduce the control of streets. As a result, the streets become “no-man’s land” allowing free for all movement (including offenders) especially at night.
Newman’s defensible space theory and Coleman’s views on crime reduction strategies have gradually become part and parcel of CPTED and have gained momentum among decision-makers and planners in USA and Western Europe. CPTED and the Defensible Space Planning create the environment for better security allowing natural surveillance and unobstructed visibility, controlling access to persons who belong on the property, preventing unauthorized access to persons onto property, integrating the security technology into functional design and architecture, allowing legitimate building users to be your capable guardians for legitimate activity (Randall, 1999).

This is only true when houses are designed and built as one whole entity. That is, designed and well built in one housing estate, and usually by one planning and architectural firm and for one real estate developer. It is only then that all the consideration of accesses, public spaces, semi-public spaces, private spaces and parking spaces can be made and enforced from the design stage to the construction and henceforth to the use.

However, the theories can be assumed to be relevant to urban areas in low-income countries like Tanzania as well. In fact, the theories are and have been used today in Tanzania and other urbanizing countries especially at individual plot level albeit without considering the local and cultural contexts. This is the main concern of this study. The contextual factors comprise climatic and cultural aspects (influencing the use of indoor and outdoor spaces), ownership of land and real estate property, and the influence of planning legislation, informal land subdivisions and transactions on urban development. No systematic and scientific study linking these urban development dynamics and crime prevention with this focus has been done in Tanzania so far.

3.5 Gated Community as a strategy for crime prevention

There is no common agreement on a definition or meaning of gated communities (Landman, et al: 2002). It is accepted that there are different types of gated communities in different countries, resulting in multitude of interpretations regarding types and meta-types (ibid). “Gated community” is a generic term referring to an area that is fenced/walled off from its surroundings with access control and privatised public/communal spaces inside (Landman, 2002, 2004; Blakely and Snyder, 1997). Gated communities refer to a physical area that is fenced or walled off from it surroundings, either prohibiting or controlling access to these areas by means of gates or booms. In many cases the concept can refer to a residential area with restricted access so that normal public spaces are privatised or use is restricted. It does not however, only refers to residential areas, but may also include controlled villages for work (office parks), commercial (shopping malls, etc) and/or recreational purposes (Landman, 2004:5). There are many types of gated communities and these differ between and within countries, varying in size and character, and offering differing degrees of
amenities, facilities and levels of security (Landman, 2004). Landman categorised gated communities in South Africa as security villages and enclosed neighbourhoods.

“Security villages” according to Landman (2004), refers to private developments where the entire area is developed by a private developer. These areas/buildings are physically walled or fenced off and usually have a security gate or controlled access point, with or without a security guard. The roads within these developments are private and, in most cases, private management body carries out the management and maintenance. Security villages not only include residential areas (such as town house complexes and high-rise apartments), but controlled access villages for business purposes (office blocks) and mixed-use developments, such as large security estates. Example of such types in Tanzania include, Tanzania Petroleum Development Corporation Estates in Mikocheni, National Insurance Corporation Housing Estates also in Mikocheni B, Bank of Tanzania Housing Quarters In Mbezi Beach, NASACO Housing Estates in Mtoni Kijichi and the Mlimani City Business Park at the University of Dar es Salaam.

“Enclosed neighbourhoods” refers to existing neighbourhoods that have controlled access through gated or booms across existing roads. Many are fenced or walled off, as well, with a limited number of controlled entrances/exits, and security guards at these points in some cases. The roads within these neighbourhoods were previously, or still are, public property, depending on the model used within different local authorities. The majority of these in South Africa are based on the public approach (Landman, 2004:5-6) where the roads remain public. Examples for this type of gated communities are not yet seen in Dar es Salaam or elsewhere in Tanzania.

In this study, a gated community is one that is closed off through road closures, and the erection of fences or walls around the entire residential community in which the roads within this enclosed residential community remain public property. Here, the local council is responsible for the provision of public services, such as water, and garbage collection, to the community within the enclosed residential community (Landman et al, 2002). Security in gated communities is usually the responsibility of the whole community with some help from the Local councils.

Gated communities have been prominently discussed in the international literature. The literature gives a diverse debate on the outcome and implications of gated communities and raises four issues.
First, it shows that there is a lack of general agreement as to its meaning for cities and this is reflected throughout the spectrum of positions held by researchers that range from those who strongly support (Foldvary, 1994; Castell, cited in Gooblar, 2000, in Landman, 2004) and those who strongly oppose (Davis, 1992; McKenzie, 1994; Caldeira, 2000; Franz, 2001 and Low, 2001 in Landman, 2004) with a large contingent who are somewhere in between (Blakely and Snyder, 1997) and (Webster, 2001 in Landman, 2004).

Second, it indicates that gated communities can have both positive and negative impact that is dependent on their purpose, spatial manifestation and interpreters (those inside or outside the gates). Those in favour of gated communities consider these from an economic point of view (Foldvary, 1994; Castell 2002, cited in Gooblar, 2002, in Landman, 2004 and LaCour-Little, and Malpezzi, 2001), highlighting the economic advantages for both urban residents (communities inside gated areas) and local councils (in terms of generating income tax), or simply as the sole way to reduce crime and insecurities in contemporary cities (Newman, 1995; Jeneks, cited in Gooblar, 2002, in Landman, 2004). Those who are critical often focus on socio-spatial concerns, highlighting the negative implications for spatial fragmentation (Veal, 2000; Franz, 200; Thuillier, 2003, in Landman, 2004), social exclusion and exclusivity (Davis, 1992; Connell, 1999 in Landman, 2004), and citizenship and democracy (Judd, 1995; and Tijerino, 1998; Caldeira, 2000, in Landman, 2004, and Blakely and Snyder, 1997). This debate also touches on discourses around the loss of the public realm in contemporary cities and a number of commentators identify gated communities as a prime contributor (Flusty, 1995; Tiesdell and Oc, 1998, in Landman, 2004). This relates to what Webster (2001, in Landman, 2004) classifies as the existing “efficiency-equity” debate surrounding gated communities (Landman, 2004).

Third, the literature begins to suggest that the outcome and implications of gated communities are often directly related to specific types of gated communities. However, the majority of work focuses on large security estates or smaller secure housing/townhouse complexes. As such, the debate around the outcome and implications also mainly focuses on these types, with a few exceptions (Leish, 2002; Gooblar, 2002, in Landman, 2004). Additionally, the literature very rarely compares the outcome of different types.
Finally, it begins to suggest that there is no single approach that addresses gated communities from the government point of view and that the different approaches can be referred to gated communities in general or only to specific types of gated communities. It is worthy to note that the study of gated communities in Tanzania is not evident. Either, no evidence is apparent to show that this study has been done in any of the African countries south of the Sahara except South Africa. One of the reasons may probably be that, until recently, this was not a significant issue or sheer neglects by architects and planners or policy makers or any reason for example, these estates may have been considered for status of the employees of such companies, thus considered positively.

3.6 Gated dwelling as a strategy for crime prevention in Dar Es Salaam

The author’s definition of a gated dwelling is a dwelling that is enclosed off or walled off/fenced off the street by either a wall to completely exclude the dwelling or house away from passers-by in the streets. In this respect, a gated dwelling can only be accessed through a gate, which is mainly closed off by different types of door shutters.

In a community of gated dwellings, the streets remain public and open to everyone, and basic services like water and electricity supplies are responsibilities of public agencies. Unless provided the responsible agencies in the area, other services like storm drainage and sewerage is done on individual dwellings. The issue of security is also the responsibility of the individual on his/her dwelling.

A number of studies have tried to explain urban crime in terms of existing conditions in cities. The widely held view by many authors is that living conditions have impact on the level of crime (Mukoro, 1996:2). At the intra-urban scale, studies have revealed a systematic inverse relationship between neighbourhood economic status and levels of crime (Harries et al, 1984, Sampson et al, 1981 in Mukoro, 1996:2). The implication of this is that as the quality of life in the urban setting declines, the level of crime rises. One could relate this to most Third World Cities where quality of life has been dwindling as a result of economic retrogression (Mukoro, 1996). This may also be true for Dar es Salaam.
In the wake of increased criminal victimization in the cities of the third world, the police cannot cope effectively with the situation. This has made it necessary for individuals to evolve ways of enhancing their own safety. Gated dwellings are a common phenomenon in East African cities, especially in residential areas. Whereas American and European Cities are grappling with the emergency and escalation of gated communities, the third world cities and especially those in Africa are experiencing both gated communities (in e.g. South Africa, and Nigeria) and gated dwellings in many of the other cities including Dar es Salaam in Tanzania. Recent developments in Dar es Salaam show private investors in housing are up for investment in “gated housing schemes.”

Going through literature review on this subject on “gated dwellings” has revealed that, little research has been done in this area. We note one research that was carried out in a city of Warri in Nigeria. Thus, the findings from the Nigerian study may not be taken to be conclusive as to apply for all other African cities, Dar es Salaam included. So a research of a similar kind in a context of Tanzania and Dar es Salaam in particular is worth pursuing.
Research methodology and design

This chapter presents the research methodology used. It covers the methods and techniques that have been applied in the study. The chapter presents the reasons for the choice of the methodology and the research process. The chapter also discusses key aspects that were considered in the design. These include: the unit of analysis, the rationale for multiple-case versus single case approach, the research design and criteria for judging the quality of research.

4.1 What is the methodology in use?

One of the key issues in the process of doing research concerns the choice of research methodology. The questions that had to be answered were: What should the methodology of the research be? How shall the research be carried out? What are the methods and techniques appropriate for this study? It is necessary to answer these questions because they have a bearing on the entire research. For the results of the research to be accepted by the research community, one important parameter to judge it is the robustness of the methodology used. To make decision on this matter, the objectives of the research and questions asked were examined so as to explore the nature of the questions being raised.

The objective of the research was to explore and explain in order to understand the processes of responding to crimes of burglary, home robberies, residential street mugging and the fear of it and to explain the outcomes and impacts of the responses to the built environment in terms of social interaction of residents, architecture and planning of residential neighbourhoods. This has the implication that the thrust of the study is on the “what” and “how” questions.

Besides the responses, i.e., processes of responding to the named crimes above are happening in the real life situation, and in specific contexts of Dar es Salaam city. In addition to the above, the processes are taking place in a context where it is impossible to separate the processes from the setting in which it is occurring. The inability of the researcher to separate the processes from the context implies that one has no control over the behaviour of the events.
Looking further at the questions posed by the research, we note that the main research questions are the “what”, “how” and “why” questions. Yin (1994:6) notes that, questions like these are exploratory and explanatory and are likely to lead to the use of qualitative research, case studies, histories or experiments as the preferred research strategies (Yin 2003:5). Since we want to know or understand how residents or homeowners respond to the crimes of burglary, home robberies and residential mugging in their residential neighbourhoods, we cannot rely only on the surveys or on examination of archival records, because we are dealing with a phenomenon that can better be studied by using case study methodology.

Yin (2003:13) has defined case study inquiry as “an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident”. He says, one would use the case study method because one deliberately wanted to cover contextual conditions, believing that they are pertinent to ones phenomenon of study. He defines case study inquiry as an inquiry that “copes with the technically distinctive situation in which there are many more variables of interest than data points and as one result: relies on multiple sources of evidence with data needing to converge in a triangulating fashion; benefits from the prior development of theoretical propositions that guide data collection and analysis”. In this sense Yin sees the case study strategy as not merely a data collection tactic or simply a design feature, but a comprehensive research strategy, that comprises an all-encompassing method -- covering the logic of design, data collection techniques, and specific approaches to data analysis (1994, 2003).

Case studies are also perceived as valuable in developing concepts and making them more precise (Lundequist, 1999). This claim that case study is most useful for generating hypotheses in the first steps of a total research process, while hypothesis-testing and theory building is best carried out by other methods, Flyvberg (2004:425) terms this as a misunderstanding and corrects this by positing that: “The case study is useful for both generating and testing of hypotheses but is not limited to these research activities alone”. The other criticism that, a case study inquiry lacks rigour, hence allowing equivocal evidence or biased views; lacks or has little ability of generalising findings (Yin 1994; Leiringer, 2003 as quoted in Eliufoo, 2005:77) and that they take a long time (Yin, 1994, 2003). Flyvberg further corrects this criticism and argues that “one can often generalise on the basis of a single case, and the case study may be central to scientific development via generalisation as supplement or alternative to other methods. But formal generalization is overvalued as a source of scientific development, whereas “the force of example is underestimated”. As for the lack of rigour and tendency to bias - this is considered equally possible in experiments, and it is obligatory no matter what strategy of inquiry adopted that the investigator must work hard to report all evidence fairly (Yin, 2003). Nevertheless, Yin acknowledges the possible cause of such critique as to have originated
from the fact that such weakness may have been more predominantly noted in case study research. However, Flyvberg on the other hand reviews this criticism asserting that: “The case study contains no greater bias towards verification of the researcher’s preconceived notions than other methods of inquiry. On the contrary, experience indicates that the case study contains a greater bias towards falsification of preconceived notions than towards verification”. And, on the difficult of summarising specific case studies into general propositions and theories, Flyvberg says: “It is correct that summarising cases studies is often difficult, especially as concerns case process. It is less correct as regards case outcomes. The problem in summarising case studies, however, is due more often to the properties of the reality studied than to the case study as a research method. Often it is not desirable to summarise and generalize case studies. Good studies should be read as narratives in their entirety”.

Flyvberg (2004: 421-422) also argues that, “in order to understand why the conventional view of case-study research is problematic, one needs to grasp the role of cases and theory in human learning. He makes two points as follows: “First, the case study produces the type of context-dependent knowledge that research on learning shows to be necessary to allow people to develop from rule-based beginners to virtuoso experts. Second, in the study of human affairs, there appears to exist only context-dependent knowledge, which thus presently rules out the possibility of epistemic theoretical construction”. He further argues that, “for researchers, the closeness of the case study to real-life situations and its multiple wealth of details are important, first, it is important for development of a nuanced view of reality, including the view that human behaviour cannot be meaningfully understood as simply as the rule-governed acts found at the lowest level of the learning process, and in much theory. Second, cases are important for researchers’ own learning processes in developing the skills needed to do good research”. He goes on saying: “If researchers wish to develop their own skills to a high level, then concrete, context-dependent experience is just as central for them as to professionals learning any other specific skills. Concrete experiences can be achieved via continued proximity to the studied reality and via feedback from those under study. Great distance to the object of study and lack of feedback easily lead to a stultified [crippled] learning process, which in research can lead to ritual academic blind alleys, where the effect and usefulness of research becomes unclear and untested. As a research method, the case study can be an effective remedy against this tendency.”

The second main point in connection with the learning process is that there does not and probably cannot exist predictive theory in social science. Social science has not succeeded in producing general, context-independent theory and has thus in the final instance nothing else to offer than concrete, context-dependent knowledge. And the case study is especially well suited to produce this knowledge.

On the criticism that case studies does not produce that general theoretical (context-independent) knowledge which is more valuable than concrete, practical (context-dependent) knowledge, Flyvberg
(2004:423) asserts: “predictive theories and universals cannot be found in the study of human affairs. Concrete, context-dependent knowledge is therefore more valuable than the vain search for predictive theories and universals”.

Whereas researchers in natural science criticize case study methodology on generalisation, case studies like experiments are generalisable to theoretical proposition and not to populations or universes. In this sense Yin explains both case studies and experiments as not drawing conclusions or generalizing from a ‘representative sample’ and that the investigator’s role is to make an analytical generalisation and not make a statistical generalisation e.g. enumerate frequencies. And the critique on the time case studies take - this need not be the case or the norm, and such critiques are taken to have confused case study strategy as a data collection method (Yin, 1994, 2003).

4.2 Research design

Lundequist (1999:39) considers research design as a programme of how to carry out a research project. Yin (2003:21) identifies five aspects that need to be considered in a case study design: defining the boundaries of a case study, the unit of analysis, the research design, establishing the rationale for single or multiple-case studies and lastly defining the criteria for judging the quality of research design. In this research, the boundaries of a case study and units of analysis are given in detail in section 4.3 of this chapter. Nonetheless, it is important that the research problem, the research questions and the research proposition(s) are reiterated and Figure 4.2 outlines the research design.

The research was carried out in three stages, the first stage being the pilot study (September 2005) during which, some elements of survey techniques were applied. This was purposely designed in order to develop the research questions and refine the research design. The other purpose of using the survey techniques in the pilot study was to establish a general picture on the issues and actions which homeowners consider taking in order to fend off crimes and to instil a feeling of security and safety against crime and fear of it. The major fieldwork (October 2006 to March 2007) involved in-depth qualitative interviews, using narrative strategy as the technique for data collection from respondents and was done in two phases with the first phase in October 2006 to March 2007. The second round of interviews was carried out in October 2007 to April 2008 mainly to tie up loose data ends particularly from key informants (Mtaa Leaders, Police Officials, Municipal Officials and Planners and Municipal Architects) and feedback to and from respondents who were interviewed in the second round.
The study was carried out by first conducting observatory and exploratory surveys of the three cases to identify homes and houses for study and also getting the general picture. This general observatory and exploratory survey helped to establish the trends thus enabling the researcher to direct the efforts to the emerging critical issues. From the observation and exploration, a detailed study of a number of selected residential houses was conducted to map out important and pertinent findings. This was carried out using multiple techniques. The results from the three residential areas were compared to find out pertinent issues whether the results were similar or different in the three cases.

4.3. Dar es Salaam as the case study region: why?

After identifying the methodology to use in the research and the methods of data collection another thing I had to do was to identify which case is the one to study and whether the study is a single case one or multiple case type. This is an important issue because the choice of case study area contributes to generalisation in case method.

Several reasons made Dar es Salaam the choice of study. It is one of the rapidly urbanizing cities in the country as well as in the sub-Saharan region; Dar es Salaam City is the largest seaport, industrial, commercial and administrative centre of Tanzania. Thus the City is the largest job provider in the country and due to its underlying socio-economic and historical factors, being also rich in housing types - public, private etc, both in formal and informal sector and their relevance to the subject of study, it therefore attracts more people. This made it to be the best option where to undertake the research.

The socio-economic, political and cultural environmental contexts discussed earlier in chapter one have created increasing levels of urban criminality, delinquency and violence. Police statistics have shown that, by the end of 1995, Dar es Salaam accounted for 25% of all crimes reported to the police throughout the country. In 1997, this figure rose to about 27% (Robertshaw, 2001:13).

A number of studies that relate to this study have influenced the selection of Dar es Salaam City as a case study region. These include, for instance, Victims’ Surveys, (Louw, et al, 2001), Crime in Dar es Salaam (Robertshaw et al, 2001). With the availability of time series aerial photographs from 1975, 1982, 1992, 1995 and 2005, Dar es Salaam becomes an information rich region for the study in terms of basic data sources when compared to other cities within the country.
4.4 Choice of case study areas and units of analysis

One of the major challenges in research is the selection of the study area, as the choice should determine the extent to which one can generalize. Denscombe (2003:33) posits that, selecting a study area is similar to selecting a case where the choice of the case depends on a conscious and explicit choice from a very large number of possibilities and that the selection needs to be justified.

In this study, three neighbourhoods were selected, one from each municipality and on the basis of purposeful selection as influenced by the Dar es Salaam Safer City Programme Victim Survey study of 2001. The choice was also based on the fact that Dar es Salaam city comprises two housing types namely formal and informal residential dwellings. The option of three cases from the formal residential dwellings is due to that, I also had the intention in the research to understand whether or not, the authorities dealing with urban planning and management of the urban environment do consider the crime issue during the planning, execution and management of the urban environment and whether they are aware of the homeowners’ actions and responses to urban crimes of burglary, thefts, home robbery and street mugging, and have approved or condone the actions and responses. This understanding is important knowledge for informing the architecture and urban planning professions.

Since urban planning and planning regulations have mostly dealt with planned parts of the urban arena, it is pertinent that I select cases as units of analysis that are planned, also in order to understand whether there are regulations in place that help to guide homeowners’ actions or responses. This is with the aim that, the findings to be used to guide architecture, urban planning and urban land management practices. Therefore, one old formal housing area that was partly built between the late 1950s and early 1960s in Temeke Municipality (Chang’ombe Housing Area) was selected. The second housing area is, an old residential planned and built during the colonial era and re-built by the National Housing Corporation in Ilala Municipality at the dawn of independence in 1963. The third study area was selected from Kinondoni Municipality, a residential area that was planned and built at the onset of Sites and Services schemes of the 1970s (refer Fig. 4.1). Among the cases, two exhibited similar characters in terms of housing status, a number of homeowners and tenants were selected for interview and detailed recording of the outlook of the environment resulting from the owners’ actions and responses were made.

The selection of the respondents as units of analysis was done after the observatory ad exploratory survey discussed earlier depending on the willingness of the homeowners to be interviewed. This was done so in two of the case areas as most of the properties in this area showed similar characters of the phenomenon being studied. In the third case, Ilala Kasulu, the Mtaa leader helped in identifying
the homeowners who would be willing to be interviewed. In some instances, we simply knocked on doors and requested permission to talk to residents. Here, the Mtaa Leader was of immense help.

**Choice of Mikocheni B**

In this research, Mikocheni B has been chosen purposefully. Other reasons for selecting this settlement among others are that this is the area where, reconnaissance survey, emotions about its setting as far as built environment and city fabric and characters arose. This is the area in which I was challenged by what I saw initially before embarking on the research. That is where I could see issues of concern in as far as urban life and safety are concerned. This includes many fences in the area. Mikocheni B is an area that is a relatively new compared to other planned and formally developed residential neighbourhoods in Kinondoni Municipality. The area is a result of the sites and services schemes of the late 1970s. In the late 1980s, the area experienced an increasing wave of criminal activities. Having lived in the area in the 1980s, I experienced this wave of crimes on property. The incidences of burglary and home robberies were occurring almost every week and especially during the rain period.

![Fig. 4.1: Location map of the three case study areas in relation with the Dar es Salaam Central Business District. Source: Modified by Author from John Modestus Lapala. 2008](image_url)
This was among the reasons that enhanced the interest in the case selection. The choice of Mikocheni B as one of the case study area was also enhanced by the fact that it represents many residential areas in Dar es Salaam that were built in the similar period. Another reason is that, the area is heavily barricaded and fenced with high masonry walls reminiscent of garrisons. There are other reasons for this choice like practical and economic reasons, i.e., being near to my workstation so easy to reach, many researches have been conducted, thus the area is rich in information, with a series of aerial maps showing its development. The case is therefore likely to inform architects, planners and urban managers regarding the phenomena at play.

**Choice of Ilala Kasulu**

This residential area was designed during the colonial period, under the auspices of a consultant Sir Alexander Gibbs and Partners who prepared the plan for Dar es Salaam in 1929. The area was designated as the Zone III high-density residential extension of Kariakoo – both settlements designed as residential areas for “Africans” (the “natives” as it was then referred). Multi-occupant Swahili type houses dominate this area with services such as surfaced roads, sewerage and drainage poorly provided (or the standard of services was kept very low) by the colonial administration.

The selection of Ilala Kasulu as the second case study area is based on its history as one of the very old residential areas in Dar es Salaam. Having been planned during the colonial era in 1920s, its development has gone through two supervisory stages, being that of the colonial period with strict adherence to the building regulations and the period after independence that is characterised by less strict follow up of the building regulations. The area is in the middle of the Ilala area. It is mainly residential. Due to its proximity to Kariakoo, some businesses and offices have moved in, replacing some residential houses into office and commercial premises. Many of the original house owners have and are moving away to other residential areas of Dar es Salaam, leaving their houses for letting to tenants.

The tenancy-residential character and the business and office mix of the area has the bearing on it selection as a case study area. The area also represents many similar old (for “natives” as were referred to) areas like Kinondoni B and Magomeni in Kinondoni District and Temeke Wailes in Temeke District. These areas were planned in the late 1930s and built by Africans using traditional building materials and in the early 1960s the National Housing Corporation in its Slum Clearance Programme of 1964-1969 carried out some reconstruction. The aim of the reconstruction was to replace the traditional building materials with the industrial ones of cement and iron sheet roofs (Kironde, 1995).
The case also would help to illuminate and give an account on how the colonial urban administrators dealt with the issue of crimes in the African Zone III. Being an old area planned by the colonial rulers, the other reason for its selection is to understand how the area coped with the wave of crimes including burglary, home robberies and street mugging during those old days and compare the results with the other case areas in regards to homeowners actions and responses against such crimes with reference to township rules and regulations. Ilala Kasulu, a section of Ilala is taken as the case to represent similar areas in the region of Dar es Salaam. Other reasons of course include the availability of information. It is an area where other studies have been conducted, thus the basic information about the area is abundant³. For practical purposes, the area is easily accessible through Mandela Expressway and Uhuru Road and also Morogoro, Kawawa and Uhuru Roads.

Choice of Chang’ombe Housing Area
Chang’ombe Housing Area is located in Temeke Municipality about 8 kilometres from the city Centre. Taifa Road bounds it to the east, Chang’ombe Road to the north, an open space and Mandela Expressway to west and open space and Dar es Salaam University College of Education to the south. The area is accessible through Mandela Expressway and Chang’ombe Road or Mandela Expressway, Nyerere Road and Chang’ombe Road.

The area was designed as a scheme to be developed by Asians (mostly Indians) from both the public and private sector. By 1950, the Chang’ombe Planning Scheme had been completed. Some plots to the east and north in the area were allocated to the East African Railways (EAR), East African Harbours (EAH) and East African Posts and Telecommunication (EAP&T), for construction of their Asian staff quarters. It is not known for sure why Chang’ombe was selected for an Asian residential scheme. Probably the fact that Chang’ombe was government land and that there were expectation of employment in the nearby Industrial areas of Chang’ombe and Pugu Road may have been important reasons for Asian housing scheme in Chang’ombe. The earmarked residents of Chang’ombe were Indians in the public service, or the poorer Indians from the private sectors who could not afford to buy into Upanga and who were not wanted in Oysterbay. The condition of plot allocation in the area however, was so designed as to exclude most Africans.

Perhaps following the spatial segregation policy that was applied by the colonial rulers, the two parts of this housing area were separated by a road and green open (buffer) space, which is now the Tanzania Cigarette Company (TCC) Club and Chang’ombe Road to the northern side. The area for EAR, EAH and EAP&T was placed at the eastern side of the area in border with the Keko Toroli

³ (For more information on this see Kironde, 1995, Lupala, 2002).
unplanned area only separated by Taifa Road, whereas the Uhindini area was placed to the western side bordering an open space on which a Secondary School for the Goan Community in the city was built and close to the Chang’ombe Police Station. Housing for the East African Railways and East African Posts and Telecommunication employees were located along the Chang’ombe Road on the north running to the west. Beyond this line of EAP&T and EAR quarters is the unplanned residential area of Chang’ombe Toroli that stretches to the western side and further beyond is the Chang’ombe Toroli Industrial area and behind this is Pugu Road Industrial Area.

Choice of respondents
I selected my respondents purposefully as well. Houses with perimeter wall fences or hedges and those without any of the two were selected according to the willingness and availability of the respondents. With the observational exploratory survey carried out earlier during the pilot study and at the beginning of the fieldwork, several homes were identified and earmarked for selection based on the features they depicted in regards to changes or modifications done on each home. Some homes were selected because no changes appeared to have taken place on and around the homes. This was with the intent to understand the reason why not, if others have modified and fenced their homes. Having selected several of the homes, one other criterion of interest to me was that the selected respondent does own the house or is a tenant who has his/her own desires and specifications for the house to rent (own built or acquired through purchase or rented homes).

Unit of analysis
Being guided by the main research objective and the research questions addressed by the study, that seeks to explore and understand: the process of barricading and wall fencing of residential dwellings in Dar es Salaam Tanzania and how these processes impact on the architectural outlook, the total built environment of the neighbourhood concerned and urban management practices - the unit of analysis considered appropriate for such cause, are dwellings in the study areas and the sub-units of analysis are the processes of barricading and wall fencing that are taking place on the dwellings and their compounds.

4.5 Why multiple case studies and multiple sources of evidence?
This research uses a multiple case strategy. This is due to the fact that there are basic and distinct advantages and disadvantages that multiple case studies bear against single case studies. Yin (1994, 2003) argues that the evidence from multiple case studies is more compelling and hence makes the overall case study more robust. Moreover, the nature of the investigation pursued does not have
features that justify the use of a single case study - such as the unusual or rare case, the critical case or revelatory case. In addition, since the phenomenon being investigated cuts across varying housing areas and different income groupings, the responses may be different, calling for multiple case study strategy.

Within the multiple case studies, I also wished to utilise the richness of multiple sources of evidence. The use of a multiple sources of evidence in the research aims at reconstructing the story on what happened, how it happened and why it happened in the way it did in each case, “as well as a means of triangulating the evidence collected to ensure validity” (Nkuya, 1996:3). The use of multiple sources of evidence is also motivated by the desire to address the problem of limitations inherent in various methods of data collection as it makes up for the shortcomings that exist within each method (Creswell, 2003:181). Creswell further relates such limitations in the various methods as the course of emergence of "mixed methods " and noted from the original concept of triangulation, as additional reasons for mixing different types of data collection methods - resulting into one method helping to develop or inform the other method. The use of multiple source of evidence by the case study strategy has a further beneficial influence to the research in that it enhances the construct validity of the research (Yin, 1994, 2003). The main sources of data included documentary analysis, wandering around and observing and registration or recording of the physical features by use of photographs.

4.6  Data collection methods
A pilot study was carried out in the months of August 2005 as a preliminary data collection technique, the findings of which were used to update and modify the research design and the interview guide (Appendix V). In addition, the pilot study results were also used to instrumentalize the research objectives and the research questions (Appendix IV). The first main fieldwork interview took place between January 2007 and March 2007; at least a month was spent in each case study area. A second round of fieldwork was carried out in the months of October 2007 to January 2008. The results of the pilot study highlighted several reasons for the actions or responses. The first fieldwork interviews helped to bring about stories on what happened, how it happened and why it so happened. The second round of fieldwork served as a feedback session and a gap filling exercise.

In carrying out the research, it was important to record the chronology of the events taking place in the whole process of responding to the crimes of burglary, home robberies and fear of it. This was done through an interview process with the homeowner in case owner-occupier and heads of the households for the rental housing. The interview guide with one main question was used to extract story like stories or explanations of what happened, how it happened and in the process of answering the “what” and “how” questions, the answer to the why question was then deduced. Open-ended
interview questions were additionally paused in the verification of the stories from the respondents. The respondents were asked to give an explanation on how it occurred that they had to install barricades and wall fences on and around their homes. The narrations from informants were recorded on a voice recorder. In addition, notes were taken as the discussion went on. The intention was to confirm or verify facts and the narrations documented. The methods for data collection for the research are described in detail in the sections below.

**Preparations for the fieldwork**

Before fieldwork commenced, research permits from the three municipal councils of Kinondoni, Ilala and Temeke where the three Case Study areas are were processed (Appendices I, II and III). In this situation research permits are obtained from the Municipal Councils. It took some time for the permits to be granted mainly due to bureaucracy.

The first approval of the permit came from Temeke Municipal Council. For this reason, I started my fieldwork study in the third case study area of Chang’ombe Housing Area. The permit that was addressed to the leaders and citizens of Chang’ombe (ref. Appendix III on p 222), required all leaders at all levels in the area and the citizens to cooperate and assist in the conduct of the study. The Ward Secretary then introduced the researcher to the “Mtaa” leader who in turn assigned an assistant to guide and introduce the researcher to respective homeowners and residents of the area.

The process of interviewing started with the Mtaa leader who has accommodated the Mtaa office in his compound. The interviewing process in this area covered 23 homeowners (refer Appendix: VI, Table 3), most of who are retirees from civil service. In this exercise, one trained research assistant and the guide from the local ward (Mtaa) office assisted the researcher in the documentation of the interviewee’s responses. The stories from respondents were also recorded on a voice recorder.

The interviews were conducted using a standardised interview guide that had two main questions. The first intended to explore how wall fencing and barricading of houses and plots came about or occurred. The second main question asked the respondents to narrate their experiences on a number of issues including the types and patterns (rise/decline, etc.) of crimes since they moved or settled in the area. These questions were followed up by several probing questions in order to explore more and confirm facts and establish causal relationships. This interviewing continued until narrations, stories and specific answers were repeated, that is, when similar answers were given to the same questions. In addition to the interviews, photographs of the specific residences or homes and streets were taken to show the types of actions done on and around the residences and the outlook of the streets as well as the general environment of the area of study.
While doing the field research in Chang’ombe, a permit to conduct the study in Ilala Kasulu, was granted. As it was the case with the Chang’ombe area, the researcher went through the Mtaa leader who also assigned a guide to introduce the author to the residents of the area house by house. Her main task was to introduce the researcher to the residents and homeowners and requested them to cooperate in answering the questions.

It is important to note here that, the issue of security and crimes in this area was a very sensitive one. To get respondents to allow you into their houses needed someone whom they knew. Even with this person they knew, we were not always allowed into the houses in most of the incidences. This, in a way affected the data collection, because we could not see the inside layout of the houses and the disposition of the rooms since we could not take the photos required. However, many respondents allowed us take photographs as well as seeing the inside of their houses or homes, although without taking pictures from inside the houses.

The study in this area, Ilala Kasulu was conducted in the months of February and March 2007. This was due to the fact that, the person assigned to guide me was assigned midway to undertake other duties in the Mtaa office that she could not delegate to another person. So we had to agree when she would be available. We (the author and one assistant) were able to get most of the homeowners and tenants to answer the questions from the old unsold houses. However, few could allow us to enter into the houses.

**Interviews**

Interviews are important sources of evidence in a case study strategy of inquiry. Moser and Kalton (1971) acknowledge, the fact that although many situations merit the description ‘interview’, they confine their definition to a situation where one is simply seeking information from an interviewee. The interview can either be formal or informal but they emphasise that in practice, the choice is not between the completely formal and the completely informal approach, but between many possible degrees of informality.

The interviews took place at the premises of the respondents; this was deliberately done so as to capture as much information on the homes and the environment on and around the home. The targeted respondents were mainly homeowners and heads of households in the tenant-occupancy. The reason for targeting these was that, homeowners have the stake in ensuring safety and security of the people who are under their care and their properties, they also have a stake in meeting conditions imposed upon them by those who would like to rent their houses. The heads of the households also
have a stake because they lay conditions for the house to rent and where to rent, depending on their own situations and conditions that include the ability to pay the rent.

Homeowners and tenant residents were also asked whether they have been victims of burglary, residential robbery or mugged within the study area and how many times since they have been living in the area. Here, the intention was to show the incidences of actual crime in the neighbourhoods, and extract the real life experience of crime inflicted upon persons.

Additional probing questions were asked regarding the actions people take to reduce these incidences of crime and other means of protecting their persons and properties and how effective the actions were in reducing crimes and fear of it. This led to answering the first three questions of my research: How do people build barricades on and around their homes in urban areas? How do people respond to crime and the fear of it in residential neighbourhoods? How effective are the responses in preventing or reducing crime and fear of it?

Key persons' interviews
Mikocheni B is located about 3 km from each of the two police stations of Oyster Bay and Kawe. Due to the history of the area, which was plagued by a wave of criminal activities in the 1980s, a police post has been built. The post is manned by a police officer. Here I interviewed the police officer in charge aimed at corroborating the homeowners and tenants’ claims. The interview with police was done also in the other case study areas of Ilala Kasulu and Chang’ombe with the intent to corroborate the police data and the information obtained from the respective homeowners’ narrations and stories.

Direct observation and photographic records
An observation protocol that featured in this study aided data collection. This protocol was conducted after the local (mtaa) leaders in the areas of study were aware of my presence in the area and working on this research. The observation was made of the general environment of the study areas, the types of the surrounding walls and hedges to the properties or homes, the burglar proofing metal grillages on houses or dwellings, metal gates and the general outlook of the streets resulting from the process of barricading and wall fencing. This was done as I walked through the areas of study. At times, I used to sit at some public spaces, usually at one of the bars in the area and just observed what was around. In this observation process many photographs were taken to show how the built up environment appeared.

The following features were recorded for individual residences and they included:
Fences and hedges, gates, door- and window-barricades,
Building setbacks on the plots;
Sidewalks along the streets;
An overall exploration of the residences/dwellings with these physical features was made for each case study area noting the changes on and around the houses/dwellings. Specific questions about why the fences, hedges, walls, etc. and comfort conditions were asked in order to understand the reasons behind the construction of the same and how they impacted on the comfort conditions of the interior uses.

In addition to the above, homeowners were asked of how they perceived and experienced the built environment of the case area in terms of architecture, interaction potentials, how they felt as they walked in the streets and how they viewed and assessed their neighbourhood.

**Participant observation**
At one time in the late 1990s, I was engaged as an architect to design a residence for a client with a plot in Mikocheni B, which is one of the case study areas. In this project I was asked to design the building together with the environment around it including the design of the wall fence around the property. Before I could design the wall fence, I had to look around in the area and at the neighbouring plots in order to understand what was around in the area. I convinced my client to go for a short and ventilated wall fence that he accepted. The purpose of this was to play down the wall and allow the building to feature more to the passers-by.

Yin (1994) takes participant observation as a special mode of observation in that, one is not merely a passive observer, but assumes a variety of roles within a case study situation or actually participates in the events. The method is said to provide an invaluable opportunity for data collection in that it affords an opportunity for one to gain access to events and processes that would have otherwise not been accessible through other data collection methods such as interviews, or even direct observation. The approach also enables acquisition of information from the "inside view" of the cases studied as against external to it. Yin (2003) further emphasizes the distinct advantage of such an "in-view" perspective as invaluable in producing an "accurate" portrayal of a case study phenomenon.

**Documents and archival records**
It was important at some stage of the study to confirm the homeowners’ or residents’ narrations or descriptions of the situations and the types of crimes in the study areas. This was to be done by collecting crime data from the relevant police stations or police posts in the areas of study. It is
understood that, police stations do have records for the incidences of crime and crime activities according to where they occur.

Analyses of these data and other documents are important tools in case study research. In this research, we used it as one of the sources of evidence for the research. The analyses are also used because of their strength for being reviewed repeatedly, and because they are unobtrusive (that is, they were created not for the purpose of the research and they are exact and have a tendency to broad coverage in terms of time span and events (Yin, 2003, Eliufoo, 2005:91). Yin (2003) also considered the most important use of documents is to corroborate and augment evidence from other sources. Documents that were obtained from the Municipal Councils (layout plans and development guidelines, planning by-laws), Surveys and Mapping Division of the Ministry of Lands and Human Settlement (aerial photo maps of the areas of study), and the Dar es Salaam Safer City Programme (victim survey reports) were analysed.

This information showed and indicated the changes that have occurred as opposed to the planned situation. Again, this had a bearing on recommendations to be put forward in the end of the research. Other information about the crime situation in Dar es Salaam and the efforts done to curb crimes was obtained from the Manager of the Dar es Salaam Safer City Programme. More documents on planning out crime were obtained from Internet search, university library at Ardhi University, the KTH Library and from literature review (refer reference list).
Problem identification from observing and lived experiences

Literature review

Theoretical framework

Selection of Cases

Design of data collection methods

Case study 1
Write Case
X-case analysis
Emerging issues,
Discussions/reflections and
Future Researches

Case study 2
Write Case

Case study 3
Write Case

Selection of Case Region/City

Fig. 4.2: Research design and process (Adapted from Lupala, (2002:74) and modified to suit the research design).
4.7 How to analyse the data: Data analysis and analytical concepts

Perception of crime

The perception of crime level in the study areas was analysed through the narrations or explanations as obtained from the interviews. One of the follow up questions in the interview questionnaire guide required the respondent to elucidate how he/she understood crime and fear from it. In this question the respondent had to choose between three survey responses (I understand as a big problem, I understand as a small problem or I understand not as a problem at all). The level of residents’ or homeowners’ perception of crime was then evaluated by summing the standardised survey responses for each study area. Then, the results were analysed and compared between the three case study areas to understand whether the feeling of fear of crime was limited to any case.

Original plans versus built plans analyses

Layout plan of the neighbourhoods, street network;
Building regulations related to the neighbourhoods and

Density of the neighbourhood

The built form was compared with the original layout plan to identify the changes and variations and evaluate whether these changes were influenced by crime and fear of it. The comparison of the two also led to the identification of the transformation processes of the urban fabric, whether the transformations were a result of fear of crime or not.

The results from this comparison was at the end of the research used to come up with some recommendations on planning of urban residential areas taking into cognisance of crime aspects and the feeling of fear from crimes.

4.8 The quality of research design: reliability and validity

Although validity in qualitative research is not seen as carrying the same connotation as it does in quantitative research, Creswell (2003:195) acknowledges reliability though in a limited way that it can be used to check for consistent patterns of theme development among several investigators in a team and generalise some facets of multiple case analysis. According to Yin (1994, 2003) the tests for measuring the quality of research designs, include: construct validity, external validity and reliability. He also identified relevant stages in the research process where such tests could be carried out. The
following section explains how the quality of the research design for this investigation was to be tested.

4.8.1. Construct validity
Construct validity involves establishing correct operational measures for the testing of the theoretical concepts. Critiques of the case study approach have always considered this aspect as lacking in such an approach and as a result allege there is a tendency to subjective judgment creeping in during the data collection (Yin, 1994, 2003). In this study, the construct validity was made possible by: the use of multiple sources of evidence; the establishment of a chain of evidence by linking the research questions and propositions to the data that was collected; and the conclusion made from there. The sources of evidence included direct observation, interviews, documentation analyses and police data and key official informants. The triangulation of data source is seen as addressing the potential problems of construct validity as the multiple sources of evidence essentially provide multiple measures of the same phenomena (Yin, 1994). Such an approach apart from acknowledging the comparative strength and weakness of each source of evidence also provided a complementary function for each source.

4.8.2 External validity and reliability
This test deals with the problem of knowing whether the study's findings are generalizable beyond the immediate case study. An analytical generalisation was adopted as against statistical generalisation. In the former, the approach strives to generalise a particular set of results to a specific category of cases or to some broader theory and not like in a survey research where a sample readily generalises to a larger universe (Yin, 1994).

Prior to the data collection process the case study protocol was prepared so as to guide the process and also increase the reliability of the investigation (Yin, 1994, 2003). This ranged from interview guide, observations that were made, documentary analyses and police records collected and municipal official key informants.

4.8.3 Replication or sampling logic
The choice of the units of analysis was based on what Yin (1994, 2003) refers to as the replication logic - an approach that he explains as analogous to the logic used in multiple experiments. The initial step involved was developing a theory; followed by case selection and the designing of protocol for data collection, and lastly, conducting individual case studies. As Yin (1994, 2003) stresses, each
individual case study is considered as a "whole" study in which convergent evidence is sought regarding the facts and conclusions for the case. Each case's conclusions were then considered as information needing replication by other individual cases. The individual and multiple-case results hence formed the summary report. Multiple cases that supports the study's theoretical proposition that Yin refers to as "literal replications" and those that do not support the theoretical proposition which he refers to as "theoretical replication" was analysed and selected.

4.9. Generalization or fuzzy generalization?

Positivist authors (the conventional views according to Flyvberg, 1999:420) in qualitative research methods have challenged case study research strategy. One of the main challenges levelled against the case study has been that, one is not able to generalise results from one case to a wider context. This however, have been discussed by a number of authors that generalisation from a case can be made.

In his paper titled: “Types of Generalisations from a Single Case”, Johansson (2007) argues that there are several types of generalisations. Johansson posits that, “besides the hypothetico-deductive model and inductive theory generation there are further two forms of analytical generalisations, both based on abductive reasoning. One constructs or reconstructs a case from an unexpected observation by applying some kind of principle or theory. The other is based on comparisons with known cases (naturalistic generalisation)”. An agreement that seems emerging from other authors that; results from case study research are not generalisable as the case is for statistical samples. Case study findings can be related or transformed/transferred to another context provided that conditions in latter context are similar (Yin, 1994:38; Patton, 1987:167; Nnkya, 1996: 258 – 59; Flyvbjerg, 1999:15, in Lupala 2002:91, Yin, 2003, Creswell, 2003:).

From the above, this research banks on the understanding that the generalisation at the end of the study is a generalisation that is particular to the cases studied. Otherwise, the generalisation should be that of naturalistic nature, basing on the comparison from the three cases studied. As Yin notes, instead of statistical generalisation, the ideas of analytic generalisation can be related to the logic of ‘replication’ (Lupala, 2002). As quoted by Nnkya, Bassey on the other hand argues that, what is important in the observation of a social phenomenon is relatibility, that is, the extent to which an observed social phenomenon in a given context might inform similar situations in which the observed phenomenon is likely to occur (Nnkya, 1996:259). And in supporting relatibility rather than generalisation, Bassey says that:

“… an important criterion for judging the merit of a case study is the extent to which the details are sufficient and appropriate for a (practitioner) working in a similar situation to
relate his decision-making to that described in the case study. The relatability of the case is more important than its generalisability (quoted in Nnkya, 1996: 259).

From this standpoint, this research does not aim to generalise the findings on the basis of statistical analyses, but on the basis of replication and relatability”. The results from the three case studies have not been used as representative of other cases. They have been presented to serve as bases for relatability with other specific contexts where conditions are more or less the same as those found in these studied cases.

4.10. Methodological problems encountered

In this section, I report the methodological problems that I encountered. Researching on peoples’ actions or responses in dealing with crime appears to be a sensitive issue. It touches on individual’s feelings and the individual’s ways of handling the issue. In the process of interviewing and going around in the study areas, I had to be accompanied with a representative from the Mtaa Leadership. This is in addition to the permit that I had obtained from the Municipal Directors allowing me to conduct the research. Doing the research with my assistants alone was not possible for I could not be allowed into the fenced homes. At some incidences, we were not allowed in the compounds even with the help of the Mtaa Leadership. In many of the interviews, we had to do the interview at night between 8:00pm to 10:00pm because the heads of the household were not around during the day. Sometimes, the Mtaa Leadership had to make an appointment for me so that I interview the homeowner at the time of his or her convenience. The leadership had to assure the respondents that I am mere a researcher from the University studying the phenomenon that is being practised by the residents in study areas. This assured that the materials obtained from them would not be used otherwise, but for pure academic purposes. So accepting to be interviewed or not was also of no harm to any one who was not interested. This was made clear at the early stage of the research.

4.10.1 Use of voice recorder.

When I started the interviewed, I very much wanted to record the interview. So, I requested respondents whether it was okay for them to be recorded during the interview, and many respondents especially in Chang’ombe Housing Area accepted. But during my first ever interview, I discovered that the machine was not working just after I have finished the interview. I wanted to play back so that the respondent could actually here what was said. Since we have spent a lot of time with the respondent, I decided to go on with another respondent, hoping to correct the mistake. However, it so happened that, I was also writing the interview when the first respondent was giving his story.
My two assistants were also taking notes. So we ended up depending on the written notes to build up the stories from the interviews.

### 4.10.2 Police bureaucracy and secrecy

As discussed above in section 4.5.5, I needed also to cross-examine the stories about crime in the areas of study by using police crime data from the areas of study. This I wanted to do by obtaining the data from the police posts and the main police stations. This proved difficult in some areas as outline here.

At the Msimbazi Police Station I did not get any cooperation at all, when I wanted the reported statistical data about the crime incidences in Ilala Kasulu. I visited the station more than 5 times to request for permission such that the Police incharge of the Ilala Police station can give any information about crimes as I requested. This was because he was not allowed to say anything unless I had a letter from his boss, the Ilala District Commanding Officer stationed at Msimbazi. “Why do you come to us when you have already started the research? You should have first come to ask the permission from us before! But anyway, the Commanding Officer is not in the office, so come another time.”

The other thing that appeared to be a problem is that, the crime data from the police are not usually sorted out according to categories of crimes. They are only recorded in a record book and that records are kept for a period of five years before they are destroyed. The task of sorting out of the records book makes police officers reluctant. You need to promise some pay so that the data that one needs can be sorted out. Since I was not allowed to see and go through the records myself, I had to pay in order to get the data from the Chang’ombe Police Station.

Even with police in charge of the Mikocheni police post was very willing to discuss the situation of crimes in Mikocheni B, the statistical data on the incidences and the categories of crime in the area was not kept at the police post. He referred me to the Kinondoni District Commanding Officer stationed at Oyster Bay Police Station. As it was the case with the Msimbazi Police Station, it was not easy to find him for all the times I visited the station to see him.

### 4.10.3 Research assistants.

Before starting the research, I had trained two research assistants for each case study area. For each case study area, I carried out the interviewing process with the assistants for 5 days making sure they understood what stories I was looking for from the respondents. After this, then we could split to
two different homes so that we can increase the number of homeowners interviewed per day and the end of each day we discussed our results. However, only at the first day, instead of recording stories from the respondents, the research assistants in one of the case study area brought in short responses in the form of “yes”, “no”, “I don’t Know”. With such responses, it was not easy to make up good stories. I therefore stopped to split the team and thereon we had to work in one team, ensuring that what is recorded are stories describing the experiences of the respondents regarding the phenomenon that was being studied.

This chapter has discussed the methodology and the research strategy that I used in the study. What has been presented and elaborated in this discussion are the tools that I used to collect the data, why I choose to use qualitative methods and how validity and reliability was handled and whether the results can be generalised at broader perspective. The aspects of methodological problems that I encountered during the research and data collection have also been presented here though in a nutshell. The following three chapters present the empirical findings (or results) from the three case study areas. Each case study is presented as a chapter of its own. There are therefore three chapters the empirical results (Chapters Five, Six and Seven).
PART II: EMPIRICAL EVIDENCE FROM THE CASE STUDIES
Mikocheni B

This chapter presents the findings from one of the case study area namely Mikocheni B. The other cases are presented in the following Chapters Six and Seven respectively. The historical development of the area is presented before the existing housing and environmental conditions are presented. This is followed by a discussion on the findings from the interviews, observations and documentary analysis.

5.1 History of Mikocheni B

Mikocheni neighbourhood is among the settlements developed in 1970’s under the National Sites and Services Project in Dar es Salaam (Kironde, 1994:37-380). The settlement is located in Kinondoni Municipality approximately 7 kilometres from the city centre. The neighbourhood is accessed from the city centre via Old Bagamoyo Road and Ally Hassan Mwinyi Road. The area can also be reached via Mwenge on Ally Hassan Mwinyi Road. The settlement is surrounded by industrial as well as institutional land.

Initially the settlement was a farmland and was inhabited by migrants from the south of Tanzania, especially Makonde who used to grow paddy and cassava as food crops. In 1974, the area was declared a planning area, under the National Sites and Services Project, which was funded by IDA Credit of the World Bank. It was the first phase of the projects that were implemented in Dar es Salaam, Mwanza and Mbeya. A total of 15,000 plots were developed as well as roads, water supply, electricity, schools, dispensaries and market. The plots were intended for the people whose income level did not exceed Tsh.1000 per month.
Table 5: Phase one of the Sites and Services Project in Tanzania

<table>
<thead>
<tr>
<th>Region</th>
<th>Area</th>
<th>No. of Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dar es Salaam:</td>
<td>-Sinza</td>
<td>3800</td>
</tr>
<tr>
<td></td>
<td>-Kijitonyama</td>
<td>1672</td>
</tr>
<tr>
<td></td>
<td>-Mikocheni</td>
<td>710</td>
</tr>
<tr>
<td></td>
<td>-Manzese(Upgraded)</td>
<td>7600(Houses)</td>
</tr>
<tr>
<td>Mwanza:</td>
<td>-Nyangato</td>
<td>1900</td>
</tr>
<tr>
<td>Mbeya:</td>
<td>-Mwanjelwa (Upgraded)</td>
<td>2050 (Houses)</td>
</tr>
</tbody>
</table>


According to the Sites and Services project, Mikocheni Housing Area was divided into two areas namely Mikocheni A and Mikocheni B. Mikocheni A, was planned as a medium density area with larger plot sizes compared to those in Mikocheni B. It is mostly an area for middle and high-income groups. The area has developed into one of the high quality residential areas of Dar es Salaam, second to Oyster Bay, Masaki and Regent Estates. With big and modern houses of single and double storeys, the area is bordering Regent Estates to the east, an institutional area to the south on Ally Hassan Mwinyi Road, Mikocheni B to the west and the Msasani and the Indian Ocean to the north. Kironde echoes this when he says: “The three areas of Sinza, Kijitonyama and Mikocheni have sorted themselves out with Mikocheni coming out as a high-class residential area with expensive houses some of which are to let to expatriates. This is partly because of Mikocheni’s location by the Ocean and partly a result of deliberate policy that subdivided the area into a comparatively high proportion of medium sized plots” (Kironde, 1995: 393).

Mikocheni B is on the west of Mikocheni A and was initially planned as a high-density area to accommodate low-income households (see Fig. 5.1). The plots are therefore smaller compared to those in Mikocheni A. The area is bordered by institutional and industrial area to the south and west, the Indian Ocean to the North and of Mikocheni A to the east. It is easily accessed from Mwenge by a road off Ally Hassan Mwinyi Road and also from Old Bagamoyo Road. A big informal housing area exists northwest of Mikocheni B that developed next to the Lugalo Military Camp and the defunct Tanganyika Parkers factory at Kawe. Middle-income and high-income households live in Mikocheni B, though there are also a few low-income people. It appears that middle and high-income households including business people have bought most of the low-income people who were initially the intended beneficiaries. Overall, the area is not very different from Mikocheni A.
Fig. 5.1: Part of a layout plan of part of Mikocheni B as planned under the Sites and Services Scheme of the 1970s. Note the compactness of the plan, the gridiron structure of roads. The shaded plots indicate the interviewed homeowners. (Source: Kinondoni Municipal Council, 2007)
5.2 Housing and Environmental Conditions

As intimated earlier, most of the houses in Mikocheni B are single-family houses of high standard that show main characteristics of a high standard area. Almost all houses are owner-occupied or rented out to a single family. They are definitely not for the low-income bracket although you can also see the houses belonging to this cadre of residents. Many of them are bungalows on medium sized plots, built by modern and permanent building materials and cement roofing tiles or the harvel tiles to most of them. Some have concrete flat roofs and a substantial number are covered with iron and aluminum roofing sheets.

Almost all houses are fenced with a range of different fences of different designs and materials. Very few are still fenced with plant hedges (michongoma – “Tanganyika thorn”) in combination with wire fences. Open or ventilated fences that combine masonry blocks and steel bars enclose a few more; while others are surrounded by masonry wall fences. In most cases, the full height measures about three metres. In some cases, a combination of solid wall at the bottom and ventilated blocks at the top is used. In addition most wall fences in the area are topped at full height with sharp iron spikes, razor wire, electric wire or broken glass so as to forestall climbing.
One also notices that in most of the ventilated wall fences, modification leading to partial or total closure of the ventilation openings has been effected. Often, cement mortar or planting of creeping plants or using palm leaves to obstruct and close out the view from outside the fence is used (see Figs. 5.4, 5.8, 5.9, and 5.10). Metal gates of different designs and makes facilitate opening into the street. However, there are also a few houses, which do not have fencing walls at all, and most of these portray the status of low-income families. Some are still under construction, or still unplastered and unpainted. In addition to the walls fences, the houses are barricaded on windows and doors with metal grills. This is said to instill security and delay the would-be intruders or any forced entry into the house in case one is able to overcome the fences.

The area was planned with roads and streets forming a gridiron pattern, thus every plot can be easily accessible. However, even though the streets and roads here are passable, not all of them are hard-
surfaced. Either, most streets are earth or gravel-rolled and many of them are not in good state. This situation has been made worse as they have been reduced in side by the encroaching fencing walls which in turn concentrate the rainwater thus turning the streets into rainwater streams during the rain seasons. This eventually hastens or rather increases the wear and tear of the streets. There are no side drains on the streets because of the wall fencing and encroachment. There are no street lighting, thus the area is dark at night, save for some few homeowners who have provided lighting at their gates.

Fig. 5.7: A ventilated fencing wall topped with iron spikes to forestall climbing. The ventilation holes can be used to scale the wall.

Fig. 5.8: A gate into the house compound designed to allow visual communication between the house and the street. Note the attempt to obstruct the visual communication as designed.

After writing the first draft of this Chapter I submitted it to some few key informants in the area for their reading and comments. One of the respondents gave very whom I had interviewed earlier said that the “small plots are undesirable and are not amenable to aesthetics”, adding that “congestion may be subject to spreading epidemic diseases”. And as a general comment, one respondent said: Houses that have so far been built and constitute the Mikocheni B suburb are in all shapes and sizes; however there is always the need to make a residential area pleasant to live in. While it may not be desirable to legislate for a standard type of architecture, the City Council may give general guidelines regarding the more acceptable type of buildings that may be erected in a given area, such as Mikocheni B”.
The Sites and Services Plans for the two areas provided spaces for neighbourhood centres to accommodate a primary school, a market and a community hall. However, the areas that were designated for these functions in Mikocheni A have been converted into residential use, while in Mikocheni B, the areas were developed according to the plan except that the community hall has not been built. A primary school and the market centre were built according to the plan. From the discussion and interview with one respondent, a retired Civil Engineer, Mr. Massawe, the most common type of crime that has given rise to the erection of fencing walls were burglary and home robberies. The situation was reported to have worsened in the late 1980s when the area experienced an increasing wave of criminal activities resulting from a cartel of drug dealers who used the neighbourhood market centre to distribute drugs to youths, who in turn terrorized the neighbourhood at night and sometime in broad daylight. Another respondent, an elder and resident in the area corroborated this by saying:

“... Pia kulikuwa na majambaji, wavunjaji, vibaka na wauza madawa ya kulevya siku za nyuma (miaka ya 1980 na mwanzo mwa 1990). Haya yote yalikuwa yakianzia kwenye soko letu la Mikocheni B ambako ndiko kulikuwa wabariki wanjijisha. Ibibidi wakazi wa Mikocheni kukubaliana kuwa soko hilo, na ndipo uhariri ukipokwisha au kupungua’. (meaning “there were also many robbers, burglars, petty thieves and drug dealers in the years before (1980s and early 1990s). All these originated from our market in Mikocheni B that has become a criminal hide out. It reached a point when all the residents of Mikocheni B had to agree to demolish the market and that is when crime was reduced” (Male, 12.03.2007).

According to the Engineer Massawe, several reasons are advanced for as some of causes for the increase of crimes in Dar es Salaam. Some of these reasons are: population increase as a result of rural-urban migration; high rate of unemployment as a result of increased population and the closure of many parastatal companies and industrial establishments; and liberalization policies which allowed
importation of goods and services that were previously not allowed in the country, such as television sets, music systems, radio sets, used cars and motor vehicles spare parts and others. Mikocheni being occupied by middle and high-income residents turned out to be an area where most residents can afford to pay for them. This situation attracted the would-be robbers, burglars and petty thieves in the area especially during the nighttime. In addition, the fact that many of the residents in the area were employed, thus leaving for work in the morning and coming back only at the end of the day, made it a good area for the would-be crime inclined to survey the area during the day and select the targets for the night attack. The area suited well in applying the Cohen’s and Felson’s ‘routine activity theory’, that assumes that, ‘for a crime to occur, there must be a convergence in time and space three minimal elements: a likely offender, a suitable target and the absence of a capable guardian against crime’. During this period (1980s), incidences of crime happened almost weekly if not daily. The situation made worse by the lack of police patrols and street lighting. This was even serious during the rain season, when apparently the rain covered the criminal trails and also made it difficult to hear the footsteps.

5.4 Homeowners’ Responses to Crime

Being relatively away (about 7 kilometres) from the city centre and 3 kilometres from the Oysterbay Police Station respectively, the ability of the city authorities to deal with the wave of crimes in Mikocheni B was not easy. Moreover, the Police Force is ill equipped and understaffed to manage patrols in the whole (see chapter 3 for details). Homeowners and residents of this area therefore had little or no other means of protecting themselves against burglary, home robbery and street mugging, but to establish what is locally known as “Sungusungu” or “neighbourhood watch (vigilantes) groups” to provide for night security patrols at neighbourhood level. Also the market centre, which used to harbour dealers of narcotic drugs, was demolished at the agreement of the residents of Mikocheni B. At individual homeowners’ level, many had to erect fencing walls and installed and reinforced the burglarproof grills on doors and windows as a means to protect ones family and property. One of the respondents echoes the foregoing by saying:

“We built the fencing walls because of fear of burglary and other crimes like robberies and mugging. There was too much of criminal activities in Mikocheni before, that is, in the 1980s and 1990s. So to instill some sense of confidence and feeling of security, one has to take action upon his/her property by erecting a fencing wall. I did not do this because it is fashionable, but out of need and necessity, and for the security and privacy of the home” (Respondent, 12.03.2007).

According to the interviews with homeowners, the measures taken against the wave of crimes and fear of crime in the area of Mikocheni B, include: building wall fences, barricades on windows and
doors, employment of private security guards or keeping fierce security dogs and participating in the “Sungusungu” or neighbourhood watch group.
Respondents argued that although wall fences and barricading do not fully prevent crimes, they at least delay the burglars or home robbers to enter the house and therefore give the occupants sometime to respond otherwise. At the same time, fencing walls prevent robbers and the would-be burglars from seeing the inside of the property and plan how to break through. To support this contention, a retired civil engineer, resident and homeowner in this area had this to say about wall fences and barricades:

“Kuta hubifadhi mambo mengi. Pia vibaka bawaoni udani. Kuta bubelewesha vibaka kuingia. Sababu nyinge ni kwa kuta hubifadhi usiri an kusitiri nyumba. Yote ni mubimu, kuwa vikubaka na kusitiri nyumba. Vitu vya kuiba havionekani”. Meaning, (“fencing walls have many functions. Also petty thieves (spivs) do not see inside the fenced compound. Walls delay the burglars, robbers and petty thieves to enter. Another reason is that walls keep or protect the privacy of the home. All are important. To reduce easy entry and protect privacy of the homes. The things to be stolen are not seen” (Respondent, 16.03.2007).

In my second round of interviews where I discussed my draft chapter with some key informant, this same respondent emphasized the point that “the need for walled fences is to stave off crime; but it is an ugly addition that does not add to the beauty of the estate”.

Fig. 5.11: Examples of fencing walls in Mikocheni A. Most streetscapes in situations where every house has a wall like this.
The following story (narration) attempts to capture lived experiences related to crime in housing areas as captured from discussion with one of the respondents. The key questions posed to him were: Can you tell us how the decision to fence and barricades (metal grills) your house including doors and windows came about? Can you also highlight the types of crimes you have experienced since you moved into Mikocheni B? Here below is a story about his experience in living in Dar es Salaam and other places in the country:

“I lived in Arusha for almost six years. The house I was living in had no fence. During the six years period, windows and doors were being broken. At one instance, I woke up only to find burglars trying to break the door. We were many renters in the house and we managed to chase the burglars away. Such crimes were common during the rain season because you cannot hear break-ins when rain is spattering on corrugated sheets.

Since I moved Dar es Salaam is almost 25 years now. When I came to Dar es Salaam for the first time, I stayed in Namanga area, Msasani. The house I lived in was fenced with barbed wire. Here I stayed for the whole period without any major burglary attempt. I used to keep poultry; there was not any attempt to break. However, my neighbours who had no fencing wall were being attacked frequently. I stayed in this area for almost five years, before I was transferred to Mwanza in 1986.

In Mwanza, I stayed at Mtakuja Street, in a house owned by one Bajber Transport Company. This house was very well fenced as the owner was an Arab. The fencing (security) wall was very high and fitted with broken glass bottles at the top. I also used to keep dogs in the compound. The dogs helped to alert me in case of an attempt to break in the compound. However, on several occasions, thieves using poisoned meat that was thrown into the compound and poisoned my dogs. I lost two dogs because of poisoning by the robbers.
In 1988, I was transferred to Tanga, where the house I stayed in was almost a “garrison” or “ngome”, that was impenetrable. It had very high fencing walls. During the hot period, one could hardly get any air movement. Here I stayed for one year without any fear or theft of any kind.

I was again transferred to Dar es Salaam and stayed in a rental house at Msasani next to TIRDO. The house was good and well fenced. I stayed there for almost 3 years. The fence was short, but with steel spikes and barbed wire at the top. From here I moved to Mikocheni B and stayed in the TBS flats. The flats are all fenced with barbed wire. Here we experienced a lot of burglary because burglars could easily cut the wire and we lost a lot of motor vehicle windscreens as well as other items. I stayed here for 15 years. When I lived in those flats, I was just a civil servant. I tried then to look for a place for business and I got this place in Mikocheni B.

I built this place initially without considering the wall fence, but we experienced a number of thefts and burglary. Following this experience, I decided to install grills on the counter, windows and doors, just to secure the business premises. This is a market and shopping area with a number of buildings where many people interact. This is why we mounted these barricades you see now on the counter and all windows and doors to prevent or delay any forced entry into the business. At this time, the 1980s and 1990s, theft and burglary was too much at the nights” (15.09.2005).

From the interviews and the story by the respondent above, one gets insights on how crime in Mikocheni B and the responses by the residents. Also, the story tells much on why homeowners are erecting not only the fencing walls, but also adopting other crime prevention measures.

In the study, more understanding is sought from homeowners regarding the reasons for the barricades. In the pilot study, there evolved several different reasons that were put forward by the
piloted residents as the reasons for the barricades and wall fencing. Now, in the main study, the author wanted to confirm whether the same reasons would be revealed. So he asked the following probing question after the stories were told: “Why the barricades and the expensive wall fences on and around the houses?” And on this, many (almost all) the interviewed homeowners cited and emphasized the reason for the windows and door barricades as for delaying or making it difficult for the burglars to break-into the houses. The barricades help to secure the house against break-ins. As it has been repeatedly said, there were many burglaries, robberies and petty thefts during the previous years. Burglars who would easily cut the mosquito wire gauzes on the windows and use long sticks to “fish pole” clothes. They could also use mechanical jacks to jack the horizontal and vertical burglar bars and let in a young boy who would then open the doors from the inside and allow the other thieves or burglars to walk in and steal everything in the sitting rooms. One wakes up in the morning only to find the door ajar and everything missing. At the end of it all, barricades are very important for security and privacy of the homes. Another respondent who happens to be a homeowner added:

"Tunaagopa uhariju na vibaka. Hivo ya magrill kwonye milango na madirisha yanachelevsha wezi. Yanafanya kazi ya kuwagia inakuwa kubwa". Meaning “We are afraid of crime and petty thieves. The grills on the windows and doors delay the thieves or burglars. They make the work of breaking in difficult.” (Male retired engineer, 12.03.2007).

On the relationship between barricading doors and windows and the wall fencing process with the increase in crime and fear, many homeowners asserted that there is a relationship and they associated the processes with the increase of crime in the past. A few said, there were a lot of crimes in the past, thus posit that the relationship is “between door and window barricading and fencing with the fear of crime and not with the crime as such”. They add to say that crime in Mikocheni B has gone down, but people or homeowners still build wall fences and barricades on and around their residences because of fear

Fig. 5.16: A street flanked by fencing walls. The wall to the left is solid and topped with broken glass whereas the wall to the right is ventilated at the top and topped with sharp iron spikes all to forestall climbing. Note the lack of drains.

Fig. 5.17: A street flanked by fencing walls. The wall to the left is solid and topped with broken glass whereas the wall to the right is solid and topped with razor wires. Note the lack of drains.
from previous crimes. Homeowners and residents do fear the history of what happened in the past adding that, although crime in Mikocheni B has gone down fairly considerably, incidences of crime from other areas of Dar es Salaam are reported daily by the news media. These also still make homeowners wary or afraid of similar incidences to recur in their area, as one respondent said:

“Kuna uhusiano wa uwoga wa uhariju na siyo uhariju wenyewe. Watu wanaogapa wanaposikia na kuona kwenye TV uhariju unaoripotiwa katoka maeneo mengine”. Literally meaning, “There is a relationship with the fear of crime, but not with the crime itself. People are afraid when they see and hear about crimes in other areas of Dar es Salaam” (Male retired Engineer, 12.03.2007).

Three tenant respondents in Mikocheni B were also interviewed and the following was said by each of them. The first respondent said the following:

“Before we came here, we were living in Magomeni Mikumi in a rental house. While in Magomeni, burglars’ break-ins into our house occurred three time in 1999. As you know some of the houses in Magomeni have no fence, we had to look for a house somewhere else. This time we wanted a house that has ample space. We had our specifications that the house must have a fence for prevention of burglary and thefts. We also wanted solid wall fences because we needed some privacy in the home. The house we were looking for should have grills on the windows and the doors also we recognize that crime is a big problem in Dar es Salaam. We found this one in Mikocheni B and we like it because it is a very safe place, peaceful and there are no thieves” (Female, 12,2007).

The respondent however observed one drawback of the wall fence noting that “the wall fences may delay the help from the neighbours when you have a problem because, you have to go out of your fence, and knock or ring a bell at someone’s gate and wait for some time till he/she opens. Sometimes the neighbour may not open especially at night for fear of criminals”.

Another tenant who was interviewed had this to say:

“Fences help in securing the compound against unwanted intruders, especially tall fences and electrified fences or those with razor wires on top of the walls. Look at that fence over there, no one would like to rent that house because the fencing wall is short and can easily be scaled up. This house is rented for me by the Kenya Airways. It was conditional that the house be fenced before I could move in. No one will rent a house that has no fence in place. This is the case for houses rented by government, NGOs or donor agencies. Security is very important for renters especially foreigners” (14.09.2005).
Yet another respondent a housewife, who was interviewed, had this to say about the wall fences:

“Previously, we stayed in Sinza in a house that had no fence. My husband used to park our car at the CCM office that was about a kilometre away. This was a big problem for us when there was an emergency at night; say you want to take a child to hospital. This prompted us to look for another house that has a fence. Since we moved into this house, the car is now parked comfortably in this house compound. We now have no hustle of going to park at the CCM office. In addition, this place has privacy and it is secure when the gate is closed” (14.09.2005).

Fig. 5.19: Steel barricades on the fencing wall. Note the sharp iron spikes at the top end and the electric wire.

Fig. 5.20: Steel barricades on windows and doors and around the counter. A means to delay break-ins.

Upon probing on whether or not crimes have increased in the city, all respondents responded affirmatively noting that; nowadays many incidences of criminal activities are reported these than in
the past. They added that one of the main causes of increase in crimes in Dar es Salaam is unemployment. They said the population of Dar es Salaam is increasing daily due to young people migrating from the rural areas in search for jobs, which are not available. “There are too many young people in Dar es Salaam who is not employed” a respondent replied. It is these crimes, which are reported daily in Dar es Salaam by the news media that accentuates the fear of crime among the citizenry of Dar es Salaam.

When asked whether there is a link or connection between the actions the homeowners take in barricading and fencing of their properties and the increase in crime and fear of it in Dar es Salaam, most homeowners agreed saying there is a close link. Even though crimes in the area of study has declined considerably, crime incidences that are reported by the media from other areas of Dar es Salaam still have impacts of instituting fear on the residents of Mikocheni B as well.

### 5.5 Homeowners’ Concerns on Built the Environment, Architecture and Social Interaction

Homeowners were asked to give their views on how they experienced the built-up fabric and the quality of the built-up environment as well as the architecture of the neighbourhood of Mikocheni B in terms of street feelings, architecture (houses, and the wall fences). Only few homeowners said the environment is good. One respondent who has settled in the area after moving from Msasani TIRDO noted:

“I like the environment because it is planned. The air movement is also good because the area is not densely populated with buildings or houses and people” (Male respondent, 16.03.2007).

However, the majority of the home owning respondents said they did dislike the environment or the architecture of the neighbourhood; noting “they did not like walking around in the area because there are no people to meet in the street. When they walked in the streets they felt uneasy. The streets looked lonely and empty without people. They felt insecure and fearful if they see someone approaching especially at night”. They also said the walls blocked the rainwater flow, causing flooding of the streets. At times even the house compounds get flooded because of the fencing walls. It was also observed that the walls deny street users the opportunity to seek shelter from abutting houses during the heavy rains. In addition, they block the airflow turning the streets into air jet streams, creating hot and stuffy environment both inside and outside the homes.
Some went as far as saying that; the environment gives a feeling of individualistic housing without social interaction (kila mtu na kwake, bakuna mawasiliano mazuri), with no communication between neighbours. Some echoed the views given by others earlier, noting: “the walls can delay one from getting a help from neighbours”. Moreover, neighbours may fear coming out to help because one would not know who is waiting to pounce outside the fence especially at night. This was more so regarding solid fencing walls, which means one cannot see the inside, or outside of the fence. A homeowner who also happens to be a retired civil servant who have worked with the Tanzania Railways Corporation corroborated what the others said noting:

“the environment is ugly (haipendezi). Napenda lakini sijisikii vizuri kutembea mitaani kwa sababu ya kuta nyingi ambazo hazifanani. You feel unwanted in the area. I do not like the architecture because you hardly see the houses. I feel fearful and unsafe. No air movement in the houses, no space for two cars to pass, flooding in the streets and in the house compounds” (Male retired Railway Engineer, 13.03.2007).

In essence, the walls hide the houses and spaces around the houses so that one does not experience the built form of the area. One sees streets flanked by walls from one block of houses to another. There is no variety, character and no robustness of the neighbourhood. The area has no visual permeability and there is no visual variety and visual appropriateness. It is not legible and not rich in variety of what to see.

Upon being asked to explain the nature of social interaction that exist, many of them said they relate normally, meaning that, they at least greet one another when they meet in the street or when there is an issue of common concern that has been initiated by the local sub ward (mtaa) leaders. The respondents added that normally they do not have much in common as neighbours, though they know their neighbours. However, they visit one another when there is a problem (like when there is a
celebration of some kind like wedding, or when there is bereavement). Otherwise, they confine themselves within their houses inside their gates.

There was a consensus that residents do not interact normally. A resident who has lived in the area many years summed it all saying:

“No normal relationship. Everyone is locked in his / her own house. We have organized a group to patrol at night “Sungusungu”. We make sure it works by each household paying a monthly allowance of T. Shs 3,000 (about USD 3.00). We do not meet unless the Mtaa government calls us for any meeting to discuss issues of common concern. We visit each other only in cases of need (for example, when there is a ceremony of some kind and when invited or when there is an issue of bereavement).

“Sungusungu” is the only issue that unites or brings people together in the neighbourhood. Residents know each other as neighbours, but they do not meet to socialize. They hardly visit one another. To worsen the matter, all the open spaces that were planned for social meetings have been turned into building plots.

The need to understand from the residents or homeowners’ experience whether they felt safer and secure after the construction of the wall fences and the barricades on the doors and windows is important as a feedback to future planning strategies and architectural design input. In order to find out this, a question was posed regarding family members feeling about safety and security before and after fencing walls were erected. Nearly all of respondents said that they felt more secure and safer. And on whether they did consider convenient exits in case of fire accidents, the majority said they have not considered that. They add that such accidents happen rarely if compared that with the incidences of crime. A few among them said they have considered this by not installing burglar grill on the doors. A respondent, retired operations manager and now a businessman had this to say:

Figs. 5.23 and 5.24: A street in Mikocheni B after the morning rain. Note the water ponds in the middle of the street. The wall fence on both sides of the street coupled with lack of side drainage channels may be the reason for such scenarios.
“Wall fences are an extra burden to the investor. If the burglars and robbers are able to break into the compound, it is really very bad, because you do not have any possibility of getting help from your neighbours. You can easily be killed without the neighbours noticing. Wall fences, doors' and windows' barricades are a disaster in case of fire or in case robbers gets into ones compound. Do you remember the incidence in Mbezi Beach, where this famous lawyer, Mr. Kapina was robbed and killed inside his own highly protected home in broad daylight in 2004?”
(Male Retired Manager, 16.09.2005).

5.6 Building code and wall fences

According to Township (Rules) Cap 101, development of any piece of land including building construction in planned areas of Dar es Salaam or any other city or town in Tanzania requires approval (building consent and permit) from the relevant Town, Municipal or City Councils in which one is building. According to Chapter 101 of the Laws – Township Rules, a building is defined as “any structure of whatsoever material constructed”. While, “to erect a building” includes: to erect a new building; to re-erect any building, the walls of which have been wholly or partially pulled down or have fallen down; to make addition to any building; to make any alteration in the structure of any building; to convert a building intended for any purpose into a building intended for different purpose; to convert into more than one building a building originally constructed as one building, and to cover any open space between walls or buildings (URT, 1999). Again, clause number 4 of Cap 101, intimates that, “no person shall erect or begin to erect any building until he has: made an application to the Authority upon the form to be obtained from the Authority; furnished the Authority with the drawings and other documents specified in the rules; and obtained from the Authority a written permit to be called a “building permit” to erect the building” (ibid). It is therefore noteworthy that according to the township rules, construction of a fencing wall around a building constitutes a development activity that requires an approval from the City or Municipal Authorities.

This research, also aimed to understand, whether the Local/Municipal Authorities with jurisdiction over the case study sanctioned the fencing walls and the barricading of doors and windows and whether or not the walls do meet the criteria as defined by the City Council or Municipal Council authorities. Homeowners were asked what roles these authorities (Councils) played in the construction of the wall fences. The questions posed include: “Did you apply for a permit to build the wall fence? If so, what were the conditions that were specified in the permit, that is, in terms of wall height, materials, setbacks and the design? Was the wall fence inspected and approved during the construction process and thereafter its construction?” Of the twenty respondents who were interviewed, only three had applied for the building permit, but the respondents could not tell if the permit was granted; besides, they could not remember what conditions were attached with the building permit. They also could not even remember if the construction of the fencing walls were
inspected and approved after construction, a requirement as spelt out in the township rules. The rest of the respondents said they did not apply for building permits from the City Council then. Some said they did not apply for the permits because they were not aware of such a requirement and that they only applied for the building permit for the main house.

5.7 The police crime data
As it has earlier been said, Mikocheni B is located about 3 kilometres Oyster Bay Police Station, and about 2 kilometres from the Kawe Police Station. Due to the history of the area, which was plagued by a wave of criminal activities in the late 1980s and early 1990s, a police post was built. The author managed to talk with the police officer in charge of the station to verify what the homeowners had been saying about the crime situation in Mikocheni B. Asked who and when the police post was built and what prompted the building of the post, the officer in charge said: “this police post was built by the help of the residents of this area, and not long ago. The post is a result of Mikocheni B’s residents’ efforts to deal with the wave of criminal activities that plagued this area in the late 1980s and early 1990s. The residents constructed the station after which, they requested the Police Authority in Kinondoni District to provide police officers to man the station”. The respondent concurred with the homeowners that, there has been a decline of criminality in the area after residents had installed the barricades and increased the wall fencing around their properties.

The police officer explained that, since he was posted to the station, there has not been any heinous crime reported from the area. He also said that criminals are probably now afraid to linger around in the streets because there are no people in the street that every one is in his/her fenced home. “So if you are seen by the police patrol loitering around, in the street, especially at night, you will be asked of where you come from”. The police officer noted this as one of the positive aspects of the wall fencing, though he detests fencing walls for other reasons; for example, he said fencing walls block the airflow into the houses, they also limit the access fire tenders into the house compound when fire emergency is required and many others. On the other hand he said that, as far as police patrols are concerned, it is easier to carry out night patrols in fenced areas because the walls closed the “vichocharos” (alleys) between the adjoining houses in a block, thus creating a linear and clear view of the street up to the next block of houses. He said with many narrow passageways “vichocharos” between houses in the block, it becomes easier for the “vibakas”, meaning “spivs”, to hide or escape when they are being chased.
5.8 **Summary of emerging issues**

From the interviews, observations and document analyses, the following are the findings form the basis for the discussion and comparison with the other cases of Ilala Kasulu and Chang’ombe Housing Scheme that are reported later in the following Chapters Six and Seven.

5.8.1 **Crime, fear of crime and policing**

Many respondents in Mikocheni B believe that crime in Dar es Salaam has increased lately. They believe the increase is probably due to population explosion in the city and lack of employment opportunities among the migrant youth. The homeowners interviewed also reported the increase of crime in the city has created a feeling of fear among city residents including Mikocheni B area. However, they also argue that in Mikocheni, crime has declined considerably. The fencing walls and barricades on the houses that are seen are an indication of fear of crimes even though overall, crime in the area has gone down.

The emergence of and the formation of “Sungusungu” in the area indicate that the national policing effort in Dar es Salaam and Mikocheni B in particular by the Tanzania Police Force is inadequate. The police force is not adequately manned and equipped to provide sufficient policing patrols in different parts of the City of Dar es Salaam and Mikocheni B in particular. This has caused fear among residents and making them to take action to devise other means for defending themselves and their properties. These include the erection of fencing walls and installation of barricades to doors and windows, the “Sungusungu” watch groups and an “anti-social behaviour” of not socializing within the neighbourhoods. Everybody in his or her own fenced compounds, doubting everyone and disregard of neighbourliness.

5.8.2 **Security, safety and privacy**

Wall fences and barricades that are seen in many residential areas of Dar es Salaam and Mikocheni B in particular have come about for security purposes. The other reason is to enhance privacy. Most respondents cited these two as the main reasons for the barricades. It is important to note from the interviews that the issue of safety in case of accidents like fire outbreaks never came out vividly as an issue of concern. Most respondents said such issues happen but not often in comparison with the wave of crimes that plagued the area between the 1980s and 1990s.
5.8.3 Types, design and heights of wall fences versus township rules

There are many different types in design and heights of the wall fences that range from plant and wire fence, solid masonry wall fences, as well as combination type wall fences. The latter refer to solid masonry wall and ventilated masonry wall, solid masonry and ventilated metal grills. In most cases, the walls are high and more or less completely prevent visual communication between the house compound and the outside street. In places where combination wall design was used, the author notes the actions by residents to block the view using materials of different kinds like palm leaves, vegetation or sealing completely using cement mortar. This is most likely due to attainment visual privacy. One may also speculate that when the fence allows for visual communication, security is compromised, thus a need for complete blockage of the view in the name of privacy.

There is also inadequate enforcement of township rules by the Municipal Authorities. We note that, many of the wall fences have been built without approval from the Authorities. The township rules that specify the design and height of the wall fences that serve as boundary walls require that all persons wishing to construct wall fences to apply for building permits. These are intended to ensure that the walls to be built do not constrain the built environments and that the resulting built environments are conducive to live in, in terms of air movement, visual quality and social interaction.

5.8.4 Quality of built environment and relationships between neighbours

Most homeowners and residents of the study area did not like the resulting built environment that has been affected very much by the criminal activities that occurred in the yesteryears. They do not experience the social atmosphere of urbanity, being and belonging together as neighbours who can easily socialize. Moreover, they do not see the beauty of architecture for the built form, for they hardly see the houses (as they are hidden by the wall fences). They experience no air movement when indoor, floods during the rain season and the feeling of loneliness as the streets are in solitary conditions. At the end of it, there is no regular social contact among residents.

5.8.5 The implications to architecture, residential planning and urban management

It is the conviction of the author that the aforementioned are important inputs into the professions of architecture, urban planning and urban management. The management of the urban enterprise involves issues of tax collection, utility fees (for instance, water bills, telephone bills, electricity charges and the like). In these wall-fenced homes, how easy or difficult is it to collect such dues?
Ilala Kasulu

This chapter presents findings from the second case study area of Ilala Kasulu. In the chapter, the state of Ilala Kasulu starting with its historical development is presented. The results from the interviews, observations and documentary findings are presented second and at the end of the chapter, a presentation of a summary of emerging issues is made.

6.1 History of Ilala Kasulu

Ilala is located three kilometres from the city centre to the west. It is bounded by the densely built Buguruni informal settlement to the west, the Central Railways Line and Pugu Industrial Areas to the south, Karume Stadium and Kariakoo to the east and Ilala Boma (Regional Office Headquarter) and Ilala Residential Quarters to the north.

The area was designated Zone III high density residential for the native Africans during the colonial period, under the auspices of a consultant Sir Alexander Gibbons and Partners who prepared the master plan for Dar es Salaam in 1929. Being an area for Africans, a multi-occupant Swahili type houses dominated this area with poor basic infrastructure services such as surfaced roads, sewerage and drainage poorly provided (or the standard of services was kept very low) by the colonial administration. Kironde, writing about services provision in the area during the colonial period notes that in 1932:

There was just one water standpipe to serve the 600 homeowners of Ilala. There was only one public toilet in the area. There was no refuse collection service. There was no street lighting or police patrols so that theft was common. In the light of this situation, native residents of Ilala submitted a petition to the Provincial Commissioner requesting: police patrols, piped water, electricity and toilets. The Provincial Commissioner’s reaction was generally hostile: “they have no hope of getting electric light I hope”, he wrote to the District Officer (Kironde, 1995: 204).

The policing situation, which is essential for property development and for safe urban residence was also not adequately provided for. Kironde (1995:201-202) adds:
"For example; it was stated in the Legislative Council in November 1935, that the number of night police patrols, exclusive of inspecting staff, in the three zones of Dar es Salaam was: 34 for Zone I; 28 for Zone II; and 17 for Zone III. Thus, the number of night police patrols in Zone I was twice as many as the number in Zone III, despite the fact that Zone III was badly lit”.

Currently, the services in the area are still poor, with most of the roads not paved. Only four roads in the area are paved (with tarmac) while the remaining ones are earth roads or gravel rolled and not in poor state. There is one police station built in 1953. The police station is manned by Police Officers who report to the Ilala District Police Commander at the Msimbazi Police Station. The police station handles also cases of traffic violation and others including cases of delinquency. Other facilities and services like street lighting are presently not available, whereas water supply is available in most of the houses in addition to water standpipes in the area.

The area is accessible via Uhuru and Kawawa Roads with Lindi Street, which traverse the area. Ilala is characterised by the relatively medium sized plots ranging between 250 and 300 square metres, with plot coverage of about 37% and predominantly single storey houses, with a floor area ration of approximately 0.37 (Lupala, 2002:65). The houses are mostly Swahili type with a main house having six rooms, that is, three rooms on each side and a corridor in between. At the rear of the plot, outer buildings comprising a storeroom, kitchen and toilet and a bath are provided. A fencing wall to define the courtyard encloses the area in between and washing platform is provided in the courtyard.

The majority of residents in Ilala are engaged in trading activities such as food vending, butchery, market stall vending, shops and restaurants. There are also many beer outlets (bars) in the area that serve beer and food until late hours of the nights. Many residents are employed in the formal sector of the economy. The land use functions of the area include residential, commercial, industrial and institutional uses like schools, offices and religious facilities such as mosques and churches. Some unlicensed vehicle repair garages are also operating in the area. Going through the area one also notes that, some houses are being transformed or being rebuilt anew after buying off the original owners. A building transformation similar to the one taking place in Kariakoo has started in Ilala and new buildings with much higher floor area ratios are coming up. In the old houses, the author have also noted that much higher densities in terms of additional number of rental rooms have built at the back and on the sides when the landlords have moved out into other areas leaving the houses purely to tenants. The latter has resulted into deterioration of the living conditions in the area in terms of quality of the physical spaces especially in terms of lighting, ventilation and the crowding in rooms, leading to congestion.
Fig. 6.1: Part plan of Ilala Kasulu bordering the Ilala Bungoni to the west and Uhuru Road to the north, the central railway to the south and the rest of Ilala to the east. (Source: Ilala Municipal Council, 2007)
6.2 Housing and environmental conditions

As intimated in the historical background, most of the houses in Ilala Kasulu are old Swahili type houses and in dire need of major repair or rebuilding. As earlier reported above, owing to the pressure for rental accommodation, some house owners have added rooms to increase rental spaces by building more rooms at the rear of the plots, this includes converting storerooms and kitchen into rental rooms. Some have encroached upon the side setbacks, and added more rental rooms. This has led to stressful living conditions with many rooms lacking day lighting and natural ventilation.

Nearly all of the houses in the residential blocks are adjoined with wall fences at the front and entrances punched through the adjoining walls into the houses’ courtyards. Adjoining walls, making a continuous wall along the streets from one block to another, blocks all narrow passages between houses. The boundary walls at the back and the two sides of the houses separate the houses in the residential blocks. The fronts of the houses face the streets bounding the blocks and windows and doors open into sidewalks along the roads, affording one to see what is happening in the streets.
Fig. 6.3: A house no.4 on Chunya Road showing a corridor through which the added rooms to the side setback can be accessed. Note the darkness in the corridor especially at night.

Fig. 6.4: Houses along Chunya Road, note the houses are co-joined by walls; that doors, verandahs and windows directly face and open into Chunya Road, affording one to see whatever is happening in the street.

Fig. 6.5: A house along Lindi Street, note the courtyard as defined by the side high wall fence. The yard is used as storage, washing and drying space.

Fig. 6.6: A house along Lindi Street, showing part of the courtyard. Note the added rooms at the rear in the background.

Fig. 6.7: Houses along Kasulu Road, at the far end, note the new buildings. Note all the front facades are facing into the street.

Fig. 6.8: Bukoba Street, note the free activities and communication between houses and the street.
6.3 Crime in Ilala Kasulu

Ilala is an old area is old which was planned by the British Colonial power and built by the natives (Africans) in the late 1920s and early 1930s as an extension of Kariakoo Area (Kironde, 1995; Lupala, 2002). The houses were built by use of traditional materials such as mud and poles with thatch as the roofing material. Gradually, the houses have been rebuilt, replacing the mud and poles with cement blocks and iron sheet roofs. The rebuilding was carried out after independence in 1964-1965 by NHC under the Slum Clearance Programme of 1964-1969 (Kironde, 1995:332-335). However, observations show that, some buildings are still made of mud and poles, with iron sheets as the roofing materials. Many of the houses appear old and dilapidated. Heirs of the former owners, that is, sons/daughters even grand sons/daughters own most of these houses. Due to this type of current ownership, it is argued that many of the houses are rented out to tenants so that the owners can get income to support living, often of the extended families of the new owners. The majority of those interviewed were tenants as most owners are not staying in Ilala, but have left and are living in other parts of Dar es Salaam.

According to one respondent, a remaining daughter of the original owner, the reason for the houses to be adjoined to one another in the block making a continuous wall along the street is as cited by Kironde (1995): “that there were a lot of thefts in the area due to lack or few police patrols and street lighting in the 1930s”. This may have prompted house owners to build walls between the houses, closing the alleys or the narrow passages between the houses to deny the bad guys places of hiding and escape. Some respondent owners also asserted this to be the reason. One of the respondents who has inherited the house had this to say about why this happened:

“I have lived here for 31 years, since I was born here in 1976. This area is good, with good roads. It is peaceful and quiet. Some years back, we in Ilala were very much worried of petty thieves (vihaka). This was a
long time ago. But now there is nothing worrying us at night. Kata zimeungania zote ili kuzuia wezi. Kuziba vichocho ili kuzuia wezi. Zamani kulikuwa na ubarija wa kukaba watu, kuruka ukuta na kuiningia mwani”. Meaning that, “walls are adjoined in order prevent thieves. The blocking of the narrow passageways is for preventing thieves. In the past, there used to be crimes of mugging and rapes, jumping walls to enter into house compounds” (Female Aged 31 years, House no.14, Lindi Street, 2007).

Of the tenants who were interviewed, no one could tell anything about the situation since most of them were of a young generation and new in tenants in the area. Many simply said the area is peaceful with no or very little incidences of crime and only if one leaves doors or windows unattended. They could not tell why the houses are adjoined with walls, saying they are only tenants in the area and thus could not possibly know why this is the case. One of these tenants said this in support of the submission that Ilala is peaceful:

“In Ilala, crime is not a big problem. In the past people used to worry of petty thieves (vihaka). But now it is no longer the case” (Interview with a male tenant, 01.02.2007).

In this area, an interesting scenario was noted. Many residents in this area are tenants. Most of the homeowners have vacated the area and rented their houses to tenants and some of the houses have been sold to new owners. One could however note that these houses are crowded with families or households ranging from six to above ten. This is because the houses after their owners had moved out to some other suburbs; modification has taken place to increase the tenants. From the usual six room Swahili house now to more than ten rental rooms. Most of the new owners comprise people from Zanzibar or Pemba. These are demolishing the houses and re-building anew. The new houses coming up are barricaded and fenced with very high fencing walls. It was even more difficult to access into these new houses even with the help of a known Mtaa leader.
6.4 Homeowners’ responses to crimes

As cited in the foregoing, the measures taken against the “petty thefts” and street mugging in the area of Ilala Kasulu, most of the interviewed house owners say “closing off the alleys and narrow passages between houses with walls was the only measure they undertook to deal with the thefts. As noted by Kironde (1995: 204), “in 1932, residents of Ilala requested for more regular police patrols that were not adequately provided by the colonial administrators of Dar es Salaam”. Another action was using the efforts of the residents in the area; at last in 1953 a police post was built in the area. The police post has grown into a full police station.

Fig. 6.13: A house along Lindi Street, note the high wall in the background that is topped with iron spikes for forestalling access.

Fig. 6.14: Short Iron pickets enclosing a verandah of a business premise. Note the short height of the same; could afford neighbours to watch over the premise when the guard is not around.

Fig. 6.15: A house along Chunya Road. Inside a secure courtyard used for different activities of the house.

Fig. 6.16: Bukoba Street, note the houses and the activities facing and interacting with the street.

Regarding reasons for blocking the narrow passages between houses, respondents gave a number of reasons during the pilot and main field study. The main reason for the barricades and wall fencing taking place in residential houses in the study areas and the city in general was that, in the past, there
were many incidences of thefts and street mugging in the areas, subsequently, house owners had to close the alleys between their houses in order to control and block hideouts for the offenders. Kironde (1995: 204), notes that “there were few or no police patrols in the area, in addition to having no street lighting”, it was imperative that they had to close off all the vichorochoros (alleys) between the houses. This action helped to get rid of hideouts for the thieves.

Respondents were also asked to tell if crimes in Dar es Salaam have increased or not. This question was raised in order to understand the extend residents of Ilala Kasulu recognize the magnitude of the crime situation in Dar es Salaam region. Almost all those interviewed said that crimes in Dar es Salaam have increased, noting that incidences of criminal activities have been increasingly reported of late. They also reiterated the views of the respondents in the other two settlements who contented that the cause of increased crimes in Dar es Salaam is unemployment. The population of Dar es Salaam is increasing daily with young people from the rural areas coming in to look for jobs. All the respondents however said even though crime in Dar es Salaam has increased; this is not the case in Ilala and especially Ilala Kasulu area. The level of criminal activities in this area is fairly low.

When asked whether there is a link between the actions the house owners take in barricading and fencing of their properties with the increase of crime and fear of it in Dar es Salaam, all house owners responded affirmatively. Even though crimes in this area are not much in accordance with the respondents, the reports from news media create fear among residents of the area.

6.5 Homeowners concerns on the built environment, architecture and social interaction

Respondents in Ilala Kasulu (owners and tenants) upon being asked to comment on how they experienced the built fabric and the quality of the built environment and architecture of Ilala in terms
of how they felt when walking in the street, the houses, and the housing blocks; many expressed satisfaction with the way the environment and the built fabric is. They said the environment is peaceful and quiet, they felt the place is almost free of crime serve for few petty thefts and that there is no feeling of insecurity when walking in the streets at night. Also many respondents said the place is busy with many people walking around almost all night long. When asked why the place is so busy even during the night, the respondents said that the place has many bars, kiosks, restaurants and religious facilities that are frequented by many people from within the area and from without. However, many of the tenants cited the character of the architecture of the place as old and dilapidated and requiring re-building. The houses are too old and the spaces inside them are congested. Homeowners and the tenants said also that the roads in the area are better than other places in Dar es Salaam. Though many of the roads are not surfaced but they are better. It is not muddy as other places such as Sinza and Mikocheni or Manzese.

When asked how they relate with neighbours, all of respondents said they visit each other only when there is bereavement or celebrations and when invited. Otherwise, they do not have meetings to discuss issues of common concern as neighbours. However, they meet when the Mtaa leaders call such meetings. All respondents said they knew their neighbours and that they only visit one another whenever need arises as indicated above. However, their children do not play together.

Regarding socialization, many and nearly all of the respondents said the area is good for social interactions because there are many places where people socialize such as beer outlets, kiosks, market, shops and religious facilities like churches and mosques. Although they do not have good social contacts with their neighbours within the blocks, they usually meet and interact when there is
bereavement or celebrations and parties within their blocks. Owing to the nature of the buildings’ or houses’ placement along the street, there is every opportunity for the residents to meet in the streets and socialize. This is in addition to the many small shops and kiosks that are open to passers-by, where people meet and interact. Also, almost all houses have doors, windows and verandahs opening directly in pedestrian walkways, thus affording communication between street uses and those in the houses if so they wished. Many tenants cited proximity to the city centre as the main reason for them to rent in the area. They also said the rent is reasonable in a place which is peaceful and quiet; and where transport to work is plenty also one can walk to place of work easily.

The study also wants to understand from the residents (tenants and house owners) their experience on whether they felt safer and securer now after the alleys between the houses were closed. So the
researcher asked the following question: “After the actions that have been taken, do you and your family members now feel more safe and secure than before? Or, do you still feel the same? Everyone who responded said that they felt more secure and safer. And on whether they did consider easy exits in case of fire accidents, all said they have no grills on doors, thus it is easy to go out in case of fire accidents.

6.6 The building code and the wall fences

As underscored earlier in Chapter 6, development of land including construction in planned areas of Dar es Salaam or any other city and any urban area in Tanzania requires an approval from the respective local authority. This is in accordance with Chapter 101 of the Laws – Town Rules also highlighted in section 6.5 of this chapter.

Like in Mikocheni B case study, in Ilala Kasulu the Municipal officials were asked whether, in accordance with the township rules stated above, the authorities have sanctioned the “closing off” of the alleys and passages between the houses and that the walls do meet the criteria as approved by the authorities in the Dar es Salaam City Council or Ilala Municipal Council. In response to the questions, the responsible planning officer was not able to tell whether the colonial authorities sanctioned the closing off the alleys and passages in between houses. The author asked house owners whether they applied for a permit to close off the passages by building the wall fences, and if so, what were the conditions that accompanied the permit? Responding to this, the three-interviewed house owners said that they did not remember as they were young and not involved in the construction process, but also said that during that period one could not undertake development of any piece of land without reporting or seeking the township authority’s approval”.

6.7 The police crime data

As it was the case with Mikocheni B, in Ilala Kasulu, the author verified the house owners and tenants’ responses by crosschecking with police reports and by interviewing the police incharge at the Ilala Police station. Although it was not possible to get the detailed report of incidences of crimes per year, the officer incharge echoed similar arguments that in Ilala, incidences of burglary are rare, although the police occasionally encountered a number of incidences of marijuana smokers is some pockets of Ilala.
6.8 Summary of emerging issues

From the interviews, observations and document analyses, several issues have come out from the Ilala Kasulu case which form the basis for the discussion and comparison with the cases of Mikocheni B reported in chapter Five and Chang’ombe Housing Area reported in chapter Seven.

6.8.1 Crime, fear of crime and policing

Many respondents in Ilala Kasulu asserted that crimes in their areas and Dar es Salaam in general have increased. They argue that the increase is due to population increase in the city and lack of employment opportunities for the migrant youth. The increase of crime in the city has created a feeling of fear among city residents in Ilala Kasulu similar to the other areas studied. However, crime levels in Ilala Kasulu and the whole Ilala area is relatively low. The blockage of passages in between houses was carried out so as to check incidences of thefts and street mugging. This the respondents said was done due lack of police patrols and street lighting. Interestingly, following the closure of alleys and passages between houses, the incidences of thefts and street mugging have gone down. The respondents also noted that, owing to the mixed-land-use nature of the area, with residential functions and other functions like commercial, institutional and recreational functions, the streets are often very active making the area safer. People in the area can walk around in the night without fear of anything because there are a lot of activities going on until dawn. The place is lively throughout the night. The activeness or dormancy of a street is a factor that may influence safety and security is an observation that is supported also by Jacobs (1961) in her book: The Death of American Cities and Jan Gehl (1987)

6.8.2 Security, safety and privacy

Wall fences and barricades that are seen in many residential areas of Dar es Salaam have come about due to security needs and for privacy purposes. In Ilala Kasulu, these were the main reasons for the closure of the alleys passages between the neighbouring houses. It is important to note that even though the issues of safety of residents in case of fire outbreaks emerged, most respondents said that such incidences do not happen so often, as compared to the wave of crimes that plagued the area between the 1930s and 1950s. Therefore, homeowners are more concerned with security against crime at the cost of optimizing on safety.
6.8.3 Types, Design and Heights of Wall Fences versus Township Rules
From the observations as recorded by photographic process, I noted only one type of wall that is used. This is a simple opaque wall that is built to adjoin the houses in the block and seal of the alleys between the houses. However, it was not easy to tell whether the walls as seen built were approved by the City Council then. This is because the settlement is old and it was not easy to finder the original owners of the houses. (Although some relatives of the original house owner simply said that it was impossible to do anything on the plot during those old days without obtaining building permit from the Dar es Salaam City council authorities).

6.8.4 Quality of Built Environment and Relationships Between Neighbours
Most homeowners and residents of the study area are not really happy about the built environment that has been affected very much by the criminal activities that occurred in the yesteryears. This is because the responses of many of this have led to poor social atmosphere, where neighbours cannot easily socialize and interact with each other. Moreover, the beauty of architecture and the built environment is not seen, for the residents can hardly see the houses that are hidden by the wall fences. They experience little air movement when indoor, floods during the rain season and the feeling of loneliness as the streets are in solitary conditions. At the end of it, there is no regular social contact among the residents.

6.8.5 The Implications to Architecture, Residential Planning and Urban Management
The management of the urban enterprise involves issues of tax collection, collection of utility fees for instance, water bills, telephone bills, electricity charges and the like. In these wall-fenced homes, collection of such charges can be a problem.
Chang’ombe Housing Area

This chapter is about the findings from case study number three, the Chang’ombe Housing Area. It presents first the historical aspects of the area and how it is today as per the fieldwork. The chapter then lays out what was found from the interviews, observations and documentary analyses. The last part of the chapter summarises the emerging issues from this case. The emerging issues shall be compared with those issues from the other cases of Mikocheni B and Ilala Kasulu in Chapter 8. Then the issues coming out of the comparison shall be discussed in Chapter 9.

7.1 History Chang’ombe Housing Area

Chang’ombe Housing Area is located in Temeke District about 5 kilometres from the city Centre. Taifa Road bounds it to the east, Chang’ombe Road to the north and Mandela Expressway to west and Dar es Salaam University College of Education to the south. The area is accessible through Mandela Expressway and Chang’ombe Road or Mandela Expressway, Nyerere Road and Chang’ombe Road.

It was designed as a scheme to be developed by Asians (mostly Indians) from both the public and private sector. By 1950, the Chang’ombe Planning Scheme had been completed and in 1950 and 1951 at least 121 Houses for Asians had been earmarked for construction on the western side of the area. At the same time, some plots to the east and north in the area were allocated to the East African Railways (EAR), East African Harbours (EAH) and East African Posts and Telecommunication (EAP&T), for construction of houses for their employees.

It is not known for sure why Chang’ombe area was selected for an Asian residential scheme. Probably the fact that Chang’ombe was government land and that there would be employment in the nearby Industrial areas of Chang’ombe and Pugu Road may have been some of the reasons for Asian housing scheme in Chang’ombe. Chang’ombe was earmarked for Indians working in the public service, as well as the poorer Indians from the private sectors who could not afford to buy and settle.
in Upanga area and who were not wanted in Oysterbay, an area designated for the whites. The condition of plot allocation in the area however, was so designed as to exclude most Africans.

Chang’ombe Housing area was divided into two major residential areas: One area to the east and north bordering the Taifa Road and Chang’ombe Road was mainly occupied by employees of East African Railways, East African Harbours and few employees of East African Posts and Telecommunication. Stories from the interviewed residents however show that people of African decent have also been living in the area since the early 1963. The National Housing Corporation built most houses in this area at the beginning of the 1960s.

The Uhindini Area in Chang’ombe Housing Area was located in the western side of the whole planning scheme and was partly built by the Ismailia Community to house its members and funded by the Aga Khan Community Foundation in the early 1950s and partly by the Asians who worked in the Pugu Road and Chang’ombe Industrial areas.

Perhaps it was because of the already established racial-spatial segregation policy that was applied by the colonial rulers, that the two parts of this housing area was separated by a road and green open space, which is now the Tanzania Cigarette Company (TCC) Club and Chang’ombe Road to the northern side. The area for EAR, EAH and EAP&T was placed at the eastern side of the area in border with the Keko Toroli unplanned area only separated by Taifa Road, whereas the Uhindini area was placed to the western side in border with an open space in which a Secondary School for the Goan Community was built. A buffer of housing for the East African Railways and East African Posts and Telecommunication workers were located along the Chang’ombe Road on the north running to the west. Beyond this line of EAP&T and EAR quarters is the unplanned residential area of Chang’ombe Toroli that extended towards the western side and further beyond is the Chang’ombe Toroli Industrial area and behind this is Pugu Road Industrial Area.

The houses in both areas are mainly single storey type with few double and three storey houses at the western end of the Uhindini area along Chang’ombe Road and housing flats of three storeys each to the eastern part of the scheme along Taifa Road. A number of these houses are detached single houses and about 15 row houses. The majority of the houses in this category are 2-bedrooms type. Just next to the open space (TCC Club) to the east are 4 double storey row houses. The single storey houses in the Uhindini area were 3-bed room detached houses. All roads and streets in the Housing Scheme were paved with proper side-drains. According to respondents residing in the area, some of whom bought houses from emigrating Indians residents, many Asians of Indian decent from the area left the country after their houses were nationalized after the Arusha Declaration in 1967 and the advent of nationalization policies coming with it. “This particularly affected the Indian landlords in
the urban centres, and in particular the city of Dar es Salaam and Chang’ombe Housing Area as one of the areas affected” (Kironde, 1995:314, emphasis added). Some of those whose houses were not nationalized sold their houses to the local Tanzanians and left for Canada, Britain and USA. By early 1970s, most of them had left and the area had become home to middle cadre civil service personnel working in the government sector and public parastatal organizations like the East African Railways, East African Harbours and East African Posts and Telecommunications. The nationalized houses became home to tenants of the newly established Registrar of Buildings.

At the peak of this nationalization policy, the area was well built with tarmac roads, well kept lawns and hedges. In the middle of the 1970s, the area slowly started to change and deteriorate, with many of the soft hedges being replaced by high masonry wall fencing. This was particularly so in the area of Uhindini where many houses changed hands to local Tanzanians. The eastern part under the parastatal organisations (TRC, THC and TPTC) remained relatively unchanged until recently when the houses were sold to the workers occupying them and to private individuals. The area has now changed like such other housing areas in Dar es Salaam. Wall fences have been erected at almost every plot. And, at the time of the study, Chang’ombe Housing Area has 34 small shops, 4 nursery schools, 4 churches, 1 medical store, 6 beer outlets and 2 office buildings (1 for bank services and 1

Fig. 7.1: Part of the 1960 layout plan of part of Chang’ombe Housing Area. Note the plan as well as the organic layout of roads. The shaded plots indicate the interviewed homeowners. (Source: Temeke M. C., 2007)
for the Tanzania Revenue Authority). People also from without the Chang’ombe Housing Area frequent these (Fieldwork notes, 2008).

Fig.7.2: An aerial view of part of Chang’ombe Housing Area, taken in 2005. Some changes in the quality of houses including building of wall fences as new owners come in. (Source: Ministry of Lands and Human Settlement Planning, Surveys and Mapping Division, 2007)

7.2 Housing and Environmental Conditions
As highlighted in the historical perspectives and as observed from the field study, the houses in Chang’ombe Housing Area are a mix of single storey detached houses, single storey row houses, two storey row houses and three storey-housing flats of medium quality standards. The materials used for their construction varies from asbestos roofing sheets, Mangalore clay tiles (Indian housing), iron sheets and concrete roof slabs, while walls are from concrete block masonry and cement sand floors with louvers and casements windows.
The infrastructure of the area like roads has since been run down. Roads have lacked maintenance and there is no street lighting. The tarmac on the roads is worn out and it is hardly noticeable in some places that were once hard surfaced. The sewerage infrastructure, which was and is still onsite disposal by use septic tanks, is still operational, with individual house or homeowner emptying his/hers using the services of the Municipal Cesspool tankers to dispose the waste.

On the social front, crimes of thievery nature that is claimed to originate from the nearby-unplanned areas of Keko Toroli and Chang’ombe Toroli have affected the residents of the area. This has compelled homeowners to erect wall fences and replaced the expanded wire and soft hedges (Fig.7.4).
Thus, fences of varied construction materials surround all houses today. Many of the houses are surrounded by concrete block walls, some of which are opaque while others are perforated with very few of them surrounded by plant hedges (michongoma or Tanganyika thorn) in combination with wire fences. Very few houses in the eastern side area are fenced with expanded wire material.

Fig. 7.4: A plan of a section of Chang’ombe Housing Area showing the wall fences around houses. Source redrawn from aerial map 2008
Crime Increase in Chang'ombe Housing Area

Fig. 7.5: At the background, a 3-storey house located in the Uhindini area. Note the solid wall surrounding it with razor wire on top.

Fig. 7.6: A single storey detached house in the Uhindini area with Mangalore tiles on the roof. Note the solid wall, topped with broken glass.

Fig. 7.7: One of the former THC 2-storey row houses with flat concrete roof. Now sold to private owner. Note the opaque wall fence topped with metal grills with spikes replacing the plant hedges.

Fig. 7.8: One of the former TRC row houses roofed with asbestos sheets. Now sold to private owner. Note the wall fence with ventilation opening at half height.

Fig. 7.9: A flat concrete roofed house in the Uhindini area. Now sold. Note the plant hedge with a wire fence hidden inside.

Fig. 7.10: A 3-storey row house in the uhindini area. Note the opaque wall replaced the plant hedge.
The study of Chang’ombe Housing Area shows and reveals an increase of crime since the early 1970s. However, the crimes commonly committed are minor crimes involving petty thievery including car parts, theft of items left outside like clothes, household articles, etc. Rarely, big crimes associated with burglary and robberies occur. Corroborating stories are presented below, as told by respondent homeowners when they were asked why and how the fencing walls and barricades (metal grills) to doors and windows came about or occurred to their house as well as the types of crimes they have experienced since they moved into Chang’ombe Housing area?

I moved in this house in 1972 after I had bought the house from an Indian who migrated to Canada. This is a medium density plot, had fences made of plants hedges. There were two entrances into the plot. Nearly all houses in this area had hedges of plants and sometimes with wire fences also. The area had tarmac roads and looked nice area to live. At that time, there were no problems of burglary and robberies, except that thefts of car parts, for example, windscreen and car radios were common. For instance, I had my car pushed from the rear of the house to the gate and the windscreen removed with the intention of stealing the car stereo. In the process of removing the radio I woke up and sounded an alarm by calling for help. The thieves ran away and could not take the radio or the windscreen. Due to this reason I decided in 1973 to build cement block walls fence around the house. I also installed one metal gate for closing off the entrance into the plot. Some of the family members did not like this fencing construction feeling that they have been locked inside. And questioned the availability of air movement and good airflow. I told them that I did not close completely, but have built a ventilated wall at the back to allow for air movement, they were satisfied. I then continued to build the three sides of plot without involving my neighbours. Apart from building the walls, I introduced four security lights for night lighting.

Since I had built the wall there has been little incidents of thefts or burglary activity in my house even if something is left outside at night. Only one incident happened once when they burgled my little shop that was in the main house. They took with them several items from the shop. This forced me to hire askaris (guards) at different times. Now I do not have any guard around but the situation is calm although I have a car and a little bigger shop (and an office for the Mtaa) (A retired Medical Doctor and now the Mtaa Leader, Jan. 18th 2007)
Another respondent answering the same questions noted:

“I have lived here since 1972. At that time, there were no fences around the houses. There were also no metal grills on the windows and doors of houses. Only the normal burglarproof bars were present then. All cars used to park outside and there were no problems of things being stolen. Overall, the relationship among the residents was good too and close. When my husband died in 1982 neighbours were fully involved in the burial.

Then in 1983 I went to Dubai to visit my relatives and stayed there for 5 years. When I came back in 1988, the situation was terrible. There were many crime activities originating from Keko Toroli and Chang’ombe Toroli. This forced me to construct block wall fence and put metal grills on the windows and doors. The walls were just short ones, however. The thieves used to jump and continued to steal our parts for the cars. Therefore, I was forced to construct high fencing walls. As time went on, all the neighbours started to construct wall fences but then, the relationship between us started slowly to go down because of these fences. At the same time, the quality of environment started to change and it is not very user friendly now as seen in Figs. 7.8a & b” (House Wife and owner, HNO. 103A, 23.01.2007).

Yet another respondent, had story to tell about how and why he erected the fencing wall as follows:

“The house belongs to our family. Formally an Indian owned the house and our father bought from him. This was sometime in the 1980’s. During the time when the house was bought, a short wall fence surrounded it. With that short wall fence it was easy to see whatever events are happening on the street outside. But due to an ever increasing of petty thieves (vibaka) our father decided to extend the fence upwards to that level. It is absolutely impossible now to see what is going on outside and possibly people never see what is inside.
We have suffered from the problem of thieves who used to steal our properties especially clothes left out during the night and even burglary when they broke in and took our TV from the sitting room. The problem of crime in this area is not any more a big issue because as you can see most of the houses are surrounded by fences” (Male, HNO. 69, Jan. 2007).

Fig. 7.13: Outside the gate. Note the iron spikes on the top of the wall and the gate to restrict climbing.

Fig. 7.14: Inside the gate. Note the high solid wall and the guardhouse at the gate.

The mushrooming of the different types of wall fences in both parts of the Chang’ombe Housing Area have largely been influenced by the increase in crimes of burglary and petty thievery. As the interviews revealed, many respondent homeowners blame the increase of such kinds of crimes to population increase, collapse of many employing parastatal corporations like Tanzania Harbours, Tanzania Railways Corporations and the like, thus loss of employment. The majority of the homeowners in the area echoed these sentiments, many of whom are retirees and have lived in the area since early 1960s. To substantiate this, one respondent who served as a state security officer, who now lives in an inherited house had this to say upon being asked about the process of erecting the fencing walls and why it was necessary:

“Hii ni nyumba ya urithi (inheritance). Nilibania hapa tangia mwaka 1977. Wakati huu hili ilikwaa nzuri kabisa, wimbi la vibaka hukumuwa. Lakini hata hiyo ongezeko la wizi katika maeneo yetu umaewa ukaweka katika vipindi vya miaka kwa mfano kati ya 1960-1970 kulikuwa bakuna wizi sababu watu wengi walikuwa na ajira. Serikali ilikwaa inatawa ajira kwa wingi. Hata hiyo kuongezeka kwa watu mnini na kufungwa kwa viwanda na mashirika ya serikali kati ya miaka ya 1970-1980 kulisababisha kailuka kwa wimi la vibaka (wazi wadogo). Tatizo limekuwa kubwa zaidi kuanzia miaka ya 1980, badi sasa mwaka 2007. Meaning, We inherited this house. I moved in here since 1977. At this time the situation was very good, the wave of criminal activities arising from thievery never existed. But though, this increase of thievery in our area can be put into two periods, for example, between 1960 and 1970, there were no thefts and burglary because people had employment. The government provided plenty of employments to its people. But, the increase of population in the city as well as the closure of factories and

The reason for this increase is the economic difficulties in life and survival harshness (ugumma wa maisha) that have put more demand for sustenance of minimum standard of life (maisha kwenda juu). Therefore the only way to sustain in such kind of life is through illegal activities including thievery. From 1980’s to date, due to persistent unemployment, collapse of Port, which was the big organization that provided a large number of employment opportunities, there is an increase of the problem of crime. In the past our house was almost necked. There was nothing of these fences. But due to the above problem we started to put wire fence. Then we proceeded to plant hedges (michongoma) in order to support the wire and create some privacy.

We did this only at the front side of our plot. But as time passed by we agreed with my neighbors to construct the walls between us. This was done perfectly. Even though our intention was to protect our properties but on the other hand we created prison. (JELA YA HIARI) For innocent guys wall fences are meant to protect them from crime and privacy, but for other guys wall fences are used to hide their illegal activities from being seen by the public” (Retired security officer, HNO. 78, Jan. 2007)

These same sentiments are supported by many of the residents and homeowners in this area. More of these were provided as is noted in the other sections of the Chapter.

7.4 Homeowners’ Responses to Crime
Chang’ombe Housing Area is similar to other parts of Dar es Salaam in terms of availability police to patrol the area at night. This leaves the responsibility of ensuring security basically to the residents the area. So homeowners here do take certain measures to protect themselves against the increase of thefts and burglary and fear of it. Nearly all the interviewed homeowners cited building wall fences, employment of private security guards or keeping security dogs and provision of security lighting around the houses. In the Uhindini area, observation shows that there are few houses with doors and windows barricades. And in place of “Sungusungu” or neighbourhood watch group, which they do not have in the area, some neighbours have agreed to exchange telephone numbers so that in case one notices something unusual may inform the others and then raise an alarm. These measures help to instill the feeling of security and enhance privacy at individual plots. They assert that wall fences reduce the chances for the petty thieves to see what is inside the compound and hence denying them the opportunity and temptations. Many respondents in the Chang’ombe area asserted this. A few of the testimonials are presented here below:

“I bought this house from an Indian who migrated to Britain. I paid almost T. Shs. 36,000 by then in 1972. Therefore the house is mine since. Before I moved here I was living in Kariakoo and moved here
because I bought a house of my own. During that time and even now, despite of some problems, the area is
good and the environment is attractive when compared to other areas in Dar es Salaam.

During the time when I bought this house there was only a wire fence surrounding the area specifically for
demarcating or marking the plot boundaries. As you can see, as the time went on I decided to plant this
Michongoma hedges alongside the wire fence so as to increase privacy. I did this because, with the openness of
the wire fence, petty thieves (vibaka) were coming inside through cutting the wire and used to steal some car
parts especially windscreens, tyres car stereo, and headlights and anything that was forgotten outside at night.
Therefore by planting this michongoma hedges, you minimize their possibility of seeing what is inside the
compound” (Male retired Security Officer, January 2007).

Another responding homeowner hard her story as follows:

“We bought this house in 1972. The house was surrounded by wall fence, which was short to almost 1-meter
in height. The situation was fairly good then because there were no thieves. But as the time went by in the
1980’s there was an increase of petty thieves (vibaka) from Keko Toroki who basically used to steal our
household items left out at night and sometimes during the day when family members are inside the house.
Therefore we were forced to extend our fence to that height.

Nowadays my perception towards crime in the cities is that it is a very big problem because many people die
and large amount of money is being stolen from the banks which is very peculiar event especially if you
compare with the past. In our case the only crime, which have experienced is theft of small car parts and
clothes left outside during the night” (Female respondent, Jan. 2007).
“We bought the house since 1974. The house was surrounded with plant hedges and expanded wire fence. The situation was fairly good in terms of crime and thieves. As the time went by my neighbours started to build (construct) their wall fence on both sides of our house. Therefore we were forced to also construct the front and rear sidewalls, just because thieves used to cut the expanded wire fence and steal some of our household items, including car stereos and windscreen. Another reason for our decision to construct the wall fence was because we started to keep some cows for milk, and we did not want the neighbours to be disturbed by the nuisance that could be caused by the cows.

Other properties that were being stolen include car tyres and car windscreen. But vibaka not big thieves did this. In our area crime is not big problem, but in Tanzania and Dar es Salaam generally the level of crime is very big problem. Yes in 2004 during the evening to our pharmacy many thieves come with guns and they locked in our children and steal some money together with our mobile phones” (Mrs. Moshi, Jan. 2007).

At the neighbourhood level, they had thought of providing street lighting, but the problem is about who is to pay for the electric bills. The issue of “Sungusungu” was also considered but the problem is that most homeowners are able to do the patrols because of age.

On the question of the “barricades”, many of the homeowners interviewed said they did not have barricades on their windows and doors. This was confirmed through observation; many houses in both the Uhindini Area and the other area had very few houses with barricades on the windows and doors. This is especially so in those houses which were formerly owned by Tanzania Railways Corporation, Tanzania Harbours Corporation and Tanzania Posts and Telecommunication Corporation. Otherwise, few houses in the Uhindini area had barricades on doors, verandahs and windows as shown here below Fig. 7.19).
In all the parts of this Chang’ombe Housing Area, nearly all homeowners who responded to the questions emphasised the wall fence as an important feature in protecting the property and the family. One of the respondents however said; “Fencing walls are generally not bad, but the design and the height should be maintained at the recommended level and the responsible organs should exercise their duties by ensuring that the laws are followed” (Mrs. Moshi, HNO: 67, Jan. 2007). Other respondents corroborated this, saying: “We built the walls to reduce burglary and petty theft (vibaka). But some other people build wall fences in pretence of privacy while in fact they do not want people from outside to see their criminal activities. They say they want privacy” (Male, HNO. 125, 26.01.2007). Another respondent who has lived in the area since 1963 supported this submission saying: “I have no barricades. Some people build wall fences to hide their criminal activities. For example, one of our neighbours who is an Indian, name is withheld is car thief. He was caught with stolen cars, including a car from the State House was found in his compound. He has a solid wall that is very high. You cannot see inside the compound” (Female Retired Taxi Clerk, January, 2007).

However, one of the respondents in the former NHC housing area said she has built the wall because every one is doing it. She believes it enhances security as well as a symbol of improved welfare. “We built the wall because everyone is doing it, largely because of crime and burglary. You know we had 3 incidences of break-ins in our house in 1999. It is also a sign of (maendeleo) development and progress” (Female, HNO. 66, 26.01.2007). When this respondent was asked to elaborate, she emphasised: “We built the wall because we wanted security and privacy in the house. The wall also protects the house from dust arising from speeding cars in the streets” (ibid). Another respondent who emphasises the security and privacy issues said: “For security and privacy, you do not want passers-by to see what you have and what you are doing in your house”. (Female, HNO.105, 24.01.2007).
On the relationship between doors’ and windows’ barricading and wall fencing process with the increase in crime and fear of it in Dar es Salaam, also many homeowners agreed that there is a relationship. With few doubting this and saying, if that is true, what about the State House? It is also heavily fenced, is this also because of crime? Those who agree with the suggestion of there being a relationship said, “Generally there is a direct relationship between the barricading processes and crime because in the past when there were not many thieves, every house in the city was naked but as the time went by the thieves increased which forced people to construct heavy walls”. One respondent emphasized this by saying: “It is obvious as we can see. The crime incidences reported by the media outlets are many. Tracing the history of this area, you can also see the relationship between the barricading and fencing process and the increase of crime” (Male, HNO. 29, Jan. 2007)

Fig. 7.20: A beautiful wall fence with ventilation openings, which also affords visual contact with outside.

Fig. 7.21: A high wall fence with bottom part opaque/solid while top open for view. Note the barbed wire and electric wire at the top to forestall climbing.

Asked how they understood crime and the fear of it in the city of Dar es Salaam, all respondents said crimes in Dar es Salaam have increased, saying that many incidences of criminal activities are reported these days than before. Like the respondents in the other two cases of Mikocheni B and Ilala Kasulu, respondents in Chang’ombe Housing Area attribute the increase to unemployment resulting from collapse of many employment opportunities in parastatal organizations; textile factories and the population increase in Dar es Salaam.

When asked whether there is a link or connection between the actions the homeowners take in barricading and fencing of their properties with the increase of crime and fear of it in Dar es Salaam, most homeowners agreed saying there is a link. One respondent asserted, noting:

“Yes crime in Dar es Salaam has increased during the 5 years. Several cases and incidences are reported daily in our media. It is true there are connections between the actions that we have taken and the increase of crime and fear of it. I think you can believe me that in the past there was no such fences because the situation was fair peaceful
and a lot of freedom. But nowadays the situation is terrible. It is better to meet a lion rather than people. Nowadays, people have changed” (Male, HNO. 69, Jan. 2007).

7.5 Homeowners' Concerns on the Built Environment, Architecture and Social Interaction

Upon being asked to comment on how they experienced the built fabric and the quality of the built environment and architecture of the neighbourhood of Chang’ombe Housing Area in terms of street activities and feelings and architecture as influence by the wall fences, the respondents gave mixed views some saying it is good to see and walk around in the streets while others said it is bad and a feeling of insecurity is dominant especially at night walks. However one of respondents had contrasting views saying:

“Since I am a Mtaa Leader, they know me. Hence they cannot do anything to me. But when I walk out at night, I feel anxious and very lonely. I feel insecure and not safe” (Female, HNO. 95, 2007).

Another resident more or less said the same:

“In the past, the situation was good and full of security but today it is not good any more. Fences are not uniform and the height is extremely not friendly. During the night when you pass along some of the streets, it is dangerous because of the feeling of insecurity and fear” (Male ON HNO. 78, 2007).

Fig. 7.22: A very high and solid wall fence blocking view and airflow. One wonders whether or not TMC has approved this.

Fig. 7.23: Some of the high wall fences that block the airflow. Similar comments could be made with respect to TMC.
Homeowners in Chang’ombe Housing Area were also asked to say something regarding how they relate between neighbours. A substantial number of those interviewed said they relate but not often and closely. Some homeowners who have opened up small shops in the front wall said the relationship is normal because most neighbors come to their shops to buy some goods; this seems to provide an opportunity to interact and talk to each other.

However, the majority of the homeowners and residents said they do not relate normally. They say that communication between the neighbours is a problem noting:

“No normal relationship, nothing in common among neighbours. Of course I know all my neighbours around because I am the Mtaa leader in this area, but we rarely meet to discuss issues of common interest. My neighbours come to me when in need and I do the same when I am in need. My children do not play with..."
When homeowners and residents were asked to give their experiences about the feeling of safety and security after the actions they have taken, and whether they considered easy exits in case of fire accidents, nearly all respondents said they felt safer and securer, and that the incidences of fire accidents are rare as compared to the incidence of crimes and that they have not considered it.

7.5 Building code and Wall Fences

As it was with the two cases of Mikocheni B and Ilala Kasulu, homeowners were asked similar questions related to involvement of the Local Authorities in the approval process of the design and erection of the fencing walls, in accordance with the township Rules (refer sections 5.5 and 6.5).

Of the thirty respondents who were interviewed, almost all (that is, 28) of them said they did apply for the building permit from the then Dar es Salaam City Council, saying it was not possible to do anything on the plot then without any permit from the council. A few said they did not apply, especially those who have done the construction recently. However, one of the respondents, who is at the same time a Mtaa Leader alleged that people built high wall fences after bribing or corrupting the Temeke municipal officials. Her story reads as follows:

“I have been living in the area since 1963. I own the house through my late Indian husband. Indians initially owned the houses in this area. Some houses were nationalized and some were sold. Most of the original owners migrated to Canada and America. Plant hedges then marked plot demarcations. All the roads were surfaced by tarmac. Wall fencing started to appear in 1972. No reason is given for the building of the fence.”
Now with the wall fences, there is no airflow, also rainwater run off is a problem. I did not build a wall fence but only a plant hedge. Since I put up my plant hedge, I have no attempts from theft. The tall walls block the air and the flow of water. Who can get rid of corruption? They corrupt the Temeke Municipal Officials and they build high wall fences that block the airflow. The environment becomes extremely hot. We have petty thefts of vehicle parts, telephones. Crime is a big problem in Dar es Salaam. Some crimes come from within. No theft or burglary has occurred in my compound. I have a guard. I also wake up when an alarm is sounded. There is also security light around the house. I also wake up at night and take patrol inside my house” (Female respondent, HNO. 95; Jan. 2007).
The police crime data
Chang’ombe Housing area has a police post within the area located in Keko. Also, quite near to this area is located the Temeke District Police Headquarters, the Chang’ombe Police Station. Just as it was with other cases of study, I searched for police information on the situation of criminal activities and incidences of crime in the Chang’ombe Housing Area. Chang’ombe Police Station as it also keeps records of all criminal incidences occurring in this area and Temeke District as a whole. Of
particular interest was the crime incidences that are directed to property like burglary, thievery and petty thefts of household items, car windscreens and the like.

A compilation of crime data for a period of 5 years from the Chang’ombe Police Station particularly for the study area show that, such crimes as named above have been going down year after year. This seems to corroborate the assertions by many of the interviewed homeowners (see Table no. 7.1).

Table 7: Number of reported crimes of thefts and break-ins in Chang’ombe Housing area as from January 1st 2003 to June 30th 2007.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of reported crimes of thefts in the study area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>11</td>
</tr>
<tr>
<td>2004</td>
<td>7</td>
</tr>
<tr>
<td>2005</td>
<td>4</td>
</tr>
<tr>
<td>2006</td>
<td>6</td>
</tr>
<tr>
<td>2007</td>
<td>3</td>
</tr>
<tr>
<td>Total in five years</td>
<td>31</td>
</tr>
</tbody>
</table>


7.8 Summary of Emerging Issues

From the interviews, observations and document analyses, several issues are emerging that shall form the basis for the comparison with the cases of Ilala Kasulu and Mikocheni B and thereafter form the basis for discussion in Chapter Nine. These issues shall be discussed within the framework of the research objectives and the research questions in the discussion Chapter.

7.8.1 Crime, fear of crime and policing

Serve for the few respondents who said differently, many respondents in Chang’ombe Housing Area said that crimes in Dar es Salaam have increased. They attributed the increase to population increase and unemployment resulting from the collapse of many parastatal organizations in 1980s, thus retrenchment of many of the workforce. They also blame the increase of crime for causing increased feeling of fear to many city residents including this area of Chang’ombe Housing Area. The observed wall fences and barricades on the houses are a result of the increased activities of thefts, illegal entry into houses and the fear associated with these incidences.
Unlike Mikocheni B case, in Chang’ombe Housing Area, residents did not consider engaging in “Sungusungu” vigilantes. This is due to the fact that this area is close to the Temeke District Police Station, and having a police post within its boundaries with police patrols frequently on the look out.

7.8.2 Security, safety and privacy

Wall fences and barricades that are seen in Chang’ombe Housing Area have come about as a response to enhance security means. The other reason that goes together with this is privacy of the house or home. Many of the respondents in this study area have cited these two as the main reason for the wall fences. A few added window and door barricades as a means of protection against break-ins and robbery in homes. It is important to also note that the homeowners in this area also recognized the issue of safety of residents in case of accidents like fire. Most of them did not have barricades on doors and windows apart from the vertical or horizontal burglar bars on the windows.

7.8.3 Types, design and heights of wall fences versus Township Rules

There are many different types in design and heights of the wall fences that range from plant and wire fence, solid masonry wall fences, and combination type wall fences; that is, solid masonry wall and ventilated masonry wall, solid masonry and ventilated metal grills. Some walls are high and completely prevent visual communication between the house compound and the outside street. Observations also show this, that some walls are higher than necessary and in complete disregard of the building code. These are however fewer when compared with those walls that appear to follow the building code, which prescribes the design and height of the fencing walls.

From the interviews few respondents blamed the Municipal Authorities for laxity in enforcing the building code in regards to wall fences. The Township Rules Cap 101, section 4 specifies the design and height of the wall fences that serve as boundary walls. The height of the fencing wall has to be 1.8 metres high. The walls have to be solid up to a height of 1.2 metres from the ground and the remaining upper part open for ventilation and view. The rules also require persons wishing to construct wall fences have to follow such specifications. This is meant to ensure the walls do not constrain the built environments and that the resulting built environments are conducive to live in, in terms of air movement, visual quality and social interaction. Upon being asked, whether the high fencing walls and the barricading doors and windows in the study area have been approved by the Municipal Council, the architect said that most of the high walls have not been inspected during the construction stage, therefore not approved. Moreover, the architect said, that though the Township rules outlines the specifications for the erection of the walls, the specified height seems to be low for privacy purposes. Therefore, most homeowners simply choose to ignore the specified height because
it does not meet the privacy requirements. This makes it very difficult for the Municipal authorities to enforce the rules. Further to this, the architect said the Township rules have been repealed and no other rules have been enacted to take its place. There are now no regulations prohibiting residents to erect fencing walls or specifying the design and height of the fencing walls.

7.8.4 Quality of built environment and relationships between neighbours

Most homeowners and residents of Chang’ombe Housing Area have mixed feelings about the quality of the built environment. Much as it has been very much been affected by the increase in crime activities that occurred in the years back, some homeowners still find the built environment good when compared to other parts of Dar es Salaam. Some homeowners however feel the changes that have resulted from fear arising from the crime activities, have made the built environment not as it was before. They say the feeling of insecurity and fear has increased and the built environment looks broken up into compartments. The social interaction experience and the social atmosphere of urban life have changed to a low level, being among neighbours who cannot easily socialize. Moreover, they do not see the beauty of architecture of the built form, for they hardly see the houses (as they are hidden by the high perimeter wall fences). Many homeowners complained of blocked air movement when one is in-door and the feeling of loneliness as the streets are in solitary conditions. At the end of it, the need for facilitating the social contact and interaction among the residents has been adversely affected if not compromised.

7.8.5 The implications of the responses to architecture, residential planning and urban management

The above emerging issues are important for discussion by the professions of architecture, urban planning and the urban managers. The management of the urban enterprise involves issues of tax collection, utility fees (for instance, water bills, telephone bills, electricity charges and the like). In these wall-fenced homes, how easy or difficult is it to collect such dues? The issue of fire safety in the fenced and barricaded houses is also of much concern to the professionals and the urban managers alike. Of late, fire outbreaks have been occurring often in residential dwellings. Always these incidences when they happen, people’s lives and properties are lost.
This chapter analyses the findings from the cases presented in the empirical chapters in order to establish whether there is any commonality or differences between the cases. The aim is not to draw a general conclusion, but the results from the three cases are pulled together in order to establish whether patterns of the findings can be related to each other for all the cases. For the purpose of consistency, the comparison here is presented following the major themes and objectives of the study, analysing the three cases accordingly.

8.1 Planning and development

In this section, I present four dimensions of the situation of crime as established from the study. These include: history of crimes, actual crime situation, fear of crime and the responses to property crimes. The four dimensions are discussed in detail in the sub sections and summaries of the responses are given in figures 8.11 and 8.11.

8.1.1 History

Whereas Mikocheni settlement as an urban area was declared a planning area in 1974, and planned for the Sites and Services Programme, Ilala was planned in the 1920s as an extension of Kariakoo, which was planned as the home base of the natives, providing labour to the Port and other areas including European and Indian residential areas. On the other hand, Chang’ombe Housing Area was planned in the 1950s to accommodate Asians who could not get plots in Upanga. Some plots in Chang’ombe Housing Area were allocated for the employees of East African Railways, East African Harbours and the East African Posts and Telecommunications. Planned as a high-density settlement for low-income dwellers, Mikocheni B has changed to become an area for middle and high-income people, while Ilala maintains its planned status as an extension to the native Zone III high-density area of Kariakoo to accommodate the Africans or the Natives. The three areas are not similar in terms of planning intentions, status and plot sizes as well as their age. The plot sizes in Ilala area are much smaller than those in Mikocheni B while plots in Chang’ombe Housing Area were laid out as medium density plots for middle income dwelling from start and still maintains that status, even though the
situation seems to be changing to a high income status as houses change hands from original owners to new owners.

The layout plans for the three areas can be said to be similar in that they were laid out in gridiron design with short blocks of houses (plots) facing streets in all sides. However, some building blocks in Ilala were provided with back alleys for circulation and provision of services such as water, while those in Mikocheni B and Chang’ombe did not have alleys at the back. Plots in these cases are laid back to back and in all the three cases, the main accesses into the plots are through streets that they front.

Figure 8.1: Four small blocks of plots in Ilala Kasulu as planned in the 1920s. Note the separating streets namely: Tunguru, Mchicha, Tukuyu and Arusha Streets. **Source: Ilala Municipal Council, 2006**

Figure 8.2: A long block of houses that resulted from closing Tunduru, Mchicha, Tukuyu and Arusha Streets. This occurred to many of the small blocks in Ilala. **Source: Redrawn according to aerial photo from the Mapping Division, MLHSUD, 2005**
Figures 8.1 and 8.2 show a typical section of Ilala Kasulu. Figure 8.1 shows 4 short blocks of plots between Chunya Street and Lindi West Street as it was laid out in 1929. The four short housing blocks are bordered by four streets (namely Bungoni, Tunduru, Mchicha, Tukuyu and Arusha). Figure 8.2 shows the same area as it appears at the time of the study. The original streets of Tunduru, Mchicha and Tukuyu have been closed off, giving way to additional two plots on each closed street. What used to be four blocks is now one long block bounded by Bungoni street in the west, Chunya street in the north, Lindi west street in the south and Arusha street in the east. Looking at the present situation, the streets appear to have been laid out and built in accordance with the original layout plan apart from the noted changes. This may indicate that, the strict follow-up of development conditions imposed by the colonial urban administrators was adhered to. The sizes of the streets still reflect the layout plan of the 1920s, apart from the changes noted in the block sizes and the closing of the streets, which might have been sanctioned by the local authority as it was not possible at that time to make any changes in this area in terms of building without the need and approval of the city authority.

Figure 8.3: Site plan of a part of Chang’ombe Housing Area as per original plan. Source: Temeke Municipal Council, 2006
These findings from Ilala Kasulu appear similar to that of Chang’ombe Housing Area. Figures 7.3 and 7.4 show a section of Chang’ombe Housing Area as it was laid out in the plan. The layout plan provides wide (12 metre) streets with walkways on the sides of each street. When compared, one notes that the layout of plots and streets was adhered to in the implementation of the plan.
The density of buildings on the plot also seems to be in accordance with the development conditions and regulations for the low and medium income densities. It appears the original layout is similar to as built situation. The streets are the same in size and layout. The new changes taking place as noted at the time of the study appear to be a result of other factors. These are additions like car garages, poultry sheds, and perimeter wall fences in place of wire fences or hedges. According to the respondents at Chang’ombe Housing Area (estate) and Ilala Kasulu housing areas, these factors or reasons for change include: ownership of houses and therefore freedom to make changes, ineffective follow up and supervision of building by-laws and regulations by the municipal and city authority’s building inspectors, and the need for privacy as means for attaining security against burglary, thievery and home robberies.

Figure 8.6: A part of the original layout plan as designed in 1974. Source: Kinondoni Municipal Council, 2006)
The case of Mikocheni B is different from the two cases described above. Here, the streets are not as wide. The non-adherence to the building by-laws particularly regarding building setbacks and the erection of the perimeter boundary wall encroaching on road reserves appear to be the reason for the resulting narrow streets. According to the empirical observations and on the basis of the responses from the key informants from the municipal authorities, non-observance of the building regulations by the developers and the lack of follow-ups by the municipal building inspectors are major causes of this encroachment. The researcher’s observations during the fieldwork in this case also indicate that the streets are narrow, such that, two cars can hardly pass each other at a time. Walking in the streets with the high walls on each side creates a feeling of fear and insecurity as one does not see people and the houses, but the high walls.

8.1.2. House types, ownership and tenure

The house types in Mikocheni B are self-contained single family houses, the majority of which are single storeys and few are 2-storey houses, while houses in Chang'ombe Housing Area, the majority are self-contained houses varying from single-family houses, row houses, and 2 to 3-storey blocks of flats. The houses in Mikocheni B are privately owned or owner-occupied while some are rented out to single households. In Chang'ombe Housing Area; some houses are privately owned, whilst the National Housing Corporation publicly owns others; of late the latter has sold some of its houses to private individuals remaining only with the block of flats. In Ilala Kasulu, the houses are multi-family Swahili type each being occupied by 6 or more households. In most of the houses, more rooms have
been added for rental purposes. Thus, the household size in these houses seems to have increased. Some houses have however changed hands (ownership) as some seem to have been demolished to give way to new developments of multi-storey nature.

The residents of Mikocheni B are mostly middle to high-income. Residents of Chang‘ombe Housing Area include low, middle and high income, most of whom being retirees. However, with some of the houses changing hands from the NHC to private individuals, high-income residents are increasingly moving in. Most residents in Ilala Kasulu are a mix of low and high-income people, largely businesspeople. Most of them are tenants; few are original owners or their relatives.

8.1.3. Layout of houses
Houses in Ilala Kasulu are laid out with their front entrances and verandahs facing directly into pedestrian pathways along the streets. The main houses are set 1.5 metres from the edge of the carriageway allowing a pedestrian passage. Thus, the front windows of houses open into pathways while the entrance doors open onto verandahs and into the pedestrian passages. The houses are attached to each other side by side by walls or metal gates forming a continuous wall facade facing the street only punctuated by verandahs, doors and front windows.

In Mikocheni B and Chang‘ombe Housing Area, the building are set out 3.00-5.00 metres from the front plot boundary, a minimum of 1.50 – 2.00 metres from the side and rear boundary lines. At the boundary line perimeter fences of different makes and designs and materials surround the houses. In Mikocheni B, the empirical data shows that most of the perimeter-fencing walls have been built beyond the plot boundaries especially at the frontage thereby encroaching on the road reserves, making the streets narrower.

8.2 The crime situation
In this section a look at the situation of crimes in the case studies is made using four factors that has been established from the study. These include: history of crimes, actual crime situation, fear of crime and the responses to property crimes. The four factors are discussed in detail in the sub sections and summaries of the responses are given in figures 8.11 and 8.12.

8.2.1 History of crimes
While Ilala, one of the oldest planned areas in Dar es Salaam has a history of crimes of burglary and other property crimes dating back to the colonial era (Burton, 2005), the history of crimes in
Chang’ombe Housing Area is relatively a recent phenomenon. From its conception as a residential area, Ilala was not provided with the basic infrastructure services. Basic services and other infrastructure such as street lighting, police patrols and police posts were not provided at the early stage of its development; they were provided later and at a bare minimum by the colonial town authorities. This favoured the flourishing of crimes related with property. According to Burton (2005:136), “The growth of crime against property was a town-wide phenomenon (emphasis added). However, offences differed by area, and the incidences of crime appear to have varied markedly in the three zones. Housebreaking occurred in all parts of the town, but appeared to be particularly common in the African and Indian quarters”. Burton (2005) attributes the roots of these higher incidences to the “lack of control over urban population- the ineffective native administration and more particularly, the insignificant police presence in Zones II and III” (refer Chapter 2). In this research, it has been established that, the crimes that used to plague the area are rare now than ever before. According to the interviews, this has probably been due to the increased mixed-uses in the area; in turn this has helped to deter criminal activities, making the streets active areas most of the time.

Chang’ombe Housing Area having been planned in the 1950s with its intended occupants being relatively affluent people including Asians of Indian decent, government employees, employees of East African Railways and Harbours had much larger number of police patrols, and a police Station nearby (the Chang’ombe Police Station). Built as a housing estate, Chang’ombe Housing Area had paved roads and streets that were provided with street lighting. This made it an area with better urban infrastructure and services; therefore the opportunities for crimes of thievery and burglary were somewhat scanty if not non-existent.

According to the interviews, it was at the beginning of 1970s when incidences of crimes of burglary, thievery and robberies started to occur after many of the Indians had vacated the houses giving way to native Tanzanians to settle in the area. This was prompted by the 1971 Acquisition of Building Act, through which nearly 3,000 buildings were acquired between 1971-1973. It was during this period when production in the nationalised factories and enterprises went down or declined. Importation of goods from abroad was also curtailed by the Ujamaa and self-reliance policies driven by the Arusha declaration. The result of this was a widespread shortage of basic goods (including,

---

4 It has been established from the interviews that, after the Arusha Declaration in 1967, and the enactment of the 1971 Acquisition of Building Act, the enactment that was geared at bringing greater equality in Tanzania’s highly differentiated housing sector through the nationalization of second homes, resulted in the acquisition by NHC of buildings, of which the majority belonged to the Asians. Among the houses that were acquired included those in Chang’ombe where Asians lived, prompting many of them to leave the country. The acquired block of flats were handed over to government department in the name of Registrar of Buildings. Some Indians whose houses were not nationalised sold their houses to the indigenous Tanzanians serving in the civil service.
radio sets, music sets, TV sets and vehicle spare parts) from the shops. The shortage of such goods generated unmet demand for the items and thus ready market for stolen goods. Since such items could be easily acquired by the affluent in areas like Chang’ombe Housing Area and Mikocheni B, these areas turned out to be attractive venues for the criminals.

The history of crimes in Mikocheni B is comparable to that of Chang’ombe Housing Area. Mikocheni B being relatively a newly developed settlement compared to Ilala and Chang’ombe Housing Area, the increase of crimes of burglary, thievery and robberies dated back to the 1980s. Having been planned as a low-income housing area but later middle and high-income moved in. The area provided plenty of opportunities for thriving of crimes particularly burglary and thievery and home robberies. With poor streets that also lacked street lighting, the settlement was rendered vulnerable to acts and incidences of crime. Furthermore, the absence of a police post nearby (only 3km away, at Kawe and Oyster Bay) accentuated the incidences of burglary, thefts and other property crimes especially in the 1980s up to early 1990s.

According to the interviews from Mikocheni B and Chang’ombe Housing Area, almost all (36 out of 44) respondents from these cases attributed the cause of the increased incidences of crime to “unemployment resulting from the collapse of the industrial sector of the economy and the poor performance of the harbour, and population increase in Dar es Salaam”. Brennan and Burton (2007:59-61) discussing Dar es Salaam position as a hub of Tanzania’s socio-economic, cultural and even political life, they draw attention to the dramatic expansion of both the informal economy and unemployment despite an official urban policy that resolutely opposed both, reporting that:

“Even with the relatively benign economic conditions that prevailed up to the mid-1970s, the formal economy’s capacity for job creation was swamped by rapid urban growth. A serious problem of structural unemployment, which had first manifested itself in the late colonial period, influenced by a complex mix of demographic, socio-cultural and economic factors continued to deteriorate after independence. A survey in 1978 by Ishumi found that, a quarter of those aged between 16-40 identified themselves as unemployed. Half of them depended upon relatives or friends to get by; a quarter engaged in occasional petty trade, notably the sales of fruits—a perennial standby for those on the economic margins”.

Brennan and Burton’s report above and the homeowners’ views from all the three cases appear to converge. Respondents in the Mikocheni B and Chang’ombe Housing Area alleged that the property crimes they experienced were not originating from within the areas but rather from outside the area, claiming that the sources of crimes were the nearby-unplanned settlements of Keko Toroli and Magurumbasi for Chang’ombe Housing Area and Kawe, Msasani, Mikoroshoni and Manzese for Mikocheni B. These allegations could not be confirmed due to lack of police crime data from the police stations to support or against that.
The resulting reaction to the increased crimes on property in Chang’ombe Housing Area, include replacement of the wire fences and hedges with high masonry wall fences by the new high and middle income house owners. The tenants of the National Housing Quarters who were mostly government employees, and employees of the East African Community Corporations (i.e., Railways, Harbours and Posts and Telecommunications), could not replace the wire fences and hedges until after the houses were sold to them in 2000s. According to the study, prior to this, the respondents in these houses could not do anything on the houses because as tenants, they were not allowed to change the fences. At the time of the fieldwork study, more construction of wall fences in these houses was taking place. Heavy metal gates indicative of storage gates to close off the entrances into the high wall fences are seen as one walks along the streets.

A similar situation happened in Mikocheni B which was initially featuring built environments like that in Chang’ombe Housing Area in the 1980s. The increase of crimes of burglary, thievery and home robberies made the homeowners to resort to replacement of wire fences and hedges with high masonry wall fences. This observation was also underscored by Mng’ong’o (2005:168), when reporting on the Browning Process in Dar es Salaam that, among the reasons, led to the replacement of “soft fences” with hard fencing walls as “being geared to protection from external theft and burglary”. According to Mng’ong’o, this was more pronounced in Sinza than in Baruti; but across the blocks studied, he observed that most residents were extending their buildings in the limited plots “replacing soft surfaces with hard concrete and changing plant fences with solid block-work walls”.

8.2.2 Actual crime situation
The findings of this study indicate that, crime in Ilala has decreased, although it was reported that crimes in Dar es Salaam city has increased. All respondents said that crime in Ilala Kasulu has declined. They asserted that Ilala Kasulu was peaceful and has fewer incidences of theft, burglary and home robbery when compared to other parts of Dar es Salaam, or when compared to the past. A respondent who initially used to live in Sinza, said her family moved to Ilala Kasulu because it was a safe and peaceful place, adding that when they lived in Sinza, incidences of burglary into their home were frequent and many. One respondent cited occasional incidences of mugging that occur at late hours at night. Citing one of the reasons for the decline of crime incidences, the respondent noted that, Ilala Kasulu is no longer a homogeneous and single land use area (that is, a residential area alone), but is accommodating many other public and leisure uses like markets, schools, bars, places of worship, vehicle repair garages, shops, kiosks and others. As such there are many people all over the area most of the time.
For Mikocheni B and Chang’ombe Housing Area, the data indicate that, there is also a marked decrease of crimes in both areas. The police crime data obtained from the Chang’ombe Police Station show a decreasing trend of crimes in Chang’ombe. For example, in 2003 there were 11 cases of thefts that were reported at the station, in 2004, 7 cases were reported while 4 cases were reported in 2005. In 2006 the number of reported theft cases increased slightly to 6 while in the following year (2007) only 3 cases were reported. Although the data show some fluctuations, the general trend indicates a decreasing scenario. This is in agreement with the homeowners view in the area, the majority of whom claimed that the incidences of crimes that affected the residents in the past have gone down considerably. A similar finding was established in Mikocheni B. Nearly, all homeowners and tenant residents in the area expressed their feelings about declining crimes, which used to terrorise the area in the past. This again was corroborated by the police officer in charge at the police post in the area. He noted: “Crime in Mikocheni B has gone down. Nowadays, I can stay here for one or two weeks without any crime being reported. This has been contributed most probably by gates and the wall fences which has reduced the opportunities”. This could also be due to the Sungusungu patrol system in the area, in which residents contribute towards ensuring that it operates at night to ensure security.

8.2.3. Fear of crime an issue of concern

The other issue that appeared consistently in the three cases is that, although crimes in the study areas seem to have declined, it was apparent from the respondents that the homeowners’ past experience in connection with crime and frequent media reports about crimes in Dar es Salaam, have impacted on the continued feeling of fear of crime. Many respondents in the study voiced this as one of the reasons why homeowners still continue erecting wall fences even though the actual crime in the areas have declined. All agree that “fear of crime” is the cause. This shows also that fear of crime is partially independent of crime, for instance, the fear / risk paradox shows that in some circumstances, residents at the least risk of victimization are more fearful of it.

The term “fear of crime” has been defined in Chapter II as a concept that describes a condition or feeling of anxiety and agitation that is caused by the expectation of crime or danger associated with crimes of burglary, home robbery, thefts in homes and residential street mugging. People’s fear can be broadly categorised via three main models of behaviours: social control, vulnerability and victimization. Social control or lack of it can be the source of fear when compared with other issues, for example, the objective risk of victimization. The concerns about the perceived inability by those in authority to institute social control and the increased social disorder may also reinforce the fear among the residents. Incivility, disorder and neighbourhood decline may also lead to actual or symbolic threats, which can enhance fear of crime.
Vulnerability as a model of behaviour proposes that personal characteristics contribute to people’s fear. Some people perceive themselves to be physically vulnerable and consequently unable to resist attack on themselves or their property. Others see themselves as being socially vulnerable and fear being exposed to victimization that they not have the capacity to resist. Victimization as a model of behaviour, however, suggests that, where high crime levels lead to a high number of victims, people have a high level of fear in anticipation of being victimised. It appears that, the concerns about crimes and fear of it among the homeowners and residents in the three cases arise from historical incidences that were experienced earlier by residents in the respective areas in the 1930s for Ilala Kasulu and in between 1970s and 1990s for Chang’ombe and Mikocheni B in line with victimization model of behaviour. This heightened fear of crime among residents of Dar es Salaam is exacerbated by increase of crime incidences in the country in between 2005 and 2006, when the media was reporting many acts of armed robberies particularly associated with banks robberies and carjacking renewed. Prior to this period, such crime incidences had declined considerably. Even with the increased government efforts to fight crime in the country and Dar es Salaam in particular, which have resulted in positive gains, homeowners are still worried about crimes. The occasional incidences that are reported, though not often do bring back memories and feeling of fear of crimes into homeowners and residents’ minds. In all the cases it was evident that the crimes that are of interest to this study have declined considerably. But homeowners and residents expressed that they operate and live with fear. As the saying goes: “Once beaten, twice shy”.

While also concerned with the continuing influx of people especially the young unemployed into the city, with the ever-increasing unemployment and the disparity in income and ways of living between the “haves” and the “have-nots”, homeowners and residents are fearful that crimes are likely to increase. This may further explain the reasons for the heightened fear among homeowners and residents.

8.2.4 Responses to property crimes by homeowners in the study areas

The study shows that the responses to crimes of burglary, home robberies and thievery appear to be similar in the three cases (Mikocheni B, Ilala Kasulu and Chang’ombe Housing Area) and that they vary from one homeowner to another depending on economic capability of the homeowner. Apart from responses that involve provision of security lighting, employment of guards, keeping security dogs, and police patrols and formation of neighbourhood watch groups, individual homeowners have responded to crimes by physical built means or features. The findings from the study show that, only homeowners and tenant residents in Mikocheni B settlement have engaged neighbourhood watch as a strategy to fight crime. Ilala Kasulu and Chang’ombe Housing Area had no neighbourhood watch groups.
While homeowners in Mikocheni B and Chang’ombe Housing Area have also responded to these crimes by erecting high perimeter fences, homeowners in in Ilala and Ilala Kasulu have responded to the crimes by closing off some streets and the back and side alleys; and incidentally the houses are laid with their main doors and verandahs facing the streets and pedestrian pathways. This response has incidentally bound the houses in one block, with long wall façades facing the streets and pedestrian pathways. In this way, all entrance verandahs, doors and front windows face and directly open into the streets. The closing of back and side alleys and some of the access roads in Ilala Kasulu has made some of the blocks of houses in the settlement to be longer than previously laid out (Figs. 8.1 and 8.2).

Other physical responses applied on houses according to the respondents in Mikocheni B and Chang’ombe Housing Area include, securing the windows and doors using networks of metal bars (burglarproof grills) and gates. These security grills sometimes are also extended to the verandah making it difficult and harder for a thief or burglar to break through.

From the study, it has also been observed in Mikocheni B and Chang’ombe Housing Area that many of the originally perforated or ventilated perimeter wall fences, have their perforations or ventilation openings closed off or sealed by either palm leaves or grass thatch to obstruct the view. It was submitted in the interviews that, the openings facilitate the burglars or thieves to scale the walls as they peep through the openings to identify objects of crime or targets (See Fig. 8.8 and 8.9) respondents also observed that some passers-by used to peep through the ventilation opening into house compounds, and this may later lead to incidences of break-ins occurred. The peeping through
openings by the passers-by was and is interpreted as a violation of privacy of individuals and houses. Thus, closing off the ventilations openings appeared to be the option to do away with the peeping and scaling of the walls. Respondents also referred this to the notion of “reducing the opportunities” for the “would-be offenders” to see attractive targets; thus, this restrains temptations among those who are inclined to committing crimes.

As noted in Chapter Five, a respondent in Mikocheni B confirmed the foregoing when he observed: “Uzio wa ukuta ni hifadhi ya mambo mengi. Uzio wa ukuta hubifadhi usiri an kusitiri nyumba, hunchelewe na vibaka na wezi na huziua vibaka na wezi kuona vitu vya kuiba.” Literally meaning: “Perimeter wall fences provide for many things. They provide for privacy of the home, they delay the petty thieves and burglars to enter into the home and they deny them the opportunity to see what to steal” (A retired game officer, March 16th 2007).

At this point and based on the findings from the case studies, it is hereby suggested that, the efforts by the homeowners reduce the opportunities for the objects of crimes or targets of crime to be seen by the would-be-offenders. The barriers also make the targets of crime harder to dislodge. It is also argued here that, this also reduces the proximity of targets from offenders and strengthens social control as well as reducing visibility to the targets of crime.
Fig. 8.11. Summary of responses from Mikocheni B and Chang’ombe Housing Area. The built responses in the bolded boxes are the common ones in Mikocheni B and Chang’ombe Housing Area.
Fig. 8.12. Summary of responses from Ilala Kasulu. The bolded boxes indicate the common built responses in Ilala Kasulu.
8.4. Types of wall fences, doors and window barricades

As earlier presented in Section 8.3 the physical responses applied by homeowners vary in strength from one to the other possibly on account of the economic means of the homeowner or how one serious the homeowner is fearful of crime. Most of the perimeter wall fences are high and many are topped with either sharp iron spikes, razor wire, electric wire or broken glass. Many of the perimeter fences in the two cases of Mikocheni B and Chang’ombe are solid wall fences and others have fences that are perforated (open from the 1.2 metre height) to allow air movement and visual communication between the house compounds and the streets outside the fences. Yet others have fences that are in form of hedges and wire or a mix of wire and hedge. Some of the fences are very temporary, being constructed using temporary materials including palm leaves just to screen the view from the street (Figures 8.13 – 8.20).

Figure 8.13: Part of a perimeter wall fence in Mikocheni B. Note the perforations for visual contact and air movement. The openings can also be used by burglars as steps to scale the wall. As such, broken glass is placed at the top of the wall.
Doors and window barricades also differ accordingly. In Mikocheni B and Chang’ombe Housing Area, one observes an elaborate network of metal grillages on windows and heavy metal gates on the perimeters walls in most of the houses. But in others, only simple burglarproof bars composed of horizontal or vertical members with wire mesh on windows with simple metal gates on entrances. This may suggest either the importance one attaches to security or affordability of individuals. Either it may suggest the value of the property, which further emphasises attractive targets tempts more than unattractive ones.
8.5. Designs of perimeter wall Fences: hardening the objects of crime?
Also in the three cases, it has been established that homeowners do modify their built environment (that include erection of wall fences and barricading windows and doors) using materials and styles depending on ones ability to afford and whether the fence is for crime prevention alone or for status in the neighbourhood. In many cases, the type and quality of wall fences used and their designs also seem to indicate and show how one’s home is worth. It was noted during the study that some of the walls are very high, solid without perforations or openings, a factor making it difficult for criminals to scale the walls. Some have see-through openings but additionally fitted with, electric wire, iron spikes, barbed wire or broken glass to forestall climbing. Some have hedges combined with wire fence. On the other hand, some homeowners use very high fencing wall to camouflage other illegal businesses in their homes on the pretext of fear of crime (The case unveiled in Chang’ombe Housing Area where a resident dealing in stolen cars had erected high-wall fence to screen (hide the stolen cars parked on his property).

8.6. Concept of privacy: a way to security and reducing opportunities for crime
The definitions of privacy vary widely according to context and environment. In many countries, the concept has been fused with data protection, which interprets privacy in terms of management of personal information. Outside this context, privacy protection is often seen as a way of drawing the line at “how far society can intrude into a person’s affairs”.

During the interview, many respondents used words like “for privacy” and “for security” together at different times to explain why they have built wall fences instead of soft hedges. Some respondents used terms like “to make difficult for the thieves to see the objects to steal”. Much as the hedges were
initially used to provide the same privacy in the past, most homeowners and residents argue that, wall fences also provide protection since they are more difficult to dislodge when compared to the soft hedges. In other words, with the wall fences, one requires more efforts to break through without forgetting the risks of being seen. It also increases the risks involved to access the house compound, let alone the inside of the house. It gives more time for the house owner to prepare for what is coming.

8.7. Built environment, social relations and social interaction

Through observation and the interview, it is apparent that the wall fences have affected the quality of streets particularly in Mikocheni B and Chang’ombe Housing Area. Walking along streets, one gets the impression of dead streets, streets without life in them. Walking through the streets, one is not able to see houses, either it is not possible for the passers-by to be seen by those in the house compounds.

The wall fences in most of the instances have invaded the streets (especially in Mikocheni B) by encroaching most of the supposedly sidewalks, leaving a narrow part of the street (the carriageway) for vehicular movement. This has turned most of the streets in particular Mikocheni B appear to be “no-man’s lands”, being used only as a vehicular and pedestrian passages and sometimes as a solid waste disposal areas (for solid and liquid waste). Very little care and maintenance is taken of the streets. Surface water runoff from the house compounds is directed into the streets during the rain season turning the streets into seasonal streams. At times, some homeowners also discharge the sewage into the streets. The environment is polluted and becomes smelly and unhealthy, school going children are particularly affected.

In the same way, poor air movement also affects environmental conditions in the interior of the wall-fenced houses. Temperatures inside the houses then become unbearably high and uncomfortable; for those who can afford the use of mechanical cooling devices e.g., air conditioning and fans is necessary. For those who cannot afford the mechanical cooling, living in these houses is a nightmare, forcing some to sleep outside during the hot seasons of the year.

Also social relationship or interaction among neighbouring residents appears to be hampered and delimited by the walls. The metal gates makes one hesitate or at least think twice before venturing into visiting a neighbour. This may be complicated by the fact that one does not know whether the neighbours are in the house or not because one does not see inside the compound. As a result of this, neighbours hardly meet, apart from accidental meeting in the streets. However, under special circumstances, for example, when invited or when reporting unusual events such as bereavement or
social gatherings like wedding, etc. Neighbours are compelled to come out of their enclosed compounds, ring a bell at a neighbour’s gate before they are able to see them. This was consistently reported in all the three cases three case study areas.

Apart from the social relations being hampered, fire risks were also raised as an issue of concern. Residents in the fenced houses were worried, saying that the wall fences make it difficult for the fire tenders to access the houses in case of fire outbreak. Since the streets are narrower, particularly in Mikocheni B, fire tenders may not negotiate easily, rendering rapid response against fire incidences difficult. The fencing walls also makes it difficult to get help from neighbours in case one is attacked.

At the level of urban management, one also notes growing problems related to access into house compounds by the utility companies (e.g., electricity and water utility companies, etc.). This is particularly in cases where homeowners refuse to allow employees of service providers involved for instance meter reading, collecting of utility charges and maintenance of the facilities to enter enclosed premises. In so doing, employees of utility companies are prevented from fulfilling their mandate and obligation. Instances in which the employees have been detained and beaten during their routine work were also reported. The situation in Ilala Kasulu however appears different. The streets have not been encroached upon. A lot of people traverse them. Front windows overlook into the streets and entrances into verandahs serve as semi-private spaces linking the public pathways.

8.8. Effectiveness of responses to reducing crimes
One of the questions posed repeatedly during the interviews concerns the effectiveness of the responses in reducing the incidences of crime and the fear from it? In response to this question, the majority of the respondents said, the measures of erecting wall fences and barricading windows and doors have served to assure homeowners and residents of feeling of security. The availability of “Sungusungu” or neighbourhood watch group patrolling the area and closely working with local communities has consolidated the security.

SOURCE: Futuna Seleman, Alasiri Swahili Daily, September 23rd 2008
One respondent in Mikocheni noted that, these target-hardening practices are not foolproof. Offenders have often devised ways of getting through to such compounds without the use of force. In such cases, victims are likely to be worse off because people outside the compounds are less likely to know what is happening inside. The chances of neighbours mobilising themselves for help or rescue operation are often limited. He cited “an incidence where in Dar es Salaam in which a prominent lawyer was killed in his own enclosed compound without the neighbours noticing”.

The other inherent danger in this practice of wall fencing and barricading is the chance of residents in cases of emergency. Most of these complex security devices as shown in Figure 8.20, are highly structured and not easy to dislodge in order to effect escape from the danger. Of late, cases where people are trapped in houses during fire outbreaks as a result of security devices installed on windows and doors. Residents are however, rather concerned with crimes than the incidences of fire, arguing that, fires are rear incidences compared to incidences of crime.

8.9. Summary of the results from the three cases
This section outlines a summary of the emerging issues as they persistently surfaced from the three cases. In summary, the issues are: the homeowners ‘and residents’ concerns about the crimes and fear of it in their areas, concept of privacy as a means to security as it serves in reducing opportunities or temptations for crime or reduce opportunity, different types and designs of perimeter wall fences to physically harden the objects of crime; built environment affecting social relations, posing urban management problems; and limited effectiveness of the wall fences. Other findings from the study

Fig. 8.20: A house in Chang’ombe Housing Area. Apart from barricading the windows and doors, the verandah is also enclosed by network of metal bars for protection against break-ins.
are: the specification for the designs of wall fences is provided but not followed and there is no enforcement by Municipal Authorities. Table 8 on page 176 is a summary of the issues and questions for architecture, urban planning and design, and urban management policy.

The reflections and interpretation of the findings and a detailed discussion including its implications to architecture, urban design and planning and urban management are presented in Chapter 9.
Table 8: Cross case analyses: Summary of main issues and urban design and policy issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>Mbocheni B</th>
<th>Ilala Kasulu</th>
<th>Chang’ombe Housing Area</th>
<th>Urban design and policy issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and Development</td>
<td>Planned in 1974 as a high-density sites and services scheme for low income. Gridiron streets. Developed into a medium-high income. Some streets blocked and plots combined. Open spaces turned into plots. Streets have been encroached by fences. Side walkways are not provided.</td>
<td>Planned and developed according to the 1929 plan. Developed as a low-income residential area. Small high-density plots. Streets in gridiron with permeable &amp; short blocks and many routes. Sidewalks reserved.</td>
<td>Planned and developed according to the 1950s plan. Medium density plots. Wide streets laid out in a gridiron design short and long housing blocks. Sidewalks reserved.</td>
<td>How can urban design facilitate individual plot-to-plot development such that the end urban product is conducive for living with activity streets and adequate natural surveillance and reduced crime incidences?</td>
</tr>
<tr>
<td>Housing types</td>
<td>Single-family houses, many in single storey and few in two or three storeys. Almost all have fences of varying in designs and materials for construction.</td>
<td>Mainly single storey multi-occupant Swahili type houses. At the time it was planned, natives built their houses using wattle and thatch grass. Rebuilt in 1963 by NHC.</td>
<td>Bungalows, row houses, housing flats (one to three storeys). Built by NHC, private and the Aga Khan Foundation. The East African Community built others.</td>
<td>What house types that should be adopted to ensure both security and privacy of the occupants while at the same time allowing occupants to have visual contact with the activities in the streets? What are prerequisite conditions for the use of this house type?</td>
</tr>
<tr>
<td>Crime and fear of crime</td>
<td>From early 1980s to late 1990s, crime was rampant in the area. At the time of the study (2004-2007), crimes (burglary, thievery and home robbery) has declined. But fear of crime prevails.</td>
<td>Crime in area was problem in the area since the colonial period in 1930s to early 1960s. At the time of the study (2004-2007), burglary and thievery have declined. No fear of crime in the area.</td>
<td>Crimes of thievery and burglary started from early 1970s until early 1990s. At the time of study (2004-2007) crimes of burglary, thefts and home robbery have declined. But fear of crime prevails.</td>
<td>How can architecture and urban design help to bring about residential environments where residents live with little fear of crimes (burglary, home robbery and thievery)? Can defensible space theory be used to achieve such residential environments where individuals build their own houses?</td>
</tr>
<tr>
<td>Responses to crime and fear of it</td>
<td>Sungusungu, perimeter wall fences, security lighting, security guards, keeping security dogs and grilling of windows and doors.</td>
<td>Blocking streets, passages and back alleys, creating courtyards and long housing blocks. Security lights and courtyards.</td>
<td>Hedges, wall fences and grillages on windows/doors; security light, employing guards, keeping security dogs.</td>
<td>How can property barriers like fences be designed for both security from crimes and privacy of homes while allowing for the natural surveillance between the house compounds and streets to occur?</td>
</tr>
<tr>
<td>Implications of the responses to built environment and urban management</td>
<td>Houses are seen from the streets. Doors and windows open on to pedestrian ways along streets. The streets have people in them. Sidewalks not affected.</td>
<td>Houses are not seen. The Sidewalks along streets encroached by the walls. Streets appear deserted and empty. Feeling insecurity and loneliness. Streets turned into drainage channels rain period and dumping places.</td>
<td>Houses not seen except those above single storey. Have wide streets with sidewalks on one side. Streets deserted and empty. Feeling of fear &amp; loneliness. Streets dumping and flooding.</td>
<td>How can residential neighbourhoods be planned and designed such that the resulting built environments are safe and secure from crime, vibrant with people in the streets, whilst proving privacy for the residents?</td>
</tr>
<tr>
<td>Observance of planning regulations and development controls</td>
<td>Only 2 out of the interviewed applied for the wall fences. 7 out of interviewed did not apply for the permit and the authority did not bother them during the erection...</td>
<td>All house owners who were interviewed said application was necessary and constructions were inspected. Closing of the back alleys or passages was approved.</td>
<td>More than half of the interviewed applied for the permit and the walls were approved by the City council. The extensions to the walls were not approved.</td>
<td>What development control mechanisms should be instituted to address development of urban environments that meet the requirements of safety and security from crimes without compromising the privacy of homes?</td>
</tr>
</tbody>
</table>
Impacts and implications for architecture, urban design and management

This chapter revisits the research problem, objectives and the methodology used in the study. The chapter also discusses the findings as presented in Chapter 8, Section 8.9 and Table 8.0. Also discussed in this chapter are the impacts and implications of the findings for theory and practice of architecture, urban design and management. Section 9.6 the last part of the chapter is made up of a conclusion about the findings of the study and attempts to recommend what could be the way forward as well as suggestions of areas for further research.

9.1 The statement of the problem
The research problem is a living experience of the researcher. Having lived in Dar es Salaam since the early 1970s, he has observed the changing look of the city's residential areas from open residential areas with houses directly connected to the streets; to residential areas with houses secluded from the streets by various types of fences. In the old residential areas, the back and side alleys, which served as shortcuts through residential blocks, have been closed. Additionally, the facades of houses have also been changing to include different types of metal barricades on doors and windows. This phenomenon is also observed in cities other than Dar es Salaam.

With the increasing levels of crimes (particularly, burglary, thefts and home robberies) in the city, the researcher considered the two to be related in some ways. Studies on the phenomena are scanty. It was presumed that there would be a lot to learn from cities of such kind because the residents, when brought together in one urban environment, their way of life from where they come from do not change overnight to suit urban living.

9.2 The objectives of the study
The study set out to explore the barricading phenomena, which appeared to be the way homeowners’ responded to crimes of burglary, thefts, home robberies, and fear of it; the impacts of the responses
to: the built form and social relations of residents in the residential areas as well as the implications of the responses for architecture, urban design and management.

With the above aim, answers were sought in regard to the following four specific objectives: how homeowners responded to crime and fear of it; the impacts of the responses to the built environment in terms of quality of architecture and urban form; the social relations between neighbouring residents, as well as those outside in the streets in terms of social interaction and community spirit; and the implications of the responses for architecture, urban design and urban management theory and practice.

Given the above specific objectives, the research sought to answer the following questions: (1). How and why do homeowners in urban areas build barricades on and around homes/houses? (2). How do these barricades impact on the character and quality of the built environment (e.g., architectural experience, urban design, and safety)? (3). How do these responses affect the behaviour of the residents in the barricaded homes and those in the streets? (4). What do these phenomena mean to architecture, urban design and the urban management professions? The study has dealt with the objectives and answered the questions using the methodology that is briefly restated and described hereunder in Section 9.2 of this chapter.

9.3. The method
Chapter 4 has explained how the study was carried out and describes the suitability of the case study method in exploring and understanding how the processes of responding to crimes of burglary by homeowners take place and the way the responses impact on the built environment and social relations between the residents. In the case study, I applied qualitative methods, attempting to distinguish the meaning of the processes and events to the participants and its impacts to the environment and society as a whole. The focus was on uncovering and obtaining the views and experiences of the homeowners in three planned residential areas in Dar es Salaam (Chapters 5, 6 and 7). From the three cases, I was able to explore and understand the effectiveness of the government machinery in the provision of security services to residents, comparing the colonial period and the period after independence. The study also sought to investigate whether or not; the urban planning and management authorities consider the crime issue during the planning, and whether they are aware of the homeowners’ responses to urban crimes of burglary, thefts and home robbery, and how they handled this.

Using an interview guide, I extracted stories from respondents, while also observing and documenting the built features, photographing and analysing the features. I also analysed documents, aerial photographs and city maps in addition to other sources of data that supplemented in the
triangulation of the evidence collected. These various techniques of data collection helped to increase the reliability of data and the narrations from respondents. I observed what has happened in the cases in terms of environmental changes and built form as compared to the plans and interviewed the homeowners and residents in order to understand what I observed to have happened in the built fabric. The various narrations were compared and analysed. Similar or related stories were grouped together to form common or similar understanding or opinion.

9.4 The findings
The following summarises the findings as discussed in last part of Chapter 8. They are: 1. Homeowners and residents are more concerned about the crimes of burglary, thefts, home robbery and fear of it; thus respond to the worries by building various types and designs of barrier walls around their homes and barricade their house windows and doors to keep out crimes, 2. Towards achieving security against crimes homeowners use the concept of privacy to conceal whatever they have using barrier perimeter walls that reduce the exposure of objects of crime. The barrier fencing walls affect the overall built form by limiting visibility through the environment; they affect social relations because neighbours are separate and this inhibits social interaction. The responses particularly building wall fences, pose urban management problems because the walls can sometimes be used to camouflage criminal activities and limit access by utility managers when need arises.

9.5 How homeowners respond and the impacts of the responses
The following sections of this chapter reflect and discuss the findings of the study in reference to the aim, objectives and the research questions. The relevance of the theories discussed in Chapter 3 to findings is also established.

9.5.1. How homeowners respond
The study has shown that, homeowners and residents affirm that crime incidences in their areas are at the time of study relatively low. However, they perceive the issue of crime to be an issue of great concern. This may be due to the over-reporting of crime incidences in the media; where over-publicity appear to be higher whenever crime incidences occur. According to many of the homeowners, the perceived rise in crime incidences, alongside the perceived inability of the police to protect residents in Dar es Salaam particularly between the 1970s and 1990s, might have led to the belief that, the government was not capable of providing security, law and order and crime control. Undeniably, the wall fencing and organizing ‘Sungusungu’ security patrols seemed to be the response. With the belief that crime may still increase due to the increasing unemployment, the erection of the masonry wall fences and barricades to doors and windows are likely to continue, and probably without adhering to the permits conditions and specifications as it has been the case.
The perimeter wall fences

The building of wall fences and barricades by the homeowners appeared to be a continuing phenomenon since homeowners and residents consider and believe that the fencing walls and barricades, serve specific purposes such as security, privacy, property boundary markers and separation of disputing neighbours. From the study, it is evident that homeowners see and trust perimeter wall fences as being necessary for increasing privacy and reducing opportunities for crimes to occur.

It is sad to understand during the study that, the Municipal authorities have no power to regulate them; the Township Rules Cap 101 has been repealed and no alternative regulations have been instituted in its place to enable the authorities carry out their mandate.

In architectural and planning terms, the impact of these walls has been that, street reserves for pedestrian passage have been encroached leaving narrow unsafe passages. Either, some streets now appear to be uncared for, serving as disposal conduits for surface water runoff and sometimes hard/solid waste. Having narrowed the streets, it has become almost impossible to provide for drainage channels. This has made the streets in the area to become water streams during the rain seasons. The turning of part the streets that are public into private space by the homeowners is a decline in public order and an urban management problem.

The perimeter wall-fencing phenomenon is also observed in the newly developing residential areas in Dar es Salaam and in other cities in Tanzania. Some developers start construction of plot perimeter fencing walls before building the house (Fig. 9.1) to protect the plots from invasion by unscrupulous plot seekers. The findings from this study also show that nearly all privately owned houses have fences of some kind around them, although the fences vary in type and whether soft or hard wall fences. In Ilala Kasulu, all houses in every block are connected side by side with walls or metal gates, defining each block with compounds or courtyards at the rear of each house. In addition, all houses are barricaded on windows and doors to restrict or make the entry into houses harder (Figs.5.20 and 7.19). Some house owners have gone to the extent of barricading the verandahs as well (Fig. 8.21). All these are modifications and additions on houses and compounds that are said to delay if not to prevent entry into houses for those not intended.

The study has also shown that, the practice of using barricades (i.e., fencing walls and barring of windows, doors and verandahs) is not a new one. The erection of perimeter wall fences and barricading of doors and windows as one way of responding to crimes of burglary and thefts was also noted by Sam Mukoro while studying crime responses in the city of Wari in Nigeria.
He observed two strategies adopted by residents in residential areas, noting the two strategies to include “behaviour modification and target hardening”; describing, “target hardening” as a response to crime problem that “involves a number of practices which shape the environment” (Mukoro, 1996).

The responses highlighted in the above discussion is understood in theory as “situational crime prevention strategy” (Clarke, 1980), with the essential notion of “opportunity” tempered by concrete strategies intended to reduce, modify or redirect the roles that temptation plays as a part of opportunity (Chapter 3). In Clarke’s conception, opportunity is moulded by five primary factors: Risk; effort; reward; provocation; and shame and guilt.

The finding further verifies the rational choice theory by Felson and Clarke, (1989). The practices of building wall fences and barricading of doors and windows help to deter crimes of thievery in homes, burglary and home robbery by increasing the effort required to dislodge the objects of crime: However, the practice negates and lacks the possibilities for natural surveillance. This type of “defensible space approach” by the homeowners is devoid of Oscar Newman’s Defensible Space
basic principle of natural surveillance possibilities afforded to the house users. The barriers defining and differentiating private, semi-private and public domains are so real, and not symbolic in nature as proposed by Newman.

In the study, respondents have affirmed the practice of erecting wall fences around houses is not necessarily a response to crime, but rather, a requirement for privacy (Refer Chapters 5, 6 and 7). Either, privacy can equally be inferred to mean protection of either personality or function or actions from public view. On the other hand, privacy may mean securing the actions, or behaviour from being seen or heard, etc, by other people whom one does not want to hear or see. When one does not want whatever he/she does to be seen or heard by other people, he/she does it in privacy, in a place secured from sight or away from being heard. Therefore, one can secure the objects of crime from being seen by the would-be thieves, burglars or the bad guys, by placing them in a private space, away from view by public viewers, who may be tempted in one way or another depending on their mindset. Therefore, one can equally say and argue that, privacy in this research can be interpreted and understood as a measure of ensuring security or protection against crime in that, as one tries to enhance privacy of his or her person or property, one is actually reducing the exposure of the property or person against the “would-be thieves, burglars or the bad guys”. This in literature is termed “opportunity reduction” (Felson, 1989). Therefore, the issues of privacy as indicated by some of the respondents in the three study areas may also emphasise “protection or security” against person or property attack.

From literature we also note the “walled cities of defence” which only survived until the invention of gunpowder, which rendered these walls of protection irrelevant at the power of the artillery. It is hard to defend that “the walls we see are for privacy purposes” alone when these wall are also additionally fitted or equipped with barbed wire, iron spikes, razor wire or electric wires at the top. What are these additions for if the only thing is to prevent visual contact? Some respondents noted by citing an incidence in which one of their neighbours, who had built a high wall fence purporting it was for privacy, was actually apprehended by the police dealing in stolen cars. From this the claim by individuals that their wall fences are for privacy purposes may sometimes be for facilitation of crimes. Sometimes one would like to hide whatever one has acquired through illegal means. Such illegal dealings may be stealing or forgery, even dealing in drugs, brothels and the like, or hide illegal activities as established in the study (Refer Chapters 5 and 7).

**Barricading windows and doors:**
One of the findings in this research is the noted barring of windows and doors using a network of metal bars. This is a practice that is meant to harden the target of crime from burglar attack. Observations from the two case studies show that, almost all houses had installations of burglarproof
bars and grills on windows and doors. Although this was not so intense in the other case, barring of windows was observed to be similar. A similar finding was noted by Mukoro (1996:6), when studying a similar phenomenon in Nigeria, describing as: “the practice is the installation of burglar proof”, which “involves the intensive network of metals used to barricade entrances into buildings”. As noted in the study, Mukoro also observed that some of these are installed in windows, others on doors, while in some cases they even cover the veranda as well.

From the study it has been noted that, metal gates to harden the accesses or entrances into the houses are used to barricade the doors overlooking the streets, verifying what in 1946 the Superintendent of Police in Dar es Salaam said: “it has been emphasised to me again and again, that the crying needs of the native area are more police and more lights, and in this opinion I heartily concur. Africans going out in the evening now lock and bar their windows, a few years ago, this was unnecessary”. This phenomenon appeared more evident at the time of the study and seen as one walks through the new and old residential areas.

Further to the erection of wall fences around the homes and barricading of windows and doors, the study has established that, some homeowners install barbed wire, razor, iron spikes, broken glass and electric wires on the wall fence to forestall climbing over the fences. In addition, homeowners also acquire firearms and keep security guards and security dogs to enhance security.

**Effectiveness of responses to reducing crimes**

The study intended to explore and understand from the homeowners and residents in the fenced and barricaded homes, whether the built responses is effective in fending off crimes and the fear from it or not. The findings from the study indicate that, a feeling of security is assured among the residents inside their homes when houses are barricaded and surrounded by wall fences. The majority of the respondents in all the cases responded thus, mostly agreeing that, the measures of building wall fences and barricading have assured them a sense of security. In addition, the feeling of security is even better when residents understand that the “Sungusungu” or neighbourhood watch group are patrolling the area at night.

However, experience from one respondent has it that: these target-hardening practices are not foolproof. Offenders have often devised ways of getting through to such compounds without the use of force. In such cases victims are likely to be worse off because people outside the compounds are less likely to know what is happening inside. Even the chances of neighbours mobilising themselves for help or rescue operation is often limited. He cited an incidence in Mbezi Beach in Dar es Salaam
in 2004 in which a prominent lawyer was killed in his own compound without the neighbours noticing in broad daylight (Chapter 5).

Based on these reasons, one sees a need for regulating the design, specifications and enhancing the inspection processes during the construction of the walls, since the phenomenon is likely a trend to continue.

9.5.2 Impacts of the responses

The study has identified a number of impacts arising from the homeowners’ responses. They include but not limited to the following: visual experience of the built form; segregation of public spaces; keeping neighbours apart and limit social interaction; affecting the environmental comfort conditions of homes; creating impression of “private appearance”; posing risks when evacuation is required; increasing lengths of residential blocks; and enhances the “subjective feeling” of fear particularly at night fall.

Visual experience of the built form

One of the objectives of the study was to explore and understand the impacts of the responses to the architecture of the built form. One comprehends the environment through vision and it is hard to neglect the visual impressions created by the walls in the study areas. The result of wall fencing and barricading of windows and doors are often visually noticeable. The study shows that the built features are sturdy in nature (the wall fences) and signifying fear. Since the walls are mostly very high (Figs. 9.2; 9.3; 9.4 and 9.5), they affect and demean whoever passes by them.

The overall physical responses seem to have changed the residential “outlook”, giving the images of places in state of siege and fear, verifying what was described by Mukoro (1996) saying: “..., they create the mental image of cages made to prevent some dangerous animals from escaping into the city of men”. Otherwise, they create the images of isolation made to prevent socialization, appreciation of beauty and the experiencing of architecture inside the walls. Other writers have described this as “architecture of fear” (Marcuse, 1997).

At a neighbourhood level, one sees streets with the high wall fences running through the blocks, meaning that, one can move through such blocks and streets without setting eyes on a house if not storey houses.

Otherwise, one is not able to experience the architecture of the neighbourhood or the built environment. What one sees are the walls, many of which are ugly to look at signifying fear. Similarly, those in the compounds may not see those on the street, verifying once again Jacobs (1961:35) assertion that, where streets are “without eyes” on them, natural surveillance is hampered, therefore,
counter productive in terms of the so much desired urban security. The streets without eyes on them appear as “no man’s land”.

**Segregate public spaces**

The observation indicates that, efforts for collective concerns regarding the care and maintenance of the streets is absent, such that many streets have been eaten away by the encroaching walls. No one seems to care for them. They can easily be turned into littering grounds for the unwanted (e.g., rubbish, surface water runoff, waste water etc While lacking the supervision from the municipal authorities, the homeowners engaged themselves into encroaching the neighbourhood streets reducing them into passages in which two cars can hardly pass at a time; reducing or hampering social interaction qualities. The streets are also not cared for and some have become places for litter (Figs. 9.3, 9.4, 9.5, and 9.6). Every one uses the streets as given, only as accesses route to homes, leaving the streets in isolation as everyone closes the gate. At the overall, this increases segregation of public spaces (roads and streets) for all into unsafe ones.

**Keep neighbours apart and limit social interaction**

The understanding of the impacts of the physical responses to the relational behaviour of the residents in the study areas was also one of the research objectives that were to be explored. The study in this aspect shows that, building of walls around properties keep apart neighbours, as they (the walls) seem to tell, “You are not wanted inhere”. These walls keep people a distance. On the other hand, wall fences can help to separate disgruntled neighbours, reducing their frequency to meet (as cited by one of the respondents in Ilala, calling it the major benefit of the separating element). Respondents and residents from the wall-fenced homes in the three study areas acknowledged the lack of social interaction between neighbours apparently due to these physical barriers. When asked to explain how they relate between neighbours, the majority of those interviewed said the relationship was not that close. All the interviewed said they knew their neighbours, but they visit them only when there is an important need calling for visitation, for instance when invited for a party or during an issue of bereavement. They could only meet to discuss issues of common concern when called upon by the Sub-Ward or Mtta Leaders.

The impact elucidated here above verifies Marcuse’s (1997) discussion on the effects of walls of separation, when contributing to the subject of “the architecture of fear”. He says: “Walls that act as boundaries, can suggest a particular set of relationships between those on the opposite sides of the boundary: separation, distance, fear, tension, hostility, inequality and alienation.
They are two-sided in their purpose: at once creating and seeking to defend against the impact of division”. He further says, “..., or ...; an eight-foot-high wall with barbed wire in Johannesburg’s white northern suburbs may similarly be built along a lot line, but its meaning is quite different. Both walls do more than simply state ownership and define territoriality; both give a clear if not opposite message about the relationship of those inside to those passing by”.

Lemanski, (2004:106), studying the phenomenon of wall fencing and barricading in the South African context, came up with the following: “the walls in fact do not just respond to crime and fear of it, but also deepen segregation of neighbours and reinforce fear by excluding difference and limiting social mixing, thus increasing suspicion and mistrust between residents”. This was verified during the interview when homeowners revealed this in the perceptions of the sources of crime. In the study, most respondents saw crime to be originating from outside the area, seeing crime to be coming from the areas where poor people live (Chapter 5). The respondents also agreed that the dividing walls and gates limit concerns for the neighbour. Nearly all the respondents in the three study areas agreed, saying: “due to walls of separation, socialisation moves away from the residential areas to some places away, to places of work sometimes. Residents only come to sleep in their gated and confined dwellings. Social contacts within the residential arena become occasional, only when serious social events occur”. This confirms what Marcuse (ibid: 102) described as: “walls are two-sided in their impact, not only because they separate those on their two sides from each other but also because they reflect domination for some, subordination for others. They will rarely if ever reflect unlimited
power, or total powerlessness to either side. Their very existence bears evidence to the limitations, the insecurities, the fears, that lead to their construction by those to be protected, at the same time as they may impose even greater limitation, insecurity and the fear on those outside their ambit”.

**Affects the environmental comfort conditions of the homes**

Other than the visual impressions of a “ghost” or “lifeless” built environment, comfort conditions inside the houses are, according to the respondents in all the three cases, affected negatively. With the network of metal grillages on windows, the effective ventilation openings are reduced. The high wall fences block the airflow, diverting it upwards from the level of the windows. Thus, the temperatures inside the houses become unbearably high necessitating the use of mechanical cooling devices for those who can afford (Figure 9.2).

![Fig. 9.3 The picture shows a street in Chang’ombe Housing Area. Note the dumping of waste along the street.](image)

![Fig. 9.4 The photo shows a street in Mikocheni B through which it is hardly possible to see the houses, unless they are 2 storey houses.](image)

![Fig. 9.5 An uncared Street in Mikocheni B sandwiched between high perimeter wall fences. Note the litter on the side of the street.](image)
Create impression of “private appearance”

The “private appearance” of houses particularly in Mikocheni B and Chang’ombe can be understood through Cozens, et al. (2001:232) explanation: that burglars and thieves associate private appearance with “potentials for reward”, therefore attracting more of the “would-be offenders”. According to Cozens et al., burglars and thieves perceive areas that appear so private as areas with high potentials for reward, that is, with many attractive targets or objects or victims of crime. Being too “private” and “fortress like” in appearance—with the high exterior boundary walls, affects the levels of surveillance and reduces potentials for residents interaction and intervention that “these detached housing design element represent” (Cozens et al., 2001:232). In the final analysis, “extreme levels of privacy may counteract with and work against existing defensible space qualities, suggesting that a crucial privacy threshold may exist in terms of urban design (ibid: 232).

Pose risks when fire evacuation is required

The other inherent danger arising from this practice of wall fencing and barricading is that, the chances of residents to evacuate in cases of emergencies like fire are limited if not hampered at all. Most of these complex security devices as shown (Fig. 8.21), are highly structured, robust and not easy to dislodge in order to effect escape from the danger. Of late, there have been reported cases in Dar es Salaam, of people being trapped in houses during fire outbreaks as a result of security devices installed on windows and doors. However, it is important to note that, residents are more concerned with crimes than the incidences of fire, arguing that, fire incidences are rare compared to crime incidences. As an example, a respondent emphasised this by saying: “For all of my life, there have never been any incidence of fire in our house, but we have experienced so many of the thefts and burglaries in our home and to our neighbours. Now, what should I be more worried off? Fire or thieves?” This sentiment was a cry of many homeowners and residents, particularly in the areas where the phenomenon was applied at big scale; a cry that appears genuine to many in the studied cases.

Increase lengths of residential blocks

The responses that involves closing off the back and side alleys and some of the streets have resulted in increased lengths of housing blocks. This, in terms of planning and urban design mean increased travel distances around the block of houses for one wishing to reach the other side of the block without turning to corners. This may also help to increase the people in the streets as they journey through to reach their intended destination, and for the thieves and burglars, this reduces or eliminates short cuts and escape routes within the blocks, thus increasing the risk of getting caught when an alarm is sounded (a positive aspect of the practice leading to reduction of thievery).
The advantage of long residential blocks advanced by homeowners and residents in Ilala Kasulu is at variance with Jacobs’s (1961:191-199) support of short housing blocks when she says, “frequent streets and short blocks are valuable because of the fabric of intricate cross-use that they permit among the users of a city neighbourhood”, and “like mixtures of primary use, frequent streets are effective in helping to generate diversity only because of the way they perform. The means by which they work (attracting mixtures of users along them) and the results they can help accomplish (the growth of diversity) are inextricably related”. Bentley et al. (2003:12) adds “a place with smaller blocks gives more choice of routes than one with large blocks. Smaller blocks, therefore, give more physical permeability for a given investment in a public space. They also increase visual permeability, improving people’s awareness of the choice available; the smaller the block, the easier it is to see from one junction to the next in all directions”. From the findings, when assessed in terms of security against crimes of burglary, short blocks provide more routes for escape of the burglars when pursued. Long blocks tend to reduce escape routes forcing the burglars to remain in a street for a long time making it easier for burglar or thief to be apprehended.

Based on these findings, the qualities of smaller blocks as advocated by Jacobs (1961) and Bentley et al. (2003), seem to be counter productive in terms of affording security to residents, as permeability in the neighbourhood provide too many escape routes for thieves and other criminals when pursued. According to the interviewed homeowners, the many streets, back and side alleys within the previously planned short blocks facilitated petty thieves and burglars to escape into places of anonymity within the streets where there were many street users thus mixing and mingling with them in the streets when pursued. They argued that, by closing the alleys and some of the streets, it became easier to catch the thief when he/she is pursued, because the place for the thief to run to would only be in the main streets where he/she can easily identified and caught.

Figures. 9.6 & 9.7 Showing housing facades with windows, doors and verandahs facing directly into the street sidewalks along Chunya Street in Ilala Kasulu. This makes the streets safe as natural surveillance is enhanced.
These responses in Ilala Kasulu have not negatively impacted on the built environment in terms of architectural experience. Houses are seen and experienced as one moves around in the streets, a situation that is different from the other two cases (Fig. 9.6, 9.7, 9.8 and 9.9). Instead, the responses have resulted into compound houses with courtyards at the backs that serve as private spaces for the residents, where private activities of the occupants are performed.

The land use mix observed in Ilala Kasulu helped to reclaim the streets and encouraged pedestrianism, which increases the “eyes of the street” and thereby makes them safer. As suggested by Newman (1973), the careful juxtaposition of different land uses decreases isolation and anonymity of some residential areas. Newman (173:83), notes: “a project with buildings or houses facing and close to a street, with lobbies visible to passers-by, is decidedly less likely to experience as much crime as one where these factors do not interplay”.

Figure 9.8 Manyoni Street in Ilala Kasulu. Note houses are seen thus architecture can be experienced.
The availability of different land use mixes in the residential neighbourhood brings about a situation in which many different people move around in the study area all around the clock making Ilala Kasulu lively throughout the day and long hours of the night. In addition, many of the non-residential uses that are commercial have security guards at night. This increases the guardianship in the area as compared to other areas, which have single residential use. This again verifies “routine activity theory” regarding crime occurrence (Theory chapter).

This land use mix seem to be happening in many of the originally only residential neighbourhoods of the City of Dar es Salaam; particularly those old residential areas. The change of use is taking place from exclusively residential to residential cum commercial or exclusively commercial.
Enhance the subjective feeling of fear

From the study it has also been noted that, the feeling of fear is subjective, and may not necessarily reflect actual crime. According to the study, although the level of crime activities had gone down at the time of the study, still homeowners and residents of the studied areas feel fearful about crimes. The feeling of fear has harmful effects to individuals and communities. This verifies the assertion that: “the feeling of fear limits activities and territory, heightens stress, makes people feel like prisoners in their homes and neighbourhoods, disrupts neighbourhood cohesion and, by so doing, may actually increase crime” (Newman, 1973; Wilson, 1975; Silberman, 1978; Wilson and Kelling, 1982; Warr and Stafford, 1983; Warr, 1985; Skogan, 1986; Taylor, 1989). Some of these effects may be more evident and pronounced when fear intensifies after dark, and among those who are physically or socially vulnerable groups like the poor, the elderly, or young females.
9.5.3 Impacts and implications to architecture, urban planning / design and management

To architecture, urban planning and design

The reported rise in crime, alongside the inability of the police to protect residents in the study areas, has led to homeowners’ and residents’ understanding that, the government was and is still not capable of providing security and order and crime control. Undeniably, the wall fencing are erected without adhering to the permits given.

The responses by homeowners is similar to “situational crime prevention strategy” proposed by Clarke 1980), with one essential element, the notion of “opportunity” induced by concrete strategies intended to reduce, modify or redirect the roles that temptation plays as a part of opportunity. In Clarke’s conception, opportunity is moulded by five primary factors: risk; effort; reward; provocation; and shame and guilt (Chapter 3). The practices also fit in with the Rational Choice Theory by Felson and Clarke, (1989), one sees them as being a help that deter crimes of thievery in homes, burglary and home robbery since they reduce the opportunities, for the offenders to see the objects of crime, and they increase the efforts and risks required to reach objects of crime as well as increasing risks to the offenders.

With this homeowners and residents’ understanding, it is expected that the practice of wall fencing and barricading is likely to continue despite its negative impacts to the built form and social relations. On the basis of this, a new approach to planning of residential housing areas is considered in which the question of security against crime is included as another factor. Also, a call for new approach of
architectural design of houses so that the issue of crime is considered as an important factor in addition to the “target hardening” practice that is most applied.

In the study, it has also been noted that, “community spirit”; a prerequisite for “natural surveillance” advocated by both Jacobs (1961) and Newman (1973) is not evident (Section 5.4, 6.4 and 7.4). In Ilala Kasulu with many of the households being tenants, interaction within the house compounds was noted and acknowledged by the respondents, especially tenants in the multi-family Swahili type houses. This may be a lesson that can be drawn from this study, which may be used in the design and planning of housing for urban dwellers. Multi-family housing schemes may be used to foster social interaction and enhance the building of community spirit in residential neighbourhood and hence improve surveillance or eyes of the street in such neighbourhoods for a secure and safe living.

To building control and management
One of the issues that have been established during the study is that, the regulations that helped in regulating the process of building within the city boundaries has been repealed. This implies that the Municipal Councils with their building inspectors cannot inspect the construction activities that have been permitted.

In line with this, the study has shown that, the majority of the new developers do not adhere to the permit conditions during the building of the fencing walls. As such the perimeter walls constructed are solid and higher than the height stipulated in the regulations and few meet the design criteria specified by the code. Even those that were initially constructed in accordance with specified and approved designs have been modified to do away with the approved criteria. This appears to be the case for most planned residential areas and the authorities seem not to be in control over the situation. The study shows that most respondents who never applied for the building permit to erect the walls; the building inspectors bothered no one during and after the erection of the walls.

The study also established that, the barricading phenomena on windows and doors on residential premises is not regulated under the municipal councils. Municipal councils have no control over it. Instead, the fire marshals in the Fire Brigade scrutinise architectural designs submitted in respect of applications for building permits’ for compliance with fire safety regulations, after which the approved designs are submitted to municipal councils who ensured the implementation was done. This indicates another anomaly in the management of the built environment. The question of having regulation of the building process being undertaken by different authorities each drawing its powers from a different Ministry is likely to cause problems with the follow up. One authority is charged to oversee and approve the architectural and planning issues while another overseeing the aspects of fire
safety in the architectural planning designs, but does not follow up to ensure what was approved has actually been implemented.

In the absence of building control, it is difficult if not impossible for the Municipal Authorities to regulate or implement the urban development plans according to approved plans and architectural designs. This leaves the developers with all the power to do whatever they wanted even if it is contrary and in violation of the urban plans and the architectural design requirements. Basing on this scenario, it is apparent that other rules and regulations are required; legislations that will help in the control of erection and construction of walls and fences in the urban arena. This has to be done as soon as it is practicable, for the developers are acting faster than the regulating authorities in developing the urban context. This calls for coordinated efforts in ensuring that all approved plans, architectural designs and fire safety concerns are implemented to the letter so that the resulting built form and environment efficient and meets the living qualities to the residents (safe and sociable built form).

9.5.4 Relationship of the current study to previous research

9.5.4 Relationship with other research

This study sought out to explore and examine the impacts of the physical built features in the built environment that homeowners undertake when faced with crimes of burglary, thefts and home robberies residential neighbourhoods. Many studies on crime and its impacts in the built fabric in the Developed World, and in particular, North America, United Kingdom and other parts of Europe, Japan and Australia appear to dwell on public housing or housing schemes developed in form of mass housing. Studies based on housing stock developed and built individually from low-income countries; specifically those countries in the developing world are limited. Few of such studies in Africa South of the Sahara are in South Africa and Nigeria.

Findings of the studies carried out in the developed world have brought with them understandings of crimes in terms of theories (in which sociologists and criminologists have contributed greatly) and in the strategies for dealing with crimes to secure a peaceful and safe living. Here, sociologists and architects like Oscar Newman have also contributed on environmental determinants for crime situations and how to tackle crime by design. Most of the ongoing studies in the developing world focus on the application of the theories and strategies developed from developed world.

This study is one of the few studies carried out in Africa South of the Sahara where the economies of the countries cannot afford to apply directly all the theories and strategies that have been evolved from the contexts, cultures and economies of the developed world. Therefore, this study can be
related to the studies in South Africa and Nigeria even though the contexts are different. In this context, studies by Lemanski (2004) in South Africa and that of (Mukoro, 1996) in Nigeria appear related to this study. However, the differences in the contexts, institutional policies and the economies still make the two different from Tanzania. Although the study in Cape Town in South Africa and that in Wari in Nigeria appear to be similar; the findings from the three countries and cities may not be the same. The study is important as it adds in the field of crimes and the prevention strategies in the World and widens the context for the application of the theories.

The findings matched with theory

The first theoretical framework that was reviewed in the study is the environmental criminological theories (Chapter 3). The observed homeowners’ responses can be explained using criminological theories as the responses function as measures to reduce opportunities or temptations for committing crimes. The wall fences prevent the “would-be–tempted” to see the objects of crime. Also, the window and door barricades make it difficult for the tempted to dislodge and access the objects of crime, further reducing opportunities for crime.

As presented in Chapter 3, for crimes to occur there must be a convergence in time and space of three minimum elements: a likely offender, a suitable target, and the absence of a capable guardian against crime. According to routine activity theory and defensible space theory, natural surveillance is a necessary factor that serves as capable guardian against crime in residential neighbourhoods. With the homeowners’ responses in place, particularly the high wall fences, natural surveillance cannot be achieved. The neighbours and the passers-by in the streets that would serve as guardians cannot see beyond the walls. By eliminating the natural surveillance, the likely offender and the suitable target are together at the same time and the offender without guardian to inhibit the temptation, the opportunity is made available and burglary or theft or criminalization of the target or victim would occur.

Depending on the four factors that may influence a target’s risk of criminal attack, that is, value, inertia, visibility, and access, crimes are likely to occur when targets are exposed to public view. This may be because offenders are always interested in targets that have value, that are not heavy, that are visible and they are placed where it is easy to pick and escape (Chapter 3). Therefore, for any property crime to occur, a likely offender must find a suitable target in the absence of someone watching and guarding, that is, in the absence of natural surveillance.

Relating the four factors with the cases in Mikocheni B and Chang’ombe Housing Area, the two areas provided attractive targets like car parts, car stereos, car windscreens, music systems and video sets.
Being inhabited by people of middle and high income, their homes had the most sought after items, which were in short supply in the country at the time. The opportunities were also abundant because many people in these two areas was a working class, leaving in their homes only domestic workers who had many household chores, making the whole environment to appear as empty without people. With many suitable targets coupled with opportunities to see them and the ease with which the targets could be accessed, a likely increase in the incidences of crime in the areas was probably the case. This may be one of the possible explanations for the increase of crimes in the studied cases in 1980s and 1990s, verifying what Felson and Clarke (1989a:4-5) established: “community life can change to produce more crime opportunities without any increase in criminal motivation”.

It also appears that the neighbourhood market in one of the case studies was blamed by respondents to be a hideout for thieves, drug dealers and the like, served as a “node” on which offenders converged and hatched their plans for criminal attacks. Near to this case study on both sides were the unplanned settlements of Kawe, Msasani Makangira and Mikoroshoni, which offered and served as edges where most of the stolen items were taken to at the end. The settlements of Keko Toroli and Keko Machungwa served as edges for Chang’ombe Housing Area where most of the stolen items where taken (Chapter 7).

The observations in Mikocheni B and Chang’ombe Housing Area during the 1980s and 1990s can be explained by the crime pattern theory discussed in Chapter 3. Offenders search for crime targets around personal activity nodes (such as home, market, school and entertainment area) and the paths among them. In addition, the paths that people take in their everyday activities may closely be related to where they fall victim to crime.

From the above discussion, one sees that the environmental criminological theories can be used to explain the homeowners’ responses. According to the study, the erection of high solid wall fences and the closing-off of the ventilation openings in some of the perimeter wall fences (Figs.7.10 and 7.11), and the closing-off of the side and back alleys (Fig. 6.23), were some of the strategies for denying or reducing the opportunities or temptations towards crime by the would-be offenders that also served to remove hideouts for the thieves and burglars. Qualifying the usefulness of the physical barriers, one respondent said this: *Fencing walls and window and door barricades have many functions. The petty thieves do not see inside the fenced compound. The things to be stolen are not seen. Walls delay the burglars, robbers and petty thieves to enter. Another reason is that walls keep or protect the privacy of the home.* (January 16, 2007).

The above assertion indicates that, seeing the object of crime is both an opportunity and temptation to the would-be offenders, the ease of entry into the home compound is also an opportunity and temptation. The side and back alleys and the many streets resulting from the short blocks was seen
and used by burglars as opportunities for escape after committing their burglary and thefts in the area.

The second theoretical concept that has been reviewed in this study is Newman’s Defensible space theory. The observed phenomenon in the study is a different kind of defensible space practice that totally eliminates surveillance possibilities, which is one of the important factors of Newman’s Defensible Space Theory. Either, the barriers are real and solid in nature that completely obscures the view through the built fabric. Also the design of the neighbourhoods do not meet the third factor of defensible space that require design considerations to influence the perception of a project, uniqueness, isolation, and stigma, and the overall image.

The study has been established that, “territorial control and boundary marking”, which is one of the parameters for defensible space is clearly in use in the studied cases. Similarly, differentiation of public and private spaces is evident. However, marked demarcations between public spaces (streets and roads) are real and no transition spaces (semi-public/private spaces) exist, except at places of shops or kiosks (Figs. 8.8 and 8.9).

The case of Ilala Kasulu appears to fit with the defensible space theory and Jacobs’ “Eyes of the Street”. Here, the transition between public, semi-public and private spaces is clear. In this case, there are clear public pedestrian streets and semi-public spaces (verandahs) before one enters into the private indoors spaces inside the houses (Figs. 9.7; 9.8, and 9.13). The public spaces are separated or marked by an adjoining wall that connect houses in the block forming a continuous wall façade facing the street. Front entrances and verandahs open directly into pedestrian pathways. Similarly, front windows open towards the pedestrian ways allowing visual communication between front facing rooms and the public pathways, thus enabling surveillance and increasing the eyes of the street.
The third and fourth explored concepts that appear relevant and linked to the study include the Crime Prevention Through Environmental/Architectural Design (CPTED) and the “Situational Crime Prevention Strategy”, which obtain their relevancy from the criminological theories discussed earlier. CPTED is based on the assumptions that: offenders commit crime when there are not many people around, where they are unlikely to be seen, and where they can easily and quickly get in and out. Secondly, crime is related to daily routines and activities in the area, such flow of traffic and pedestrians (or lack of flow) on nights and weekends. CPTED aims at reducing “opportunities” for the individuals to engage in un-wanted or criminal behaviour.

From the study, what appears unique the missing surveillance possibilities and activity support factors. Also, the social relationship among neighbours in the cases is non-existent, making the opportunities for surveillance difficult. The homeowners’ responses have been limited to reducing opportunities without the use of social guardianship. By foregoing social guardianship in residential neighbourhoods, that is, foregoing community spirit, social interaction; surveillance also is inhibited and increasing the vulnerability of the residential neighbourhood against crime.

Based on the findings from the study, it appears the defensible space theory, and the crime reduction strategies as proposed by Newman, Randall and others, have their application limited to contexts and economies where provision of housing for the urbanites and other citizens is by public housing agents, designing and planning large residential neighbourhoods and producing them in mass. The defensible space theory and the other suggested crime prevention strategies (Chapter 3) could probably be applied successfully if and when houses are designed and built as an entity. That means,
designed in a manner of housing schemes and built in one housing estate, and probably by one planning and architectural firm and for one real estate developer. It is only then that all the consideration of accesses, public spaces, semi-public spaces, private spaces and parking spaces can be made and enforced from the design stage to the construction and to the use.

Where houses in residential neighbourhoods are developed individually, without the intervention of public money or big estate companies or agents, the defensible space theory and the strategies like CPTED and Situational Crime Prevention are not likely to be achieved. One important aspect of these strategies and the defensible space is the achievement of natural surveillance and unobstructed visibility. Highly surveillable, residences afford a clear view of the property from both the house and the street, which increases security. When surveillance is difficult, increased concealment opportunities are presumed to increase the dwelling’s vulnerability to burglary.

From the findings, the homeowners’ responses only satisfy the controlling of access to persons who belong on the property and the preventing of unauthorized access to persons onto property. The strategies lack the integration of the security technology into functional design and architecture in order to allow legitimate building users to be capable guardians of houses as well as the streets in the neighbourhood. The high walls exclude the streets from the buildings, obstructing the visibility from the dwellings, prevent access for a helping hand and above all, reduce the control of streets. As a result, the streets become “no-man’s land” allowing whoever, freedom of movement (including offenders) within the streets without any monitoring and control especially at night, a situation observed in the study.

9.6. Conclusions, recommendations and areas for further research

9.6.1 Conclusion

It was at the outset considered that homeowners react to crime by erecting barriers around houses to delay or block criminal actions. Instead, the study has established that despite crimes and fear of crime, there are more reasons that make homeowners resort to erecting wall fences, barricading doors and windows and closing of back and side alleys. The study has shown that, apart from the need for protection from the thievery, burglary and home robberies, there are many other reasons for the practice. The study has indicated that disputes and conflicts between neighbours may also be some of the reasons for the erection of barrier walls simply to limit visual contacts between the concerned neighbours. Urban farming, (which involves keeping of animals or chicken in residential quarters), may cause conflicts and misunderstanding between those doing it and those not doing it. Others do the practice for privacy of the homes, and that wall fences signified or indicated progress; or to improve the value of home or simply because, if others are doing it, why not us? Also, some respondents believe and think that soft hedges are breeding places for mosquitoes and require regular
maintenance in terms of pruning as opposed to the wall fences. Another reason that has been established in the study for the erection of the perimeter wall fences is property marking to ensure no trespass occurred (which seemed necessary because of the rampant double plot allocation practices from the Ministry of Lands, Housing and Human Settlements Development and City Council which is blamed on corruption practices in the land sector). According to some respondents, this was imperative because the plot benchmarks (the beacons) defining the plot boundaries could be removed and replaced with others with different numbers or marks, rendering the original land or plot allottees helpless in identifying their boundaries to prove their claim to the land or plot.

Out of these reasons, the study has shown that, the frequently cited reason by the majority of the respondents in the three cases is security of the homes against crimes and privacy of the homes. The study has indicated that the responses include but not limited to erection of perimeter wall fences, barricading of doors and windows using burglarproof metal bars, employment of security guards or mobilisation of Sungusungu watch groups.

The study has shown that, responses by homeowners depend on many factors which include the abilities to pay for whatever action they undertook. Although soft fences initially was used to provide privacy for the homes and defined territoriality and property marking, the increase of crimes in 1970s and 1980s compelled many homeowners to replace the hedges and wire fences with hard and solid wall fences in order to deal both with privacy and protection from the crime. Either, for reasons of affordability, some homeowners simply provided simple temporary perimeter fences using makuti and fencing wire.

The study has also indicated that, although the homeowners’ responses from the three study areas appear to be different in detail, on the overall, they are similar in that they involve reducing the opportunities for crimes to occur (refer: opportunity makes the thief and “Situational Crime Prevention” in Chapter Three). Faced with increased crimes during the 1930s, residents in the Ilala settlement closed off all the back and side alleys within the blocks including some of the streets. According to this study, this helped to reduce hideouts within the blocks of houses that were used by thieves and burglars. Opportunity and temptations reduction appears have applied in all the three study cases. Again, the closing off of all the side alleys in the blocks helped to create private courtyards and defining public, semi public and private domains in Ilala. While exposing front house windows to the streets, the practice also increased the lengths of the blocks, making it easier to tail the offenders when pursued. This supports Jacobs (1961) proposition that: placing houses along the streets with windows and doors facing into streets in order to enable neighbours of houses to watch over each others’ doors, thus increasing social contact, security and safety of the streets.
From the study, it is apparent that, the levels of actual crimes in the study areas have gone down considerably. However, homeowners still erect wall fences and barricade their houses. Basing on the empirical evidence from the three cases studies, “fear of crime” is among the factors contributing to the continued erection of wall fences and barricading of houses even if the actual levels of crime are low. Either, the overall idea or concept of crime opportunity reduction appears important for every homeowner in this study.

The study also shows that, the story of crimes and their increase is historical. The respondents in the three cases told of the rising incidences of crime in the past years (1970s and 1990s). In the study we can conclude that, the fencing and barricading of houses have partly been a result of actual crimes, but largely a result of fear of the crimes. Otherwise homeowners may be doing it and will probably continue doing it because they have become accustomed to building wall fences due to fear of crime and for privacy purposes; but not necessarily because of actual crimes. Either, a feeling of incompleteness is or may always be talked about, according to the study when the houses are without perimeter fences of some kind, just as it was echoed during the study: People are erecting wall fences and barricading houses because of fear of crime, some because it has now become a culture, an Arabic culture so to say, and others for proper keeping of their animals to avoid conflict with neighbours.

Following from the above, it can be concluded that, the erection of wall fences around houses and barricading of doors and windows serve to reduce the incidences of burglary and thievery in houses, by reducing the opportunity for seeing the objects of crime and increasing the efforts required to access or break into the homes. In this way, the wall fences make the “would-be offenders” cautious of the risks involved. This may also mean that the wall fences and barricades on houses increase the efforts required to reach the objects of crime.

Another important conclusion is that: the closing off of the back and side alleys as well as the change of land use that has happened in Ilala Kasulu (from residential only to mixed land use) have brought with it diversity and increased population in the streets, thus improving natural surveillance as people journey through the streets in search of the services offered by the mix.

The study has indicated that, despite of the benefits in reducing the opportunities and temptations for those inclined to commit crime, wall fences and barricades on doors and windows have numerous adverse effects and drawbacks with respect to visual appreciation of architecture, social relations between neighbours and interaction scenarios and the management of urban concerns. It has been shown from the study that, apart from hiding the houses from view, wall fences impact on comfort conditions of the homes by cutting off air movement into the houses; they also segregate neighbours and streets, reducing streets into no man’s land. This, according to the study increases vulnerability
for those using the streets. The window and door barricades have, according to the study been confirmed to increase vulnerability in case of fire outbreaks, making it difficult to evacuate or getting help from neighbours. On the overall, experiencing architecture of the built fabric is hampered, as one is not able to see the houses unless they are above one storey high. This study affirms that, Jacobs’ idea, ‘eyes on the street’ is lost with these responses because streets are isolated from the houses, thus surveillance is not achieved.

On the urban management, for instance, collection of urban management charges (solid waste collection charges) and utility dues by the urban authorities and utility companies (like water and electricity companies), entering the home premises by urban managers for different purposes become a difficult undertaking. Utility companies have repeatedly complained of harassments particularly by people considered to be friends or family members of high-ranking government officials despite the fact that the utility companies have legal authority to enter the premises of any of their customers for official business including taking meter readings and routine maintenance of water or electricity infrastructure.

The study has established that, homeowners can use wall fences to hide illegal businesses or undertake illegal and unlicensed businesses. Cases of hiding stolen cars, operating illegal sex trade in residential neighbourhoods were some of the findings from the study. These illegal car dealing and brothels may, according to this study be hideouts for criminals and probably drug dealing places. This study sees the concept of privacy with all the arguments for it that, the same can be used to secure illegal and unapproved conducts within residential premises.

From the study, we can also conclude that, the purported increase of incidences of crime in the study areas has been a result of population increase, increased unemployment and increased poverty and disparity of income between the haves and have-nots. From the study, it is suggested that, the observed and experienced decrease of crime may largely be a result of four reasons: increased opportunities for employment; the unemployed engaging in other income generating activities; all possibilities that remain to be confirmed by other research. Or else increased efforts by the

---

*A water disconnection mission by four Dar es Salaam Water and Sewerage Corporation (Dawasco) ended on a sour note yesterday. Reports say they were held hostage and beaten by an irate customer in the city’s posh Mikocheni area. The customer reported to have been involved in the incident is said to have resisted an attempt by Dawasco staff to disconnect water at his residence, allegedly detaining them up for at least four hours before releasing them. Sources said things went wrong soon after the workers began the water disconnection at the residence (House No. 1108) at Mikocheni Bonde la Mpunga. According to the sources, the customer warmly welcomed the team to his residence but soon locked the gate, ordered them to surrender all their working tools and started beating them up (The Guardian Newspaper: pg1-2, Saturday January 19th 2008).*
government in dealing with crime and the hardening of targets of crime have made it difficult for the criminals to dislodge the objects of crime, thus causing the “would-be-offenders” to resort to other non-criminal activities in order to earn a living. It is also possible that a displacement of crime incidences from these areas to other settlements, which do not have the high walls and barricades, has occurred which also requires further research. Either, the items (objects of crime), which were in great demand at the height of crime increase in the late 1970s and 1990s, are presently available, rendering the stolen items difficult to dispose with ease. At the height of increased incidences of crime, the most sought after items (objects of crime) included: car windscreens, car stereos, TV sets, and music systems. These items are currently available in the market and at reasonable prices for those who provided the markets for the stolen items (i.e., those who were on the demand line on the “supply-demand” paradigm).

One of the findings that have also come out that, the concept of “privacy” could also be used to cover unacceptable behaviour occurring within a residential neighbourhood. Illegal actions and businesses like hiding of stolen items that may include cars, operation of brothels and drug dealing and sometimes hideouts for criminals. This was a peculiar revelation to the researcher that came out of the study of the two cases of Mikocheni B and Chang’ombe Housing Area when some of the homeowners were revealed to be carrying out activities that included receiving, modifying by repainting and changing chassis numbers of stolen cars and reselling them.

With residential crimes, particularly crimes of burglary, thievery and robbery, the study seem to confirm the saying that, “opportunity makes the thief”, and that the physical or architectural responses by homeowners and residents towards such crimes are aimed at reducing opportunities and temptations for the crimes. The responses simply hide the objects of crime from being seen by the “would-be thieves or the bad guys”. In this study, some of the responses by the homeowners are in contrast with some theories and strategies, which have been recommended by researchers from the developed world (in particular the Newman’s defensible space theory). The study has indicated that the actions and responses by the homeowners seem to fit well with the environmental criminological theories that have their route in the three perspectives: opportunity makes the thief, rational choice, and routine activity perspective. The responses also seem to be in line with the “situational crime prevention strategies”. From this study, the responses differ with some known strategies in that, they offer no surveillance possibilities and hinder or limit social interaction between the residents, factors that are vital for defensible space and CPTED concepts.

Basing on the findings of this study, one can see architecture, planning, urban design, and urban management in residential neighbourhoods using the window of criminology and criminological theories. On the basis of the foresaid, the study sees the impacts of the responses and their
implications to the built environment as challenges to architecture, urban planning and design and or urban management professionals. The study also highlights to architects, urban planners/designers that, residential crimes (burglary, thefts and home robberies) can influence the plan and design of residential neighbourhoods in the context of Tanzania and other developing countries. As shown in the study, when houses are designed and built higher than single storey, users can observe what is happening on the streets as well as at the neighbours on ground floor, which increases the eyes on the street. Neighbourhood planning and design, in which social interests are considered and put in place to enhance interaction possibilities despite the wall fences and barricades is necessary.

9.6.2 Recommendations for urban architecture, urban design and urban management

The study have shown that there are many reasons that have made homeowners in the three cases go along erecting perimeter fences and barricading their houses. Alongside a perceived rise in the incidences of crime and the perceived inability of the state and its security organs to protect citizens in the residential neighbourhoods, many of the respondents in all the areas studied strongly maintain that, they barricaded and fenced their houses mainly due to fear of crimes (burglary, thievery and robberies); crimes that were prevalent between 1970s and 1990s, the situation that the state was not capable to contain.

The other reason that runs second in importance was a need for enhancing privacy of the homes since privacy makes the objects of crime not to be easily seen by the would-be-offenders (criminals). There are many other reasons that were given during the study. However, what was apparent though is that “fear of crime” has come to inflict more on the residents and homeowners than the crime itself. This leads to a situation in which homeowners and residents in the study areas understand that erecting wall fences and barricading of the houses are means towards assuring security. As such, the phenomenon of perimeter fencing and barricading is now presumed to be there to stay, even though the social impacts and their implication to the urban built form and fabric and the environment in general are considered negative.

The inability of the state organs to provide security in residential areas coupled with the organs’ inability to oversee, supervise and monitor the erection of the perimeter fencing walls is understood to have given more confidence among homeowners and residents to react to the situation in whatever way they wished. Given this understanding, the researcher sees the phenomenon of erecting perimeter fences and barricading of the houses is according to the findings likely to continue, and as such, he sees it as an element or building layer in the urban built environment that is to be accepted and moderated by planning and architectural design. In this regard, the researcher recommends a number of architectural, planning and urban management issues that have to be considered and
incorporated in the overall planning and management of the urban arena particularly in residential neighbourhoods.

**Holistic approach to architectural and urban design**

The findings from the study indicate that wall fencing of homes is becoming a common practice. Whether the fences are used for privacy, security or whatever reason, the fact is: they will continue to be used to enclose homes notwithstanding their impacts and implications to the built environment and the built fabric in general. In order to mitigate the impacts and implications of the fences to the built environment and the social impacts to the dwellers in the residential neighbourhoods, architects, planners and urban managers are advised to consider and take on board the wall fencing phenomenon, considering and accepting the fences as additional layers or building elements that have influence on the overall appearance of the urban environment.

A holistic approach to the design of houses with the fences that enclose them is recommended, using the needs of the individual homebuilders or developers as challenges for achieving an overall built fabric and environment that satisfies a myriad of requirements for security, privacy and social interactions among the residents in the neighbourhoods. This means that whenever undertaking any planning of residential areas or neighbourhoods, the design of the perimeter fencing walls should also be considered together with the design of the houses. By so doing, architects and planners are then able to foresee how and what the end product of the overall built environments are to be at the end. For the urban managers, a requirement needing architects to submit drawings of houses including the fences in the application for building permits is an essential ingredient in ensuring a satisfying built environment.

**Residential neighbourhood planning**

Urban designers argue and recommend that, the most attractive neighbourhoods are those which offer in addition to houses a range of work, service, shopping, educational and leisure opportunities. With quality in the public realm, they help to create a focus for the local community and shape a sense of place. The experience from Ilala Kasulu is in conformity with or matches the urban designers’ arguments. This is however only possible if houses and residential neighbourhoods are planned, designed and built as an entity or one estate.

Learning from the experience of Ilala Kasulu, an area which has changed from being a pure residential land-use area to a mixed land-use area, it is recommended that the design and planning of residential areas and neighbourhoods have to take on board the concept of mixed land use. Residential neighbourhoods have to be conceived, planned and designed to include other land uses and facilities that are needed to support the living within the neighbourhood. This means that other
uses like commercial, recreational, institutional and cultural uses (open public spaces and playgrounds), have to be included in the plan. This is expected to increase people in using the streets, thereby increasing the eyes of the streets and consequently improved natural surveillance for security of the neighbourhoods.

**Creating coherence with flexibility**

An approach that can help deliver a coherent spatial residential structure in new larger developments is variation of perimeter block design. They can accommodate a range of land uses, building types, densities, or open space, making successful connections between adjacent areas. Perimeter blocks design help to make a clear distinction between public fronts and private backs. These are further reinforced when primary access to development is from the street.

**Layout of streets and houses on the plots along streets**

Street patterns and layouts should adopt the use of layouts that group houses around public facilities/spaces. Where gridiron layouts of road and street are used, long housing blocks with private spaces for the use by residents within the block have to be used. The long blocks are meant to reduce permeability that increases movement routes within the residential neighbourhood, which in turn may create opportunities for escaping criminals. Hillier (2004: 44-45) advises to: join buildings together, avoiding any kind of secondary access, make sure that all public spaces are continuously constituted by dwelling entrances and maximize the intervisibility of these entrances by linear rather than a broken-up layout. Both streets and cul-de-sacs should be: a) reasonably well integrated (adding a simple linear cul-de-sac to a through street does not increase integration – in fact, it increases integration value of the street, and b) designed in a doubly constituted linear form. All cul-de-sacs should be on simple lines linking the visually through routes, and they should not form hierarchical complexes segregated from the main local circulation system.

The study has also shown that, short housing blocks create too many routes within the residential neighbourhood, thus making it too permeable. This permeability of the neighbourhood is easy to travel and escape when and in case of burglars and robbers whenever being pursued. In this, and according to Hillier (2004), reasonably regular street layouts with fairly large building blocks (to structure movement and reduce unnecessary permeability) are best, provided the ‘flip-over effect’ is avoided by the local spatial detail. If such a layout is interspersed with simple linear cul-de-sacs directly attached to the through street, then the cul-de-sacs may well be the most secure parts of the layout – but only if the street is there in the first place to keep the cul-de-sacs simple and linear.

It is recommended that houses on plots have to be placed in such a way that they face the streets and close to the pedestrian passages or pathways ensuring that the transition from the public streets,
semi-public space and the private house interior are clear. This enables house entrances to be easily overseen by neighbouring and fronting houses for ease of surveillance by neighbours, in case an unfamiliar face is spotted on the door of an absent neighbour. As a general rule, houses’ frontages should address or offer informal supervision to the streets, open spaces, and walkways along the streets. Again, Hillier advocated this by saying: \textit{When integrated streets are continuously constituted with ‘joined-up’ buildings or houses on both sides, reasonably linear to give good intervisibility of the front entrances, and having no secondary access in the form of side or back alleys or exposure to other public space such as parks or car parks, then integrated street tend to be fairly safe. However, when the integrated street does have these ‘local’ (side and back alleys) vulnerability factors then it can become more vulnerable than other types of space} (Hillier, 2004: 37-38).

\textbf{Building regulations and building inspection process}

From the study, it has been established that the regulations (Township (Rules) Cap 101 of 1931) that were in use to regulate and supervise the building process in the city of Dar es Salaam was repealed in 2004. It was also revealed that since that time, no other regulations have been put in place to regulate the process. Understandably, this has left the Municipal Authorities without any tools to use in the control of building development including the construction of fencing walls. Without such regulations, the interests of the public in residential neighbourhoods are not easy to achieve. It is recommended therefore that, it is important and urgent that new regulations are enacted. Appropriate regulations for use in monitoring building and construction of houses including fencing walls need to be put in place urgently. The regulations have also to be flexible and practical in terms of easy use allowing many possibilities, which may be proposed by users and homeowners alike. The regulations have to take into consideration the fences around homes in residential neighbourhoods as another building element that shapes the urban built fabric particularly in residential neighbourhoods; and that, perimeter fences have to be designed to satisfy security, privacy and environmental comfort considerations (e.g., air movement and visual perceptions and surveillance possibilities) and the architectural look.

Regulations for the control of the building and construction process in the urban arena are important when the management of the urban environment is considered. There has to be someone in authority who is tasked and mandated to oversee whatever everybody is doing in the residential building sector for the interest of everyone and the public in the neighbourhoods. Without such regulations, the concept of the “animal farm” would crop in, where only the fittest survive the storm. When enacted the regulations have to be observed by homeowner in the city and the city authorities have to enforce and control both housing and the fencing wall construction specifications as per the permitted designs.
The study has also shown that the city’s and municipal authorities’ capacity to supervise the building process within their areas of jurisdiction is inadequate to meet the pace of homebuilders. Although the investigation into the level of training acquired by the building inspectors was not a task of this research, it appears though that, apart from being very few in number, their levels of training is also questionable\(^7\). Therefore the need to have many and qualified building inspectors cannot be over-emphasised. Inspection and control of the building process in residential neighbourhoods have indicated an awful weakness. With the notable level of corruption in the building sector, many construction activities appear to be going on without the required supervision and approvals. Having witnessed two multi-storey buildings collapsing in Dar es Salaam in a span of two years (the first one in 2006 and the second one in 2008), it is high time that the inspectorate section in local authorities must be given its due consideration and respect, so that it is given the relevant manpower that is qualified to take their roles effectively and in accordance with the regulations that will be put in place.

9.6.3 Areas for further research

This study on homeowners’ responses to crimes: its implications to architecture, urban planning and design, and urban management, was limited to formally planned areas of Mikocheni B, Ilala Kasulu and Chang’ombe Housing Area. The results of the study suggest that, many things are at play when in residential areas which motivate homeowners to modify their built environments. This therefore calls for more research in the field using different cases. The following section provides further areas of research in the subject, which may bring out more knowledge on the issues at play.

**Crime and fear of crime in informal settlements: How do the residents and or homeowners’ respond?**

The issue of crime and the prevention strategies are issues that affect all sectors of the built environments. Whether the areas are planned or not, people are affected by crimes and the fear of it. Different people from different economic and social statuses usually respond to crime differently. This study has looked into the issue of crime and the responses by homeowners living in planned or formal areas, where one expects that the organs of the state that deal with ensuring security and safety are present. In the unplanned or informal residential settlements, the organs of the state dealing

---

\(^7\) This is in reference to the collapse of a 10-storey building in the City Centre in June 21, 2008 due to poor construction and use of inferior building materials. It was noted by the investigating team (a team formed by the regional Commissioner to investigate into the causes that led to the collapse of the building), although there was evidence that supervision by the city building inspectors was provided, the materials used was so poor to withstand the loading of such tall building. However, the building inspector had signed and approved all the stages of construction from the foundation level, and now the building was in its finishing stage.
with ensuring security rarely operate. The issue of the security in these areas is usually left in the
domain of the residents themselves.

Studying crime and fear of it in informal settlements may bring about different perspectives and
understanding which may be a feedback for formal planning and management of the urban arena. Is
there anything to learn from the informal residential areas regarding the people’s built responses or
otherwise, to crimes and fear of crime? How do residents and homeowners in these areas deal with
the issue of crime? Can social capital be used as a response to crime? These may be some of the
questions which could be answered by doing a similar study in the informal residential settlements the
results of which can be a feedback and input to formal urban planning and design; and urban
management, of which future research is recommended.

**Does defensible space theory work in gated communities?**

Large housing estates that are planned, designed and built to accommodate large number of dwellers
are not common in Tanzania. What is called Gated Communities in the developed world are housing
schemes that architects, planners and urban managers read about in books as possible mass housing
schemes which takes into consideration of crime in their development. From literature, they are
housing schemes in which the affluent opt to settle and own homes because of their security
consolidations.

In Tanzania the experience with mass housing of the nature of gated communities is limited to staff
housing that were built when Tanzania had many parastatal organizations employing a big number of
staff. The demise of these public parastatal organization followed by privatization of the same has left
very few of such housing estates in the hands of public ownership status. Such remaining housing
estates include BOT Staff Housing in Mbezi Beach, the University of Dar es Salaam Staff Housing
and NASACO Housing Estates in Mtoni Kijichi to mention a few. It may be of interest and
importance to carry out a study in such housing estates in order to understand how planning of the
estates have incorporated in the plans the concept of security. Can these housing estates serve to
illuminate what gated communities offer in terms of security of their occupants? By studying these
housing schemes, one can evaluate how they really engage the concept and theory of defensible
space. This again can feed back and inform urban planning policy, urban design, architecture and
urban management.
References


Case Study Research in Educational Settings. Open University Press, Celtic Court, 22 Ballmoor, Buckingham MK 18 1XW

Blakely, E. J. & Snyder, M. G. (1997a)
Divided We Fall. Gated and Walled Communities in the United States, in Architecture of Fear, Edited by Nan Ellin (1997), Princeton Architectural Press

Blakely, E. J. & Snyder, M. G. (1997b)


Dar es Salaam position as a hub of Tanzania’s Socio-economic, cultural, and political life, Tanzania Mkuki na Nyota Publishers.


“Brothers by day”. Colonial policing in Dar es Salaam under the British Rule, 1919-61. Urban History, 30 1 (2003), Cambridge University Press, Printed in UK


Clarke, R. V. 1980.
Design out Crime. London: HMSO

Crime as opportunity: a note on domestic gas suicide in Britain and the Netherlands.
British Journal of Criminology. Vol. 29, pg 35-46


Designing and Conducting Mixed Methods Research; Sage Publications, Thousand Oaks, California 91320


Dar es Salaam City Council (2004):
Dar es Salaam City Profile. A Document prepared by the Dar es Salaam City Council, 2004


The Links Between Crime Prevention and Sustainable Development; in Open House International Vol. 24 No. 1.

Knowledge creation and transfer in construction organizations in Tanzania; Doctoral Thesis, Building and Real Estate Economics, Sweden


Making Social Science Matter, Why social inquiry fails and how it can succeed again; Cambridge University Press


Crime Prevention Theory and Practice. Australian Institute of Criminology

Designing out crime: Crime prevention through environmental design. Canberra, Australia: Australian Institute of Criminology


Implications of landed and tied-up capital on urban development: the unfinished and unoccupied buildings of Dar – Es - Salaam in Tanzania. Habitat International Volume 28 Issue 3 Pg 369-383


*Illiffe, J. (1979)

Jacobs J.(1961)

Theory of Science and Research Methodology. Unpublished Lecture Notes, Department of Infrastructure, Built Environment Analysis, Royal Institute of Technology, Stockholm Sweden.
Types of Generalization from a Single Case. Special Issue 18th IAPS-Confere. Vienna, 2004/220

On Case Study Methodology. Open House International, Nr. 3


Methodology of Research in Social Sciences; Published by Mrs. Meena Pandey, for Himalaya Publishing House, Mumbai

Informal Land Management in Tanzania. Spring Research Series; Spring Centre, Faculty of Spatial Planning, University of Dortmund, Germany, Department of Planning and University of Science & Technology – Kumasi, Ghana, School of Urban and regional Planning SURP and University of the Philippines

Formal and Informal Land Management in Tanzania: The Case of Dar es Salaam City. SPRING Research Series Vol. 13, Dortmund

Kvale, S. (1996):

Wells Fargo Home Mortgage & Washington College in St. Louis (michael.lacour-little@wellsfargo.com; and Department of Real Estate and Urban Land Economics, University of Wisconsin – Madison; smalpezzi@bus.wisc.edu

Urban Fortresses; Gated Communities as a reaction to Crime, African Security Review, Vol. 11, pg 71-85


Planning at End of the River. Land and Water Use Management in Chekereni Moshi District – Tanzania, Unpublished Doctoral Thesis 1996, Royal Academy of Fine Arts, School of Architecture, Copenhagen, Denmark

Results of a City Victim Survey; in “Crimes in Dar Es Salaam”, African Security Review Volume 10 No. 1. Also available on the net: http://www.iss.co.za/Pubs/ASR/10No.1/Louw

Victims' Surveys as a Basis for City Safety Strategies. African Security Review Volume 10 No. 1. Also available on the net: http://www.iss.co.za/Pubs/ASR/10No.1/Louw


Maliyamkono, T. L & Bagachwa (1990):

Crime as opportunity (Home Office Research Study No. 49). London: H.M.S.O.


Urban Violence and Insecurity: An Introductory Roadmap, Environment and Urbanization 2003; Vol. 16, 2. Pg 3-16

10-storey Dar building comes tumbling down: High-rise building collapses in Dar es Salaam (One person still missing; Sinking sensed early). The Guardian Newspaper (Tanzania), ISSN 1821-6196, Issue No. 0056, IPP Media Group Ltd.

Target Hardening and urban security in the third world: A study in Nigeria. Department of Urban and Regional Planning, Federal University of Technology, Akure, Nigeria.


220


Samwel, N. and Mkonya, J. (Saturday January 19th 2008).  
*Water Disconnection staff get a hard time.* The Guardian Newspaper (Tanzania), ISSN 0856-5422, Issue No. 4100, IPP Media Group Ltd.  
IPP Media Group Ltd.

*Planning for crime prevention. A TransAtlantic Perspective.* Routledge, 11 New Fetter Lane, London ECAP 4EE.


UK LAW ONLINE (1997).  
Are the cameras to blame??? Princess Diana’s Death Privacy Laws and Press Freedom in the United Kingdom, http://www.leeds.ac.uk/law/hamlyn/


URT (2007).  


URT (1931).  
The Township (Building) Rules CAP 101

Social Life and Dwelling Space. An analysis of three house types in Dar es Salaam. Department of Building Function Analysis, University of Lund, College of Architecture, Report No.2, 1975


APPENDICES
Appendix I: Research Permit for Mikocheni B
Appendix II: Research Permit for Ilala Kasulu

HALMASHAURI YA MANISPAA YA ILALA
BARUA ZOTE ZIPELIKWE KWA MKURUGENZI WA MANISPAA

OFISI YA MKURUGENZI MANISPAA YA ILALA.

Afisa Mtendaji Kata,
Kata ya Ilala.

YAH: UTAMBULISHO WA NDUGU BULAMILE L.B.
Tafadhali rejea somo la barua hili.
Mtajwa hapo juu ni mwanachuo wa masomo ya Falsafa. Anafanya
utafti wa kukamilisha masomo. Anatafiti namna upangaji/ubunifu wa
Miji na Mazingira unavyowaza kusaidia katika kuzula matukio ya uhalifu
katika mazazi.
Tafadhali mpeni msaada wa kutosha wa kumpia taarifa
anaozihitaji.

P.J. Mbembele
Kny: MKURUGENZI WA MANISPAA ILALA

5
Appendix III: Research Permit for Chang’ombe Housing Area
### Appendix IV: Instrumentalization of the research objectives and questions

<table>
<thead>
<tr>
<th>No</th>
<th>Objective</th>
<th>Research question</th>
<th>Variables</th>
<th>Source of data</th>
<th>Method/technique</th>
<th>Expected input</th>
<th>Expected result</th>
</tr>
</thead>
</table>
| 1  | To explore how urban residents react and respond to crime and fear of crime (burglary and home robberies) | 1. What measures do urban residents undertake to fend of crime in their dwellings? | - plant hedges  
- wall fences  
- burglar proofs  
- guard/security dogs  
- employing guards  
- Sungusungu  
- stay indoor  
- magic/ charms  
- fire arms  
- flood lights  
- search lights | - homeowners  
- residents  
- literature  
- physical environment | - literature review  
- interview  
- mapping/sketching  
- Photographing  
- Measuring  
- observation | - interviewers  
- layout plans  
- sketch books  
- camera  
- tape measure  
- questionnaire | - various measures (architectural or construction measures)? |
|     | 2. Why do urban residents build barricades on and around their dwellings? | - privacy  
- others do it  
- security, theft  
- prevent burglary  
- securing dogs  
- boundary  
- assert territoriality | - homeowners  
- tenants  
- literature  
- residents | - open ended interviews  
- focussed group discussion | - notebook  
- tape recorder  
- interviewers  
- tape recorder  
- questionnaire | - reasons for the barricades?  
- benefits of barricading?  
- problems of barricading? |
|     | 3. Is there, a relationship between these barricading and wall fencing and the increase of crime and the fear of it? | - yes  
- no (the guess may be so) | - homeowner  
- tenants  
- literature  
- residents | - interview  
- observation  
- literature review | - notebook  
- tape recorder  
- interviewers  
- tape recorder  
- questionnaire | - yes?  
- no? (the guess may be so) |
|     | 4. What is the typology of these architectural responses? | - plant hedges  
- masonry fences  
- wire fences  
- combination of plant and wire fences | - dwellings in the study areas and their fences | - photography  
- observation  
- measurement | - camera  
- tape measure  
- notebook | - types in terms of materials used,  
- types in terms of form (ventilated or solid) |
|   | To examine the outcomes of the responses to the physical make-up of the built environment and social relations between residents from within the gated dwellings and those outside in terms of social interactions and community spirit:  
A). Examine the built environment (quality of architecture),  
|   |   | 2. How do these architectural responses affect the behaviour of the residents (those in the barricades and those outside)? | - relations  - fear  - worries  - suspicion  - them versus us  - trust | - homeowner  - tenants  - residents  - literature  - street users | - interviews  - literature review | - interviewers  - tape recorder  - notebook | - surveillance?  - social interaction?  - no social interaction?  - segregation?  - security/safety? |
|   |   | 3. How do the residents related to each other: perceive or understand one another within their gated dwellings as the neighbours? | - relations  - fear of others  - worries  - suspicion  - them vs us trust | - homeowner  - tenants  - residents  - literature  - street users | - interviews  - literature review | - interviewers  - tape recorder  - notebook | - social relations?  - themselves versus us? |
|   | 3. to establish the impact and implications of the responses for urban architecture, urban design and urban management practice | What do these phenomena tell or inform those in the architectural, urban planning and management professions? | - building regulations  - crime prevention theory  - environmental criminology theory (back to theory and practice) | - literature review  - police  - municipal experts  - architects  - urban managers  - the study and its results | - interviews  - literature review  - reflections on the findings and lessons that can be learnt,  - focussed group | - Balance (public-private responsibility),  - security & safety in residential areas and good architecture,  - recommendations for planning and management,  - issues for further research |
Appendix V: Interview Guide

HOMEOWNERS’ ARCHITECTURAL RESPONSES TO CRIME: its impacts and implications to urban architecture, urban planning and management theories and practices. The case of Dar es Salaam.

INTERVIEW GUIDE

<table>
<thead>
<tr>
<th>Date</th>
</tr>
</thead>
</table>

Introduction

This is an interview guide for a PhD research project titled: “Homeowners’ physical (architectural) responses to crime in Dar es Salaam Tanzania: its implications to urban architecture, urban planning and management theories and practices”. This study is being undertaken in joint collaboration between UCLAS and the Royal Institute of Technology in Stockholm Sweden. It is hoped that the completion of this research will help to bring about built environments in residential neighbourhoods that are safe and secure from crimes and appropriate in terms of architecture, urban planning and management.

Dar es Salaam, which enjoyed peace and tranquillity in regards to crime and fear of it in the 1960s until the 1980s has seen an increase in crime. A study carried out in Dar es Salaam in 2000, shows that the situation has changed and crime has been increasing. “… between 1990 and 1995, a total of 573,668 crime incidents were reported to the police in Dar es Salaam. In 1995 alone, 126,401 crimes were reported to the police – the highest for the period. Accordingly, “about 43% of the people interviewed in the study stated that they had been victims of burglary between 1995 and 2000, while 32% said they had been mugged with about 61% saying they felt unsafe in their homes at dark” (Robertshaw, et al 2001). Between January and April 2006, there have been many incidences of armed robberies in Dar es Salaam that were directed to financial institutions. In these incidences, money and lives were lost (Alasiri, July 27, 2006).

The objective of this interview guide is to guide the interviewer on the issues to explore while conducting the interview. There are many actions that are taken by homeowners as responses to crime of burglary in residential dwellings in urban areas. Some of the actions are physical (architectural) and some are not physical. Our interest in this research is on the physical responses that are taken by homeowners as responses to crimes specifically of burglary and home robberies. We also want to understand the implications of the responses to the built form and what the implications inform (or tell) us about architecture of the built form, residential neighbourhood planning and urban land management in Tanzania? Can the findings of the research inform the architects, planners and the urban managers?

Personal Particulars:

Name of Interviewer:………………………………………………………..
Study Area Name:.........................................................Plot No. .................
Particulars of the Plot: ........................................................................
Particulars of the House: ....................................................................
Date of Interview:.............................................................................
Name of Homeowner/Tenant:.............................................................
Education Status of (Homeowner/Tenant)..............................................

Homeowner’s resume
Do you own this dwelling?
How long have you lived in this area?
Where did you live before you moved here?
What are the reasons that made you leave that area and move here?
What do you like of this area?
For the time you have lived in Dar es Salaam, what is the worrying think when it dawns?

Main Questions:
Can you tell me how your fencing walls and barricades (metal grills) to doors and windows came about or occurred to your house? Can you. ALSO tell me or describe to me the types of crimes you have experienced since you moved in this area? (The best way to describe or explain this is to tell when it happened, how it happened, where it happened, and why it happened, who were involved and how it was received by the three neighbours).

PROBING QUESTIONS/GUIDES
Understanding crime and the fear from it
How do you understand/ perceive crime in this areas? (Big problem, minor problem, no feeling of it at all)
Understand as a big problem?
Understand it as a small problem?
Understand it as not a problem at all?
Have you, in living in Dar es Salaam been a victim of crime (e.g. Burglary, robbery, mugging and the like)? When and where did it happen?

Measures taken against crime and fear of crime:
What do / have you done to fend off crime and the fear of it at your dwelling? (List the actions taken by homeowners against crime and fear of crime at dwellings)
What do / have you done to fend off crime and the fear of it at your neighbourhood? (List the actions taken by homeowners against crime and fear of crime at dwellings)
Do you plan to take any further action to fend off crime?
How do you secure your dwellings against crime and fear of crime?
After the actions you have taken, do you and your family members now feel more safe and secure than before the actions? Or do you still feel the same?
Have you considered the escapes in your barricades in case of fire accidents?

Why barricades and fences?
Why did you barricade (metal grills, metal gates, etc.) your dwelling? (List the reasons)
What reasons can you give that led to the construction of fence around your dwelling?
Which of these are the most important reasons for the barricades and the construction of the fence?
Why did you spend so much money to build a fence around your dwelling?
Did you apply for a permit to build the fence? If so, what were the conditions that accompanied the permit? (in terms of height, materials, setbacks and the like).
Was the fence approved after its construction?

Relationship between barricading and fencing process with crime increase and fear of crime
Do you think crime in Dar es Salaam has increased lately?
What makes you think crime has increased lately?
Do you think there is a connection between the actions you take in barricading and the increase of crime and fear of it?

On quality of the built environment and architecture in the neighbourhood
How do you experience the built fabric (i.e., the streets, the houses, the fences, etc) of the neighbourhood?
Do you like walking around in this neighbourhood?
Do you like the architecture (i.e., the fences, houses) you see around when walking in the neighbourhood?
How do you feel when walking in the streets of this neighbourhood, especially at night?
After building your fence around the dwelling, are there any problems that you have experienced which may be a result of the fence? (List them)
How have you dealt with these problems?
Do the neighbours experience the same?

After every one has fences around his/her dwelling: the relationship between neighbours
Do you relate normally after each homeowner in the neighbourhood has a fence around his / her dwelling?
Do you have anything in common as neighbours? (e.g., do you discuss issues of security, safety, environment, drainage, water supply, etc)?
Do you know your neighbours around your dwelling?
Do you meet with your neighbours to discuss issues of the neighbourhood?
Do your neighbours come to you when in need?
Do you go to your neighbours when in need?
Do your children play with other children from the neighbourhood?
Appendix VI: Findings from the Case Study Areas of Mikocheni B, Ilala Kasulu and Chang’ombe

Table No. 1: Summary of the main findings from Mikocheni B: Case 1

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Particulars of the dwellings and its environs</th>
<th>Understanding crime and fear of it</th>
<th>Measures taken against crimes and fear of it</th>
<th>Why the barricades and the wall fences</th>
<th>Relationship between barricading and fencing processes with crime and fear of it</th>
<th>Quality of the built environment and architecture in the neighbourhood/area</th>
<th>Relationship between neighbours in the neighbourhood/area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms Nurat Abdallah Ree (Family home)</td>
<td>A single storey dwelling, with tiled roof. Masonry construction, glazed windows, doors and windows grilled. The dwelling is surrounded by wall fence that is half topped with sharp metal grills (Family dwelling)</td>
<td>We understand that crimes are a big problem in the city and we have experienced it in our home. Types of crime: Petty theft (2002)</td>
<td>Mwanzo tulikuwa na ukuta, lakini harukuwa na grills kwenye milango na madirisha. Jirani zetu ambao hawakuwa na kuta wakikuwa wananingiwa kila mara. Hii ilitutia wasiwasi. Hivyo: Takaamua kweka grills milangoni na madirishani, Tunahakikisha kuna mtu nyumbani wakati wote, Tunashiriki ulinzi wa sungu sungu.</td>
<td>We built the fence because we wanted privacy. Kusitiri nyumba na kuzuia wezi. The barricades and fences are important for protection against burglary and thefts. The fences are for security and privacy. We did not apply for the permit, neither was it approved after erection.</td>
<td>Yes, there is a relationship. But many people like privacy. Even without crimes, people will build fences. There is no direct relationship A fence is important even without crimes. For the privacy of the home.</td>
<td>It is good (Ni nzuri tu) Feeling of quietness. No problem when walking in the streets of the area. We get airflow because our fence is a ventilated wall fence.</td>
<td>Yes, we relate normally. We do not have anything in common as neighbours. We meet only when the local ward leaders call us. We do not meet with our neighbours to discuss issues of neighbourhood unless the local ward leaders call the meeting.</td>
</tr>
<tr>
<td>Incidences: several thefts</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Alban Rupilya (Owner)</td>
<td>A single storey dwelling, flat concrete roof. Masonry construction, grilled and glazed windows. Doors are also grilled. The dwelling is surrounded by wall fence that is half topped with sharp metal grills (Family dwelling)</td>
<td>We understand that crime was a big problem before, but now it is no longer a big problem. The worrying thing at night is <em>Hali ya usalamu</em> (security issue)</td>
<td>Tumukuta kuna system ya ulinzi wa sungu sungu an tunalipia kilila mwezi TZS 3000 kwa mwezi. Pia tuna mlinzi wa kwetu. Ukuta unasaidia kuthibiti eneo letu ili mlinzi aweze kulimiliki sawa sawa. Ukuta pia unasaidia kuzuia maji yanayoitiika barabarani.</td>
<td>We built the fence because there was a wave of criminal activities in Mikocheni in the 1980s. The reason for the barricades and wall fences: crimes, burglary and privacy (Usalam na kujisitiri) We applied for the building permit for the wall and it was approved afterwards.</td>
<td>Yes, crimes have increased in Dar es Salaam. The incidences being reported are many. This started after 1971. Before then people were not many in the city. People increase thereafter without increase of jobs.</td>
<td>Not very good. I do not really like walking around in the area. There is no system of rain surface water collection, water supply not good and there is poor drainage system of rainwater. When walking in the streets, I feel worried. The streets look fearful and very lonely or very empty without people. So I feel lonely, insecure</td>
<td>Yes, we relate normally, but we have nothing in common as neighbours. Of course I know all my neighbours, but we do not meet to discuss common issues. We visit each other of course if in need.</td>
</tr>
<tr>
<td>Incidences: 3 burglaries</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Hendi Joseph Msuya (Owner)</td>
<td>A single storey dwelling, iron sheet pitched roof. Masonry construction grilled and glazed windows. Doors are also grilled. The dwelling is surrounded by wall fence. The front wall is ventilated with holes (Family dwelling)</td>
<td>I understand that crime was a big problem before, but now it is no longer a big problem. But fear of crime is now higher than crime itself. (uwoga ni mkubwa kuliko uharifu wenyewe). The worrying thing at night is: Majambazi na wakabaji (Robbers and muggers)</td>
<td>I built the fence because of fear of burglary and other crimes like robberies and mugging. I did not do this because of fashion or because others have done it. This was out of necessity. The reason for the barricades and wall fences: crimes, burglary and privacy. Sexuality and privacy of the home is important. (Usalam na kujisitiri)</td>
<td>Kuna uhusiano wa uwoga wa uharifu (there is a relationship with fear of crime and not the crime itself). Incidences of burglary have increased. Tunasikia kwenye radio na tunaona kwenye TV na magazeti. Pia kuna uhusiano kati ya uwoga huu na hatua ambazo watu wanachukua kujilinda.</td>
<td>Haleti picha nzuri kwa sababu ya kuta (Does not give a good picture because of the walls). I feel worried when walking in the streets. I feel fear. The streets look fearful and very lonely or empty. Ifeelonely, insecure and fearful. The walls block the water flow, also block air movement. The streets flood in rain seasons.</td>
<td>Not normal. Mawasiliano ni shida (Communication is a problem between neighbours). Sungu sungu is our common issue as neighbours. I know all my neighbours, but we do not meet to discuss common issues. We do not visit each other often only if in need (wakati wa dharura).</td>
<td></td>
</tr>
</tbody>
</table>
### Incidences: Burglary

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Incidences</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Khalid S. Mtwangi</td>
<td>A single storey</td>
<td>1 burglary</td>
<td>A single storey dwelling, iron sheet pitched roof. Masonry construction, grilled and glazed windows. Doors are also grilled. The dwelling is surrounded by a ventilated wall fence topped with sharp iron spikes and a small portion of michongoma plant hedge. Ni tatizo kubwa lakini kwenye makazi ya watu limepungua Before it was a problem, but now it is no longer a big problem. Hata kwetu iliishatoka mwaka 1992. Talivunjija na kubwa vitu vingi. The worrying thing at night: Security / usalama wa watu na mali (security and safety of persons and properties).</td>
</tr>
<tr>
<td>Mr. Luambano Mohammed</td>
<td>A single storey</td>
<td>2 burglaries</td>
<td>A single storey dwelling, iron sheet pitched roof. Masonry construction, grilled with mosquito gauze on windows. No grills on doors. The dwelling is surrounded by a wall fence which is ventilated at the top. Ni tatizo kubwa lakini hapa Mikoheni kwa sasa siyo tatizo kubwa. Hata kwangu iliishatoka mara mbili mwaka 1979. Nilibiwa radio 3 na pistol. The worrying thing at night: Wadekoku au vibaka.</td>
</tr>
</tbody>
</table>

### Security

- **Baada ya kuvunjwa, tuliongezea iron spikes juu ya ukuta, tukaweka taa (security lights), na tukaanzisha ulinzi wa Sungusuungu.** This helps to some extent, about 50%. We feel ok now.
- **Wall fence and burglar proofing. All these for security and privacy of the home (usalama na kusitiri nyumba).** Hatukuomba kibali cha ujenzi wa ukuta. Yes. The incidences have increased. Because of unemployment. Because increased number of people in Dar es Salaam. It is possible there is a relationship. People are afraid of these crimes. Yes. The incidences have increased. Because of unemployment. Because increased number of people in Dar es Salaam. It is possible there is a relationship. People are afraid of these crimes. Very ugly (haipendezi). Napenda lakini siisikii vizuri kwa sababu ya kuta. You feel unwanted in the area. Do not like the architecture. I feel fearful and unsafe. No air movement in the house, no space for 2 cars to pass, flooding in the streets and in the compounds. With no solution so far.

### Dwelling Description

- **The dwelling is ventilated at the wall fence which is surrounded by a ventilated wall fence topped with sharp iron spikes and a small portion of michongoma plant hedge.**
- **A single stokey dwelling, iron sheet pitched roof. Masonry construction, grilled and glazed windows. Doors are also grilled. The dwelling is surrounded by a ventilated wall fence topped with sharp iron spikes and a small portion with michongoma Plant hedge.**
- **A single storey dwelling, iron sheet pitched roof. Masonry construction, grilled with mosquito gauze on windows. No grills on doors. The dwelling is surrounded by a wall fence which is ventilated at the top.**

### Safety

- **Security**
- **Usalama wa watu na mali (security and safety of persons and properties).**
- **Kwa sasa uharifu haviwa. Hata kwenye vyema. Wapendeja na kusitiri kwa sababu ya kujenga ukuta.**
- **Umongezeka. Sasa ni uharifu hasa, watu wanaa wazungu. Hukuto la ujumla ukawa ni uchafu tu.**

### Other Details

- **People are afraid of these crimes.**
- **Very ugly (haipendezi). Napenda lakini siisikii vizuri kwa sababu ya kuta. You feel unwanted in the area. Do not like the architecture. I feel fearful and unsafe. No air movement in the house, no space for 2 cars to pass, flooding in the streets and in the compounds. With no solution so far.**

### Conclusion

- **Hatukuomba kibali cha ujenzi wa kukuwa.**
- **Nina silaha yangu na ukuta mrefu.  Pia ninajilinda. Halafu ninajilinda.**
- **Hata kwenye vyema. Wapendeja na kusitiri kwa sababu ya kujenga ukuta.**
- **Umongezeka. Sasa ni uharifu hasa, watu wanaa wazungu. Hukuto la ujumla ukawa ni uchafu tu.**

### Note

- **Hatukuomba kibali cha ujenzi wa kukuwa.**
- **Nina silaha yangu na ukuta mrefu.  Pia ninajilinda. Halafu ninajilinda.**
- **Hata kwenye vyema. Wapendeja na kusitiri kwa sababu ya kujenga ukuta.**
- **Umongezeka. Sasa ni uharifu hasa, watu wanaa wazungu. Hukuto la ujumla ukawa ni uchafu tu.**
<p>| 7 | Mr. P. J. Sebastian (Owner) | A double storey house, with Mbezi tiled roof. Masonry construction, grilled with mosquito gauze on windows. Also grills on doors. A high wall fence surrounds the house. | Crime is a big problem in Dar es Salaam | Wall fence, window and door grills and a gate. I have also closed off the ventilation openings of the walls to obstruct visual contact with the outside. | Wall fences provide and enhance visual privacy. Also prevents thieves. I did apply for the permit to build the wall fence and it was approved after erection. | For now crime in Mikocheni B has gone down. In 1980s and early 1990s, crime was a big problem here. There is a relationship between increase of crime and barricading. | Air corridors have been closed. No air movement. Those with money now install air conditions and fans. Road reserves have been encroached by fences. Houses are flooded during the rain season. Feeling of insecurity when walking in streets. Walls are not as good as hedges. They are also expensive to build. | The relationship between neighbours is not that close. But we contribute money towards neighbourhood watch (sungu sungu). I know my neighbours. Mtaa leaders sometime calls us for meeting to discuss issues of common interest. |
| 8 | Mama Massawe (Owner) since 1984 | A single storey house, with CI sheets. Masonry construction, grilled with mosquito gauze on windows. Also grills on doors. A high wall fence surrounds the house. | Crime is a big problem in Dar es Salaam | We had several burglaries and robberies in our house. We built the wall fence, and grilled the windows and doors. We also keep dogs. There is also Sungusungu in the area. There were also break-ins to our neighbours. | Wall fences prevent thefts and burglary. I did not apply for the permit to build the wall fence. | For now crime in Mikocheni B has gone down. There is a relationship between increase of crime and barricading. | Fences block the air and the drainage. However, we persevere because lack of air and drainage problems are better devils than thieves and burglars. | The relationship between neighbours is not that close. But we pay money towards neighbourhood watch (sungu sungu). I know my neighbours. Mtaa leaders sometime call us for meetings. |
| 9 | Mrs. Nasibu (Tenant) since 2000 | A single storey house, with CI sheets. Masonry construction, grilled with mosquito gauze on windows. Also grills on doors. A high wall fence | Crime is a big problem in Dar es Salaam | We needed a house with wall fence, such that we can park our car inside. When we were in Sinza we parked our car at the CCM office that was not convenient when we had an emergency | Since we moved here in 2000, we have not experienced any excess heat. The drainage is fine because there is a slow towards the gate. It drains into the street. | We have not experienced any excess heat. The drainage is fine because there is a slow towards the gate. It drains into the street. | Yes we relate well with our neighbours. We also pay money towards neighbourhood watch (sungu sungu). I know my neighbours. Mtaa leaders also calls us for meetings when need arises. |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Owner</th>
<th>Year</th>
<th>Incidences</th>
<th>House Description</th>
<th>Crime Prevention</th>
<th>Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Mrs. Aisha Ibrahim (Owner) since 1997</td>
<td>A single storey house, with Mbezi tiles. Masonry construction, grilled with mosquito gauze on windows. Also grills on doors. A high wall fence topped with broken glass surrounds the house.</td>
<td>Crime is a big problem in Dar es Salaam</td>
<td>We had many incidences of thefts and burglary</td>
<td>Yes, there is a relationship between increase of crime and barricading</td>
<td>No permit</td>
</tr>
<tr>
<td>11</td>
<td>Mr. Zacharia Nicholaus (Owner) since 1995</td>
<td>A single storey house, with Mbezi tiles. Masonry construction, grilled with mosquito gauze on windows. Also grills on doors. A high barbed wire wall fence surrounds the house.</td>
<td>Crime is a big problem in this area. For example, that house over there is burgled always because they do not have wall fence.</td>
<td>I built the wall fence and placed barbed wire on top to prevent climbing. I also have a guard and I keep security dogs.</td>
<td>Yes, there is a relationship between increase of crime and barricading.</td>
<td>No permit</td>
</tr>
<tr>
<td>12</td>
<td>Mr. Nicholaus Miyango (Tenant) since 2003</td>
<td>A single storey house, with harvel tiles. Masonry construction, casement windows. Barricades on doors and windows. A high-electrified</td>
<td>Crime is a big problem in this area. For example, that house over there is burgled always because they do not have wall fence.</td>
<td>The wall fence has electric wire on top to prevent climbing. I also have a guard and I keep security dogs.</td>
<td>Yes, there is a relationship between increase of crime and barricading.</td>
<td>No permit</td>
</tr>
</tbody>
</table>

Incidences:
- Mrs. Aisha Ibrahim: 2 burglaries
- Mr. Zacharia Nicholaus: 1 burglary and several thefts
- Mr. Nicholaus Miyango: 0 (no incidence)

The weather conditions in Mikocheni B are not that bad. During the rain season water collects at that corner and it drains out into the street. Yes we relate well with our neighbours but not closely. Everyone is inside his/her house compound. I know my neighbours. Mtaa leaders also calls us for meetings when need arises.

Yes we relate well with our neighbours but not closely. Everyone is inside his/her house compound. I know my neighbours. Mtaa leaders also calls us for meetings when need arises.

Yes we relate well with our neighbours but not closely. Everyone is inside his/her house compound. I know my neighbours. Mtaa leaders also calls us for meetings when need arises.
Summary of respondents in Mikocheni B:
1. Understanding crime and fear of it in Dar es Salaam: 13 homeowners were interviewed in Mikocheni B. 8 of the respondents said crime in Dsm is a big problem and has increased and while 5 said crime in Dar es Salaam is not a big problem. However, all 13 said crime in Mikocheni B is no longer a big problem saying that crime in the area has declined. This was corroborated by the police officer in charge at the police post in the area.

2. All respondents (13) said the measures they have taken (individually) against crime include: erection of wall fences, employing guards, keeping of security dogs, burglar proofing of doors and windows and provision of security lights around the houses. At the neighbourhood level, they have engaged a Sungusungu where every house contributes money towards payment to the group.

3. Regarding the application of building permit for the construction of the wall fences: only 1 out 13 applied and have the construction of wall approved by the City Council authority. 12 out 13 did not apply for the permit and the authority did not bother them during the construction of the walls up to completion.

4. On the relationship between crime increase in Dar es Salaam with the increasing use of wall fences: 12 out of the 13 interviewed said there is a direct relationship. Only 1 out of 13 doubted the relationship to exist.

5. Regarding the quality of the built environment after every house has a wall fence: 6 out of 13 respondents said the environment is good, saying the area is quiet and peaceful. 7 out of 13 respondents said the quality of the built environment is not that good, citing narrow streets due to encroachment by walls, streets becoming water channels during rain season as every house compound releases the water into the streets, feeling of fear and insecurity at night as one walks home at night, emptiness of the streets and loneliness as one moves without seeing people and not seeing the houses as one walks into the streets unless houses are of two or more storeys in height.

6. On the relations between house neighbours: 7 out if the 13 respondents said they relate normally (i.e., they relate closely) and 6 out of 13 said they relationship is not that close because everyone is in his/her own compound. Citing the only chance they ever meet is when the Mtaa Leaders calls them for a meeting. They only share as a common issue of concern the issue of Sungusungu.

7. Out of the 13 respondents, 9 had been victims of crimes of thefts and or burglary. The 4 tenants have experienced no crime incidence.
<table>
<thead>
<tr>
<th>Respondents</th>
<th>Particulars of the dwellings and its environs</th>
<th>Understanding crime and fear of it in DSM</th>
<th>Measures taken against crimes and fear of it</th>
<th>Why the barricades and the wall fences</th>
<th>Relationship between barricading and fencing processes with crime and fear of it</th>
<th>Quality of the built environment and architecture in the neighbourhood/area</th>
<th>Relationship between neighbours in the neighbourhood/area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incidence:</strong>&lt;br&gt;0 (no incidence)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Incidence:</strong>&lt;br&gt;several thefts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Incidence:</strong>&lt;br&gt;0 (no incidence)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The dwelling faces the Lindi Street and connects to adjacent wall on both sides and back to define courtyard.</td>
<td>kuhalkikisha anafunga milango na madirisha. Hakuna magtrill kwenye milango yote ya njie.</td>
<td>mitaani wanaoalind maduka, mabaa na vitu kama hivyo. Siyo sehuma zote. Dmii kuna uharifu. Pia matatuko yamepunguza. Mimi sijui kama kuna uhusiano.</td>
<td>mvua yanazama baada ya muda mfupi.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Mr. Kobelo Iddi (Tenant)

Incidences: 0 (no incidence)

A single story modern dwelling, with Mbezi tile roof. Masonry, timber casement windows with burglar proof bars. The dwelling faces the Kasulu Road. A wall fence at the rear and the two side. All side alleys between the houses have been close to define a courtyard.

Mr. Kobelo Iddi (Tenant)

Incidences: 7

A single story modern dwelling, with Mbezi tile roof. Masonry, timber casement windows with burglar proof bars. The dwelling faces the Kasulu Road. A wall fence at the rear and the two side. All side alleys between the houses have been close to define a courtyard.

Mrs. Eva Siame (Owner)

Incidences: several

A single story Swahili House, with CI roof. Masonry construction, timber windows with burglar proof.

Kwenda madishia na milango basi. Wote wanafunga madishia na milango (To lock doors and windows properly). Hakuna magrill kwenye milango yote ya nje.

Kwenda madishia na milango basi. Wote wanafunga madishia na milango (To lock doors and windows properly). Hakuna magrill kwenye milango yote ya nje.

Kwenda madishia na milango basi. Wote wanafunga madishia na milango (To lock doors and windows properly). Hakuna magrill kwenye milango yote ya nje.
|盗窃 | 栅栏。这所房屋位于Manyoni Street。一个墙壁围栏在后方，两侧。侧巷已经被封闭来定义一个庭院，后方和侧边（1963年建造）。

| Employee | kwangu | kwenye milango yote ya rje。 | ukabaji。 | sana。

### 报告结果

1. 了解达累斯萨拉姆的犯罪和对其的恐惧：8位居民（3位房主和5位租客）在Ilala Kasulu进行了访谈。8位受访者表示达累斯萨拉姆的犯罪是一个大问题。然而，所有8位受访者表示Ilala Kasulu的犯罪不再是一个大问题，说该地区的犯罪已经下降。

2. 三位（3）房主表示他们采取的措施以对抗犯罪包括：封闭所有后巷和房屋之间的通道，创建庭院，窗户防撬，出门时关上门，以及庭院中的安全灯。在邻里层面上，他们没有Sungusungu。

3. 关于对旧址申请建筑许可证以进行围墙建设的问题：三位房主表示，如果没有与Township当局进行沟通，就不能在旧址上做任何事情。5位受访者为租客，因此他们不知道。

4. 关于在达累斯萨拉姆犯罪增加与围栏使用增加之间的关系：三位房主表示存在直接关系。5位租客表示他们不知道这种关系是否存在。

5. 关于每个房屋有围墙后建成环境的质量：三位房主表示环境是好的，说该地区是安静和平的。5位租客表示房子太旧，需要重建，但他们喜欢该地区的无犯罪和接近工作场所。

6. 关于房屋邻居之间的关系：所有8位受访者表示房屋邻居之间的关系不是那么紧密。只有当有遗体问题，聚会或当Mtaa Leader号召他们讨论整个社区的事情时。

7. 8位受访者中，只有4位是盗窃和入室盗窃的受害者。这4位租客都没有经历过任何类型的犯罪。
### Table No. 3: Summary of the Main Findings From Chang’ombe Housing Area: Case 3

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Particulars of the dwellings and its environs</th>
<th>Understanding crime and fear of it</th>
<th>Measures taken against crimes and fear of it</th>
<th>Why the barricades and the wall fences</th>
<th>Relationship between barricading and fencing processes with crime and fear of it</th>
<th>Quality of the built environment and architecture in the neighbourhood/area</th>
<th>Relationship between neighbours in the neighbourhood/area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vincent Semkuruto (Owner) since 1972</td>
<td>A single storey dwelling, with Mangalore tiles. Masonry construction, Casement windows. No grills on front on doors. A wall fence surrounds the house. On one side the wall is part of a poultry house, a shop and office form part of the front wall.</td>
<td>Crime is a problem but not a big one in Dsm. The worrying thing at night is: Wadokozu au vibaka. Tulikuwa tunavunja na vibaka.</td>
<td>Building a wall fence. Employed security guard. Providing security lights. No sungu sungu. Patrols inside the house at night.</td>
<td>To secure my family and property against thieves, vibaka. Security is important than money. To restrict thieves. I applied for permit and the wall was approved.</td>
<td>Yes, there is a relationship. (Ndiyo kuna uhusiano. Watu wanaogopa uharifu).</td>
<td>Tunafurahia mazingira yaliyopimwa na uchafu ni kidogo. Nitembeapo mtaani sina wasiwasi.</td>
<td>Mahustiano siyo mazuri sana. Sis hatuna ulinzi wa sungu sungu kwani wengu wetu ni wastaafu. Hakuweci kubinda ustiku. Mimi kiongozi wa mtaa, nawaahamu watu wangu. Wanakuja kupewa barua kwa ajili ya shughuli mabalimbali.</td>
</tr>
<tr>
<td>Incidences: 1 robbery, 3 thefts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stuwart Ngereza (Owner) since 1989</td>
<td>A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Grills on front on doors. A wall fence surrounds the house.</td>
<td>Crime is a problem because it creates fear and loss of confidence.</td>
<td>Construction of a wall fence. Employing security guard, keeping dogs and providing security lights. No sungu sungu. Patrols inside the house at night.</td>
<td>To secure ourselves against thieves, vibaka. Security is the most important factor. To restrict vibaka (thieves). I applied for permit and the wall was approved.</td>
<td>Yes, it is obvious as we see! Many cases are reported by the media.</td>
<td>Because of the fence I feel fear. Yes, the fence obstructs ventilation. We tried to plant trees and left opening to allow air passage. The environment is good.</td>
<td>Not as good as it was in the past. We are independent. I know them by name, but not as neighbours who can share stories. We when there is a problem (bereavement, etc). They come to ask for help, I also do the same.</td>
</tr>
<tr>
<td>Incidences: Several thefts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P. F. Mhando (Owner) since 1972</td>
<td>A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Grills on front on doors. A hedge surrounds the house.</td>
<td>Nowadays, crime is a problem, because majority of youth have nothing to do, because of lack of education and employment. The only way to survive is through stealing.</td>
<td>Planting hedges to increase privacy. With the wire fence, thieves could see &amp; cut through and stole car accessories. Employ security guard, Hedges minimise the visual contact (street and compound). No</td>
<td>For security purposes. Life is better than money. No need of building permanent wall.</td>
<td>Yes, media reports it. Crime incidences in Dar have increased. There is a relationship.</td>
<td>Very bad, too heavy and high wall fences. A lot of fear.</td>
<td>Yes, but not always. I know my neighbours, I have been here long. I meet some of them, not all. They come for help when in need and I do the same. Not easy to restrict children to play. Fences are not bad, the height should be low and the responsible</td>
</tr>
<tr>
<td>3</td>
<td>Mrs. Issa Mahamudu (Owner) since 1972</td>
<td>A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Grills on front on doors. A high wall fence surrounds the house.</td>
<td>Nowadays crime in DSM has increased. Crime is a big problem, people are killed, money from banks are stolen. In our home we experienced theft of car parts, clothes.</td>
<td>Extending the wall to this height. For security, to prevent petty thieves. The original short wall was approved, but the extension was not applied for and not approved.</td>
<td>Definitely there is a relationship. It is a sign of development. It indicates development. I like to walk in the streets. But the feeling of insecurity at night.</td>
<td>Yes we relate, but our relationship is not that close (not meeting every day? We live independently. Yes, I know my neighbours. We do not meet to discuss issues of common concern. Neighbours visit me and I do the same when in need. Before the fences, it was possible for children to play together but now everyone is inside.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mr. &amp; Mrs. Moshi (Owner) since 1974</td>
<td>A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Grills on front on doors. A high wall fence surrounds the house.</td>
<td>Nowadays crime in DSM has increased. In our area crime is not a big problem. We had one experience of robbery in our pharmacy.</td>
<td>We replaced the hedges at the front and the rear. Our neighbours on the side built the sidewalls. We also employed a security guard</td>
<td>We built the front and rear fences for security purposes. We also wanted to keep cattle. The walls were permitted and approved by Municipal Council</td>
<td>Yes, there is a relationship. Crime is reported daily by the media. The environment is bad because of high and solid fences. Yes I walk around because I am used to. No, I do not like because of different designs of fences. I feel insecure in the streets at night. No there are problems caused by fences.</td>
<td>Yes we relate. We do not have anything in common with ours neighbours. I know my neighbours because we have been here for many years. I meet some of them but not all. They visit me and I do the same when in need. With the fences it is not easy.</td>
</tr>
<tr>
<td>5</td>
<td>Ngirwamungu Family (Family house) since 1980</td>
<td>A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Grills on front on doors. A high wall fence surrounds the house.</td>
<td>Nowadays, crime is a not a big problem, because most houses have wall fences.</td>
<td>Extension of the height of the wall fence. No sungu sungu. Planting hedges to increase privacy. With the wire fence, thieves could see &amp; cut through and stole car accessories. Employ security guard, Hedges minimise the visual contact (street.</td>
<td>For security and privacy purposes. Because of thieves. Obvious, you have to used money to protect your life and your wealth. Money is there to be used. It is better to use your money for your security instead of alcohol. The short wall was</td>
<td>Yes, crime in Dar have increased during the 5 years. Incidences are reported by media. It is true there is a relationship. I think you can believe that in the past there were no fences because the situation of crimes was different with a Physically the built fabric looks good although there is no good organization. I like walking because it is part of exercises. In some streets you can feel insecurity because fences are extremely high. The problem inside is lack of air movement and we use fans.</td>
<td>Yes, we relate but not but closely unless there is a problem. We do things independently. I know my neighbours for I have been here for a long time. We do not meet. They come for help when in need and I do the same. We have no children.</td>
</tr>
<tr>
<td>6</td>
<td>Marick Singh (Owner) since 1971</td>
<td>A row house double storey, with Mangalore tiles. Masonry construction, Casement windows. Grills on front on doors. A high wall fence surrounds the house.</td>
<td>Crime has increased in DSM. After the fences crime has somehow decreased a little.</td>
<td>Construction of wall fence, street lighting, security guard, sharing mobiles with neighbours.</td>
<td>Yes, crime in Dar has increased. Media reports incidences. It is true there is a relationship.</td>
<td>The built fabric is good compared to the past. I like to walk but not because of the fences. But because I used to walk before.</td>
<td>Yes, we live in good relation; we see each other because most of my neighbours are used to come to my shop to buy some goods. Close relationship. They come for help when in need and I do the same. Our children also play together.</td>
</tr>
<tr>
<td>7</td>
<td>Mr. &amp; Mrs. Elias Makia (Owner) since 1975</td>
<td>A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Grills on front on doors. A high wall fence surrounds the house.</td>
<td>Crime has increased in DSM. After the fences crime has somehow decreased a little.</td>
<td>Construction of wall fence, streetlights, security guard. We spent a lot of money, because life and property should be protected by us. This was basically due to hardship caused by closure of parastatal organizations.</td>
<td>Yes, crime has increased lately in Dar es Salaam. Incidences being reported in the Media. It is true there is a relationship. Some house owners use their fences for conducting illegal actions like drug dealings, keeping guns, etc.</td>
<td>The built fabric not good compared to the past. I do not like to walk in the street. Feeling of insecurity, Drainage problems. Because everyone stays in his house, it is not easy to know exactly the problem that we face.</td>
<td>Yes, but not everyday with the exception of Arabs. They come for help when in need and I do the same. No children in my home.</td>
</tr>
<tr>
<td>8</td>
<td>Mama Fidahussein (Owner) since 1965</td>
<td>A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Grills on front on doors. A high wall fence surrounds the house.</td>
<td>I consider crime as a big problem because I have lost a lot properties because of these thefts. They create a sense of insecurity and fear. I have been among the victims of crime.</td>
<td>Construction of wall fence, keeping dogs, employing a guard, streetlights.</td>
<td>Yes, everyone knows that crime has increased in Dar es Salaam. Incidences being reported and many people are victims, some of them we know. It is true there is a connection, because in the past</td>
<td>The built fabric is good by appearance. I do like to walking because it part of exercise. Not all fences are good like mine, but others are not good. Feeling of insecurity when walking between them.</td>
<td>Yes, we relate to some of my neighbours. Everyone is busy. I know my neighbours. But we live independently. They come for help when in need and My grand children play with other children.</td>
</tr>
<tr>
<td>Name</td>
<td>Incidences</td>
<td>Description</td>
<td>City Authority</td>
<td>Crime Perception</td>
<td>Feels Secure</td>
<td>Relationship</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>------------------</td>
<td>--------------</td>
<td>--------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mama Sarah Abdiel Urio</td>
<td>0 (no incidence)</td>
<td>A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Grills on front on doors. A high wall fence surrounds the house. We have never experienced crime in our house. We built the wall because we thought it beautified the house. We also like to be enclosed.</td>
<td>Approved.</td>
<td>We liked the wall because we thought our house the value of our house would be improved. Money is nothing in beautifying our house. We have never encountered any crime incidence. The city authority approved the fence. We like privacy. Wall was applied for and approved.</td>
<td>I am not sure if there is connection.</td>
<td>It is good, something we are looking for. The built fabric is good by appearance. I do like to walking because it part of exercise. Not all fences are good like mine, but others are not good. Feeling of insecurity when walking between them.</td>
<td>Yes, we relate to some of my neighbours. Everyone is busy. I know my neighbours. But we live independently. They come for help when in need and Our children play with other children.</td>
</tr>
<tr>
<td>Charles Chezi</td>
<td>several thefts</td>
<td>A single storey house, with asbestos roof cover. Masonry construction, Casement windows. Burglarproof bars. A hedge surrounds the house. I consider crime as a big problem. They create a sense of insecurity and fear. I have been among the victims of crime. Erecting a wire fence and hedges. Security light, exchanging mobile phones with neighbours. Keeping dogs Saving my family, no trespass and prevent crime. Some use the walls to hide their crimes. They don't want to be known by neighbours. No wall, thus no application for wall fence.</td>
<td>Approved.</td>
<td>Yes, there is a relationship.</td>
<td>In the past, the situation was good and full of security but today it is not good anymore. Fences are not uniform, and the height is extremely not user friendly. At night, the feeling of insecurity is felt when walking along.</td>
<td>Yes, to some extent we relate especially in some issues of funeral. I know my neighbours. But we live independently, each one is busy with his own things. They come for help when in need and Our children play with other children.</td>
<td></td>
</tr>
<tr>
<td>Padri-Daniel Said Mhando</td>
<td>several thefts</td>
<td>A single storey house, with asbestos roof cover. Masonry construction, Casement windows. Burglarproof bars. A hedge surrounds the house. Increase of crime as a big problem.</td>
<td>Approved.</td>
<td>Because of increased crimes (thieves), protect my properties and my family, because of security. Fence was approved.</td>
<td>Generally there is a relationship between barricading and crime increase, because in the past when there were no thieves, every house in the city was naked, but as time went on the thieves increased this made people to</td>
<td>As city it looks good. I like walking for exercises. Walls represent development and civilization. However, you feel insecure if there is no lighting in the streets. Since I have been here for a long time, I know most of the people in this area. In the past we used to see each other almost every day due to openness, nowadays it is not easy.</td>
<td></td>
</tr>
</tbody>
</table>
| **Mama Kubaga**  
*Owner* since 1965 | A single storey house, with asbestos roof cover. Masonry construction, Casement windows. Burglarproof bars. A hedge surrounds the house. | Increase of crime as a big problem. | Construction of fence, security light, employing security guard, security dogs. | For security purposes. Because of increased crimes (thieves), protect my properties and my family, because of security. We applied for the permit. Fence was approved. | Generally there is a relationship. Many people have suffered from crime. | To me, the built fabric is not good because many fences have not been built standard walls. I am too old to walk around. During the night you feel fear. It is better to meet a lion than the vibaka at night in such streets with high wall fences. | We relate but not as close. We do not have anything in common. I know my neighbours. We do not meet only when the Mtaa leaders calls us. They come when in need I also do the same. You cannot prevent children to play together. |
| **Stella Nerry**  
*Owner* since 1975 | A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Burglarproof bars. A hedge surrounds the house. | A big problem. My sister is among the victims who have suffered a lot against robberies. Our neighbours also suffered such crimes. | Construction of fence, security light, employing security guard, security dogs. No action at neighbourhood level. | For security purposes. Because of increased crimes (thieves), protect my properties and my family. Wall was applied for and approved. | There is a relationship. Many people have suffered from crime. | The environment is good, although walking through the streets at night is frightful. | We relate especially when there is a problem. We meet at the ward level to discuss some matters related to our streets when the Mtaa leader calls us. Neighbours come when in need I also do the same. Children to play together. |
| **Mhera Kardinal Saudin**  
*Owner* since 1972 | A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Burglarproof bars. A hedge surrounds the house. | Increase of crime as a big problem. | Construction of fence, electric wire fence, security guard, security dogs, security light. | Protect against fear of crime and crime. Increased crime, for security purposes. Wall was applied for and approved. | Generally there is a relationship. Incidence is reported by the media. | Not very good because some fences block air movement. | We relate but not closely. We do not have anything in common. I know my neighbours. Yes but not to all my neighbours. |
| **Mama Zainabu Razak**  
*Owner* since 1963 | A single storey house, with Mangalore tiles. Masonry construction, Casement windows. Burglarproof bars. A hedge surrounds the house. | Crime is a big problem. No theft or burglary has occurred in my house. | I wake up at night and take patrol inside my house. I have security light. I have a guard. I have a hedge around the house. | Some built fences to hide their criminal acts. I have hedges around my house. No wall, no application for permit. | Yes and No. Some only wish to hide their illegal actions. The media almost daily reports the number of incidences. | Not very good because some fences block air movement. Rainwater concentrated in the streets. Environment becomes hot. I feel insecure walking in the streets at night. | We relate but not closely. My neighbour come to me when in need and I do the same. We do not have anything in common. I know my neighbours. My grand children do not have time to play with other children in the mtaa. |
<table>
<thead>
<tr>
<th>Name</th>
<th>Owner since</th>
<th>Incidences:</th>
<th>House Description</th>
<th>Security Measures</th>
<th>Crime and Environment</th>
<th>Neighbours and Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Justin Omari</td>
<td>1970</td>
<td>0</td>
<td>A single storey house, with Mangalore tiles. Masonry</td>
<td>Crime is a big problem. No theft or burglary has</td>
<td>Yes there is a</td>
<td>We relate but not closely.</td>
</tr>
<tr>
<td>(Owner)</td>
<td></td>
<td>(no incidence)</td>
<td>construction, Casement windows. Burglarproof bars. A</td>
<td>occurred in my house.</td>
<td>relationship. Incidences are reported in the media. Crime has</td>
<td>My neighbour comes to me</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>wall fence surrounds the house.</td>
<td>I built a wall fence and employed watchman and kept</td>
<td>increased.</td>
<td>when in need and I do the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
<td></td>
<td>security dogs. I have security light. I have a pistol.</td>
<td></td>
<td>same. We do not have</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Having a phone to call neighbours.</td>
<td></td>
<td>anything in common. I know</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Wall fence for security and privacy. To secure my</td>
<td></td>
<td>my neighbours. I have no</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>family. I applied for the permit to build the wall</td>
<td></td>
<td>children now.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>fence and it was approved.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes there is a relationship. Incidences are</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>reported in the media. Crime has increased.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not as good as in the past. The feeling of fear in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>the streets.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yassin Azad Khan</td>
<td>1967</td>
<td>0</td>
<td>A single storey house, with Mangalore tiles. Masonry</td>
<td>Crime is a big problem. No theft or burglary has</td>
<td>I do not know.</td>
<td>We invite one another</td>
</tr>
<tr>
<td>(Owner)</td>
<td></td>
<td>(no incidence)</td>
<td>construction, Casement windows. Burglarproof bars. A</td>
<td>occurred in my house.</td>
<td></td>
<td>when there is a wedding.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
<td>wall fence surrounds the house.</td>
<td>I erected wall fence, keeping dogs, security light,</td>
<td>I do not go out,</td>
<td>We do not meet unless</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and also sounding alarm to alert neighbours.</td>
<td>therefore I cannot say</td>
<td>the Mtaa leader calls us.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Wall fence for security and privacy, dogs, security</td>
<td>anything about this.</td>
<td>My neighbours come to me</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>light. Better use your money to protect your family</td>
<td></td>
<td>when in need and I do the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and properties. I do not know. My husband</td>
<td></td>
<td>same. My grand children</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>constructed the wall. I believe He applied for it.</td>
<td></td>
<td>do not play with other</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes, crime has increased in DSM. There is a</td>
<td></td>
<td>children in the mtaa.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>connection between crime increase and wall fencing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I do not go out thus I cannot say anything about this.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not very good. I feel insecure and fearful. No air</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>flow. I use a fan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Hazina Hassan Ali</td>
<td>1965</td>
<td>1</td>
<td>A single storey house, with asbestos sheets. Masonry</td>
<td>Not a big problem. No theft or burglary has occurred</td>
<td>We do not relate as</td>
<td></td>
</tr>
<tr>
<td>(Owner)</td>
<td></td>
<td>(robery and several thefts)</td>
<td>construction, Casement windows. Burglarproof bars. A</td>
<td>in my house.</td>
<td>before the fences. Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>19</td>
<td>high wall fence surrounds the house.</td>
<td>Building a wall fence, keeping dogs, security light,</td>
<td>because I am the Mtaa</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and burglar proofs.</td>
<td>leader, so I have to</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>To prevent rainwater from coming into our house.</td>
<td>meet people in my area</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Security against thefts. I do not know.</td>
<td>of jurisdiction. My</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes, crime has increased in DSM. There is a</td>
<td>neighbours come to me</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>connection between crime increase and wall fencing.</td>
<td></td>
<td>when in need and I do</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I do not go out thus I cannot say anything about this.</td>
<td></td>
<td>the same. My grand</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not very good. I feel insecure and fearful. No air</td>
<td></td>
<td>children do not play with</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>flow. I use a fan.</td>
<td></td>
<td>other children in the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Some neighbours yes, but others no. We do not</td>
<td></td>
<td>mtaa. There were no</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>meet unless the Mtaa leader calls us. My neighbours</td>
<td></td>
<td>mixing of children since</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>come to me when in need and I do the same. My grand</td>
<td></td>
<td>1960s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>children do not play with other children in the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>mtaa.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. Emmy A. Henjewele</td>
<td>1969</td>
<td>3</td>
<td>A single storey house, with asbestos sheets. Masonry</td>
<td>Not a big problem. Theft or burglary has occurred in</td>
<td>We do not relate as</td>
<td></td>
</tr>
<tr>
<td>(Owner)</td>
<td></td>
<td>(burglaries)</td>
<td>construction, Casement windows. Burglarproof bars. A</td>
<td>my house 3 times. We have no money to finish the</td>
<td>before the fences. Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>short wall fence</td>
<td>construction of the wall fence.</td>
<td>because I am the Mtaa</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Employ security guard, security light, and burglar</td>
<td>leader, so I have to</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>proofs.</td>
<td>meet people in my area</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>We built the wall because everyone is doing it, and</td>
<td>of jurisdiction. My</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>because of crime and burglary. It is a sign</td>
<td>neighbours come to me</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>development. Yes we applied for the permit, but the</td>
<td>when in need and I do</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes, crime has increased in DSM. Media reports</td>
<td>the same. My grand</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>many incidences.</td>
<td>children do not play</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>There is a connection between crime increase and wall</td>
<td>with other children in</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>increase and wall</td>
<td>the mtaa.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not very good. I feel insecure and fearful. No air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Mr. Hussein Fakeer (Tenant) since 1994</td>
<td>A single storey house, with asbestos sheets. Masonry construction, Casement windows. Burglarproof bars. A high wall fence surrounds the house.</td>
<td>A big problem. Theft or burglary has occurred in my house 3 times.</td>
<td>Wall fence, employ security guard, security light, and burglar proofs on windows.</td>
<td>We built the wall to reduce burglary and thefts. Some people built walls to because they do not want neighbours to see their bad acts. They say they want privacy. Security and privacy. Crimes, burglary, privacy. Yes the wall applied for and approved.</td>
<td>Yes, crime has increased in DSM. Media reports many incidences. There is a relationship between crime increase and wall fencing.</td>
</tr>
<tr>
<td>21</td>
<td>Mr. &amp; Mrs. Wilfred Chikoye Owner) since 1974</td>
<td>A single storey row house, with asbestos sheets. Masonry construction, Casement windows. Burglarproof bars. A hedge surrounds the house.</td>
<td>Not a big problem. Rarely they steal car parts.</td>
<td>We never took any action because the houses belonged to the NHC. After they have been sold that is why now people are taking action. We had sungu sungu. I have not taken any action. I have no burglar proofs on windows and doors.</td>
<td>I have no barricades. I have no fence. People build wall fence for privacy, following Arabic culture, for protection of business, keeping animals and poultry. We have no fence.</td>
<td>Yes, crime has increased in DSM up to 2006. Now crime has gone down. Incidences have become rare. There is no relationship. It is an Arabic culture. Not for crime prevention.</td>
</tr>
<tr>
<td>22</td>
<td>Mr. &amp; Mrs. Matimbwa (Owner) since 1982</td>
<td>A single storey row house, with asbestos sheets. Masonry construction, Casement windows. Burglarproof bars. A hedge surrounds the house.</td>
<td>A big problem. Rarely they steal car parts.</td>
<td>I have grills on both front and rear doors and windows. We also have sungu sungu.</td>
<td>We have no wall fence. We have not built the wall because we still have a boundary dispute with our neighbour. When this is through we shall build the wall fence We shall apply for the permit.</td>
<td>Yes, crime has increased in DSM. Many refugees. Also soldiers are thieves.</td>
</tr>
</tbody>
</table>
Summary of respondents:

1. Understanding crime and fear of it in Dar es Salaam: 23 homeowners were interviewed in Chang’ombe Housing Area. 17 of the respondents said crime in DSM is a big problem and has increased and while 6 said crime in Dar es Salaam is not a big problem. However, all 23 said crime in area is no longer a big problem saying that crime in the area has declined. This was corroborated by the police officer at Chang’ombe Police Station.

2. Almost all respondents (20 out of 23) said the measures they have taken (individually) against crime include: erection of wall fences, employing guards, keeping of security dogs, burglar proofing of doors and windows and provision of security lights around the houses. At the neighbourhood level, they have not engaged themselves with Sungusungu.

3. Regarding the application of building permit for the construction of the wall fences: only 15 out 23 applied and have the construction of wall approved by the City Council authority. 3 out 23 did not apply not apply for the permit and the authority did not bother them during the construction of the walls up to completion, 2 out of 23 had hedges, 2 had neither hedge nor wall fence and 1 out of 23 did not know whether the application was made.

4. On the relationship between crime increase in Dar es Salaam with the increasing use of wall fences: 18 out of the 23 interviewed said there is a direct relationship. 5 out of 23 doubted the relationship to exist.

5. Regarding the quality of the built environment after every house has a wall fence: 10 out of 23 respondents said the environment is good, saying the area is a quiet and peaceful. 12 out of 23 respondents said the quality of the built environment is not that good and 18 out of the 23 respondents said they felt fear and insecure at night as one walk home at night, citing emptiness of the streets and loneliness as one walks without seeing people and not seeing the houses as one walks into the streets unless houses are as of two or more storeys in height.

6. On the relations between house neighbours: 7 out if the 23 respondents said they relate normally (i.e., they relate closely) and 6 out of 23 said they relationship is not that close because everyone is in his/her own compound. Citing the only chance they ever meet is when the Mtaa Leaders calls them for a meeting.

7. Out of the 23 respondents, 18 had been victims of crimes of thefts, home burglary or robbery.

CROSS CASE SUMMARY

1. Understanding crime and fear of it in Dar es Salaam: 44 residents (homeowners and tenants) were interviewed in Mikotheni B, Ilala Kasulu and Chang’ombe Housing Area. 27 of the respondents said crime in DSM is a big problem and has increased and while 17 said crime in Dar es Salaam is not a big problem. However, all 44 said crime in their areas was no longer a big problem saying that crime in the areas has declined.

2. Almost all respondent homeowners (36) said the measures they have taken (individually) against crime include: erection of wall fences and closing of back alleys and passages, employing guards, keeping of security dogs, burglar proofing of doors and windows and provision of security lights around the houses. The use of Sungusungu neighbourhood watch was only applied in Mikotheni B.

3. Regarding the application of building permit for the construction of the wall fences: 19 out 44 applied and have the construction of wall approved by the City Council authority (The majority of those who applied are from Chang’ombe Housing Area and Ilala Kasulu while in Mikotheni B only 1 applied for the permit). 11 out 44 did not apply for the permit and the authority did not bother them during the construction of the walls up to completion ( 8 of these from Mikotheni and 3 from Chang’ombe Housing Area).

4. On the relationship between crime increase in Dar es Salaam with the increasing use of wall fences: 33 out of the 44 interviewed said there is a direct relationship. 11 out of 44 doubted the relationship to exist.

5. Regarding the quality of the built environment after every house has a wall fence: 19 out of 44 respondents said the environment is good, saying the areas are quiet and peaceful. 24 out of 44 respondents said the quality of the built environment is not that good, citing narrow streets due to
encroachment by walls, streets becoming water channels during rain season as every house compound releases the water into the street; and 23 out 36 felt fear and insecure at night as they walk home at night due to emptiness of the streets and loneliness as there are people in the streets and sight any house unless houses are of two or more storeys in height.

6. On the relations between house neighbours: 17 out if the 44 respondents said they relate normally (i.e., they relate closely) and 27 out of 44 said they relationship is not that close because everyone is in his/her own compound. Citing the only chance they ever meet is when the Mtaa Leaders calls them for a meeting.

7. Out of the 44 respondents in the three cases, 31 had been victims of crimes of thefts, home burglary or robbery. 13 out the 44 most of whom are tenants have experienced no crimes of burglary, theft or home robbery.