

Fortunatus Bahendwa

**URBAN FORM THROUGH RESIDENTS' PRACTICES:
The unconventional transformation processes in suburban areas in Dar
es Salaam, Tanzania**

© Fortunatus Bahendwa 2013

ISSN: 1502-217x

ISBN: 9788254702505

CON-TEXT: 60

PhD Thesis

Akademisk doktorgads-
avhandling avgitt ved
Arkitektur- og
designhøgskolen i Oslo

PUBLISHER

Oslo School of Architecture and Design

COVER ILLUSTRATION:

Fortunatus Bahendwa

PRINTED BY:

Unipub forlag AS

DESIGN AV BASISMAL:

BMR

*To my mother,
Domitina Bahendwa*

Table of Contents

List of Figures	vi
List of Tables.....	ix
List of Boxes	x
Acronyms	xi
Acknowledgement	xii
Abstract.....	xv
Chapter 1: Introduction.....	1
1.1 Background of the study	1
1.2 Issues on unconventional urban processes	4
1.3 The objective of the study	8
1.4 The relevance.....	9
1.5 Research design and methodological strategy	10
1.5.1 Case selection.....	11
1.5.2 Data collection method.....	12
1.6 Analysis and interpretation framework	17
1.7 Reflection on the adopted method	18
1.8 The structure of the thesis	20
Chapter 2: Urban Theories and Conceptual Reflections	22
2.1 The context of urban form.....	22
2.1.1 Urban form.....	22
2.1.2 The African city	26
2.1.3 The form of Dar es Salaam	33
2.2 Informal urbanism.....	35
2.2.1 Informal urbanity	35
2.2.2 Informal urban space	39
2.2.3 Informality and spatial practices	45
2.2.4 Roles of actors in African urbanism.....	50
2.3 Land tenure and informality	54

2.3.1 Formal land tenure and titling as a means to better city form	54
2.3.2 Formal and informal tenure duality	58
2.3.3 Perception of urban plot and land tenure	63
2.4 Informal initiative on social services and infrastructure provision	70
2.4.1 Slum characteristics	70
2.4.2 Context for slum dwellers to invest in urban services	70
2.4.3 Slum perception and its service improvement concepts	71
2.5 Intervention policies on urban informality	74
2.5.1 Settlement demolition policies	74
2.5.2 Sites and services and squatter upgrading schemes	76
2.5.3 Informal housing land regularisation	78
2.5.4 Cities without slums	80
2.5.5 Lessons from the interventions policies	81
Chapter 3: Individual Practices in the Making of Informal City 83	
3.1 The general background of Kimara	83
3.1.1 Location	83
3.1.2 History of Kimara	86
3.1.3 General character of social services in Kimara	89
3.2 Resident's judgement of suburban location	90
3.2.1 The relationship between dwelling and working locations	90
3.2.2 Decisions on moving to suburban area	91
3.3 Ownership and development of individual plots	97
3.3.1 Land market	97
3.3.2 Plot acquisition	99
3.3.3 Security of tenure	103
3.3.4 Actions and reactions on settlement space organization	104
3.3.5 Plot formation	105
3.3.6 Types of development	109
3.4 The plot contents and its contribution to block or neighbourhood	111

3.4.1 The plot content	111
3.4.2 Shaping development ideas on plot	117
3.4.3 Varied motives accommodated in settlement	122
3.5 Development of a block	124
3.5.1 Social contact for spatial organization	124
3.5.2 Meetings	127
3.6 Design and construction of home-buildings	128
3.6.1 Use of professional services	128
3.6.2 Determination of house size	130
3.6.3 Building duration	132
3.7 The cost of development	134
3.7.1 Mixed income groups	134
3.7.2 The cost of plot development	135
3.8 Financing plot development	141
3.8.1 Source of plot development funding	141
3.8.2 Plot as an asset for self-financing	143
3.9 Social services and infrastructure	145
3.9.1 Social services in general	145
3.9.2 Water supply	148
3.9.3 Power connection	150
3.9.4 Solid waste management	150
3.10 Summary	151
Chapter 4: Collective and Institutional Efforts on Informal Urban Space Change	153
4.1 Background	153
4.2 The informal public space	153
4.2.1 Public space occupied by informal actors	155
4.3 Creation of informal market in Kimara	156
4.3.1 Vendors reorganising for control of market space	158
4.3.2 Market space transformation	159
4.3.3 'Legal' and 'illegal' market space	161

4.4 The Kimara informal market traders	162
4.5 The contribution of Ten Cell Unit to settlement physical development	164
4.6 Professional planning interventions in informal settlements ..	168
4.6.1 Regularization programme in Kimara	169
4.6.2 Planning at the grassroots	171
4.6.3 People at the grassroots are 'planners'	172
4.6.4 Proposed maps for upgrading plans.....	173
4.7 Summary	177
Chapter 5: Urban Space as a Product of Spontaneous Residents' Practices	178
5.1 Background	178
5.2 Creation of settlements.....	178
5.2 The urban block	182
5.3 Local centres.....	186
5.4 Roads and paths	191
5.5 Private and public space	193
5.6 Summary	198
Chapter 6: Conclusion.....	199
6.1 Reflection on findings	199
6.3 Relevance to cities in Tanzania	209
6.2 Relevance of informal urbanity in African city	212
6.3 General conclusion.....	215
Bibliography.....	219
Appendices	227
Appendix 1. Issues for Field Data Collection	228
Appendix 2. Guiding questions and areas of observations	232
Appendix 3. Part of summary of residents' responses and reflection to questions on field study.....	235
Appendix 4. The Process of Individual plot development: Interview Summary	244

Appendix 5. Some of Interview summaries held with vendors in
Kimara informal market.....253

Appendix 6. Property tax demand note for Mr Msalaka.....256

Appendix 7. Letter for research permission264

Appendix 8. Residential house drawings for one of Kimara’s
residents.265

List of Figures

Chapter 2

Figure 2.1: The meeting of Shahjahanabad, or Old Delhi (north) and New Delhi (south).

Chapter 3

Figure 3.1 The City of Dar es Salaam and its three Municipal Councils

Figure 3.2 Kimara is located on western side of the city centre

Figure 3.3 Satellite image of the most current part of Kimara Centre through which Morogoro Road passes

Figure 3.4 Kimara settlement in the context of the Dar es Salaam City

Figure 3.5 Mr. Rutta's House of reasonable quality

Figure 3.6 Satellite image of Mr Rutta's cluster

Figure 3.7 Mr Rutta's plot and the surrounding plots

Figure 3.8 Plot formed informally in one block in Kimara Settlement

Figure 3.9 The corresponding development in every plot in Figure 3.8

Figure 3.10 Mrs Amina's House built to the design and size desired

Figure 3.11 Satellite image showing Mrs Amina's house (in circle) in its cluster at Kimara Michungwani

Figure 3.12 Mrs Amina's plot (shaded) and neighbouring plots, house location and orientation.

Figure 3.13 Mrs Amina's house plan of plot

Figure 3.14 Mr. Mangole's house image and its floor plan

Figure 3.15 Mr. Masama's house facing the main access road and its side facing the path

Figure 3.16 Mr. Masama's house in *Figure 3.15* was designed to meet functional and constructional implementation requirements

Figure 3.17 Mr. Masama's floor plan was made to facilitate the incremental development process

Figure 3.18 The yard within Mr. Masama's plot facing the main house and two houses for rent, indicated as 'B' and 'C' in *Figure 3.19*

Figure 3.19 Mr Masama's and Mr. Mangoles's Plots

Figure 3.20 Mr. Masama's and Mr. Mangole's plots fitted within the layout of the cluster

Figure 3.21 The image of Ms. Agnela's house

Figure 3.22 The floor plan and plot location of Ms. Agnela's house

Figure 3.23 Visual impression produced as per respondent's narration on organization of development ideas

Figure 3.24 Individual plot development is a key element in building up the settlement form

Figure 3.25 The contribution of individually developed plots in terms of moulding the settlement

Figure 3.26 Uncoordinated developments require negotiation and collaboration between individual developers to generate a holistic continuity that safeguards collective interests

Figure 3.27 Mr. Mganga's block house plastered and painted

Figure 3.28 Mr. Mganga's house floor plan

Figure 3.29 Mr Edgar's house is made of wattle and mud walls which were smooth finished and whitewashed

Figure 3.30 Mr. Edgar's house floor plan

Figure 3.31 The house being incrementally constructed

Figure 3.32 The Plan of the house image on the left

Figure 3.33 Steel fixing in progress

Figure 3.34 Producing, pouring and moulding of concrete in progress

Figure 3.35 Conveying and pouring of foundation concrete

Figure 3.36 Interlocking soil stabilized block work underway

Figure 3.37 A corridor to various rooms or courtyards

Figure 3.38 A courtyard for domestic activities for both tenants' and owner's families

Figure 3.39 The complete house of Mr. Goza that comprised a series of rooms and a fence resulting from six construction phases that took about 26 years from 1977 to 2003

Figure 3.40 Satellite image indicating the nature of building organization of the cluster including Mr. Goza's Property

Figure 3.41 Renovation of one part of rooms for rent at Mr. Lusuva's house

Figure 3.42 The renovation in progress

Figure 3.43 Mrs. Lusuva's house and rooms for rent floor plans

Figure 3.44 The structure used to run the elementary School business

Figure 3.45 Another residential house used to run the Pre-school business

Figure 3.46 Pupils in one class in the structure in Figure 3.44

Figure 3.47 Pupils in another class in the structure in Figure 3.44

Chapter 4

Figure 4.1 Most roads and pathways left between buildings after informal development become de facto public space

Figure 4.2 Private plot owners along the roads take the opportunity to invest in trading stalls

Figure 4.3 Most public space is occupied illegally by vendors

Figure 4.4 The market is on a highly congested street with private shops, street vendors, food stalls and all other types of trading

Figure 4.5 A display of foodstuff in Kimara market

Figure 4.6 A display of foodstuff outside the market

Figure 4.7 Open shed for market at Kimara Mwisho

Figure 4.8 Display of foodstuff inside the roofed Kimara market

Figure 4.9 The service road between the 'legal' and 'illegal' markets where motorists, cyclists, pedestrians and customers strive for space

Figure 4.10 Informal process of creating Kimara informal market space

Figure 4.11 The administrative structure of local government in Tanzania

Figure 4.12 A Map of 'Kimara Mwisho' centre

Figure 4.13 Proposed upgrading layout plan for the part of Kimara informal settlement prepared by the MLHHSD

Chapter 5

Figure 5.1 Urban developments are closing the gaps created by the concentration of developments on four major roads

Figure 5.2A Built-up and unbuilt-up areas on the inner areas away from Kimara Mwisho centre

Figure 5.2B Same map as in Figure 5.2A but with shaded sloping sites and valleys representing some of the unbuilt-up areas

Figure 5.3 Part of Kimara settlement with mixed development on the upper land and along the gentle slopes

Figure 5.4A A block in Kimara Michungwani presented with plot layouts and house plans

Figure 5.4B The plot and block contents differ depending on individual needs, resources and opportunities available

Figure 5.5 Several services at Kimara Mwisho Centre

Figure 5.6 The road that connects three Sub-wards' head offices

Figure 5.7 Streets along centres attract business that may also include a series of makeshift stalls with all kind of goods for sale

Figure 5.8 Often plots alongside roads have room for commercial uses

Figure 5.9 Irregular and organic road networks develop as the settlement grows

Figure 5.10 Roads provided are usually narrow as each individual developer attempts to maximize the utilization of his plot space

Figure 5.11 A road can also be a shopping terrace, a pedestrian walkway a meeting place and any other public activity

Figure 5.12 The densely located buildings in informal development caused merging private, semi-public and public space

Figure 5.13 The fenced dwellings had enough space to create useful space after the fence was erected

Figure 5.14 A house with a solid fence demarcating private space

Figure 5.15 Hedge demarcating private space

List of Tables

Chapter 3

Table 3.1 Range of years when respondents moved to current location in Kimara

Table 3.2 Residents' previous location

Table 3.3 Methods through which respondents accessed land

Table 3.4 Type of plot ownership

Table 3.5 The extent to which plot buyers decide on plot size

Table 3.6 Plot development purpose

Table 3.7 Residents' associations

Table 3.8 Effects related to individual decisions on plot development

Table 3.9 Residents' collective initiative to develop

Table 3.10 Use of technical services for developing plot

Table 3.11 Construction duration

Table 3.12 Plot owners' type of employment

Table 3.13 Social services

List of Boxes

Chapter 3

- Box 3.1 Perception of suburban area in relation to change of time
- Box 3.2 Mixed motives for migrating to suburban area
- Box 3.3 Rural–urban migration as genesis to urban–suburban migration
- Box 3.4 Assurance of legitimacy of property for sale before decision to invest was made
- Box 3.5 A respondent allocated land through military order
- Box 3.6 The process of informal land transfer
- Box 3.7 The adaptation of local values in transferring informal land
- Box 3.8 Residents' readiness to formalise and hitches surrounding titling
- Box 3.9 Future investment plans for the plot
- Box 3.10 Exploitation of opportunities for income generation
- Box 3.11 Factors affecting the developer's choice of specific plot
- Box 3.12 Use of professional services for construction of buildings
- Box 3.13 Determining the size of house design
- Box 3.14 Extended family as determinant of size and design of house
- Box 3.15 Cost of development
- Box 3.16 Incremental development
- Box 3.17 Sources of funding for plot development
- Box 3.18 Urban service preference
- Box 3.19 Poor water supply
- Box 3.20 Other means of sorting out water shortage

Chapter 4

- Box 4.1 Land occupied informally may not be expropriated without compensation
- Box 4.2 Managing 'legal' and 'illegal' market operations

Chapter 5

- Box 5.1 Shared space created shared responsibilities
- Box 5.2 Space character resulting from erection of boundary fence
- Box 5.3 Boundary fencing to prevent trespassing

Acronyms

AHO	Arkitektur- og Designhøgskolen i Oslo (Oslo School of Architecture and Design)
ARU	Ardhi University
CBD	Central Business District
CCM	Chama Cha Mapinduzi (The ruling Party in Tanzania)
DAWASCO	Dar es Salaam Water and Sewerage Corporation
JICA	Japan International Cooperation Agency
MDGs	Millennium Development Goals
MLHHS	Ministry of Land, Housing and Human Settlement Development
MUMADA	Muungano wa wenye Masoko mkoani Dar es Salaam (The Association of Market owners in Dar es Salaam region)
TANESCO	Tanzania Electric Supply Company Limited
TANROADS	Tanzania National Roads Agency

Acknowledgement

I would like to extend my sincere gratitude to those who contributed to the realization of this study. First of all, my thanks go to the Architecture Department for nominating me for a PhD Programme, to Ardhi University (ARU) for allowing me to pursue the Programme, to Oslo School of Architecture and Design (AHO) for admitting me into the Programme and to the Norwegian Government for granting me a scholarship under the Quota Programme.

More specifically, my distinguished thanks go to my supervisors Professor Karl Otto and Professor Edward Robbins of AHO for their valuable guidance, academic counselling and constructive criticism, which were vital to the shaping of this study from the beginning to the end. Special thanks go also to my local supervisor Professor Wilbard Kombe of ARU for his tireless advice, guidance and constructive criticism.

Many thanks go to Dr. Living Moshia, the Head of the Architecture Department at the start of my programme and then Dean of School of Architecture and Design, for his support and encouragement. Special thanks go to Dr. Cyriacus Lwamayanga, the Head of the Architecture Department, for his friendship, profound support, earnest encouragement, insightful interest in my work and critical contribution to my study.

My heartfelt gratitude goes to PhD Coordinators at AHO, Ingrid Tolstad and then Birgitte Oppegaard, for their constructive support on academic matters and for tirelessly facilitating my travels and stay in Oslo, to PhD colleagues from East Africa, Esther Katile, Joseph Mukeku and Joseph Kamenju, for their constructive support on academic and social matters, to all PhD colleagues from Norway and

other countries for their academic, social and moral support especially when we attended a four-month PhD course in Fall Semester, 2008.

I am very thankful to the library staff at AHO for their useful guidance and support on how to make best use of the AHO library. My thanks go to the IT department staff at AHO for their assistance with computer-related hassles. I am especially indebted to Dr. Ezekiel Moshi, who provided me with working space in his office at ARU and invaluable encouragement, support and tireless and constructive criticism of my study. My heartfelt thanks go to Kristofa Nkembo, who spared his valuable time to introduce me to the Map processing computer program. My sincere gratitude is due to my colleagues at ARU: Dr. Ludigija Bulamile, Fred Nderimo, Owden Mwakipesile, Richard Beshu, Daniel Mbisso, Anthony Mosha, Dr. Kamugisha Byabato, Shubira Kalugila, Vicky Heilman, Jafar Jongo, Omary Shegilla, Edson Sanga, Valentine Rweyemamu, Dr. Liberatus Mrema, Khama Abdallah, Awadhi Abdallah, Dr. Camilius Lekule and Simon Mhando, for their academic and moral support.

Many thanks go to the Kinondoni Municipal Council Director and the Kimara Ward Executive Officer for allowing me to conduct my fieldwork in Kimara area. I am especially grateful to Fadhili Mhawila, my key research assistant, who worked tirelessly in my presence or absence. Thanks too to Vaileth Mhabuka and Emanuel Fares, who were always ready to assist me in my research work at short notice. My sincere thanks go to Mr. Mashaka Ramadhani, Mr. Masama, Mr. Sakafu, Mr. Jakaya Mzee, Mr. Joel Mwasanga, Mr. Mbena and Mr. Yahaya Abdallah, the Ten Cell leaders, who tirelessly assisted me with my fieldwork.

My heartfelt thanks go to my mother, Domitina Bahendwa, who kept on diligently providing exclusive support and encouragement but also graciously took care of me and provided a pleasant environment for me to read and write during my working visits in Helsinki. Special thanks go also to my sisters: Droni Bahendwa and Alinda Bahendwa and my nephews: Joseph Bahendwa and David Bahendwa for their esteemed company, encouragement and earnest support during my stays in Helsinki.

I am grateful to my father, Professor Festo Bahendwa, for his

encouragement and support. I am also indebted to my sisters: Mercy Mahega and Griselda Mvula and my brothers: Gamaliel Bahendwa and Gabriel Bahendwa for their keen interest in my work, their prayers, profound encouragement and support.

Finally, since it is very difficult to mention and thank everyone individually, I would like to say 'thank you' to every one of you who, in one way or another, contributed to make this study a reality.

Asanteni sana.

Abstract

Challenges arising from irrelevant conventional procedures adopted in an attempt to create desired urban form amid rapid urbanization in most African states have led to an increased contribution by local residents to meet that end. The conventional practices mostly involve formal urban institutions and professionals as major actors, with little regard for whether the tools and resources at their disposal are relevant to the specific urban context. This conception tends to ignore the contribution of ordinary urban residents who play a significant role in shaping urban space that accommodates their basic needs on the ground. This thesis is an attempt to identify such knowledge accumulated unconventionally so that the approach may be supplemented to fill the gap in creating convenient urban form.

Concepts relating to informal urbanization, especially in the African context, are explored. Kimara informal settlement in Dar es Salaam City has been used as a case study to illustrate the role of urban residents in transforming urban form. Residents' practices that had a significant impact on urban form were explored, including factors influencing migration to suburban areas, plot acquisition, transfer and development, characteristics of land ownership and the residents' initiatives to provide community infrastructure and services.

The findings show that the growth and form of suburban areas in Dar es Salaam are largely dominated by the transformation practices of individual developers acting informally on a plot-by-plot basis. Suburban areas are preferred by most developers from all social income groups for residential development since land is easily accessible and development requirements are flexible, which together

reduce development costs. The rationale for the design and planning of neighbourhoods depends on how individual developers in a cluster or block collaborate to deal with communal or collective requirements, such as roads, paths, public space, marketplaces, shopping areas, water supply, power supply and others.

It was also revealed that the creation of urban space was determined by the need for its use rather than its aesthetic value. The diversity of informal processes contributes to a rise of grassroots institutions, which guide and organise informal transformation practices. Furthermore, the political elements through the Sub-Ward and Ten Cell Unit leadership play a significant role in guiding the process of informal urbanization.

The study concludes by reconceptualising the urban form through appreciating and recognising the ingenuity of informal practices in creating relevant urban space and responding to real conditions on the ground. It also identifies the limitation of the fragmented efforts of informal developers on a plot-by-plot basis to create a relatively meaningful functional city. Thus, professional and state intervention is imperative but should aim at facilitating the capacities imparted by informal transformation processes in order to meet urban requirements on all urban scales, hence achieving the urban form that works best.

Key words: Urban form, residents, transformation, informal urbanisation, process.

Chapter 1: Introduction

1.1 Background of the study

My interest in furthering my understanding of the peculiar¹ transformation of cities in my country arose after I studied the course of Architecture at Ardhi University in Dar es Salaam, Tanzania. During my course, I studied some concepts on urban design and planning. To sharpen our comprehension of the concepts, we used to consult examples of layouts and images of Western cities, neighbourhoods and all the necessary facilities required to meet urban needs. Most of these examples were a representation of how the concepts we studied could work in real life. It was very unfortunate that, although we studied these concepts as the means to guide our professional career in designing and planning our cities in the future, there were hardly any local examples that could be used to motivate us. In fact, we could not even demand such examples since we had barely observed the city environment referred to in those models in relation to the city of Dar es Salaam or other cities we know in the country. This situation raised more questions than answers such as: Is it possible that our urban professionals have failed to deliver? Do we study urban design concepts for the sake of ‘education’ that one may have to put aside during the ‘real practice’? Are the concepts too rigid to relax in certain contextual realities? Who is really an urban designer in our urban context, the professional or the urban resident or both or none?

One of the urban design and planning concepts I studied was based on the zoning system, which requires a strict separation of urban

¹ Urban transformation processes in this context can be referred to as *peculiar* based on the contradiction associated with ‘the designed’ and ‘the real’; ‘the professional input’ and ‘the inhabitant’s input’; ‘the theory’ and ‘the practice’; and the modern concepts dominating academic discourse and the consequence of their application in the field.

functions, such as residential, commercial, recreational, industrial, institutional functions and others. This was aimed at providing a city form that operates in a most convenient way without one function conflicting with the others. The designer could distribute the city in different scales, beginning with the city scale where different zones and their main facilities are identified. From the city scale, the scale goes further down successively to urban district, neighbourhood, block and cluster, up to an individual urban project or a single building. In some cases, it was also possible to identify clearly the hierarchy of urban scale in examples of Western cities we consulted. Again, the urban design and planning activity was mostly the responsibility of professionals, who had the skills and knowledge to organize, isolate and harmonize various functions to provide relevant urban facilities to produce a conveniently operating city.

However, my experience of the form of Dar es Salaam city and some other cities in my country was somewhat different. The more one moved away from the central core of the city, the more the conventional rationality of city organization diminished. It seemed like every function was everywhere so that one may find residences, shops, a carpentry workshop, car repairing garage, a school, a military camp, a church, a night club, an office building, a warehouse and others, all in the same urban area. One may find that such a mixture has some functions which are interdependent while other functions appear to be far from being related. Although this situation may not look normal to some observers, these functions could be operating in a relatively normal way within the socio-economic context in which the urban space was produced. However, despite all the questions that may arise on whether such a spontaneous mixed organization is functional or not, on the one hand I tended to ask myself about what had happened to the zoning approach as a 'default' tool available for professionals. On the other hand, I observed that most land development in the city of Dar es Salaam and other cities I know in Tanzania was being carried out by individual urbanites. This raised another question on the role of professionals in producing urban goods and services for the majority of city dwellers. But also it caused me to be curious about the ingenuity of ordinary urban residents, who create and service their urban places in which to live, work and recreate that

are reasonably convenient. This observation posits the important point that, although the professional contribution with its associated modern dogma may be relevant, the intensity with which ordinary urban residents contribute to urban production and its impact on urban form demands a generous reconceptualization that would take seriously the relevant unconventional features on board.

Generally, the urban transformation of cities in Tanzania has increasingly involved the uncoordinated practices of ordinary urban residents with varying capacities, who have contributed the lion's share in the formation of urban form. Although this situation is rarely acknowledged positively in professional circles as possibly a constructive way to achieve the urban goal as expected, it is the reality of transformation practices that greatly shape our urban form of today. Again, the normative professional understanding perceives the residents' ever-increasing involvement in uncontrolled urban transformation as a problem that need to be tackled through specialised formal practices. In this regard, less attention is given to constructive input of urban residents who are the major contributors.

Looking at the example of Dar es Salaam city again, one would find that new settlements with substantial rationality and environmental qualities are being created mainly in suburban areas. Moreover, older settlements are being improved and transformed informally by residents. The relative spatial design and planning, plot sub-divisions and allocations, provision of services and infrastructure, housing and public space and others are the result of processes associated with the practices of ordinary urban residents. The outcome of urban contexts follows the patterns and forms that are likely to depend on the needs, expectations and capacities of the very actors.

The increased uncoordinated transformation practices of the residents should not be judged by the simple conclusion of lack of resources, institutional weakness, technological deficiency or others, but they should be judged by what they could offer the design and planning professionals. Thus, the underlying forces that lead to the actions of the residents' involvement in the moulding and remoulding of urban form should not be speculated on, but rather should be analysed through organised investigation.

The contribution of individuals, who in principle share substantially in this process, has been marginalised by planners, designers and other top decision makers mostly working under stringent urban institutional regulations and policies. It is on the basis of this handicap that the contribution of urban residents and their associated processes has to be prominently featured in urban transformation discourse with the view to capturing adequate information on the initiatives of transformation processes and the emerging urban form.

The current research takes this as its starting point to find out what role is played by individual uncoordinated practices, such as establishing homes, places of work, services, infrastructure and others, to achieve a relatively convenient urban environment. The current practice indicates that the dominant reliance on professionals and top decision makers to respond to theoretical and practical problems concerning the production of urban goods and services in this context has proved to be an inadequate approach. Therefore, the best practices have to be sought, whereby tools from conventional and unconventional contributors can be balanced and put to proper use to address the conflicting positions of actors and approaches in the process.

1.2 Issues on unconventional urban processes

Studies analysing urban processes that involve local residents as the main actors in urban transformation without the direct control of formal institutions categorise the process as informal or illegal urban development. Despite the higher scale in which ordinary actors are engaged in unconventional urban processes, less attention has been given to informal urbanization by urban institutions and professionals such as architects and planners, who simply evaluate it by the simple dichotomy of formal against informal, legal against illegal, planned against unplanned, rich against poor, inside against outside and the like (Castillo, 2000:4, Anyamba, 2005: 9). The resulting informal settlements are usually regarded as imperfect urban places to be legalised and upgraded by injecting professional inputs whenever resources are availed by the formal institutions. Such an attitude not only alienates the relatively positive elements the informal practices could impart to the transformation process from the general

perspective, but it also overlooks the opportunity for the enhancement of prudence in allocating the combined resources deployed by different individual actors for the same purpose. A relevant example of neglect of residents' efforts by urban institutions is pointed out by Burra (2004: 139), who stated that a new plan for Makongo informal settlement on the outskirts of the city of Dar es Salaam was prepared by the city authorities in total ignorance of the investment made by the residents. The attempt to implement the plan faced strong opposition from residents so that its realisation was impossible. In that way the city authorities had to back down and agree to involve residents in the planning and implementation of the improvement of the settlement's infrastructure and services. This is one of the examples showing that constructive informal efforts have been neglected by professional practitioners and public institutions. Experiences of this kind expose the need for gaining a comprehensive understanding of the initiatives of informal urban processes with the view to providing prudent guidance for professional urban interventions.

Simone (2004: 5) indicates how urban residents' efforts are not just for survival but also for advocating for better planning and management of the city. He notes that:

Self-responsibility of urban survival has opened up space for different ways of organizing activities. Communities have become increasingly involved in one or more aspects of the provision of essential services, while advocating for more effective urban planning and management. Many local associations have been formed to improve sanitation, provide shelter, improve marketing, extend microfinance and advocate for a broad range of rights (Simone 2004: 5).

Such community initiatives have significant spatial impact that can greatly contribute to informing architectural and planning strategies for urban design if the inherent socio-economic forces attached to urban space are known.

The causes of informal urban practices are mostly related to urban institutions' failure to provide their citizens with all the necessary urban products and also to the magnitude of rural-urban migration that puts pressure on the infrastructure and services meant

for a smaller population. However, little has been done to discover the tacit knowledge accumulated through residents' initiatives, which may supplement the deficiency of the existing approach to the production of urban goods and services. The UN-Habitat Report (2003:5) argues that state governance is to blame for the mushrooming of slums as a result of the failure of housing policies, laws and delivery system as well as of national and urban policies. It adds that:

There is no doubt that the political will to achieve long-lasting and structural interventions constitute the key to success, particularly when accompanied by local ownership and leadership and the mobilization of the potential and capacity of all the stakeholders, particularly the people themselves (UN-Habitat 2003:5).

Although responsibility for the environment is directed at the governance of state institutions, the report is optimistic about the positive direction of urban residents' initiatives.

Some researchers associate the challenges of urban informality and poverty with the lack of innovation by urban institutions, international donors and professionals for devising means to resolve informality challenges in the cultural, economic, political and technological context, but instead they embrace modern ideologies of urban planning and design, which demand massive investment in technology, which is beyond the capacity of local institutions or residents to sustain (Kimaryo , 1995: 27; Simone, 2004: 8; Robbins, 1989: 59, Hamdi, 1995: 24).

In most cities in the developing world, responding to the challenges of informality is conceived to be the responsibility of urban institutions to provide the urban citizens with housing, social services, infrastructure and others. These efforts are noted to be barely sustainable, since only a few such urban projects are carried out as compared with the demand. Furthermore, the projects are not assimilated into the local context and depend heavily on foreign funding. In turn, most projects take place in small sections of cities as pilot projects and the perceived problem of informality persists. Castillo (2000) argues that it is wrong to overemphasise the housing problem as the key problem to informality. Other dimensions of informality that could be turned into resourceful means of resolving

the problem were neglected. He was also of the view that the move by most governments to intervene in housing issues suppressed the contribution of informal efforts within the sector, thus increasing the problem.

The recognition of informality as an affordable means of survival in the city, at least for the poor, started to change the attitude of states and professionals to the sector.² It was resolved that regularization of informal settlements by providing basic infrastructure, services and registration of property ownership would be the best way forward. However, the regularization programmes were mainly sponsored by foreign funding, resulting in few settlements being upgraded. Thus informality escalated, forming part of the normal growth and transformation of most cities in developing countries (Hamdi, 1995: 18).

Some analysts look at informality and the associated processes with an optimistic eye in the expectation that its cure rests on a proper understanding of its potential, as well as the innovation and creativity of the actors, especially how they can creatively sustain their livelihoods in the unpromising urban environment (Hansen, 2004; Simone, 2004; Murray, 2006). They look at the informal sector as operating in a complex situation of collaboration, connections and networks, which maintain survival activities and improve the welfare of individuals as well as creating urban space. The physical situation, such as congestion arising from small-scale activities, dirty streets, dilapidated infrastructure, inefficient social services, the high rate of formal unemployment and others, disturbs most analysts, who have little perception of the inherent social qualities and think of urbanity in this context as improper. In this regard, there are socio-economic and cultural factors that are more crucial than physical quality. There are also different perceptions of evaluating physical quality among different social structures (Rapoport, 1997: 105).

Further, the issue of land tenure is pointed out to be one of factors contributing to the escalation of unconventional urban

² In recent times, the earliest references to the phenomenon of informal urbanization appear in the work of Jonh F. C. (1968) and Charles Abrams (1964, 1966). But the first time the term 'informal' is used with regard to urban policy is with the International Labour Office (ILO) Employment Mission to Kenya in 1972 (Anyamba, 2005: 10).

transformation. The modern land ownership system that is usually adopted in the formation of cities often conflicts with the customary land tenure system, which frustrates professional efforts to modernise the city. This conflict is considered to have arisen from the professional ego that ignored the customary land tenure system and over-emphasised the western mode of land ownership in producing urban goods and services. This contradictory situation has become a stumbling block to the professional practices of design and planning in most African cities (UN-Habitat 2003: 22, UN-Habitat 2007: 10, Coquery-Vidrovitch 2005: 51, Rakodi 1996: 373). More issues on unconventional urban processes involving ordinary urban residents in the context of African cities are discussed in Chapter Two.

1.3 The objective of the study

This study is based on the argument that the position of urban residents through their practices has increasingly become crucial to the current production of meaningful urban forms rather than being mere informal actors striving for subsistence in urban environment.

The study analyses the role of urban actors, especially the individual urban dweller, in creating settlements in Dar es Salaam informal suburban areas in order to understand, explain and describe the essence, relevance and suitability of their practices in transformation processes and the resulting urban forms, especially regarding how they meet the need for informal urbanity and their key requirements and how the process can be defined in the design and planning discourse. It involves analysing and describing the process of transformation that involves the way residents integrate, negotiate, collaborate and make judgments in the processes, such as their preference for living in suburban areas, land ownership and the development of individual plots, the development of urban clusters or blocks, the provision of social services and infrastructure, the creation of urban space and the involvement of other actors in the process. Based on the current trend of transformation, urban residents are considered central to the enquiry as they are crucial actors in production of urban content in this case.

The main objective of the study is to explore the urban transformation processes and practices dictated by ordinary urban

residents and their relevance to their local context, with a view to gaining an understanding of their contribution to urban design and transformation knowledge.

The areas of analysis of the transformation processes as pointed out above in various categories raises a number of specific research questions, such as:

- How, when and why do urbanites move to suburban areas?
- How is space accessed and developed?
- How are urban blocks developed?
- Who provides social services and infrastructure and how?
- What types of urban space are produced and how?
- Who else is involved in the transformation process and how?

However, the main research questions which cover the concern of all specific questions are:

- How do individual practices concerning urban space influence the resulting urban form?
- What kind of urban space is created and how is it organised, used and maintained?
- How best can intervention in unconventional urban processes be carried out?

The answers to such research questions will considerably enlighten our knowledge of the urban transformation processes that incorporate individual residents in suburban areas in Dar es Salaam.

1.4 The relevance

Dar es Salaam city in Tanzania is among the rapidly growing cities in Africa. Some of other regional cities, which at one time were once not attracting attention because of their rate of growth, are also growing faster than anticipated. The urbanization statistics of 2010 in Tanzania show that 26 percent of the total population live in cities and the annual growth rate is 4.7 percent³. In addition, cities increasingly draw multifaceted actors contributing to their transformation, whereby the ordinary urban residents are ever more becoming the major actors. The pace at which cities grow raises great challenges concerning how

³ <http://www.indexmundi.com/tanzania/urbanization.html> accessed on February 2012

their spatial organization and service provision can cope with the rate of growth. The common practice still associates professionals and public institutions with most responsibilities for urban spatial design, planning and the provision of urban services. This standpoint attributes urban miseries, which include unorthodox spatial organization, lack of public services, unguided development and others, to the failure of the professionals, policy makers and urban institutions to act accordingly. However, the majority of the urban population, for instance, 70 percent in Dar es Salaam, living in informal settlements, are involved in organizing their urban spatial environment and engaging in the provision of minimum services. Although it is debatable whether or not the outcome of unorthodox practices works, it is still the avenue through which the majority of the urban population access reliable and relevant sanctuary for urban life and source of livelihood.

Therefore, two matters of relevance to this study are identified. First, the over-emphasis of responsibility for shaping urban space of professionals and public institutions at the top without sufficient tools to fully address the problem could mean that the ingenuity contributed by urban residents to transformation is disregarded. Secondly, because most urban citizens (in the case of Dar es Salaam city more than 70 percent of the population live in informal settlements) are involved in unconventional spatial practices the enormous spatial impact they have can be felt at city level and thus should not be ignored.

Since unconventional practices are real, active and persistent, they should be acknowledged and begin to inform the professionals' sense of practical engagement. In this way, the tools to understand the unorthodox urbanization attributes have to be really shaped by the dynamics of the process itself.

1.5 Research design and methodological strategy

The study arises from the idea of questioning the observed physical urban product and its production process as regards the theory claiming to back its creation and existence. The observed physical urban form gives every indication that it is influenced by ordinary urban residents' transformation practices rather than professional influence. Thus this study involved investigating the

common practices of individuals in the urban setting and the resulting physical outcome, with a view to understanding and describing the transformation process. The nature of study of individuals' practices in a specified context led to the adoption of the case study method. The case study method in this case responds to the specificity of the phenomenon investigated, as noted by Gillham (2000: 6) that:

Natural sciences research is aimed at *generalizable* findings (which may have general implications for theory). But in human behaviour, generalization from one group of people to other, or one institution to another, is often suspect – because there are too many elements that are *specific* to that group or institution. For example, what is true about one school (e.g. the causes of bullying, or low achievement, or high delinquency rates) may well not be true of another (Gillham, 2000: 6).

This applies to this study since the information required involved the exploration of a great spectrum of individuals and group activities, urban spatial qualities and physical forms, which are primarily contextual. The case study research method is a strategy bounded by time and activity, and allows for variety of data collection procedures. The complexity posed by the nature of the case study necessitated the use of both qualitative and quantitative research strategies for data collection, analysis and interpretation (Yin, 1994: 6; Creswell, 1994:13). Further, as Gillham (2000: 13) noted, the case study was applied as a main method, within which different sub-methods such as interviews, observations, measurements, photographic registration, sketching, document and record analysis, work samples and mapping were used. In this way the choice of case study areas emphasised places where the influence of urban residents on the change in urban form is of significant proportions. From that point of view, the suburban areas of Dar es Salaam was chosen as a precise case study areas since the majority of urban residents dwell there and also a multitude of urban components was produced by them.

1.5.1 Case selection

The selection of the case considered the availability of sufficient information relating to urban products resulting from

residents' practices. Contrary to the city centre, the suburban areas of Dar es Salaam city are places where current urban growth is experienced, with most of the development carried out by urban residents. The enormous stretch of suburban areas posed a challenge for the selection of a specific case study area where most suburban areas could be equally suitable for the study. However, the criteria for the selection of the case study area were made very simple and personal but very important to the researcher. In this way, Kimara area in the western part of Dar es Salaam city was selected as the case for this study. The researcher had various relatives in the area and so he had a greater opportunity to visit the area very frequently than other suburban areas in the city of Dar es Salaam. In this way the researcher felt not only closely attached to the area but also had a sense of familiarity with the area. This kind of attachment facilitated the general understanding of the place and paved the way for easy accessibility to critical information and other related research matters.

Furthermore, Kimara has a certain maturity in the sense that the continuity of processes of change involving residents is evident. The place started as an urban farming area, or rather urban-rural, with scattered farms occupying a large area of land for cultivating. The consolidation process started when farmers started to sub-divide their land and selling it to urban immigrants or urban dwellers, who were moving from the city centre to suburban areas. The consolidation process took place to the point where the area changed from farmland to urban, and the value of land kept rising as further consolidation took place (Mng'ong'o, 2004: 152). The process of consolidation is still taking place and it is not clear when saturation point will be reached. This process of change, which has taken several decades to reach the current urban stage, adds an interesting quality to the area for its suitability as a case study area.

1.5.2 Data collection method

Data collection was done in two main phases, with the first phase being the preliminary phase and the second phase the main phase. The preliminary phase aimed to acquire a general understanding of the case study area in terms of its overall physical and architectural condition, the general transformation activities, the probable key informants, the characteristics of social groups involved

and the community infrastructure in place. The main methods for data collection employed in this phase was a general observation of the physical condition of Kimara informal settlement and informal discussions with residents, Ten Cell leaders, officials in Ward and Sub-Ward offices and the Planning Officers of Kinondoni Municipality and the Ministry of Land Housing and Human Settlements Development (MLHHS). Further, maps, satellite images and documents were analysed. The information gathered from this phase informed the strategy for conducting the study in the second phase. Among the information gathered in this phase was the importance of the Ten Cell leaders as key informants. They were also very important for guiding the choice of individual respondents in their respective areas and played the role of creating their trust in the researcher's work. Kimara Ward and the Sub-Ward offices were also very useful as they provided general information on political, economic, spatial, demographic, historical and social development issues, which was important for obtaining a general overview of Kimara informal settlement as presented in Chapter Three.

Furthermore, the involvement of mixed social groups in the informal transformation processes meant that the researcher considered the categorization of social groups in studying the processes. However, the preliminary study indicated that, despite the existence of different social income groups, the general concept of development processes was common to all groups. The nature of property acquisition, transfer, ownership, plot development processes and other transformation practices was common to all social income groups. This rendered the categorization of social income groups irrelevant in the process of trying to understand the transformation process at the individual and collective level. The researcher also expected that the key source of professional information regarding the design and planning of the informal settlement of Kimara would be Kinondoni Municipal Council. However, the researcher came to realize that the regularization programmes that were taking place in Kimara were administered by the MLHHS, which also became a key informant in that area.

On the aspect of function, although there were commercial, industrial, institutional and recreational functions, Kimara was a

mainly residential area with mixed social income groups involved mainly in the construction of their own residential dwellings on their plots. However, it had to be acknowledged that the area along Morogoro Road had a concentration of commercial activities, perhaps resulting from its high land value and being the main circulation corridor at the local as well as the city level. The quality, quantity and scale of development projects were different responding to the diversified needs and financial ability of individual developers. This displayed a complex physical and architectural image that extended to almost the whole settlement. The observations were important for informing the selection of sub-cases for further investigation in the second phase.

Further, the inventory on informal space configuration in the preliminary phase raised a methodological concern about how to understand the process of generating informal urban space and how that could be generalised. The issue was how to connect the process of urban change and the physical space generated. It was considered earlier that describing the physical configuration, such as size, shape and form of space should, among others, be central in order to attain a certain quantifiable generalization. The challenge of this idea was that space occupied by plots, clusters, blocks, roads, paths and others was continuously changing in size, shape and form due to the multifaceted contributions of disjointed actors in creating and organising it. There were no defined codes directly guiding the resulting physical space, which meant that its contribution to an understanding of the form and generating it was reduced. In such a context, less emphasis was put on generating a general quantifiable urban form and more emphasis was put on describing the process of generating the form. This idea was adopted in the second phase of the field study and was considered relevant since the physical configuration of informal urban space was the result of the process shaped by the socio-economic context of the citizens involved.

In this way, the process was captured through interviews with selected informal developers in different Sub-Wards in Kimara and observations of the resulting components of physical space. Moreover, the discussions and interviews with key informers such as Ten Cell Leaders, Sub-Ward Chairpersons, Ward Office staff and City Planners

contributed to building up the process of creating the informal urban form. The development projects carried out by the respondents were taken as the physical outcome of the process narrated. The fact that respondents were developing plots in the urban context, and the way in which they dealt with individual and community interests was captured. This was done in order to gain an understanding of the way in which a network of individuals was created to deal with common interests, thus moving from dealing with individual plots to a level where urban space was being created.

The second phase was conducted as a refinement of the first phase. A field study was conducted as a more informed research strategy in a more focused way. As found in the first stage, attributes of the transformation process were common to all social income groups in all parts of the informal settlement of Kimara, and so the selection of sub-cases for further field study was unrestricted and open. Thus, the field study at this stage concentrated on three Sub-Wards radiating from *Kimara Mwisho* centre at Morogoro Road, namely: *Kimara Matangini*, *Kimara Michungwani* and *Kimara King'ong'o*. The first Sub-Ward is located along Morogoro Road and the other two are located away from Morogoro Road. The selection of sub-cases in this manner took into consideration the distribution of function observed in the first phase of study that included the concentration of commercial functions along the areas bordering Morogoro Road. In this way, at least one Sub-Ward was selected along Morogoro Road and the other two in the inner part of the settlement away from the main circulation corridor.

Three Ten Cell Units were randomly selected from each Sub-Ward. Officials at each Sub-Ward were influential in the selection of Ten Cell Units. From the knowledge the researcher obtained in the first phase concerning the fact that the conceptual attributes of the development process were common to all social groups, the researcher accepted the suggestions made by the Sub-Ward officials. The Sub-Ward officials suggested the Ten Cell Units whose leaders were very cooperative and committed, who could be available at short notice. The suggested Ten Cell Leaders worked well with the researcher. Further, each Ten Cell Leader guided the researcher to select five property owners among his people for interviewing to grasp the nature

of their involvement in transforming the urban space and their control over the process. This selection was made randomly and the researcher took the advantage of the Ten Cell Leaders' knowledge of their people. The main subject areas of concentration in the field study were: people's key preferences for the choice of suburban locations; the process of plot acquisition; the mode of plot ownership, plot development and use; the method of developing an urban unit such as urban block; the process of acquiring social services and infrastructure; and the involvement of other actors in the development process. The data were mainly collected through interviews, observations, taking photographs, sketching and analysis of maps and satellite images of the areas in question. Semi-structured interviews were used to obtain as much information as possible. The prepared questions in each theme under investigation were treated as guiding questions. More questions could be asked as a result of the responses and extra questions could be asked to provide more information wherever possible. However, despite the subjective endeavour to capture as much information as possible, a certain level of objectivity was maintained in the data collection process, which allowed quantitative reflection during empirical data analysis and interpretation.

As part of being key informants, Ten Cell leaders were interviewed to acquire a general overview of the local socio-economic context as well as the nature of the transformation process in their respective areas of jurisdiction. The researcher exploited this opportunity because the Ten Cell Leaders were mostly informed on land development issues as the part of their routine responsibilities in their respective areas. Again, the Ten Cell leaders assisted the researcher in locating property owners for interview, who were picked randomly from their people. The Ten Cell Leaders were dependable regarding their choice of convenient interviewees as they intimately knew their people. For instance, they knew who the property owners were, who would or would not be cooperative with the researcher's mission and who was likely or unlikely to be available at the time scheduled for interviews. They had also to be around when the interviews were being conducted to assure the interviewees that the interviews were in a good cause so that the researcher could gain their

cooperation. With the assurance of the Ten Cell Leaders it was also possible to take photographs of the interviewees' property, making sketches of their house and plot layouts and others.

There was a peculiar case where a group of vendors created a public market using their own initiative that served Kimara settlement and other parts of Dar es Salaam city. This initiative took place at Kimara Matangini, the Sub-Ward located along Morogoro Road. The way the land was acquired by the group of vendors, whose interest were to secure an income-generating source while providing the urban community with an important public service, and the way they established, organised and maintained the market on their own deserved the attention of this study. It was selected as an appropriate sub-case representing the residents' self effort in providing these services and infrastructure in their communities. The market chairperson was interviewed to gather information on how the market was established, operated and maintained. Furthermore, five vendors in the market were randomly selected and interviewed to capture a second opinion but also to discover the impact of their vending activity in the market on their urban life and vice versa.

1.6 Analysis and interpretation framework

The analysis involved searching for the interrelationship or interplay of parts within the whole by examining, categorising, tabulating or combining evidence in order to arrive at a good understanding of the whole or the system that is comprised of. Using the empirical data, the analysis in this case was aimed at describing how social practices in real urban life impact the urban form, hence providing implications for urban design and planning discourse. Comparing and reflecting on the empirical data was done quantitatively and qualitatively. The empirical data collected from different sources were analysed in each category as independent and also interdependent when compared across categories to provide a rigorous description of the phenomenon. Preliminary reflection on the data was usually done in order to determine any potential gap to be filled by further data collection. The data collected in the preliminary stages were allowed to be challenged, questioned and compared in order to give a specific understanding of a phenomenon and provide grounds for further empirical investigation.

1.7 Reflection on the adopted method

The researcher had to start by acknowledging his initial cynicism that residents would not cooperate in providing information on their property development activities for fear of connecting his work with government programmes of expropriating land for the provision of public facilities. This fear was prompted by the fact that some government programmes have affected Kimara settlement, whereby some owners' property had been expropriated by the government to pave the way for road construction. Even during his research process, there were owners whose properties had already been identified for expropriation by the government for road construction and the provision of other public facilities⁴. However, the researcher was surprised by the sincere cooperation accorded by the residents in providing their individual information on their plot development activities. Some respondents were keen to provide as much information as possible in the expectation that, if the researcher got sufficient and right information, his study could help improve their urban environment.

The researcher also acknowledged that the full cooperation offered by the respondents was achieved by the Ten Cell Leaders who had to accompany him whenever he collected data from individual property owners such as conducting interviews, taking photographs, making sketches, taking measurements and others. In some cases the Ten Cell Leaders prepared their people the day before he met them for data collection. In this way the respondents were very responsive to the researcher's questions and other data collection activities.

It has to be acknowledged further that part of the methodological approach was influenced by the local leaders at Sub-Ward and Ten Cell Unit level. The researcher relied on their knowledge and experience of the area and the people to make important decisions regarding the methodological approach. The selection of Sub-Wards and Ten Cell Units as sub-cases and the

⁴ However, compulsory acquisition laws stipulate that persons whose land is expropriated for public interest have to be fairly and promptly compensated. The spirit of the compensation payable to dispossessed persons is to ensure that households affected neither lose nor gain as a result of their land or property being appropriated for the public interest. The property owners whose land was expropriated, or was about to be expropriated, in this case were being or expected to be compensated by the government.

selection of interviewees are examples of the methodological decisions influenced by the local leaders.

In the course of collecting general information, some photographs have to be taken in streets to capture specific activities, scenes, artefacts and others. Although permission to collect data was provided by the City and local administration, people were usually not happy to be photographed. In a number of cases, people stopped and asked us the purpose of our actions. Although it was not feasible to explain our mission every time we took photographs, those who were curious about our activities appeared to understand and support the purpose of our research work whenever we explained and produced our letter of permission. Thus, in order to keep our research work moving forward, we decided to explain the purpose of our work only when someone stopped us and asked.

On the other hand, during the collection and management of data, the researcher would do everything to avoid falling into unnecessary or predictable difficulties. But some contextual conditions caused the researcher to experience unexpected difficulties. The researcher used to keep a backup copy of data on an external hard disk at home. But due to frequent power failures at home, as a result of the prolonged critical power shortage in the country, the researcher had to take the backup external hard disk to his office in order to scan it and upload it with more research data. It was very unfortunate that on his way back home, the laptop, the backup external hard disk and the camera, all in one bag, were stolen. Almost all the photographs and most written materials were lost. Fortunately, the researcher kept some important written materials and data on the internet⁵ and the recorded interview sheets were safe in his office. This relieved the difficulty of repeating the work although a substantial amount of work had to be repeated, such as the photographing and some preliminary data management and analysis. Despite the researcher's worry about how to handle the respondents when repeating the same activity, the Ten Cell leaders were again very useful in making this exercise run

⁵ Thanks to the PhD research course in Fall Semester in 2008 at Oslo School of Architecture and Design where, among other courses, we were introduced to internet tools that could be useful to facilitate the processing, storage, exchange and communicating our materials. Thus, among the internet tools introduced to us, I chose to use 'Evernote.com' and the website I created with 'wordpress.com' to process and store some of my PhD materials.

smoothly. They suggested that it was not necessary for everyone to know that the researcher had lost the data and thus was repeating the activity. They offered to deal with their people while the researcher did his research work. In this way, they treated his repeating research activity as a continuation of his research work.

1.8 The structure of the thesis

This thesis consists of six chapters. Chapter one provides the general introduction to this study. It presents the background of the study and contextualises the research subject. Further, the research problem, objectives, questions and the relevance of the study are outlined. The research methodological approach adopted by this study is also clearly presented.

Chapter two contains discussions on the literature review. Concepts relating to this study, such as urban form, informal urbanity, land tenure, social services and infrastructure, and intervention policies on urban informality, are identified and discussed with the view to building the conceptual framework on which this study is grounded. On the aspect of making the conceptual framework relevant to the study, the concept of the African city is emphasised to show how it deviates from the conventional urban models to produce its own peculiar form influenced by the African context.

Chapter three presents the empirical data collected from Kimara settlement, focusing on the individual practices of property owners in developing their plots. The empirical data on individual preference for urban location, plot acquisition, plot ownership, plot development and individual initiatives in providing services and infrastructure are broadly discussed.

Chapter four discusses the empirical data focusing on collective initiatives, including groups of residents, groups with special interests, urban administrative bodies, state institutions, and professionals in their specific roles and contribution influencing urban transformation in Kimara informal settlement.

Chapter five explores various physical urban components and forms resulting from the practices of the various actors described in chapters three and four. The physical urban components such as plots,

urban blocks, neighbourhoods, local centres, roads, paths, public space, private space and others are described as they take shape resulting from formal and informal practices.

In chapter six, the conclusion is drawn by presenting the key findings of the study in terms of how they contribute to an understanding of specific urban forms through the mirror of informal transformation practices and their implications for the growth of informal and formal settlements in cities in Tanzania and other countries in Africa.

Chapter 2: Urban Theories and Conceptual Reflections

2.1 The context of urban form

2.1.1 *Urban form*

The urban form can be associated with the social product that results in the organised composition of various urban spatial practices, their relationships and connections which together form a system of buildings and the voids. The organisation referred to here is not necessarily a conventional one but it can also be organic. Parker (2004: 40), referring to Park's study of human anthropology of the city, notes how he displayed the importance of the urban structure (the planned environment, the layout of buildings and houses, etc.) within which social transactions were played out. He further adds that:

Structure and action are explicit in the division of the city study (Park, 1915) which deals in turn with: (i) the City Plan and Local Organization, (ii) Industrial Organisation and Moral Order, (iii) Secondary Relations and Social Control and (iv) Temperament and the Urban Environment. Here, each structural feature is juxtaposed with some aspect of human character or human relations in an attempt to reinforce Park's view that the city is not just a physical construction but a human community upon which society's complex hierarchies and divisions are mapped.

It is then from that point that the urban form depicts a myriad of social contents to the extent that for researchers with an interest in understanding the urban social processes may choose to take form as one of important study areas. The urban form and its history could be mapped to a series of social contents and contexts in terms of technology, economy, politics, culture, environment and others. The modernists strongly associate urban form with function so that the

form is derived from functional categories that determine social organisation that are organised in their popular zones of residence, work and recreations connected by traffic routes. To the contrary, Rossi (1982: 47) argues that form is independent of function since the city form is a permanent structure as it ‘remembers’ its past and ‘realises itself’ as it develops and adjusts itself to accommodate various functions along its history. He notes that:

Once we attribute different values to different functions, we deny the validity of naive functionalism; in fact, using this line of reasoning, we see that naive functionalism ends up contradicting its own initial hypothesis. Furthermore, if urban artefacts were constantly able to reform and renew themselves simply by establishing new functions, the values of the urban structure, as revealed through its architecture, would be continuous and easily available. The permanence of buildings and forms would have no significance, and the very idea of the transmission of a culture, of which the city is an element, would be questionable. None of this corresponds to reality.

This discourse contends that it is difficult to provide form with a precise definition because there is always a ‘residue’ that is impossible to describe in a precise way. One relevant example is the failure of implementation by most modern urban planning in Africa that is based explicitly on the segregation and permanence of different functions. *The state provided planning ordinances and decrees that showed little real variation from colonial patterns except that the capacity to carry out such plans was no longer there. These plans were in some respects nefarious in the way they privileged some social groups and in other ways irrelevant to the real social processes at work in the city (Freund, 2007: 156).* Rossi asserts that city agglomeration is explained precisely on the basis of what functions its citizens seek to exercise and the function of a city becomes its *raison d’être* and, he adds, it is in this that the form reveals itself. This may be explained by the diminishing popularity of modern urbanism and rising popularity of post-modern urbanism, the approach of which provides more independence between function and form. The significant recognition of ‘informal urbanism’ in design discipline as part of urban realities shaping the form in developing countries’ cities is one realization of the freedom of form against function. In this way

remedial action in relation to the informality of cities should take place within the context of this understanding.

Morris (1994) provides a contribution to urban form by showing the influence of historical factors on its generation. He introduces two main determinants influencing the forms of both rural and urban settlements along their history. First is the 'natural-world' with three geographical attributes of the location of a settlement, namely its climate, topography, and the available construction materials. These determinants have played a part in shaping all historic urban form, both organic growth and planned growth. The second comprise the 'man-made' determinants involving numerous human interventions in natural settlement processes. He notes that the man-made determinants are considerably more numerous and have continued to increase in number as urban societies and technologies have evolved. He went on to describe each determinant in detail, not of much of which is needed here. However, this points out the relevance of the urban past in African cities to current urban forms and processes, and their significance for setting grounds for future change of the form. Morris (1994: 10) further points out that:

An understanding of the 'why' and the 'how' of present-day urban circumstances, it is argued, can but precede any attempt to instigate change, which usually means to strive after improvement. It is not that history necessarily has answers to offer: rather it is a question of needing to gain an understanding of the relevant local past in order to identify the nature of its present-day problems. It is stressed that neither sequence nor comparative written length accorded the determinants is of significance. That which is of fundamental importance is relative effect as the cause of the form of individual settlements.

Further, urban form has been an important factor for the sustainability of the city and determines the extent to how well it meets social, economic and environmental requirements. The conventional determination of urban forms involves conceptualising rational relationships and the disposition of resources within specified values of physical, social, economic, environmental and other categories. This process has usually taken place through a top-down

approach, but as time passes a more inclusive approach has evolved, based on feedback from various actors in the network.

In trying to understand the form-producing process it is considered useful to look at the three city models raised by Shane (2005: 39) that has influenced city form along its evolution. He notes how urban actors would structure and organise the relationship of the city if they had absolute power and acted logically. The first is the city of faith, the main actors being feudal warlords and priests, who favour stasis, place making and land based on an agrarian economy. The second is the city as a machine, where the main actors are corporate executives and capitalists, who favour a system of flow and exchange, of consumption and production, embedded in a space-based, capital intensive and industrial economy. The third is the ecological city, which is considered to consist of a complex structure in which an elected elite responds to feedback from the city's inhabitants. He asserts that the three models present a city's historical evolution in succession from the first to the last. But he also notes that the three of them can apply to one contemporary city or different cities.

However, for the sake of this study, adopting the above theories on African urban form would hardly be relevant as it represent the path of form evolution that is different from the path cities of Africa have taken. Taking the agrarian and industrial economy, African urban processes have hardly passed through the 'green'⁶ and industrial revolutions, which are the driving force for the surfacing of the city of faith and the city as a machine. Urbanization in Africa has happened without remarkable industrial or agricultural revolutions, where it is referred to as urbanization of poverty (UN Habitat, 2003). In that way it would be useful to assess African urbanism from its historical ventures experience. African urbanism is seen to gain a certain

⁶ The industrial revolution was preceded by most innovations in agricultural technology which was a major capital-absorbing activity in Europe in nineteenth century. The development of the genetic science of breeding and fattening animals, rotation farming, animal-driven mechanical drills and hoes, soil fertilizing and others are among agricultural innovations observed by Rykwet (2000). According to Coquery-Vidrovitch (2005: 6), Africa's urban revolution was different from that of the West, where urbanization is older and occurred in a very specific context of both increased agricultural production (the "green revolution" has not yet occurred in Africa) and industrialization, in other words, parallel to economic development.

interest by some researchers, who attempt to pursue a historical path that involves social, economic, cultural and political processes of various African communities. These studies also look at the effects and implications of extended contacts with the world within and outside Africa that were established by local communities during early African urbanism.

2.1.2 The African city

An attempt to understand the transformation processes taking place in urban Africa, especially in Sub-Sahara Africa, can be suitably backed by assessing the specificity of the African city within its own course. This may be important from the point of view that the making of Africa cities, as various cities in other continents, has followed a specific path from its inception, growth and flourishing to the current stage. O'Connor (1983: 20) notes that it may be hard when generalising the urbanisation process in the whole of tropical Africa, excluding North and South Africa to miss the vast diversity of different cities. However, due to the shared historical processes of the pre-colonial, colonial, pre-independence and post-independence periods, some urban common features result from that shared path. Given the historical difference in the social processes within a given social group in any part of Africa, the interaction among different social groups on the continent and their contact with the rest of the world is worth understanding in order to provide a relevant background for the study of urban processes.

It is indisputable that the majority of African people have lived, and still do, in rural areas. Even with the current statistics of extreme rapid urbanization in Africa, the urban population has, although approaching, not yet reached half of the total population as pointed out by Foster (2010: 127) *that, Africa's population remains predominantly rural. About 66 percent of the inhabitants live in rural areas, with significant variation across countries.* Nonetheless, this is still not a sufficient demonstration to prove the lack of urban tradition in the history of African society. There is now substantial evidence that cities in pre-colonial Sub-Sahara Africa have not only been locally established but also existed since around 3000 BCE (Gugler in Gugler, 1996: 211). This indicates that the city is not a new phenomenon in the region and it significantly disproves the argument

that Africa, especially the sub-Saharan region, was totally rural before foreign influence and then colonial rule. Freund, in his African city analysis, tried to regard the social, economic and political context within which African cities evolve rather than dwell on the strict modern urban standards. As he built up the urban idea in his analysis of the evolution of the African city, he notes that:

It is important to stress that if they (*African cities*) fail to meet certain contemporary criteria of what city should be like, such settlements should not be dismissed but rather embraced with interest for their unique configurations and contribution to the cultural development of mankind (Freund 2007: 2).

However, there has been some debate on the significance of those large and populated settlements formed in early times as to whether they could represent the meaning of the city as referred to by Wirth (1938) or whether they were still large villages because of their huge dependence on agriculture for sustenance⁷. Coquery-Vedrovitch (2005: 19) argues that even in cities of Medieval Europe, a large percentage of city dwellers farmed. Some analysts argue that certain settlements may not satisfy the definition of a city in its totality but the existence of elements, such as the permanency of dense settlements, the presence of established groups conducting and depending on trade, the existence of political administration of the city and the presence of long-distance contact with the outside world, made some such settlements qualify as actual cities. It is agreed, however, that the survival of these large settlements depended on agriculture to feed them as the trading of goods and services was not mature enough to sustain the cities.

In the ancient African city, the urban form has evolved from a kind of village to urban agglomeration⁸. This were characterised by the presence of a chief and the associated ritual practices. The chief

⁷ Louis Wirth (1938), a sociologist, defines a city as a relatively large, dense and permanent settlement of socially heterogeneous individuals. Due to socio-economic context of the time, some early African cities may not be accorded this definition.

⁸ Freund (2001: 2) referring to anthropologist John Peel who wrote about large Yoruba urban settlements as they may have been before the nineteenth century, that they often seem to defy simple categorization on a rural-to-urban continuum. Gugler (1996: 215), discussing the forces behind the emergence of urban civilization in Africa, refers to Connah (1987: 231), who put forward the 'productive land hypothesis'. He connects this with emergence of the African elite, social complexity, control of productive land and one of a number of other forces, the improvement and intensification of agriculture.

was the main representative of the ‘ancestors’, who was assisted by priests, part of the elders of royal families, to lead the ritual practice of the agglomeration. But the agglomeration was also an economic strategy for survival and for security purposes. An example of this is the nature of the agro-towns of Tswana chiefdoms, which expanded substantially in the context of the insecure and unstable conditions of the nineteenth century, as noted by Freund (2007: 4) that:

The agro-towns are certainly emblematic of the power of chiefs gathering together a variety of people under their sway. In fact, the structure of the town resembled a series of villages based on descent and affiliation to chief or elder; a distinct feature was the space for *kgotla*, a community and ceremonial meeting ground that virtually defined what community means to the Tswana. But Tswana chiefs were not immeasurably powerful, nor was this the only way a chief in Africa could gain submission. Up to a point, defence may have been a factor in the gathering of a large number of people.

In this way, based on cultural orientation, the city form consisted of the chief’s palace located at the centre, surrounded by a group of compounds of elders of clans and royal families, beyond which was community space for ritual, cultural and other public gatherings, followed by settlement of the people. On the fringes, people farmed for the subsistence of the city population and non-food producers. Writing on the form of ancient cities of the small kingdoms of Central Africa in the pre-colonial era Coquery-Vidrovitch (2005: 67) noted that:

Social differentiation, specialization, and urbanism were therefore present, even though they still seemed in their infancy in some respects. The classical plan of the capital city was that of straight roads converging at the palace or royal compound in the centre and connected by circular streets, similar in pattern to a spider web. The roads led to the quarters were compounds of the various chiefs spread out in the direction of the provinces they controlled. The city was also full of spaces, made up of a series of compounds (houses and livestock enclosures or even lands side by side) that simply reproduced the rural architectural model on a larger and more widely spaced scale. It was, as R. Hull says, a city that minimized urbanity in order to maximize urban space, e.g.,

market space, meeting spaces, agricultural spaces, and living spaces. All known descriptions and interpretations of ancient Bantu cities portray more or less this schema.

Pre-industrial cities, such as medieval cities, had a kind of urban form and displayed the technological level, and the culture, economic, social and political context of the time and space. Assessing the various perceptions of western medieval and early African cities Coquery- Vidrovitch (2005:51) notes that:

The urbanism reflects what we suspect, based on later sources, about the culture of African societies. The urban planning contradicts the centralised vision and carefully mapped view of the western medieval city tucked behind walls and crammed around monumental buildings, such as churches, palaces, markets, and, later bell towers. In Africa, city dwellers used many different locations, depending on the season and function (that is, work or rest). The absence of private, individual ownership of the land made it possible to extend and vary human settlements, including cities. The market, meeting place par excellence, could also be a space on its own, and not especially close to the city; this is still often seen today throughout the Sahel.

Cities which were independent of any form of foreign influence during pre-colonial times could be found in almost all parts of Africa. Those cities which had had some foreign influence adopted and blended this influence with local elements to form a new native form, for instance, the Portuguese influence in the fifteen century on cities like Mbanza Kongo in Angola; Gondar and Aksum in Ethiopia (Freund, 2007, 8). Further, those cities which adopted Islamic culture blended Islamic features into their culture and the built environment but maintained most indigenous cultural elements. O'Connor (1983: 31) notes that Islamic cities occupied mainly by the Hausa people in northern Nigeria, like those of the Yoruba, show cultural continuity with the surrounding rural areas, although they have always housed a distinct elite. Much change has occurred during this century, but it has been largely incorporated into the traditional social system rather than producing a very different system, as happened in cities in many other parts of Africa. Freund (2007: 37) shows that *contacts with European merchant capital and consequent responses largely represented the addition of a different layer of urban activity and urban life, although*

sometimes they did take place in regions of Africa where such contacts had little precedent. So foreign influence was not imposed on the native urban culture but the normal procedure of urban process of giving, taking, changing and blending various peoples' cultures and traditions was under way to form a hybridized local urban culture.

On this aspect, Elleh (1997: 8), referring to Professor Ali Mazrui's concept, introduced the Triple Heritage concept that acknowledges and appreciates the interaction of several cultures that came in as a result of contacts with Africa and the rest of the world. This concept describes the blend of indigenous, Islamic and western cultures as triple cultural legacies that a study of African history may not be comprehensive without their proper realization. He acknowledges that this concept embraces all the components that form African history: indigenous, Islamic and western. Though Elleh concentrates on a study of African architecture coming under such influence, the African city is no exception because they are both the product of social processes. Elleh (1997: 8) quotes Professor Ali Mazrui as below:

Contemporary Africa's triple heritage of indigenous, Islamic and Western legacies is just the modern culmination of a much older triple heritage – the heritage of indigenous, Semitic and Greco-Roman influences in Africa. The ancient Semitic strand has now narrowed and focused more firmly on Arab and Islamic influences; the ancient Greco-Roman strand has now expanded to encompass wider European and American intrusion.

Further, the start and growth of pre-colonial African cities did not necessarily depend on trade as an influential factor. Studies show that there were agglomerations of large and dense settlements of about twenty five thousand people, for example, 'agro towns' in today's Botswana, that were not necessarily connected with trade (Freund, 2007, 3). Conversely, it is described further that some such cities were ephemeral due to their dependence on either trade links or shifting cultivation or other forms of dependency on the natural environment. Elleh (1997: 9) indicated an interesting example of the capital cities of the Congo Basin, wherever they were located, which were spectacularly designed by skilled urban designers. He notes that:

Most of the capital cities of the Congo Basin were moved due to shifting cultivation and leadership changes, but the chief architects re-created the plans of the original capital wherever it was relocated. A good example is the Kuba capital in the Congo. Vansina (1984: 59) notes that “although the Kuba capital was not permanent, precise measurements for every street, and for the positioning of every public building in or out of the place, of every plaza, of every private compound, were kept as a plan by the architects recreating similar effects wherever the capital went.

Colonial occupation followed the industrial revolution in Europe. The birth of industries in Europe rendered the international slave trade obsolete and created a new demand for trade commodities, especially raw materials, which were not available in the temperate zone. Among other areas, tropical Africa with plenty of arable land became important to the European economy for guaranteeing the supply of raw materials at low cost. After the colonial occupation, cities became important centres for administration of the colonialists’ main purpose of extracting raw materials for their industries back in Europe. In this process, they either occupied the established cities, which they modified to meet their need, or they established new city centres. In the case of existing cities, they extended them by creating a colonial city alongside with the native city. The form of the colonial city was organised on the modernist principles of zoning into residential, work and recreational areas, connected by traffic routes. The organization of space had also clear racial demarcations, with Europeans at the centre, coloureds in the buffer zones and Africans on the fringes.

After independence, the African city adjusted to the new socio-economic and cultural realities as colonial cities were inherited. The restrictions imposed by colonial rulers preventing Africans from migrating to cities, except for a limited number of Africans needed for labour, were abolished. The fact that cities were ‘islands’ and centres of social, economic and political domination meant that they could be changed, at least ideally, into centres to stimulate the development of new independent African countries. As a result, the new African elites saw the city as a place to express the new identity of the nations and a platform for the realization of the modernization ambition. As colonial

rule passed into memory, urban growth in Africa has now proceeded at such a pace that a large percentage of most Africans today are increasingly town dwellers. This has resulted in African cities facing unprecedented challenges as they try to cope with the increasing population, when industrialization and economic growth have failed to take place. Current world economic trends, bunched together in many accounts as ‘globalization’, have marginalized Africa, making the management of its cities an impossible task in terms of supporting them financially in a particularly bleak scenario (Freund, 2007: 147; Moshi, 2009: 21).

In the first years after independence, the character of planning and the structure of the late colonial economy remained in place and modernism was harnessed to suit the image of the new elites. However, starting in the mid-1970s it had become clear that the economies of most African countries could not sustain the modernist dream as the new socio-economic realities manifested themselves, especially in the ever growing cities. From 1970 to the 1990s most African countries systematically adopted some policies to address the emerging urban challenges regarding rapid urbanization. Some of the success stories of urban development in the early years of independence were the result of subsidies provided by African governments at the expense of the underdevelopment of rural areas. This raised the concern of international financiers such as the World Bank, which looked upon it as ‘urban bias’, whereby the extra funding to make the modern city work was not the truly representative of the prevailing state of the economy as noted by Freund (2007: 156):

Moreover, the impact of the World Bank influenced policies of the 1980s and 1990s aimed at reducing what became known as urban bias through cutting out anything that smacked of state subsidisation, effectively making life in town more difficult than in the countryside according to many criteria.

The growth of the African city went through a rough path even after independence. The size and form took unprecedented shape, whereby conventional and unconventional struggles took place to reach the current bleak state. The high growth rate of African cities cannot guarantee an opportunity for professional efforts or state institutions to control and sustain the urban growth. These challenges

have caused African cities to grow along their own peculiar path for which a strategy to address them would require a different and appropriate approach that reflect their socio-economic context. It is obvious that over-reliance on modern models and conventional avenues has resulted in not responding appropriately to local challenges. It is thus important to assess various unconventional approaches of various actors or even those ad-hoc solutions for sorting out African urban issues in order to have a relevant discourse on urban design in this particular part of the world. The form of Dar es Salaam can be explored specifically as an African city.

2.1.3 The form of Dar es Salaam

Taking the example of social aspects of the early design of Dar es Salaam city, the social forms can be traced back to the colonial period, when the city was designed on a racial basis, or rather a power basis, with the economically powerful elite being on highly serviced and valuable urban space, the middle income group in the intermediate urban space and the low income group in a totally unserviced and highly congested urban area. In Dar es Salaam, the plan for blacks, who were mainly the low income group, were isolated at a distance in Kariakoo. The city design ended up influencing various forms of class isolation.

The social form in the above example also had economic, physical and demographical forms to mention a few. Economically, taking the example of the whites' area, it had exclusive infrastructure and services installed, with distinctive architecture and high-scale business activities. These characteristics diminished as one moved down to the remaining social classes. Demographically, population density was high in the lower class, while it declined at higher class level as a result of city planning based on class distinction. Commenting on the English colonial city form in India, which is a relevant analogy of the English city of Dar es Salaam, Lynch asserts that:

The English themselves lived in low density compounds, in which English landscapes were recreated, as far as possible. Space was used to express social distance and to control the contacts between native and colonist. Indian servants lived and ate apart. The new city was sharply defined from the old, crowded

native city. The entire landscape, from the form of chairs to the hierarchical naming of roads, was used to make the imposed social structure visible and concrete. Separation and control were maintained, while the nostalgia and anxiety of the intruders was made manageable (Lynch, 1981: 21).

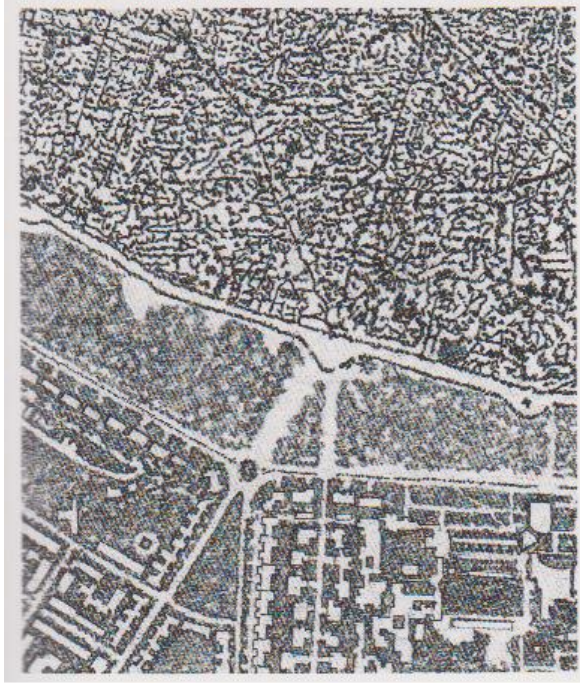


Figure 2.1: The meeting of Shahjahanabad, or Old Delhi (north) and New Delhi (south).

The two are separated by the walls of the Mughal city and a band of open space, the Ramlola ground, acting as a cordon sanitaire. This part of New Delhi, around Turkma Marg, was designed as a residential district for low ranking government workers. The street pattern is radically different from that of the Islamic city.

Source: Kostof (1992: 94)

Such an example of English organization of the colonial city had a great impact on the physical form at various scales. For instance, the colonial planning of Dar es Salaam city left it with a government building district with spacious green land, wide roads, elaborate architecture and high rise buildings while on the other hand the district

of congested settlement had limited green land, narrow roads and low rise buildings. These forms had a great influence on the direction of the transformation of the city where class-based transformation continued to take place long after independence.

The formal part of the city of Dar es Salaam includes the Central Business District (CBD) and some settlements close to it, which include the colonial planning legacy and some planning conducted in the early times of independence. As observed by Moshi (2009) on development of Kariakoo, the transformation in this area was conditioned by the plot structure and road network, which have hardly changed since colonial times. Most parts of the urban periphery have developed informally involving various actors, the majority of which are ordinary urban residents from all income groups. This meant that the bulk of the spatial development of the city of Dar es Salaam has been achieved through unconventional processes. This study dwells on the urban periphery where the impact of residents' practices on the form is far more relevant as it accommodates the majority of the urban population.

In this study, the urban form referred to above is, however, not limited to a specific type but flows out of various forms depending on what unfolds from the involvement of urban residents and their interaction with urban space. The form is kept amorphous and flexible to allow residents and their practices to give it a shape. The role of resident as a designer and planner in creating form is given the priority it deserves as the main subject of transformation in specific urban settings. Since this process takes place informally, it is considered relevant to explore the context of informal urbanism.

2.2 Informal urbanism

2.2.1 Informal urbanity

The element of informality in the urban environment has long been seen as a setback to the general outlook of urbanity from the professional point of view and thus not fully accepted as a proper part of the city. In response to the perceived setback, a number of professional measures and strategies spearheaded by state institutions have been taken to rectify the situation so that urban quarters meet the desired standards of the city.

Informal settlements have, in some cases, been created and grown in undesirable locations of cities, such as steep or mountainous areas, swampy areas, valleys and the like and usually in the vicinity of working areas such as city centres, industrial areas, higher class neighbourhoods and others. This is also exemplified by UN Habitat (2003: 21) comparing the areas of slums and the wealthy that, *'slums, it is believed, begin on fragile or poor-quality land subject to flooding, landslip and other disadvantages, while the rich locate in areas of high amenity – ocean views, pleasant, slightly hilly areas of good soil and aspect'*. Davis (2006: 121) notes that squatters trade physical safety and public health for a few square metres of land and some security against eviction⁹. In such a disgusting and despicable environment which is not desirable for normal human life, one could credit institutions for their decisions to demolish urban shacks as a rational way of dealing with the problem of undesirable urban living standards. However, institutional efforts to provide the urban population with decent living standards could not match the rate of urbanization. This has led informal development to extend from the populous undesirable urban locations to even decent urban locations. In this way informal settlements are growing to an uncontrollable level so that urban residents have to devise means by which to spearhead strategies for their spatial arrangements that respond to their local urban reality. These self-efforts at manipulating and negotiation through various diverse and complex socio-economic lines of survival in the urban setting have resulted in a certain urban culture, which is also reflected in informal urban space. Simone (2004:9) looks at this as follows:

In one sense, shrinking public sector employment, overcrowding in informal sectors, increased competition for resources and services, and growing survivalist orientation on the part of many urban residents relocates the way people structure everyday work relationships...

The emerging urban culture as a result of the shrinking public sector, as pointed out by Simone, may be the outcome of what we

⁹ Davis notes that squatters are pioneer settlers of swamps, floodplains, volcano slopes, unstable hillsides, rubbish mountains, chemical dumps, railroad sidings, and desert fringes. And from such unattractive and hazardous nature, it offers "protection from rising land values in the city" (Davis 2006: 121).

experience as improved environmental and planning through self-help from the once undesirable informal environment. But how is this positive initiative of the residents themselves making an effort responded to by professionals? How can these efforts inform future urban design?

According to Castillo (2000: 6), professionals have failed to identify urban space in the informal process by concentrating on legal and economic status instead of making an effort to understand the reality of informal urbanity. He notes that urban space in informal urbanization, which represents its physical forms and patterns, is not just an effect of the structural, legal, political and economic condition but is an active element in the development of urbanity. He refers to the urbanity of the informal as the practices and forms that a group of stakeholders undertake not only to obtain access to land and housing but also to satisfy their need to engage in urban life. In this way, Castillo considers the urban practices of various actors as one of the key elements resulting in informal urbanity and it can also be used as means through which informal urbanity can be understood.

There has been a growing understanding of the informal process but with little connection to the positive formation of urban space. The notion of some analysts and planners is that a finished package of space with its legal and economic status influences both concrete forms of land appropriation for urbanization and the process of legitimization of property (Castillo 2000:6). This argument cannot be generalised because, in some cases, concrete urbanization may take place unabated under legal or/and illegal conditions. For instance, there are cases of land ownership in most cities in Tanzania where land tenure is vested in the mutual understanding of various social actors and parties. Even where land is transferred to new owners, land is invested in with confidence, which fuels informal urbanization even further.

It is through this kind of social setting that Castillo cautions against the tendency to emphasise the polarity of legality and illegality of the process as the only factor determining the nature of urbanization on the assumption that every action in the formal process is legal and vice versa in the informal process. He insists that this

claim may not be valid in a situation where the judicial system or the institutions responsible have no sufficient resources to deploy and enforce the legal instruments. He shows that legal or illegal actions may not be merely represented by the dichotomy of formal or informal urbanization noting that:

According to this perspective, informal urbanization can involve illegality in many ways: first, when the land does not belong to the person selling it. Second, when public land is sold and developed for urban use without authorization. Third, when land considered unalienable, such as “*ejido*” is sold or transferred. Fourth, when the infrastructure, services or areas to be left open are not provided or set apart by the developer. Fifth, when the sale transaction is not registered formally with the Land Registry. Sixth, when the individual dwellings do not follow building codes. And finally, there are administrative code violations by the landowners, developers or residents in any of the transformation stages of the settlement. These clear-cut divisions unfortunately do not explain the whole picture nor are they useful in generating a comprehensive policy (Castillo 2000:9).

The complexity and heterogeneity of informal processes that lead to diverse informality has also been analysed by Anyamba (2005) in the city of Nairobi. The above illegal actions may hardly be associated with the informal process only. In Anyamba’s study, a number of cases of planning codes not being conformed to in formal areas were revealed, whereby individuals occupy areas meant for public use and areas allocated without infrastructure and services and the like.

This proves the conflicting situation among formal and informal processes while at the same time involving actors from various levels (urban citizen, practising professionals, planners, politicians and others). This is also revealed by a study by Moshi (2009) in Kariakoo area in the city of Dar es Salaam, which showed the morphological transformation of Kariakoo from a black Africans’ settlement with single storey Swahili houses in a grid system around 1910 into a multitude of high rise buildings of up to fifteen storeys in 2009 within a maintained grid system layout. The transformation of this area has been taking place in a formal and planned area that is currently part of

the CBD. However, there is no consistent conformity to planning regulations by all the developers, practising professionals and urban planners. There is the tendency of formal and informal processes taking place concurrently, resulting in the current incredible transformation with a blurring of individual and public interest in urban space. The main actors who influence such complex efforts are: developers with capital for development; plot owners with the original single storey houses and also as prospective sellers of highly valuable underdeveloped plots; practising architects, engineers and contractors for designing and constructing high-rise buildings; politicians at various levels with political interests to preserve; and the city council planners and officials who issue development consents. These actors operate in a complex system, bridging formal and informal processes, which include land acquisition, plot development plans, development consents, erection of high-rise buildings and finally the spatial and morphological impact of the new structures on the context.

These examples highlight the process taking place in most African cities, although in varying scales and intensity. In this way the actors in informal practices as exemplified have a direct impact on the process of urbanity reflected in spatial conditions. Informal urbanization is, therefore, the reality of the urban process, although they are not linear or homogenous but complex and heterogeneous, where the search for proper cognition tools is imperative in order to reveal and understand their significance. Having discussed the informal process in the form of informal urbanity, we may turn to one of the important informal products, the informal urban space.

2.2.2 Informal urban space

Urban space is perceived as an urban product associated with professional input from its formation to prescriptions concerning its use. Therefore certain prescribed parameters and qualities such as compliance with design principles and city planning regulations ought to be imparted so that a space is qualified to be proper urban space. In that way urban spaces in informal urbanism have not yet featured sufficiently in urban discourse, mostly because of the deficiency of formal inputs. However, indicating capacities within informal land development processes, Kombe (2000: 33) points out that there exists some significant and peculiar self-organization initiatives for

engendering an orderly spatial structure by private actors in the absence of public interventions or regulations. He notes that:

Normally the informal sector operates within some norms and procedures which have been developed at the grassroots in order to provide a minimum of security of individual property rights. Often the sector is even co-operating with the formal institutional structures available. Fairly well-developed concepts of spatial orderliness, elaborate mechanisms for land alienation and security of tenure including locally developed procedures for guaranteeing rights of property and dispute arbitration can be identified, questioning the position that without planners or plans settlement will head into chaos.

Urban space can be referred to as the totality of the system of the public realm in the urban context where a multitude of public activities can take place and can be accessed by the public. Discussing space and urban space Madanipour goes deeper in the debate of various conceptions of space in different fields of study. However, his reference to the architectural conception of urban space may be taken as more relevant to this study.

... architectural space comes into being by the erection of two walls, creating a new space in between them, which is separated from the natural space around them.

Zevi (1957) gives the same definition of urban space, where street, squares, parks, playgrounds and gardens are all 'voids' that have been limited or defined to create an enclosed space. Since every architectural volume, every structure of wall, constitute a boundary, a pause in the continuity of space, it is clear that every building functions in the creation of two kinds of space. Its internal space, completely defined by the building itself, and its external or urban space, defined by that building and the others around it (Madanipour 1996:7).

Further understanding of urban space goes beyond the physical spatial enclosure by associating it with social processes in the urban context as quoted below:

It is not an easy task to provide a definition of urban space because such a definition must consider the social parameters of its constituent parts: urban and space. The difficulty of defining urban space is enhanced if one considers that urban space is an

artefact of urbanization – a social process that describes the manner in which cities grow and societies become more complex. For example, a synergistic perspective of space situates the location of “urban” as an outcome of social and institutional forces associated with urbanization. In contrast, a structural perspective of space identifies “urban” as the product of social structures and relationships that typify urbanization. Combining the synergistic and structural perspectives results in the identification of social features associated with urban space: (1) diversity of social roles and relationships, and (2) institutional arrangements and social networks necessary for efficient social order. No matter which perspective one adopts, one thing is clear: urban space is a dynamic aspect of urbanization. Urban space involves synergistic and structural aspects. From a synergistic perspective, urbanization is fuelled by population growth and institutional expansion. In a simplistic scenario, in order for urbanization to occur, people must come together in large enough numbers that they are situated in a space that makes them noticeable¹⁰

This understanding of urban space generates a discourse that cannot be disassociated from the informal process. *The assumption that informal urbanization is unplanned or irrational ignores the sophisticated and sometimes more effective devices that the people involved in these processes resort to, in order to locate and allocate resources, organize space and resolve social and economic needs. This form of planning is foremost spatial; in other words, the decisions and strategies are thought of and developed as transformations of the physical space* (Castillo 2000: 12). This level of rationality and the environmental qualities displayed in the current development of informal urbanity present a credible process whereby urban space is moulded. Because of such rationality, significant requisite components of urban space are likely to be created through the informal process. The usual difference in the creation of urban space is the nature of the process itself. The informal process is usually characterised by individual efforts or self-help, collective ownership, no preconceived form, based on emergent needs, labour

¹⁰http://www.blackwellreference.com/public/tocnod?id=g9781405124331_chuk_g978140512433127_ss1-18

intensive, involves local resources, low cost, practice-based production methods and the process of creation is mostly incremental.

Commenting on institutional adaptation of informal process Kombe (2000: 7) noted that SCRS's (Substandard Commercial Residential Subdivisions) applied mainly in Latin America but currently common in developing country cities are considered an adaptive and learning response of informal urban space production means. He indicates that in some countries SCRS's imitate formal space production procedures whereby formal professionals such as surveyors and engineers are involved in producing urban layouts.

On the other hand, the formal process involves professional expertise, specified ownership, preconceived form, prescribed function, mechanised labour, sometimes the use of imported resources, imposed conditions with extra cost implications, theoretically based production methods, provision of the finished product and others. The difference in the nature of the processes may be reflected in the outcome of urban form and may not necessarily qualify or disqualify any of the processes or the products as superior or inferior. Each process may have an advantage or disadvantage and so one may appropriately conclude that it is a matter of choice of the process, which might be within the capacity of the actors. However, the room for choice may be limited if the institutional structure limits the choice in the formal process only without much consideration being given to the sustainability of the process and the capacity of the prospective actors involved. Because of this restriction most urban residents leave the institutional structural system and opt for the informal system, where options are open for various actors with different capacities to enter. This line of argument raise questions such as: Can more processes be incorporated into the institutional system so that actors with varying capacities are able to get in? What will be the roles of each actor at various levels as well as institutions? Is concentrating on the polarity between formal and informal processes enabling us to achieve the common goal of creating a better urban environment?

The incremental nature of the creation of urban components in the informal process does not hinder physical urban space from

generating. However, utility, the formation of informal space and its eventual quality are claimed to take place concurrently. Trading in the form of vending, as exemplified by Anyamba (2005), can occupy space temporarily, especially at the beginning. The vendor begins working in open space, then he develops a temporary structure on the open space, and finally he improves it so that it becomes a permanent structure. Further, the prolonged use of space by vendors in a strategically occupied public realm leads to the claim of use right (Anyamba 2005:117).

In the formal process, the production of space is clearly defined. Shane (2005) shows that in the modern world the city is distributed in enclaves of residences, production, distribution and recreational space which are connected by access roads and other infrastructure lines, often in a grid system as a rational functional city using highly technological material innovations. He further notes that according to this line of argument, it is the modern designer's duty to seize on the new opportunities offered by the industrial mechanization of the life-world to provide happiness to the greatest number (Shane 2005: 107). Space production in this way has been associated with capitalism and space commodification. Parker (2004: 20) points out space commodification as:

Like Marx, Lefebvre saw the city as a location where use value and exchange value meet and are combined in a formal system or as 'relations of production'. Put simply, use value relates to the physical environment and human and raw materials, where exchange value relates to the worth of commodities produced for sale by the capitalist modes of production. As the intensity of capitalist development grows, so the transformation of space and the location of activities within urban locations become increasingly commodified

In this way space can be acquired and transferred according to market forces, and those actors with enough resources to access specific spaces may determine the fate of urbanity. The example of the Hausmanien style in France's spatial transformation took place in this fashion, involving huge capital investment in spaces and extensive professional input. Shane quoting Schulz describes how the scientific life-world is dominated by abstract schema distinct from personal

knowledge or communal, vernacular ‘rule of thumb’. Design in the modern world requires professional knowledge learnt from books, not from practice. Modern designers are trained to atomize a problem into discrete isolated elements, whose qualities can be classified and known and each part is a distinct, geometric entity, clearly segregated from its neighbours (Shane 2005: 109). This suggests that modern design may not be influenced by the practice of residents, who have little to influence on urban form, as opposed to the process whereby urban residents’ practices are part-and-parcel of the moulding of urban space and hence the way of life. Parker (2004: 17) comments on the two different products of the urban world:

Only in wholly bourgeois cities are the separations between private and public space so neat and distinct. In proletarian cities the person and the public are intertwined within invention and bravado so that the streets and pavements become inscribed with the folk routine of their habitué.

This understanding of space creation determines the relationship of the user and the space and hence the nature of urban life. In contrast, the informal processes of space creation are practical oriented probably with a closer relation between the people and their space formation processes and practices where personal and communal knowledge may be prevalent. An example of this may be the discussion by Schulz quoted by Shane on how the early cities were built, as they used communal knowledge because a lot of practical knowledge resided in the community, where skills are developed by individuals and passed down from generation to generation by word of mouth, with relatively little being written down. The individual might build a personal knowledge base along a particular line of interest. But this knowledge only comes to fruition when shared with the group. Communal knowledge tends to survive as folk culture, outside the realm of modern science (Shane 2005: 107). On informal urban space, it is important to recognise the likelihood of vested interests at the individual and community level in making incremental decisions by a complex interaction among players in creating progressive spaces. The resulting informal urban space plays an active role in the development of urbanity and thus should find its credible place in

urban discourse. However, informal space is the result of formal or informal spatial practices, which also need to be identified.

2.2.3 Informality and spatial practices

Within current informal practices, urban space appropriation, alienation, processing and transmission are activities that are taking place unabated in informal settlements, with most terms and procedures of operations set by the urban residents themselves. It is also not uncommon for the same informal practices to take place in formal settlements, because informal practices spread among informal settlements and, to a certain extent, to formal settlements, as noted by Anyamba (2005) in his study of ‘diverse informality’ in Nairobi city¹¹. These result from either the misconception of or weaker urban formal mechanism for checking and balancing the production, supply and consumption of urban goods and services by the ever increasing demand of the growing urban population. Although public institutions have the duty to supply urban goods and services to urban dwellers, they do not have the resources at their disposal, and so the informal sector has risen to fill the gap.

This ‘diverse informality’ is characterised by the domination of formal spatial activities in the inner city decreasing towards the urban fringe areas. The informal spatial practices on the urban fringes involve procurement, alienation, and the transfer of urban goods and services. In order to understand how informal spatial practices operate it is important to explore their context of entry.

First of all, the basic characteristic of informality is that it consists of actors most of whom are poor (UN Habitat, 2003: 17). *‘Slums result from a combination of poverty or low incomes with inadequacies in the housing provision system, so that poor people are forced to seek affordable accommodation and land that become increasingly inadequate. The numbers of urban people in poverty are,*

¹¹ Anyamba (2005: 113) notes that, with ‘diverse informality’, the informal spatial practices take place in both informal and formal settlements. He puts informal spatial actors into four groups: survivalist, primary, intermediate and affluent. The primary and intermediate actors impact heavily on spatial practices in informal and formal settlements due to their place-based characteristics and their ability to access some resources, depending on the group being able to afford change. The survivalist actors have less spatial impact due to their mobility characteristics and the affluent actors have less impact to ‘effect informality’ on formal settlements due to being located in the most privileged areas with the availability of almost all necessary infrastructure and services.

to a large extent, outside the control of city governments, and are swelled by a combination of economic stagnation, increasing inequality and population growth, especially growth through immigration' (Ibid). In that way, they opt for the mode of access to space which is sympathetic and responsive to their lack of ability to pay, their unstable income sources and the diversity of their socio-economic activities. Further, in the informal settlement, they benefit from the diversity of available urban goods to accommodate the varied needs of the majority including the poor, the not-so-poor and, to a lesser extent, the higher income group. The informality, for that matter, provides relaxed and modest conditions of entry despite the UN Habitat (2003: 83) claim that *'contrary to popular belief, access to squatter settlements is rarely free and, within most settlements, entry fees are often charged by the person or group who exerts control over the settlement and the distribution of land'*. This is because, even if payments have to be made, a variety of products is made available for any aspirant. Thus, entry is affordable for people from any economic social class, contrary to in the formal structure, where fixed standards, inflexible tariffs and stringent requirements are imposed.

Hansen (2004: 10) quoting ILO characterised the informal sector as: ease of entry, reliance on indigenous resources, family ownership enterprises, small scale of operation, labour intensive and adapted technology, skills acquired outside the formal school system and unregulated and competitive markets. However, these characteristics can serve as a working guide because the distinction between the two is not as clear as elaborated, also as far as 'diverse informality' is concerned. For instance, the ease of entry, with availability of diverse opportunities, can allow the existence of small and large-scale operations simultaneously with both formal and informal characteristics. Also, reliance on indigenous resources in the informal sector is untenable as resources from either formal or informal sources can apply, for instance, operating a legal business on an illegal plot, operating a registered business with unregistered employees, or carrying on construction work on an illegal plot using legal professional services. However, the complexity of characterising spatial practices in the informal process can trigger opportunities and

contradictions in the search for common grounds for operating as Simone (2004:12) notes:

For knowledgeable action is largely a practical activity involving the construction of new relations in the gaps that always open up in the process of conducting existing relations of acting, gesturing, moving, and aligning. Urban collaboration does not simply reflect and institutionalize clearly identifiable social processes and forms. There are gaps and openings, room for negotiation and provocation, and thus collaboration can take many forms. Sometimes people coalesce in organizations that have names, but where it is unclear to almost everyone what precisely the organization is and what it does. At other times, an event may trigger an entire neighbourhood into apparently unfamiliar courses of action, but with a synchronicity that makes it appear as if some deep-seated logic of social mobilization is being unleashed

These complexities of both formal and informal avenues of spatial practices amount to heterogeneous processes which, in some instances, blur the distinction between them. This is further observed where actors in formal settlements execute spatial alterations informally to maximise the exploitation of urban space within their territories. Furthermore, actors in informal settlements may borrow some formal norms and procedures in operating to shape the development of land to meet their social and economic spatial requirements.

The modes of these practices are performed through residents' associations adopting rules and norms of contacts. In this way, generally, three types of informal spatial practices can be identified as squatting, illegal land sub-divisions and illegal transformation of formal properties.

Taking the first spatial practice of squatting, it is observed that squatter settlements in urban Tanzania have not featured as much as in other developing countries. It appears that informal settlements that once had squatter characteristics have already been upgraded to a new status so that they are part of the municipality with the residents assuming de-facto right of their property as pointed out by UN Habitat (2003: 82):

Squatter settlements are generally found in the towns and cities of developing countries. Some of them, in South and East Asia, date back to the 19th century; but most have much more recent origins. They are, primarily, though not exclusively, built on public land. They can be the result of organized ‘invasions’ of land, which may have occurred overnight (especially in Latin America), or they can be the result of a gradual process of occupation and incremental growth. Many land invasions and squatter settlements have grown to become municipalities in their own rights, housing hundreds of thousands of people. With them has come the commerce and services that characterize any town – although perhaps taking a different form or on a different scale from that of the formal city.

Another reason for squatter settlements not escalating in Tanzania is the land tenure system, whereby land is declared to be public property and remains vested in the President as a trustee for and on behalf of all citizens of Tanzania.¹² But this law also recognises customary land rights and provides that the president can only revoke this right upon payment of fair and prompt compensation¹³. So this provides security of tenure for urban residents with customary rights to develop their land without fear of eviction. The main development on informal land is residential, whereby owners and tenants occupy houses. It produces an enormous informal real estate capacity responsible for housing the majority of city residents.

According to Kombe (1995: 45) informal settlements depict development before the land is planned and surveyed; so unlike the term squatter settlements, the emphasis is not on the illegality of land ownership or occupation but rather on the land development process. This can add to the blurring of the distinction between most informal and formal built fabric as observed by Nnkya (2002: 228) that *‘most informal settlements in Tanzania have relatively good quality of shelter and related services and infrastructure, not significantly different from those built in formal housing areas’*. In that way,

¹² Land Act No.4 of 1999 as operated from May 2001, (Sanga, 2004)

¹³ In the past, according to land law, land as a public property had no ‘value’ but the property developed on it was the one with ‘value’. However, the Land Act of 1999 makes provision for a land market which gives land a ‘value’.

squatting per se is almost non-existent in most urban areas but it is common in some vending and trading activities. Most public space, mainly open spaces and road reserves, are grabbed by individuals and organised to conduct their trading activities. Generally, these activities take place in the open or in temporary structures to reduce the risk of loss in case of demolition and eviction.

Secondly, the illegal sub-division of land is conducted by landowners who sell land to land seekers for various development purposes. There is an extensive informal land market on the urban fringes. As pointed out earlier, most cities in Tanzania have hardly any unoccupied public land that could be potential places for squatting. In that way, a large stock of land is privately owned and thus an individual can access land by purchasing it through informal arrangements. The prospective buyers of the land are people from different income groups, that is, the poor, the not-so-poor, the middle income and the high income. The people from all income groups lining up to seek land in suburban areas resulting in informal developments can be put into three categories. First; as the urban population increases as the result of rapid urbanization, the demand for land by all social groups equally increases. Second, the formal land supply structure has failed to be transparent and responsive enough to the prevailing high demand of various categories of urban products. Third, the land in the centre is very scarce, and even the rarely available land is too expensive for many land seekers and is not viable for residential purposes, which most land seekers aspire for.

Thirdly, informal activities take place in formal settlements without legal permits, or in ways that do not meet city standards. Such activities are the extension and alteration of legal properties beyond the prescribed density, change of use without a legal permit, keeping livestock or poultry against regulations, grabbing public space for private use, sale of property illegally and others. These activities take advantage of the weak formal structure, which fails to enforce urban regulations and to provide and maintain the necessary infrastructure and services in these areas. Thus, the 'informalisation' of formal settlements is partly the result of self-help efforts aimed at improving the urban living environmental, as well as maximising the economic potential of their land in response to its increasing value.

As pointed out by Anyamba (2005), the ex-formal settlements generate a new hybrid architecture, whereby the formal and the informal merge over time, making it increasingly difficult to distinguish which part of the built fabric was originally formal. However, apart from identifying the informal spatial practices, it is imperative to explore the roles of informal actors.

2.2.4 Roles of actors in African urbanism

The history of the creation of cities worldwide, although on varied scales, indicates the involvement of practices of specialised skilled people such as builders, artists, craftsmen, painters and others who were responsible for the early iconic monuments in cities, such as palaces, temples, markets, theatres and other public projects. These actors worked under the influence of powerful elites, such as kings, council elders, royal families, wealth merchants, priests and others, who were responsible for those iconic building and monuments. However, while the work of specialists was mainly concentrated on public and specified projects of the medieval city, the rest of the city was developed incrementally, involving even lay actors with regard to their needs and aspirations. Nonetheless, in the modern period, the design and development of cities is mainly dominated by the work of professionals.

An example of Haussmannian concepts for the redevelopment of Paris in France shows that a city could possibly be made into various products to accommodate customers' preferences in order to meet the preconceived goals and objectives. The main actors in the preconception, design and creation of specific urban products were the powerful corporate, policy makers and professionals. To fulfil city objectives, the driving theory as asserted by Panerai (2007: 2) was that: *'the wealth of taxpayers was the city's wealth. The best way to increase the budget was to make the taxpayers richer, and the very large projects were at the same time the instrument and the product of this strategy. The city was managed like a capitalist business'*. This required enormous investment in the construction of infrastructure to serve the social, economic, cultural and political functions of the city. As a result a large amount of capital was depended on to fund the projects, which the state and big corporations were capable of providing.

The British example, especially of Garden cities, emerged as a response to the ills resulting from industrial cities that had caused the deterioration of the natural environment. Some individuals such as Ebenezer Howard¹⁴ and Raymond Unwin¹⁵ were a major influence on the garden city, where people from all classes of society and income levels were accommodated, with design concepts such as green streets, green fenced houses instead of solid fences, good designs and the freedom to use public facilities (Panerai, 2007: 35). This endeavour to intervene in the living conditions of city dwellers and the deteriorated natural environment aimed to improve the standard of living, working conditions, the image of the city, and the relationship of the city with countryside. In this way, the strong influence of concerned professionals compelled the state and individual investors to invest in some garden city projects.

The above examples of the practices of the state organs and private developers in generating urban products and services demanded the availability of substantial technical and financial resources. In this way it was possible for a small group of policy makers, professionals and developers to impose the intended city forms that would enhance the living conditions of the residents which, in turn, would be beneficial to the growth of developers' and investors' businesses. The involvement of a limited and specialised section of actors in the creation of cities was possibly due to the control of management, availability of the necessary resources and the formalised system of urban conception and creation in which the involvement of city residents is not directly evident.

As regards the African city, the involvement of various actors in the production of medieval cities is observed whereby the influence of outsiders was not necessarily the driving force in its emergence, growth and flourishing or death. Further, the city layout, which was characterised by the hierarchy of social classes, reflected the amount

¹⁴ Ebenezer Howard, the author of theoretical garden city in his publication of *'Tomorrow : A Peaceful Path to Real Reform'* in 1898 as the great influence on the idea of garden cities starting in England.

¹⁵ By 1904 in England, Letchworth, the first garden city was built according to the economic development model of Howard and the first important realization by Raymond Unwin and Barry Parker. In 1909 and 1919 Hampstead and Welwyn garden cities followed respectively following Howard's and Unwin's ideas (Panerai, 2004: 30).

of resources involved in the production of urban space in a specific urban location. This observation can be verified by examples given by Freund (2007: 20) below:

...The population (*of the early city of Alexandria in Egypt*) included many intellectuals among its different social strata and, no doubt, a large number of wage-earners or proletarians. It was certainly also a city of poverty as well as wealth. Estimates for a much smaller city, Hermepolis, whose records have survived for some of the Roman period, reveal that of the land owned by urban dwellers, some 78 percent was owned by 2 percent of individuals.

The result was the new form of city with varied residents' interests where the economically and politically powerful residents tended to gain far more access to city space and facilities than the economically and politically weak. This is further noted by Freund and Karen that:

As a result of historical evolution, in fact, Fez (*an early city in Morocco*) consisted of two physically distinct cities, one dominated by the palace, the military, and the state, and the other, older Fez – the “city of the people of Fez” – all the more given over to production and commerce. (Freund, 2007: 27)

It is observed that Africans were alienated not only from being city dwellers but also from participating in city production during colonial times. The purpose of the city changed to become centres of social, economic and political domination by the colonial rulers. The modern approach to urban production dominant in Europe was introduced without much regard for the local context and the professionals responsible for city planning and design. Freund (2007: 75) gives examples of the colonial attitude to African natives:

European authorities in general were reluctant to acknowledge and sustain the property rights of established African populations. Even in West Africa, plans for the destruction of existing African residential communities were often ruthlessly pursued before World War I. Struggles over such plans in the German-controlled port city of Duala in Cameroun reached a peak when the authorities hung Rudolf Manga Bell, who had led the struggle against redevelopment, for treason. There were plans in this period for the destruction of the old city of Mombasa on

the coast of Kenya while the British also toyed in 1908 with the idea of destroying the old sections of Accra following a plague epidemic.

It is also observed that the colonial modern city planning and design approaches were retained after independence. The widely embraced modernist zoning of city functions, which limited urban residents' unconventional actions, failed because they were irrelevant to the social, economic, cultural and political context. These ideas, which demanded the technological and economic transformation of the industrialized world, were wrongly applied as a blueprint for African countries, which were not industrialised enough to sustain them (Kimaryo, 1995: 27). Even the barely advanced technology in communication and transportation could hardly contribute to the transformation of most African cities, which are still, to some extent, dependent on individual residents' creative solutions for basic sustenance. This failure of the good intentions of African governments to impose a stringent structure for guiding urban growth and to provide basic needs to the urban population culminated in both economic livelihoods and urban services being provided informally to the majority by the African urban population.

The heterogeneity of social classes and actions involved in residents' practices influencing the urban form implies complex processes. There is a fuzzy way of specifically defining the nature of various processes taking place in African urban places since both better off and poor residents are involved in both formal and informal activities which shape the city of today. The understanding of such processes is subject to locating the crucial elements of the locality and the socio-economic position of the city. Further, the role of urban residents in creating physical form congruent to their needs and its architectural rationale are considered relevant in this study. Furthermore, the question of land tenure is one of major influential factors in the context of informal urbanity processes which need to be sufficiently explored.

2.3 Land tenure and informality

2.3.1 *Formal land tenure and titling as a means to better city form*

The current wave of formalization of land tenure and titling is principally influenced by, as noted by Davis (2006), the economist Hernando De Soto's conception of property rights and their economic rewards, especially for the poor, as well as the backing of these ideas by the donor community, international funding agencies and governments in developing countries. According to De Soto, formal titling and secure tenure would stimulate not only the wellbeing of the citizens but also open up economic opportunities based on the use of legalised properties as collateral to access and accumulate wealth.

The poor inhabitants of these nations – the overwhelming majority – do have things, but they lack the process to represent their property and create capital. They have houses but not titles; crops but not deeds; business but not statutes of incorporation. It is the unavailability of these essential representations that explains why people who have adapted every other Western invention, from the paper clip to the nuclear reactor, have not been able to produce sufficient capital to make their domestic capitalism work (De Soto, 2000: 7).

Tanzania is one of the countries that have adopted this idea that combines infrastructure upgrading and an improvement in land tenure security. Currently regularization and formalization projects have been carried out in the cities of Dar es Salaam and Mwanza. Improved security of tenure is considered critical for improved access to finance and income generation (Kombe, 2006: 4).

Davis (2006:79) referring to de Soto as a 'Peruvian businessman, who has become the global guru of neo-liberal populism', notes that he is more of a rescuer of international lending institutions and their associated agencies from their past failures than of the poor. He shows that de Soto's ideas are far from being realistic, as he asserts that¹⁶:

¹⁶ Davis (2006:79) citing Godfrey Payne (1989) Unpublished report, quoted in Alan Gilbert and Ann Varley, (1991: 4) *Landlord and Tenants: Housing the Poor in Urban Mexico*, London

Ironically, de Soto, the Messiah of people's capitalism, proposes little more in practice than what the Latin American Left or the Communist of India (Marxist) in Kolkata had long fought for: security of tenure for informal settlers. But titling, as land-tenure expert Geoffrey Payne points out, is a double-edged sword. "For owners it represents their formal incorporation into the official city, and the chance to realise what may be a dramatically increased asset. For tenants, or those unable to pay the additional taxes that usually follow, it may push them off the housing ladder altogether." Titling, in other words, accelerates social differentiation in the slum and does nothing to aid renters, the actual majority of the poor in many cities. Payne warns that it even risks "the creation of a large underclass that is denied access to any form of affordable or acceptable housing" (Davis 2006:79).

He gives an experience of the result of the titling programme that took place in Sao Paulo to upgrade the huge illegal city. He notes that although there were some admirable results, there were also negative repercussions because the land and houses became consumption goods and the price went up. This led to the growth of new 'slum' within the *favela* containing the poor who could not afford the increased costs.

Manji (2006: 10) looked at this current surge of using land laws to bring development to the poor as a revival of law and development movements of the past. She notes that in the immediate post-independence period between the 1960's and 70's the main concern of law and development scholars and practitioners was to provide technical assistance to government ministries and to boost their administrative efficiency in order to bring about development. Not much was achieved at that time and the movement was abandoned. As a consequence, Manji may be concerned about how the law that is resurfacing will boost development. Even in Tanzania, Kombe raised concern about the outcome of the programme, given the magnitude of the challenge of informality, the high rate of growth and consolidation, the need for huge financial outlay and the demand for proper control against further consolidation. Further, the use of title as collateral might fail to attract financial institutions because of the poor environmental settings ensuing from excessive densification (Kombe, 2006: 5).

Furthermore, experience and research have revealed that the provision of formal land tenure and titling as a means of integrating poor and vulnerable people to the benefit of the urban economy may not be the basis for improving their social and economic conditions. In the economic neo-liberalism environment, titling may improve land market efficiencies by reducing uncertainty, providing incentives for property upkeep and renovation, encourage community investment, provide the access to credit, and assist marginal groups like women (Durand-Lasserve, 2007:10). These economic and social benefits have hardly been achieved by urban formalization programmes in most of the developing world.

On the nature of urban land tenure, Rakodi (1997: 374) elaborates on the background in Sub-Sahara Africa. She shows that during pre-colonial times, despite considerable variations, land tenure was based on the concept that ownership of land was vested in a community. Under this system the head of the tribe, clan, lineage or family was entrusted with administering it on behalf of the ancestors. He would distribute the land according to the traditional rights of all adult members, allocate unused land and arbitrate disputes. Moreover, customary tenure was not static but evolved, depending on social, economic and political circumstances. For instance, the spread of Islam, with private ownership as a part of sharia law, led to modification of indigenous tenure in northern Nigeria, the Sudan and coastal Kenya (Rakodi, 1997: 374). This indicates that not only was the customary land tenure system diversified but it was also generative, adaptive and flexible to social dynamics as a means of maintaining its relevance.

During the colonial period, some indigenous urban settlements with their associated customary tenure were allowed to remain although they were modified based on the need for land by the colonial administration for its own administrative and trade functions and personnel. Land in the urban centre or in a parallel European settlement was appropriated and declared 'crown' or state land. The arable land in rural areas, especially in settler colonies, was appropriated and declared state land. Indigenous rural inhabitants were confined to reserves. Land titling was introduced on state controlled land which was alienated under leasehold or freehold

tenure. In the settler colonies of Kenya, Zimbabwe, South Africa, Angola, and Mozambique, large areas of land were sold at low prices to European immigrants, who used it for development and speculation (Rakodi, 1997: 376).

At independence, therefore, African countries inherited a "dual" system of land supply, in which the European system of tenure, land administration and policies that embodied colonial aims and social relations coexisted uneasily with indigenous tenure and land administration that reflected the social and political relations of a tribal society (Rakodi, 1997: 378).

Adversely, the formalising of land tenure and titling programmes have not resulted in the economic or social empowerment of the targeted urban poor. One fundamental formal titling snag is that it can lead to evictions of some households to pave the way for new title holders. In addition, poor tenants may be evicted due to a rise in rent, poorest households may not be eligible for tenure formalization due to failure to meet some costly formalization demands and the owners of formalised households may sell their property and move to a slum due to a rise in the cost on property maintenance (Durand-Lasserre, 2007:10). Acioly (2007:2) indicates the local differences in informality in developing countries but also identifies the commonest problem of all noting that:

Despite these local differences, the phenomenon has many common characteristics: the formal land delivery system is not working for many people; land prices are skyrocketing; individuals are trading land and property rights regardless of legal status as a way to access a place to live and legitimize their right to the city; and these settlements are plagued by overcrowding, inadequate sanitation, and poor housing conditions.

The foregoing discussion underscores the existence of customary tenure which is deeply rooted in the culture and tradition of the community in a particular context. Tenure systems evolve as a result of responding to specific social, economic and political needs and using experiences that suit specific circumstances. They are not homogeneous, irrational or chaotic, as might be regarded in some instances, but they are often regular and with known protocol and a

system of land alienation that seems to work in the real situation and according to the real needs of the people at a given time and space. Studies have revealed that there are various informal tenure arrangements that meet the needs that the formal tenure system might not be able to. Raising the informal land and housing market issues Acioly (2007:2).noted that:

A flourishing informal market already provides housing alternatives for poor, middle-class, and even some high-income families in many cities where sanctions on informality are lax and/or access to land is constrained in the urban core and held privately in the fringe areas.

The escalation of informality happens to raise the debate on the dichotomy of the formal and informal tenure status in professional discourse that is yet to produce a definite conclusion.

2.3.2 Formal and informal tenure duality

Urban development policies, planning regulations and guidelines and professionals' perceptions are mostly guided by the habitual trap of dualism, with the conviction that formal values are the answer to the ills of urban informality. This has become the easiest and most direct way to justify counteractive actions without much regard for the specificity of the context and the associated consequences. Under this duality, formal arrangements are used to regulate all the social, economic, cultural, political and contextual constraints of the informal system to fit into predetermined rational urban conditions. This dualism considers formality and informality as homogeneous and thus, based on this equal and opposite phenomenon, the prescribed formal provisions can cause informality to fit appropriately into the formal system with all those positive consequences of empowerment of poor and vulnerable people. This follows the theory that ready access to formal urban land is a prerequisite for dealing with urban misery and housing problems and, consequently, bettering the economic prospects of urbanites.

One of the approaches for achieving the formal tenure system through titling has been to amend the laws in developing countries to suit the standard neo-liberal models that would facilitate, among others, relaxed access to formal land to guarantee a quick shift to a

bright economic situation. Based on this thinking, which paradoxically involves external pressure and aid conditions from developed countries and international funding institutions, Manji (2006: 12) wonders whether changing laws would be the best means for bringing about development. She quotes Kennedy that using the rule of law as a means for acquiring development disregards the building of the rule of law that might 'by itself be a development strategy'. She further notes that since the law involves a political and economic consensus, using the law as the means to an end implies that the law can avoid confrontation with perplexing political and economic choices. Land, as a social and economic asset, invites such contestation perhaps more than any other resource. She further cautions against overemphasising the law and ignoring the relevance of customary land tenure:

De Soto's professed celebration of the assets of the poor should not, however, mask the fact that alternative forms of land tenure are deprecated and undervalued by advocates of formalization. Communal and informal tenure arrangements are characterised as 'passive', 'defective' and 'extra-legal', and as belonging to 'the grubby basement of the pre-capitalist world' (Manji, 2006:20).

She further notes that overemphasis on land law reform has disregarded the legal centralism, where the state and its institutions administer the law while other lesser normative orderings are hierarchically subordinate to the law and institutions of the state. *The multitude of ways in which people relate to and perceive land as well as their fellow landholders is denied by legal centralism. In deprecating informal land tenure arrangements as backward and economically inefficient, advocates of formalization suggest that it is only by bringing these arrangements into the formal legal system of the state that their value can be realised. This approach fails to acknowledge the multitude of ways in which people deal in land and fail to explain why law-like patterns of social behaviour occur even though they lack some of the apparently essential characteristics of formal law* (Manji, 2006:20). These concerns raise more questions than answers as to whether formalisation of land tenure can lead to the eradication of poverty and lead to economic success.

Regarding this over-emphasis on formal tenure and titling as key to empowerment of the poor, Robbins (2008) notes that there is sufficient evidence that, in the South, approaches to ownership of or claims to houses, land, tools and even institutional space are the result of meanings that are socially, culturally and historically embedded. He further asserts that, due to such a context of meanings there is a need to understand property rights in terms of what type of rights are involved, in what form each right appears and how each right is practised. He notes:

In addressing the issue of legal empowerment through property tenure it is important to undertake analyses of the range of property types, forms and practices that may be in play in any situation. It is not enough, for example, to depend on untested neo-liberal ideas about what property is and how it best serves people. Rather, it is critical to avoid relying on limited, simplistic and historically and socially specific understandings of what constitute property and the forms of ownership and tenure with which it is associated (Robbins, 2008:181).

Understanding these situations is not a straightforward issue, as he acknowledges, but they are important issues as a primary basis for setting up relevant theories and programmes for dealing with complex land tenure systems in the South, if the sought-after empowerment of the poor through that path is to be achieved.

From the understanding that informal and formal tenure systems are each homogeneous and on opposing sides, there are contexts where this is questioned, as LEAP (2005: 4) notes: *'some "formal" systems have in reality become informal over time; for example, when the property information in situations where the state has intervened to bring people into the registered system (e.g. township-type layouts) has declined to such an extent that people with registered tenure, such as ownership evidenced in a title deed, once more find themselves regulating their property informally'*. In this way, LEAP considers the need to adopt a continuum concept which would accommodate a more balanced approach for dealing appropriately with the situation by including supportive elements and excluding inhibitive elements in each system. This could form a hybrid and useful approach rather than polarity from opposing approaches. Robbins (2008: 177) questions the

misleading conception that formality and informality cannot coexist by providing experience on ground that the informal is often found inextricably linked to the formal in many instances, and at times develops within the formal in what has been called the ‘re-formalisation of the formal’.

However, the informal land tenure system is not homogeneous. Studies have revealed that in reality there are multiple tenure systems that may all display varying degrees of formality and informality and are more accurately placed in multidimensional relationship to one another (LEAP 2005: 4). These tenure arrangements take into account the real life of poor and vulnerable people with regard to their need to access and use land as a livelihood asset. It is from this point that some evidence and research findings have shown that formal tenure and titling can be a problem for poor and vulnerable people. The formal tenure system may not be sensitive enough to accommodate the conditions of the bulk of vulnerable and poor people. LEAP (2005: 8) quoting Hornby (2004) argues that:

The legal [property] system ...does what it needs to do for land markets, credit facilities, land use planning and urban zoning. The rich can afford it, and they are visible to the economy and the state...The extra-legal property system meets the needs of the poor for cheap access to land, relatively functional tenure security, oral-based evidence and adjudication practices. Its major problem is that it is invisible to those who determine and allocate government and private sector resources. It is a black box to the official systems.

As noted earlier, in most of the developing world, property rights are socially, culturally and historically embedded in diversified traditional societies, where multiple customary tenure systems have emerged. This strong attachment of the community to land, which is much stronger in villages, has a substantial influence on the informal land tenure systems in urban areas, where the balance between individual and communal rights is defined. The communal tenure system refers to multiple levels of community decision making on local land issues, land rights and access, spatial arrangements, land use management and governance practices (LEAP, 2005: 14). Contrary to the formal tenure system that is inclined to give property

rights to legally identified individuals, the informal tenure system can give property rights to an individual or a group of people identified as social components. However, even in the case of group tenure arrangements, individuals in the group may have defined levels of rights that may vary with time, age, marital status and context.

While the neoliberals consider land as a way of accumulating wealth, the poor in the developing world regard their land as an asset for generating livelihoods. From the neoliberals' point of view, the only way to shift land from an untapped economic benefit to a system where economic benefits can be exploited is through the formal titling of land of specific individuals. In the informal environment, however, this may offer little flexibility to accommodate some of the complex realities of the informal tenure system and to deliver economic benefits, especially in the developing world. Taking the instance of community land ownership as pointed out by Robbins (2008), giving land to an individual belonging to a group may reduce the capacity of the group to cooperate economically, and may favour some individuals over others. He adds that:

Even more critically, it might well impose property claims and tenure systems that upset tradition or customary system of property claims and rights; e.g., women and children may lose their rights if a titling system is created that awards tenure to male heads of households. Access to shared resources, for example, water holes, grazing lands and road easements, could well be upset by a model of tenuring that does not take account of traditional forms of use right and occupancy of land (Robbins 2008: 186).

Durand- Lasserre (2007:30) emphasises giving formal titles to individuals, and quoting Daley and Hopley (2005) he notes that:

The link between individual ownership and tenure security in the property rights approach has also been shown to be theoretically flawed, for example, group ownership can generate tenure security too, depending on the make-up and management rules of the group (...) In addition, where there are multiple rights to a piece of land, the tenure security conferred on one person by formal individual ownership creates corresponding insecurity and loss of rights for others.

Meanwhile, individual land ownership can generate uncertainty if a 'secure' title deed is neither enforceable nor recognised locally as being socially legitimate.

Examples in South Africa show that the government has made an effort to resolve the issue of the communal tenure system by introducing group titling (LEAP, 2005: 18). However, what the policies failed to address was the varying nature of rights to a property based on time, age, gender, marital status and the like. In that way, the formal titling process of identifying a group of individuals was too homogeneous and inflexible so that the revolving right over the property accommodating various people at various periods was missed. Again the traditional and customary system may be frustrated and create potential grounds for disassociation.

Specific communities in villages where communal values and cultural norms are stronger may have rights claims and tenure arrangements defined. Inversely, in cities where heterogeneous communities are created, tenure arrangements would depend on the prevailing urban context, including the authorities' attitude to illegal urban activities. UN-Habitat (2003: 94) provides an example of this whereby people may be located in an inner city slum, older slums in the city centre or slum estates on the outskirts of the city. They may form different spatial types even in slums. For example, they can be communities sited legally on public or private land as owner occupiers or tenants; illegally sited on either public or private land as owner occupiers or tenants; illegally sited on either public or private land as occupiers of self-built homes and with perceptions or claims of some form of ownership, or as tenants among other possibilities. In that way, people will respond to the situation and take the opportunities available to them, which will determine the form of land tenure to be pursued. Further land tenure status can be analysed through plot perception as a modern philosophy of understanding the city form.

2.3.3 Perception of urban plot and land tenure

In a conventional city, the plot is a very important unit in defining the language of the city. A plot is also the smallest unit in the urban scale if the scale is read in ascending hierarchy of plot, cluster,

block, neighbourhood, district and city. In this way, the plot is a key unit that builds up the city form from below.

Even though the form of the city in its entirety is not comprised of plots only, other elements associated with the city form such as circulation networks and other technical infrastructure and services are necessary components of the city but their existence is basically to serve the plots. Logically, plots contain permanent developed properties which demand access to technical infrastructure and services to ensure their sustainability. In this way, the nature, form and structure of other elements in the city may depend on the form of plots. On relating the urban form and the plot, Lupala (2002: 22) notes that:

The size and shape of plots play an influential role in the definition of urban types since they finally determine the amount (size, coverage, floor space ratio and orientation) of buildings that can be built up. Acioly and Davidson (1996: 16) argue that plot size is a culturally bound phenomenon and therefore varies from country to country. Empirical studies show increasing trends in plot size from Asian, Latin and Southern American countries with the largest plot sizes recorded in many African countries.

Although this discussion on plot concept is not intended to put much emphasis on plot size, Lupala (*ibid*) referring to Carlos Barquin et al (1986: 3) argue that *plot areas vary widely from region to region, from as small as 18 square metres in India to more than 100 square metre in Africa and South America*. They add that there has been little agreement as to what constitutes an optimal or minimal plot size. While the high cost of land and infrastructure has been used by authorities to justify a reduction in plot sizes, critics of small plots argue that the larger the plot the greater the economic benefit of the owner. This is because bigger plots may have incentives for future incremental extension of the property that may result in economic gain of the plot owners. He also quotes Acioly and Davidson arguing that the narrower the plot the better it fits into a particular cluster, which is usually predetermined. The shape and size of the plot affect the type and means by which plot development would be executed. This argument, however, has an inherent effect on city form with regard to decisions made on plot sizes and the prospects of plot development.

The popular modern zoning approach is a relevant example of the dominant role the plot has in determining urban form. Zoning based on population density provides plots of different sizes, in different zones, with the biggest plots in low density zones, bigger plots in medium density zones and the smallest plots in high density zones. Commercial, institutional, industrial and recreational zones get plot sizes determined by their function and other related development requirements. For instance, in commercial zones, a massive development can take place on a smaller plot through vertical development, while in industrial areas, where immense functions take place at ground level, the allocation of bigger plots may be required.

Though concentrating on European medieval cities, Morris (1994: 97) describes the medieval urban form as a ‘planned city’ with the possibility of plot demarcation and an ‘unplanned city’ with less prospects of plot demarcation. The growth of medieval cities was organic and incremental such that plots were probably developed in the same way or plot demarcation was not necessary because external space was perhaps dedicated to public functions. Public life was an essential activity in medieval cities, especially when Morris notes that the entire medieval city was a ‘marketplace’. This means that both public and private space was used for production and trade. Further, he notes that the form of the medieval city was more pronounced by monuments than lesser individual elements such as urban plot. Morris (1994: 97) notes that:

With the all important exception of Islamic Spain, medieval towns generally have similar social, economic and political contexts in most European countries. They are also alike as regards most visual details: the same kind of local vernacular buildings make up both the formal gridirons of planned new towns and the informal uncontrolled layout of their unplanned contemporaries. The component parts of the medieval town are normally the wall, with its towers and gates; streets and related circulation spaces; the market place, probably with a market hall and other commercial buildings; the church, usually standing in its own space; and the great mass of general town buildings and related private garden spaces.

Although this insight suggests less emphasis was put on strict distinction of individualised plots in the early European urban context,

other versions indicate the existence of land partitioning from earlier times based on individual ownership.

A plot is basically an individualised piece of land produced to facilitate its marketability. It is thus made a manageable unit that complies with market requirements as an exchangeable commodity. It seems that there is a connection between the emergence of a plot as an important urban marketable unit and the expansion of feudalism and then capitalism in Europe. In this respect, UN Habitat (2003: 22) notes that:

Older European cities grew in an environment where market norms and feudal landholding systems had been well established since the Middle Ages, and dwellings could be readily traded by owners or landlords for alternative uses. They also grew, initially, during a time when most work was centrally located and people walked, then later expanded to suburbs along rail corridors, filling between these corridors as personal motor transport became universally available. However, the situation of cities that have emerged as substantial centres in the developing world during the past 50 years is often very different from that of a succession of land uses described by the Chicago School. Their business centres have often not been in the historic centre, but have been purpose built and multinucleated, with access to airports and to the residential zones of the more affluent. The shape of the city has been determined not by centralized rail networks but by minibuses and private cars.

Thus this expression indicates that the plot is a much older concept in Western cities than in African cities. The succession of land uses in older Western cities as per Chicago School theories and the lack of it in African cities sheds light on the difference in social relations associated with land distribution.

The land tenure arrangement may be an influential factor affecting the mode of plot production, distribution and consumption. Since the plot concept involves the sub-division, distribution and ownership of land, it cannot be discussed without touching on the land tenure arrangement of the community in question. Thus certain issues of land tenure modes may contribute to an understanding of the concept. In that view, the way in which a plot was received as an

important unit in modern urban production in Africa may be understood.

Further, the strict distinction of individualised land may have inhibited the unauthorised occupation of land in many Western states. This limitation made a substantial contribution to making the city in the Western World a permanent settlement. In contrast, land ownership was communal among African societies and thus shifting the settlement from one location to another was common among early African societies (Rakodi, 1996: 373). Perhaps, because of that some early African cities were ephemeral.

This shows that the distribution of land in the African context was not conceived as the physical organisation of pieces of land or plots but as social organization. Therefore, this system allowed a certain flexibility, which enabled the organization and reorganization of urban settings without limit. For instance, whenever changes in social groups happened they could easily be replicated in settlement reorganization without restrictions as there was no strict individual partitioning of land. In this way, the social organization determined the physical organization in terms of land distribution and the city physical form. In societies with individually based land ownership, land partitioning determined the social organization.

Generally, in the civilised world where capitalism is the major driver of social relations, especially in the current world of globalization and the free market, the plot remains the basic unit that determines the urban form but is also a commodified unit that is easily traded in the market.

The advent of colonialism and imposition of external rule in African societies disrupted the indigenous tenure arrangements and the western style of individual ownership was introduced, especially in urban areas. In this way, land urban centres as central commercial areas was partitioned and allocated to individuals, specific institutions and public functions. Hence modern urban planning was introduced where land was distributed for various functions and the plot was important for achieving that end. This trend has been now adopted where individualised plots have become the basis for perceiving the city of today.

The plot concept can also be associated with modern urban design and planning. In this way, the plot is accompanied by professional prescriptions resulting from the need to abide by modern urban principles. The irrelevant conditions associated with the introduction of plots as means for determining organised land distribution in African cities did not receive a cordial reception among African societies. The foreign conditions have mostly clashed with indigenous land sub-division arrangements, distribution and ownership associated with the indigenous land tenure system. The plot concept involving individualised property was directly opposed to the indigenous land ownership concept that is collective, communal and social in nature. An example of this is that in some African cities the urban authorities have tried to introduce modern planning using individualised plots as essential organising units but they have faced stern difficulties or have even failed completely. In Uganda, various indigenous tenure arrangements that coexist uneasily with the conventional tenure system have made it difficult to introduce modern planning in the city of Kampala. As a consequence, most city authorities in developing countries have the mandate to control development while they have no right to claim all the land in their respective cities. Regarding the challenges of planning Kampala city amid the presence of various contradicting land tenure systems, UN Habitat (2007: 10) noted that:

The land tenure systems in Kampala are complicated and multiple, with considerable influence on the way the city has grown and how slums have developed. This is because certain types of tenure easily support planned development on land while others work to the detriment of orderly growth. Since the abolition of statutory leases by the 1995 Constitution, Kampala City Council lost its 199 year lease; the land reverted to customary owners. Majority of the slums are now currently on private *mailo*¹⁷ (such as *Kagugube*) or on former public land which customary tenants have taken over as owners due to the abolition of statutory leases (such as *Kinawataka*) in which case Kampala District Land Board is obliged

¹⁷ *Mailo* is the indigenous land tenure arrangement in Uganda where the holders have rights equivalent to freehold. These have the overall supreme right of ownership over land and have powers to either subdivide or sell or give away to others. The landowners can sell their tenancy rights (locally referred to as *kibanja*) or may subdivide their *mailo* titles into several smaller plots (locally referred to as *plooti*) which may create layers of secondary rights on *mailo* land.

to issue them Freehold titles against their customary claims. Planning is no longer a condition for compulsory acquisition of land according to the 1995 Constitution, this has greatly affected the implementation of planned developments, since land belongs to people who did not appreciate planning, thus the sprouting of poor housing and sanitation in Kampala's informal settlements.

Rakodi (1996: 378) points out that in Nigeria and Ghana are groups or families with a strong attachment to land that has belonged to them since pre-colonial times, thereby inhibiting individual sales. Those systems make it difficult to acquire land for public purposes, thus limiting the capacity of the authorities to use conventional plots to set up the modern urban form.

Similar examples can also be found in urban areas in Tanzania, where customary tenure arrangements are negotiated impatiently with the conventional tenure system that impacts the configuration and organization of plots. The existence of customary tenure in urban areas like Dar es Salaam puts a substantial quantity of urban land into private ownership. In this way, landowners are in the supreme position of executing the sub-division, alienation and transformation of urban land in the form of plots. The practice is contrary to conventional plot sub-division and alienation that involves professional bodies, state institutions and legal operationalization. Thus the following questions can be raised on. What factors are used to determine the plot under such complex tenure arrangements? Are the factors used consistent in all situations? Do the customary and conventional tenure arrangements contribute to determining factors of the plot?

Thus, the plot in the context of this study forms a complex conceptual understanding attached to cultural, social and economic factors that either contrast with the prescribed and standardised conventional requirements or demand the constructing of requirements that meet the real needs on the ground. The eventual resulting plot as an essential urban unit impacts the way city is produced and hence its form. It is from this argument that this study searches for a description of the contemporary city production process amid the complex factors that involve conventional and unconventional norms.

2.4 Informal initiative on social services and infrastructure provision

2.4.1 *Slum*¹⁸ characteristics

One of the major characteristics of a slum is the poor or lack of social infrastructure and services. Apart from their alienation from the city's mainstream, slums and their complex organization pose substantial difficulties for the provision of social services and technical infrastructure. Thus, this situation has left slums as islands within the systems of cities.

Some slums have benefited from regularization programmes, where a minimum amount of infrastructure is provided, such as roads, water taps, public toilets, storm water channels and solid waste collection points. However, upgrading programmes are too few to meet the magnitude of the slum challenge mainly due to overdependence on limited foreign funding for their sustainability. This situation leaves few options for infrastructure provision and so residents take responsibility for providing the basic infrastructure and social services that are within their capacity. Therefore infrastructure provision becomes part of the informal development strategy, which is usually contingent and incremental.

2.4.2 *Context for slum dwellers to invest in urban services*

It was realised that the informal sector supplemented the resource-starved formal sector in meeting the overwhelming needs of urban settlers. Residents in informal settlements put up the basic informal structures necessary to make life possible, sometimes in a rather precarious situation. Settlements may keep on consolidating

¹⁸ Slum is a term used to generalize 'the urban informal settlement'. According to UN Habitat (2003: 10) there is no general agreement of slum definition. However, UN Habitat (2003: 10) provides two of the more accepted definitions as:

- (1) ...a contiguous settlement where the inhabitants are characterized as having inadequate housing and basic services. A slum is often not recognized and addressed by the public authorities as an integral or equal part of the city.
- (2) Slums are neglected parts of cities where housing and living conditions are appallingly poor. Slums range from high-density, squalid central city tenements to spontaneous squatter settlements without legal recognition or rights, sprawling at the edge of cities. Slums have various names, favelas, kampungs, bidonvilles, tugurios, yet share the same miserable living conditions (Ibid).

The reference to 'slum' or 'informal settlement' in this study corresponds more to settlements developed outside the formal structure rather than poor housing conditions.

with more development taking place, creating more demand for services and infrastructure, resulting in the need for residents to act on a self-help basis.

In an overcrowded situation or in cases where the risk of eviction is very high, residents would not make a substantial investment in their properties or in their common infrastructure in the settlements. In this case, incremental improvement, as the common development trend in most informal settlements of this kind, would be difficult. Such a situation would prevail in the sense of squatting on public or private land. However, the situation may change with a change in land tenure status.

Informal settlements developed on private land acquired through either purchasing, inheritance or otherwise with higher security of tenure, where the risk of eviction is almost non-existent, residents tend to invest substantially in development, including contributing to infrastructure and social services. These kinds of settlements can be observed in most cities and towns in Tanzania, including the city of Dar es Salaam.

2.4.3 Slum perception and its service improvement concepts

Slum formation can be viewed as the initiative of squatters to provide themselves with the means to access necessary urban goods and services. They mobilise and utilise their limited resources to achieve that goal. Davis (2006: 21) points out some efforts made by some analysts in describing the slum since they emerged in the western world urbanization process. Early Victorian analysts connect slums entirely with criminal practice. They link them with ‘rackets’ or ‘criminal trade’. This description can be interpreted as the way the upper class which dominated urban resources perceived the lower class crammed in slums, deprived of basic urban services. However, classic analysts associate slums with the result of the weakness of the formal urban structure. They look at the slum as ‘room in which low goings-on occurred’¹⁹. This notion regards slums as an integral part of the growth of cities but also represents the alienation of and discrimination against certain social classes in the distribution of

¹⁹ A statement used by Cardinal Wiseman referring to ‘slum’ which became accepted by most writers for transforming ‘slum’ from street slang (Davis 2006: 21).

urban goods and services. The classic definition culminates in Charles Booth's accepted definition that '*all slums are characterised by an amalgam of dilapidated housing, overcrowding, disease, poverty and vice*' (Davis 2006: 22). This conception of slums is adopted by UN Habitat (2003) as pointed out by Davis (2006: 22) that:

The authors of *The Challenge of Slums* discard these Victorian calumnies but otherwise preserve the classic definition of a slum, characterised by overcrowding, poor or informal housing, inadequate access to safe water and sanitation and insecurity of tenure. This operational definition, officially adopted at a UN meeting in Nairobi in October 2002, is "restricted to the physical and legal characteristics of the settlement," and eschews the more difficult-to-measure "social dimensions", although it equates under most circumstances to economic and social marginality.

The legal characteristics referred to in this context are represented in the two scenarios discussed above, which in turn affect the resulting physical characteristic of settlements, including the level of infrastructure and social services and the willingness of residents to contribute to infrastructure and social services provision. Most informal land development processes taking place on private land principally happen out of necessity as the formal institutions have failed to provide sufficient affordable services. In this way, the creation of informal settlements is not necessarily because of destitution, but as the alternative means by which people from almost all social classes can be accommodated. This situation takes the form observed by Rakesh Mohan in Bogota at the end of the 1970's and quoted by Davis (2006: 40):

... these *pirata*²⁰ sub-division settlements did not result from land invasion: the land has actually changed hands through legal purchases. It is the subdivision itself that is usually illegal. But these settlements are better described as extralegal rather than illegal. Low-, lower-middle-, and middle income families, having been shut out of the formal housing markets, buy lots from entrepreneurs who acquire tracts of undeveloped land and

²⁰ *Pirata* – used as a Columbian term for 'pirate urbanization'. Davis refers to pirate urbanization as the privatization of squatting. Squatting is mostly not free and thus associated with 'substandard commercial residential subdivision' (Davis 2006: 40).

subdivide then without conforming to zoning laws, sub-division regulations, or services provision standards. The lots sold usually provide only a bare minimum of services, often nothing more than streets and water standposts. Typically, this rudimentary infrastructure is incrementally upgraded after initial settlement has taken place.²¹

Because residents' economic position ranges from low to middle income groups, it implies the availability of considerable resources for investing in social services and infrastructure. Infrastructure provision becomes part of informal development so that its improvement is parallel to that of individuals and the settlement as a whole.

As the socio-economic aspects of residents in the informal settlement improve, the demand for social infrastructure and services increases. Mostly, shopping services are among the first to be provided by petty trading through informal groceries, markets, shops, barber shops, hairdressers, shoe shiners, food vending, handcraft workshops and others. The intensity of such services depends on the demand, the population served and the ability of the people to pay for them. Some services tend to exploit the advantage of the locations that attract the crowds.

Further, as settlements grow, the need for more services becomes crucial. For instance, the improved socio-economic position of residents leads to increased consumption, leading to more production of solid waste, which in turn makes the need for better management of solid waste necessary. Moreover, improved living conditions lead to the increased movement of people, goods and services and so vehicular roads become necessary. Again, the need for electricity, sewerage services and others increases as more people are able to contribute to their provision and are able to pay the bills. Under this kind of informal transformation process, the social theories of city transformation are obeyed.

²¹ Quoted by Davis (2006: 40) from Mohan R. (1994: 152-53) *Understanding the Developing Metropolis: Lessons from the City Study of Bogota and Cali, Colombia*, New York

2.5 Intervention policies on urban informality

Policies for informal urbanization have generally been entrenched in the global development paradigms since the 1960s. The Western modernization theory was one of the other strategies for modernising and eradicating slums through providing people with decent housing and an environment based on the modern approach to creating a better urban community. Demolishing indecent settlements, servicing sites, introducing squatter upgrading schemes, regularising informal housing and creating ‘cities without slum’ are among the policies adopted to address the issue of informal urbanity.

2.5.1 Settlement demolition policies

During the colonial period, the precarious image of slums could not be tolerated in the city vicinity, because of the health risk they posed to colonial administrators, and so slums were not allowed within the colonial city. However, a few slums at a safe distance on the fringes so that the hygiene of the city could be assured were tolerated to keep cheap human labour at an accessible distance and also because formal housing for natives was limited and could not keep all African workers as revealed by Sofer (1955: 57) in the then colonial city of Jinja in Uganda:

African concentration on the peripheries of the town is not accidental. For European or Asian, close proximity of the African living under village conditions lower sanitary standards, involve danger of spread of disease, destroy amenities and threatens his status superiority.

... Even if they are not wanted as neighbours, Africans are, of course, wanted as workers and they themselves wish to participate in the urban economy.

Thus, the demolitions of the 1960’s were a continuation of the fulfilment of colonial policies except that control over the urban influx of natives was abolished. Implementation of the policy was the result of the then dominant design and planning paradigm of modernism whereby the master plan was the only means used to plan the city. Thus, the problem of slum growth was conceived as the lack of rationality provided by the master plan. These resolutions came in the early years of independence in most African countries and so they

were embraced by politicians as one of the nation-building strategies. They were also embraced as governments' opportunity to give the city back to its people after their long elimination and isolation from urban life. UN Habitat (2003: 130) highlights the scenarios for adopting the demolition strategy:

This was a common response to the development of slums during the 1970s and 1980s, particularly in political environments predominated by centralized decision-making, weak local governance and administration, non-democratic urban management, non-recognition of civil society movements and lack of legal protection against forced evictions. When it became clear to the public authorities that economic development was not going to integrate the slum populations, some governments opted for a repressive option with a combination of various forms of harassment and pressure on slum communities, leading to selective or mass eviction of slum dwellers.

According to UN Habitat this approach did not solve the problems of slums, but instead it shifted them to the periphery of cities, to rural urban fringes, where access to land was easier and planning control non-existent. The continuing spatial growth of cities brought about an endless cycle of new evictions and the creation of new slums on the periphery of cities, outside municipal boundaries, or it accelerated the overcrowding of dilapidated buildings within cities. Similarly, the unpromising results of demolition strategies started to open up new ways for handling the perception of slums. Contributing about the burgeoning urban informal settlement and the shift in its perception Hamdi (1995: 16) notes that:

Thinkers such as Ward, John Turner, William Mangin, Lisa Peattie, and C. J. Stokes have led us to redefine the vast shanties, historically depicted as the despair of cities, as "slums of hope". Shanties are no longer deteriorating but alternatively are viewed as housing in the process of improvement.

Why these ideas should have become increasingly accepted through the 1960's and 1970's is probably best explained by social historians. But accepted they did become, at least to some who had influence over public policy. Gradually burgeoning informal settlements of the poor became an unavoidable urban fact. Yet they emerged in perception less as a

problem than as an opportunity for efficient, even equitable, housing.

Appreciating the various levels of decision making could enable governments to create appropriate policies that could guide integrated urban development. Site and services and squatter upgrading policies were taken as the best approach to dealing with slums in the light of the failure of demolition policies.

2.5.2 Sites and services and squatter upgrading schemes

In the 1970's, the World Bank initiated the Sites and Services and Squatter Upgrading (SSU) Programme in many countries in Asia, Latin America and Africa. The strategy was adopted to provide planned and serviced housing land to low income people in urban areas and improve basic community infrastructure services, such as water, sanitation, roads and market facilities in informal settlements. The move emerged out of a consensus arrived at during the Habitat I conference in 1976 which included: site and services and self-help housing projects; core housing; slum and squatter settlement upgrading; tenure regularisation programmes; the stimulation of small-scale enterprises and informal sector activities in project areas; and an attempt to expand the provision of public services (Burgess, 1997).

The policy was introduced in response to the poor results of housing provision programmes that proved to lack sensitivity to the conditions of the poor but also proved costly and less feasible, as revealed by the problem of rapid informal urbanization. In recognition of this, the World Bank and United National Development Programme changed their lending programmes. Instead of engaging directly in project operations, the funds were directed at reforming policies and institutions and public administration and providing technical assistance. The terms of reference for borrowers encouraged programmes to be designed more on the basis of effective user demand and less on the preconceived notion of adequate housing (Hamdi, 1995: 18).

Critics of the site and service scheme claimed that the level of investment in infrastructure was too high to achieve cost recovery, which was a precondition for lending by international institutions.

Lisa Peattie, one of the World Bank's most trenchant critics, estimated in 1987 that the bottom 30 to 60 percent of the population, depending on the specific country, were unable to meet the financial obligations of site and service provision or the loans for upgrading²². Again, the demand for housing development was based on strict standards set by the municipal authorities. Thus the resulting projects were in fact little more than public housing projects but without houses. Further, critics observed that the projects required the same level of planning as public housing projects; people who depended on their work in the inner cities were pushed to the periphery; the cost of their administration was high; and they polarised classes and presented far fewer economic opportunities than in the mixed economy of the informal settlement (Hamdi, 1995: 24).

More critics pointed to the programmed disassociation of housing provision from employment creation, and the inevitable tendency for site and services schemes to be located on the periphery that was poorly served, if at all, by public transport²³. Other authors have posited that regularization is intrinsically connected to political manipulation (Castillo, 2000: 27).

In most developing countries, including Tanzania, the strategy has had little impact on the control or improvement in the living conditions of the urban poor living in slums and informal settlements, mainly because of weak cost-recovery mechanisms, inadequate community involvement and corruption in the allocation of serviced plots (Kironde, 1991; Rakodi, 1987). This is also revealed by Davis (2006) quoting Mosa in Aldrich and Sandhu (1995: 346), who pointed out that:

In Dar es Salaam after the end of an ambitious World Bank intervention (1974- 81), a study found that “a majority of squatters allocated plots in the site and service programme have sold their plots and gone back to squat on virgin land on the periphery of urban areas.” Most site-and-service lots ended up in

²² See Davis M. (2006: 72) '*Planet of Slum*', and Peattie L. (1987: 69-76) 'Affordability', *Habitat International* Vol. 11, No.4

²³ Davis M. (2006: 74) '*Planet of Slum*'

the hands of state employees and the middle class (Davis, 2006: 74).

Thus, since World Bank withdrew financial support for the programme in Tanzania in the early 1980s, there has not been any large-scale upgrading or site and services project apart from the Hanna Nassif Community Infrastructure Project, which was executed over the 1996–2002 period²⁴. A number of local governments in the country, such as Dar es Salaam City Council and Mwanza, have tried to improve basic infrastructure services in some informal settlements, but these projects are very few and sporadic (Kombe, 2006: 4).

There is, however, a consensus that conventional intervention strategies, such as Sites and Services and Squatter Upgrading programmes, sought to solve the informal housing and slum problems through traditional engineering approaches without adequate resources to match the growing problem associated with urban poverty. In this regard, strategies to deal with urban poverty ought to go beyond the provision of housing and physical infrastructure (UNCHS, 2003: 164). Issues such as governance and political will, ownership and property rights, social capital and access, and partnership with stakeholders including involvement of the poor in economic and political activities, ought to be at the centre of interventions.

2.5.3 Informal housing land regularisation

By the late 1970s slums became increasingly recognised as a durable structural phenomenon that required an appropriate response. This shift was based on the diversity of local situations, the legal and regulatory framework, and the failure of responses based mainly on repressive options and the direct and highly subsidized provision of land and housing by the public sector for the poorest segment of the urban population. Recognition of slums also fostered increased awareness at international level of the right to housing and protection from forced eviction, and the definition of new national and local political agendas in the context of an emerging civil society, as well as the process of democratization and decentralization.

²⁴ According to Kombe and Kreibich, (2006: 4), The Hanna Nassif upgrading project was funded by UNDP and the Ford Foundation primarily as a strategy to promote labour-intensive technologies for improved employment and income among low-income settlers in informal settlements.

The three main areas of self-help and upgrading policies were: firstly, the provision of basic urban services, secondly, the provision of security of tenure for slum dwellers and the implementation of innovative practices regarding access to land, and thirdly, innovative access to credit, adapted to the economic profile, needs and requirements of slums dwellers and communities. (UN Habitat, 2003: 130).

The difference in this scheme from previous strategies was the need for more utilization of as many resources from urban citizens as possible due to state withdrawal from the direct provision of public services. This was then followed by a state-of-art economy that led to the adoption of neo-liberal economic principles by most governments in developing countries, where most public service provision parastatals were privatised. UN Habitat notes:

From the late 1980s, with the launch of the Global Strategy for Shelter, self-help programmes reached a new level of sophistication based on neo-liberal principles of the withdrawal of government to a broadly facilitative role and the fostering of efficient markets. It was decided that the resources of the private sector and the people themselves needed to be mobilized and that the role of the government would be to remove bureaucratic obstacles, provide plans and advice, and generally facilitate the process. The strategy was never really implemented on a significant scale, as it was something of an interim step on the way to the comprehensive poverty reduction programmes of the late 1990s. The ‘enabling approach’ is still official policy for many agencies and countries, although it tends to be honoured more in the breach than in the commission (UN Habitat 2003:127).

Kombe (2006: 5) argues that the move to regularise, formalise and improve the property rights of the poor in informal settlements is a welcome idea, as it may open prospects for income generation. However, considering the magnitude of the problem of informal settlements and their high rate of growth and consolidation, huge financial outlays would be required to regularise them. Sliuzas (2004:46) as quoted by Kombe (2006: 5) sounds a warning, adding that given the extent of the informal housing sector in many cities of sub-Saharan Africa and the weak public sector, adoption and

implementation of a comprehensive upgrading approach such as regularisation is out of the question.

2.5.4 Cities without slums

‘Cities without Slums’ is a joint initiative of the World Bank and UN-Habitat, which was launched as part of the Cities Alliance programme. Its vision is to realise cities without slums by adopting the slum and squatter upgrading approach, with global targets. The target is, according to the Millennium Development Goals (MDGs), that by 2020 at least 100 million people in slums and informal housing will have benefited from slum improvement globally. The programme banks on substantial resource support from the international community and calls for the concerted efforts of local and international partners to address broader policy issues, which have hitherto undermined the sustainability of upgraded settlements. The action plan for the programme also calls for investment in global knowledge, learning and capacity in slum upgrading and reducing the growth of new slums (UN-Habitat, 2003:167).

However, a critical problem confronting governments, the international community, civil organisations and urban managers is how to upgrade existing settlements, which are rapidly growing and expanding, while at the same time putting in place effective mechanisms to check further consolidation and the formation of new ones. The MDGs target to improve conditions for 100 million people living in slums and informal settlements by the year 2020 aims at barely 6 percent of the expected population. This is due to the fact that the momentum of the growth of slums and informal settlements is obviously too high for the current policy measures in place to make a significant positive impact in the foreseeable future (Kombe, 2006: 5).

Cities without Slums depend on a substantial resource flow from the international community and local and national governments. This calls for governments to move from political rhetoric to action in order to house the urban poor and it requires donors to respond compassionately and swiftly. However, the programme may face snags due to the possible lack of response by local governments and the unwillingness of most rich countries to comply with their international commitments, such as the call to contribute at least 0.7%

of their GDP to official development aid. This leaves many questions unanswered regarding the realisation of cities without slums (ibid).

One of the critical tasks, therefore, is how to empower and sustain local communities and municipalities in their role of securing and safeguarding the public interest in informal urban development. It is argued that discussions so far on meeting the MDGs targets appear to have underestimated the role of local institutions. It is pointed out that the massive flow of international aid will achieve little unless it is geared to improving local institutions in Africa, Asia, Latin America and the Caribbean. It is apparent that a more pragmatic approach is needed to link and complement limited public capacities with initiatives from below (ibid).

2.5.5 Lessons from the interventions policies

The discussion on policies for informal settlement intervention found out that three main issues emerged based on the nature of their formation and implementation. First, most policies were based on a reactive approach than a proactive one. Policies were formulated to react to the problems already in place. Policies aimed at guiding the actions of actors and mobilizing resources at various levels to maintain development and prevent the problem from escalating are rarely emphasised.

Second, it appears that the policies were not owned by the countries or the very people affected by the informality. The excessive involvement of external organisations and international agencies in the manufacture and implementation of policies distanced them from the affected countries and the poor people in the slums. Further, the tendency to over-rely on foreign funding, overseas consultations and external expertise led to various misconceptions of the informality challenge and to improvising solutions which were out of context.

Third, the solution to informality had some elements of preventing informal actors from taking control of their urban space. But even after understanding the importance of the informal actor having more control over urban space in the quest to reduce or eradicate the problem, the conditions and regulations associated with some policies tend to take it away.

However, the question in this respect is how the design discourse can learn from the practice of informal actors in designing and maintaining urban space. The best approach might be to learn by reflecting on the real practice in order to understand the extent to which professional intervention can address the real problem of urban informality.

Chapter 3: Individual Practices in the Making of Informal City

This chapter describes the individual practices of urban residents in the quest to organise themselves in the urban environment, especially through the mirror of plot development processes where space is created and shaped within the context of prevailing socio-economic conditions. The findings present the process that is mainly under the control of individual plot owners and covers plot acquisition, transfer, ownership, development, maintenance and others. It also includes the consequential initiatives of individual developers to engage with neighbours and other relevant actors to sort out communal or collective urban requirements, such as the provision of basic community infrastructure and services. The chapter commences by providing the general background of Kimara informal settlement before embarking on the interaction with the individual occupants.

3.1 The general background of Kimara

3.1.1 Location

Kimara informal settlement that also forms a political boundary of Kimara Ward cannot be understood in isolation without looking at it in the context of the whole city of Dar es Salaam. The city of Dar es Salaam consist of three Municipal Councils, namely Kinondoni, Ilala and Temeke. Each Municipal Council consists of a number of Wards with Kimara forming one of the Wards of Kinondoni Municipal Council (Figure 3.1). Kimara Ward is located on the western side of the city centre. It can be seen as a part of the expansion of the city of Dar es Salaam that is influenced by Morogoro Road. The latter cuts Kimara Ward in almost two parts to the North and South. The influence of four major roads on the city's growth is outlined in Figure 3.1. Although Kimara is a suburban area 15 kilometres from the city

centre, it is in the intermediate part of Dar es Salaam Region unlike the peri-urban Wards of Mbezi and Kibamba.

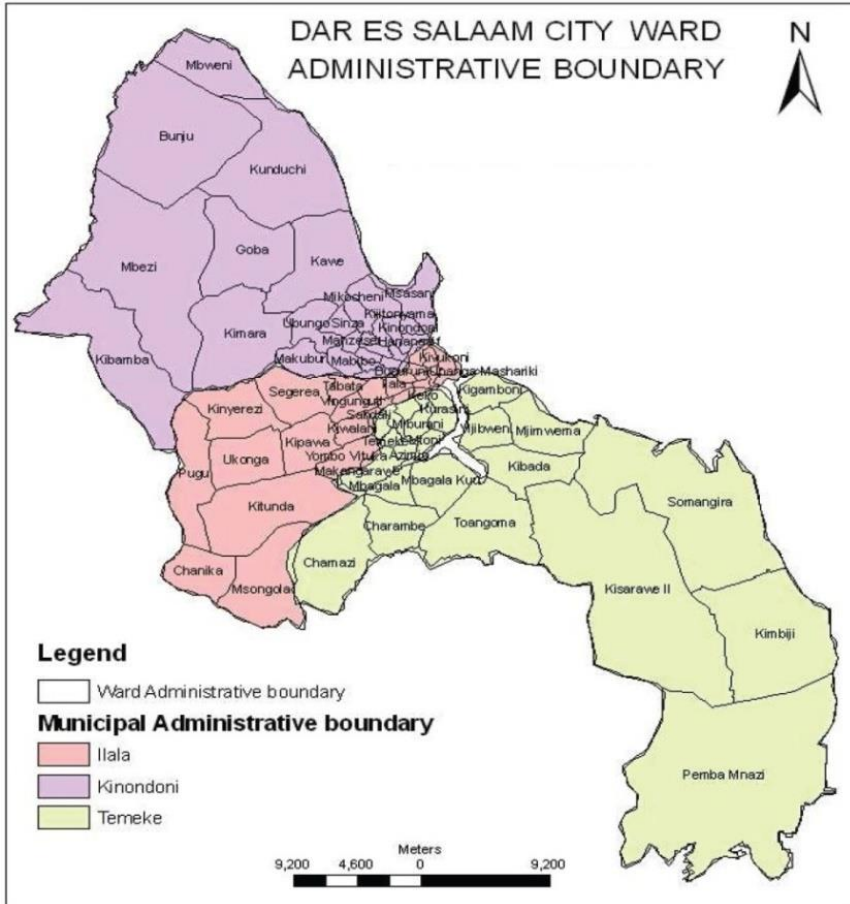


Figure 3.1: The City of Dar es Salaam and its three Municipal Councils: Kinondoni, Ilala and Temeke with their Wards' divisions.

Source: Dar es Salaam City Council 2007

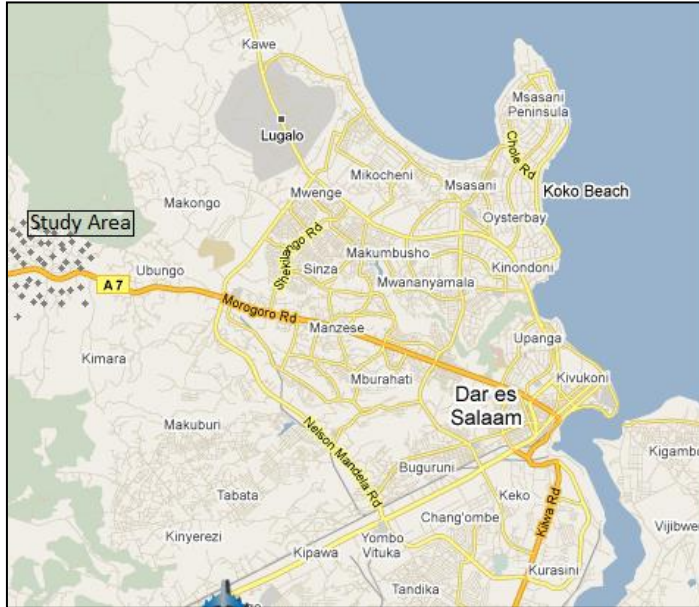


Figure 3.2: Kimara is located on the western side of the city centre

Source: 2010 Google Map



Figure 3.3: Satellite image of the most current part of Kimara Centre through which Morogoro Road passes.

3.1.2 *History of Kimara*

Kimara does not have a long history, as opposed to informal settlements such as Buguruni, Keko and Manzese which were closely located to the historical city centre of which their poor inhabitants depended for jobs. Kimara was originally a bushy area before it was occupied by scattered farmers starting in the mid-1970s (Mng'ong'o, 2004: 152). Being far away from the city centre, Kimara informal settlement was most probably not a strategic location for the urban poor, who would settle in areas near their place of work or sources of livelihood. Thus the growth of Kimara informal settlement that has attracted developers from all income groups is a recent development.

The Map (Figure 3.4) indicating the city's historical layers provides a picture of the history of the whole city. Lupala (2002: 56) quoting Kironde (1994) outlined four urban development areas existing in Dar es Salaam which I also consider useful for understanding the history of Dar es Salaam city and its parts. First are the old 'planned' areas which were developed mainly before 1970 including the city centre, Kariakoo, Oysterbay, Chang'ombe, Pugu road Industrial area, Upanga, Kinondoni, Magomeni, Ilala and Temeke. Second are the new 'planned' areas which were developed after 1970, including the sites and serviced areas of Kijitonyama, Sinza, Mikocheni, pockets of Mbezi Beach, Tegeta and Tabata settlements. Third are the old informal settlements developed before 1980, including Keko, Buguruni, Msasani, Mwanayamala, Hanna Nassif, Manzese, Mtoni and Tandika informal settlements, and fourth are the new 'unplanned' areas developed during the past three decades and include outer areas of Kimara, Mabibo, Bunju, Mbagala and Ukonga, which are still being developed at fairly low densities and include a sizeable population who could be categorised as high-income earners or who have influential positions in society. Land in these areas is still partly put to agricultural use.

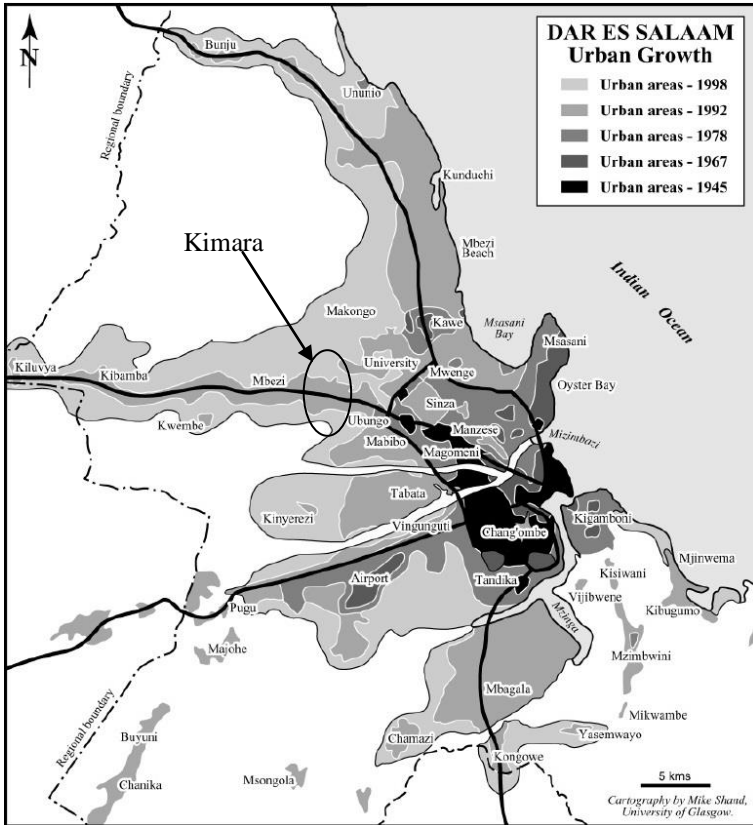


Figure 3.4: Kimara settlement in the context of the Dar es Salaam City.

The Map shows the influence of four major roads (Bagamoyo Road, Morogoro Road, Nyerere Road and Kilwa road) on horizontal expansion of the city through the formation of mainly ‘informal settlements’. The existence of Kimara centre along Morogoro Road has a longer history that dates back to the late 1960s. However, rapid extension of the settlement to the outer areas of the centre came later during the 1990s.

The Map indicates that the settlement in Kimara along Morogoro Road emerged around 1992. By 1998 there had been significant growth of Kimara settlement in the outer areas.

Source: Brennan J. and Burton A. (2007)

Mng’ong’o (2004: 152) citing Lupala A. (2002) observed that in 1967 Kimara was covered by bushy vegetation. In 1977 the bushy

area was completely replaced by mixed farming. In 1999 most of the farming areas were covered by housing development. The extension of 'unplanned' settlement to the outer areas of Kimara is generally a recent process in the history of Dar es Salaam city although Kimara had already a consolidated centre along the Morogoro Road by the early 1980s. Trying to find explanations for agglomeration in suburban areas far away from the city centre, Abebe (2011: 34) citing Hill & Lindner (2010) notes that the urban poor in Dar es Salaam city do not depend very much on services delivered in the CBD but they depend greatly on nearby informal sub-centres in which they are attracted to settle. The sub-centres referred to are Tegeta on Bagamoyo Road, Kimara on Morogoro Road, Gongo la Mboto on Pugu/Nyerere Road and Rangi Tatu on Kilwa Road. All these sub-centres were already consolidated in 1982. Because of this, it is probable that these sub-centres originally attracted poor migrants to move to be near them but later they became major catalysts for suburban migration involving people from various income groups moving to the outer areas from the sub-centres, which led to the emergence of more sub-centres along the four arterial roads. Since they were located far from the city centre, it is highly probable that the sub-centres were mainly sustained by agriculture, which was dominant at the time. Rapid urban population growth and lack of formal housing opportunities to absorb it were some of the critical factors for the widespread proliferation of informal settlements including Kimara. Brennan and Burton (2007: 61) note that by 1979 in Dar es Salaam city 478,489 people out of an urban population of 769,445, amounting to 62 percent, were housed in unplanned settlements. These included not only impoverished communities in informal settlement such as Manzese or Mikoroshoni, but also middle class residential areas like Kimara and Mlalakua.

In general, the early years of the growth of Dar es Salaam from the 1890s to the 1980s, apart from a few planned areas of the city, most of the population were accommodated in informal settlements in the vicinity of the city centre, which became saturated a few decades after independence. From the late 1980s onwards, the urban population faced limited or the lack of the formal and informal supply of land and housing near the CBD, which forced them to find refuge

in undeveloped accessible land, mostly in suburban areas like Kimara. Suburban areas of the city of Dar es Salaam continue to attract migrants but they also offer a number of other investment opportunities which attract investors. Because of this, the expansion of the city and informal settlements, in particular towards suburban areas of Dar es Salaam city, continues.

3.1.3 General character of social services in Kimara

Kimara Ward covers an area of 42.05 square kilometres. According to the Tanzania National Census of 2002 the population of Kimara was 66,280. Based on Dar es Salaam's growth rate of 4.1% per annum, it was estimated that Kimara had a population of 87,049 in 2009. According to MLHSD, in 2007 Kimara informal settlement had 23,000 plots, 75 percent of which were built on. The number of persons per household was estimated to be at 5 to 6 persons. The data gathered by Kimara Ward Office, based on a door-to-door count in May 2010, the number of households was 16,719. This figure is subject to error due to the lack of records and data on residents and landed properties as well as the limited resources available for conducting the exercise. On the issue of infrastructure and social services, Kimara has four private dispensaries and one government dispensary. There are also nine private primary schools and eight government primary schools, eight secondary schools and one government school. There are a number of informal markets serving the population but the largest and most reliable one is at Kimara centre known as 'Kimara Mwisho'. A number of churches and mosques can also be found in the Ward. Roads in Kimara cover a total length of 79 kilometres. These comprise three categories of roads based on who is responsible for their maintenance. These are roads under TANROADS, roads under the care of Kinondoni Municipality and roads maintained by residents under their local leadership or own arrangements. Most roads in Kimara are established by developers as they occupy and develop their plots. Regarding water connection, the area is facing serious problems of potable water supply. Some areas of Kimara are not connected to water supplied by DAWASCO and those areas which were connected were either facing erratic supply or experienced dry pipes for long periods.

3.2 Resident's judgement of suburban location

3.2.1 *The relationship between dwelling and working locations*

Some studies show that a connection exists between the socio-economic status of people and their urban locations. The market forces, as posed by neo-liberal urban theorists (UN-Habitat, 2003: 2), can be the reason for the segregation of urban groups as they are organised in different locations with respect to their ability to afford the consequential costs. One view associates location near workplaces with low income groups in their quest to optimise their living costs. Limbumba (2010: 103) in her study of Keko Machungwa informal settlement in Dar es Salaam city revealed that proximity to work or livelihood opportunities was one of requisite drivers of location decisions made by most respondents, especially the poor. The congested, service deficient and environmentally contentious Keko Machungwa informal settlement is in walking distance of Kariakoo area, a flamboyant commercial centre, which has many casual and specialised employment opportunities and the largest market for food and other supplies at reasonable prices. In this regard Davis (2007: 27) notes that:

The urban poor have to solve a complex equation as they try to optimise housing cost, tenure security, quality of shelter, journey to work, and sometimes, personal safety. For some people, including many pavement-dwellers, a location near a job – say, in a produce market or train station – is even more important than a roof. For others, free or near free land is worth epic commutes from the edge to the centre. And for everyone the worst situation is a bad, expensive location without municipal services or security of tenure (Davis 2007: 27).

UN-Habitat (2003: 2) concurs with the post-modernist theories that look at urban spaces as multi-centred and fragmented cities of the 21st century. It notes that most cities are divided by different occupational groups: the very rich; the unskilled worker; the informal worker; and the residual or marginalised 'under-class'. Each has a clear part of the city to themselves, supported by housing and distribution networks, but overlaying each other rather than being confined to clear 'quarters' (ibid).

In the case of Dar es Salaam, the segregation phenomenon may apply at city level, where some pockets of social segregation can be identified. These are more or less evident in some planned areas where the modern zoning system, which was used to distinguish different neighbourhood densities, ended up segregating communities with respect to their income status. However, some formal settlements, with some informality creeping in, have become the area of mixed income groups. Informal settlements such as Kimara present more of mixed groups ‘overlying each other’ that can also be displayed in physical forms and a variety of socio-economical activities, which could be considered a natural support of post-modernist theories as pointed out above.

It is however important to note that the larger extent of urban Dar es Salaam is informal and provides an attractive environment and flexible conditions of entry for various social and income groups as prospective developers²⁵. The general view of respondents as to when and why they moved and settled in their current locations is presented in the following sections.

3.2.2 Decisions on moving to suburban area

It was revealed that some respondents had not conceived the idea of moving to suburban areas at the beginning. Some had bought land in the suburban area for the purpose of cultivating crops and/or keeping animals to supplement their food supply and income and to reduce living costs (Box 3.1). This category involves most respondents who bought suburban land in the 1970s and early 1990s. At that time, the land in the suburban areas was regarded as suitable for agriculture rather than for residential or commercial purposes. The few families living in suburban areas in the 1980s were living the village life of cultivation and pastoralism. One of the respondents²⁶ who settled in Kimara in 1979 was engaged in cultivation and keeping a large flock of goats. He noted that he and a few other people were

²⁵ The informal settlement was considered to accommodate around 80 percent of the urban population in Dar es Salaam by 2000 (Kombe et al, 2000: 40). This may give a rudimental idea as to the extent to which informal settlements cover a surface area. Further, given the continued expansion of the city as a result of informal settlements increasingly retaining the role of being the best choice for most prospective land developers, its population is likely to have risen beyond 80 percent.

²⁶ An interview held with Mr. Mbena on 11 May 2010.

living the village life. However, at the time of interview, he was no longer involved in agricultural activities since he had a limited amount of land that accommodated only his house and a small courtyard. This was because he had sold most of his land to more than five developers, and the area had also become increasingly urban. In relation to changes in the development motive as time went by, one respondent had this to say:

Box 3.1: Perception of suburban area in relation to change of time

“We bought this area to have a ‘shamba’²⁷. The area was bush except for a few native famers who were living around. Most land was ‘mashamba’ belonging to absent owners, who lived in the consolidated areas of the city. We never thought it would be a suitable location for our future home. We built a mud wattle house where the ‘shamba’ worker used to live. The ‘shamba’ was very useful as we produced various crops, such as banana, cassava, maize, oranges and others, and we had extra to sell”.

“Around the early 1990s our motive changed, especially when we saw a great number of our neighbours building their houses and moving in. This inspired us and thus we considered doing the same. In addition, the place where we were renting in Sinza Uzuri²⁸ was becoming more congested, noisy, dirty and polluted, which was an added incentive to move to our green, quiet, spacious and homely ‘shamba’ in suburban area as a suitable location for home”.

An interview with Mr. Rutta on 07th May 2010

According to Mr. Rutta, there were rapid changes in the 1990s. The land which was treated as ‘shamba’ in the 1980s became potential plots for residential and other purposes. This implies that the change in the socio-economical environment changed the land value which, in turn, changed the perceptions of the potential of land in the area. This change may almost certainly be connected with the economic liberalization policies starting in the mid-1980s. A random survey of a few selected respondents showed very little migration to the suburban area of Kimara settlement between the 1970s and 1980s, but there was

²⁷ ‘Shamba’ is a Swahili word for a ‘farm’. ‘Mashamba’ stands for plural.

²⁸ Sinza Uzuri is an informal settlement about 10 kilometres from the city centre on the eastern side. Sinza formal settlement is on the western side and Manzese, one of the oldest consolidated informal settlements in the city, is on the southern side.

a sharp increase in migration from the 1990s onwards (Table 3.1). In the 1990s as the value of land increased, the demand for land changed from the '*shamba*' requirement to demand for residential development and other investment opportunities. Even the size of land available for sale declined as the price rose, which meant it was not viable for '*shamba*' purposes. In this way most respondents who bought land in Kimara from the 1990s onwards did so for residential development and not for '*shamba*' uses.



Figure 3.5: Mr. Rutta's House with reasonable qualities.

The place meant for a '*shamba*' has been made into a home. The family moved here in 1993. The place has a lawn, garden and trees but no more cultivation but has a serious poultry-keeping project.



Figure 3.6: The Sattelite image at Mr Rutta's cluster.

Small plots subdivision has resulted to a congested development. Extra huts on Mr Rutta's plot are for poultry keeping, stores and the original hut used by a '*shamba*' keeper

Source: 2010 Google Earth and Author's construction.

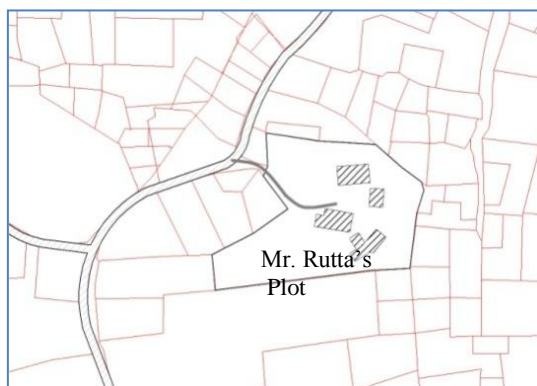


Figure 3.7: Mr Rutta's plot and the surrounding neighbouring plots.

Unlike his neighbours, he has not sub-divided his plot for sale and thus it is spacious. Note that he had to buy land for his access road.

Source: 2005 Parcels Map from MLHSD and Author's construction.

Table 3.1: Range of years when respondents moved to current location in Kimara

Year	Number of plot owners	Percentage
1971 - 1980	6	14.0
1981 - 1990	6	14.0
1991 - 2000	15	34.8
2001 - 2010	16	37.2
TOTAL	43	100.0

As to 'why' settlers had chosen to resettle in a specific location in a suburban area, there were mixed responses, such as: seeking calmness away from noise and congested areas; attracted to the area due to the availability of public transport, water supply and power; allocated the land by employers (Box 3.5); need for land for 'shamba' purposes; inheritance of the land and/or the house from parents; and others had no restriction on choice of location (Box 3.2). Some would not buy the land without being sure of its status as far as planning conditions are concerned (Box 3.4).

Box 3.2: Mixed motives for migrating to suburban area

“When we were still living in a rented house, our landlord was not a good person and so we had to tolerate his harassment. We first thought of moving out to rent some rooms in another house to avoid the landlord’s harassment because we did not have enough money to start building our own house. But we were against this idea because we could not be sure of not running into another bad landlord. At that time, we had this land which we bought in 1996. So, we decided that we should start building our own house with the little money we had, even if we had to start with one room, to make sure that we could move to our own house where we could live our life away from potential irritations from landlords. Thus, in 2000 we built one room and a toilet in four months and moved in immediately. Since the room was too small to accommodate our entire family, we sent our children to live with their grandparents while we struggled to add a second room. After about another four months we finished the second room and we brought our children home. When we settled with our children, we were no longer under pressure for more rooms and thus we concentrated on other equally important matters. It was then after three years that we started to build three more rooms and a veranda that led to the complete house as you can see. Since we had no urgent demand for a room, that particular construction phase took three years to finish. However, we still haven’t done most of finishes to floor, walls and ceiling but since we were able to build this entire house, I believe we will also do the finishes.”

Interview with Ms Amina on 06th December 2010

However, my observation through contact with the residents and local leaders was that the greater number of residents living in a particular location, the more attractive it became to other immigrants, regardless of whether the infrastructure and social services were available or not. Mr. Ndimbo²⁹ revealed that he moved to his suburban place in Kimara because there were already a number of residents. To him, living close to neighbours was more important than the availability of infrastructure and social services. He argued that whenever a settlement grows in size and population, it was obvious that infrastructure and services would follow, either through people’s initiatives or municipality provision or both.

²⁹ An interview held with Mr. Ndimbo on 11th May 2010 in Michungwani Sub-Ward, Kimara Ward.

Table 3.2: Residents' previous location.

Previous accommodation	Number of plot owners	Percentage
Renting in other locations in Dar es Salaam city centre,	33	76.8
Living with parents in the city centre,	2	4.6
Living with a relative in the city centre,	2	4.6
Employer's house in the city centre,	3	7.0
Own house in another location in Dar es Salaam,	1	2.4
Moved from other upcountry regions	2	4.6
TOTAL	43	100.0

Generally, the random survey showed that most migrants moved to Kimara from the city centre or consolidated part of the city (Table 3.2). This could probably be explained by the fact that the land aspirant had to go through the process of searching for land, negotiating the price and buying it. Further, land acquisition could take a lot of time if the agreement of payment was in instalments over a year or more. It might also take a long time to raise the funds to develop the land. All these factors may require a prospective home builder to rent in the city, probably in the city centre, to be able to endure the entire process. This could be the reason why migrants, mostly poor, from the countryside may not find suburban areas as suitable for meeting their immediate needs. This situation can be related to the narration of some respondents about how families made strategic migration moves. For instance, in one case, only a few members of the family, parents and younger children, moved into the city in 1972. They started renting a room in Buguruni informal settlement³⁰. In their rented accommodation they could make ends meet while they went through the process of saving, searching for land, and acquiring and developing it. This landed them in Kimara suburban area in 1975. The rest of the family joined them in 1983, after 11 years, since a part of the family migrated to Dar es Salaam

³⁰ Buguruni is one of the oldest informal settlements in Dar es Salaam. It started during the German colonial era around 1899 in the form of a village. Its close location to the city centre made it convenient for casual labourers who worked in the city in the morning and in their farm in the afternoon. It has thus retained its strategic character of accommodating and serving the poor long after independence (Bahendwa F., 2005, *Improving Outdoor Living Spaces*, Masters Thesis, AHO)

city. This revelation explains the levels of migration that may involve movement from the countryside to the city with its spatial connotations, which also may constitute the basis for migrating from one part of the city to another. It also explains that migration within the urban territory can be informed and strategic, and rural-urban migration can also be equally informed and strategic. The respondent had this to say:

Box 3.3: Rural–urban migration as genesis of urban–suburban migration

“My parents moved to the city of Dar es Salaam from Kigoma region in 1972. They brought with them the younger children and left behind the elder children of whom I was one. They got a place to rent in Buguruni area in the city. In 1975 they bought this place in Kimara where they built a mud house and moved in within the same year. They brought us to the city in 1983 to join them in our new home here in Kimara. Later in 1984, my father started to build a concrete block house with three rooms as a starting point for his dream house. We moved into the new house in 1986. We were very lucky because as soon as we moved into the new house, the mud house fell down within a few days. In 1988 my father died and as the oldest brother I inherited the property. I got married in 1995 and have four children. I have managed to construct three more rooms on to the house. One is a sitting room and the other two are bedrooms. The addition of those rooms made the house complete except for the finishing.”

“Since it was difficult to save enough money at one go, I had to sell our ‘shamba’ of about one and a half acres in another location in Kimara in order to finance the construction of those additional three rooms.”

Interview with Mr. Yahahya on 19th February 2010

3.3 Ownership and development of individual plots

3.3.1 Land market

How people got land in the suburban area was another peculiar individual activity that took place in various forms. It has to be noted that the formal real estate market in Dar es Salaam is still in its infancy, as information on what is in the market, where and when is scanty if not non-existent. In this way the information on ‘what’, ‘where’ and ‘how’ concerning property available in the market is accessed informally and sometimes accidentally accessed. People seeking land, as pointed out by a number of respondents, would hunt

for information on the availability of land from relatives, friends, neighbours, workmates or 'brokers'. Therefore, access to information depended on social networks. Information on the availability of property for sale would be circulated by the owners mostly to people they know or 'wish to inform' and not anybody else. The land sellers may also be ready to sell to someone they know. If a stranger was introduced to the land seller by a person known to him or her, the stranger may be trusted to buy the land. One can therefore say the transaction was largely driven by the seller.

Probably the kind of relationship between the seller and the buyer might have been encouraged by past experience of the 'Ujamaa' system, whereby the land as 'public property', with no value whatsoever, could not be sold except the development on it. This can also be related to Kombe's (2000: 66) observation in his field study in Rangi Tatu informal settlement in Dar es Salaam:

Although land transactions are presently commonplace and have been going on in Rangi Tatu for decades, most households are still timid about admitting that they are selling or have sold their land. This is essentially so because a family which has disposed of its land fears being stigmatised. This apprehension might also be related to the fact that the state is statutorily still the sole proprietor of land and that the government had until recently prohibited the buying or selling of bare land. This might have created fear among households who have sold or are intending to sell their land causing them to withhold information about their involvement in land transactions (Kombe and Kreibich, 2000: 66).

In the past, before the passing of the Land Act No. 4 of 1999, it was illegal to sell bare land and in that case many sellers would wish to know whether the buyer could be trusted or not. This is no longer the case since the adoption of economic liberalization policies, whereby the land value and the market have been legalised. Further, buyers would like to ensure that the property they acquired was secure and legitimate, as one respondent noted:

Box 3.4: Assurance of legitimacy of property on sale before decision to buy is made

“I checked to see if there was any public function in the area allocated by the master plan before I bought this place. Thus, I took the trouble to make enquiries at the Ministry of Land, Housing and Human Settlements Development to get assurance that this place was not designated with public functions. I did that because I wanted to avoid losing my money by being evicted at a later stage because the land was earmarked for public functions.”

“I considered road access to the plot as a crucial factor, but most importantly, I was impressed by the calm environment that even makes it possible for me to do some office work at home. It was not easy even to rest at home when I was renting a room at Magomeni because of the congestion and noise”.

Interview with Mr. Mapunda on 07th May 2010

3.3.2 Plot acquisition

Generally, most land seekers in Kimara acquired land through buying it (Table: 3.3). As the selling information was mainly sought informally, the land purchase was also mostly done informally (Box 3.6). Upon being satisfied with the size, location and other factors, the buyer would agree to pay the price. The land boundaries would be verified by the neighbours sharing the borders with the land being sold to avoid any conflict regarding boundaries after the land is transferred. Almost all landowners interviewed bought their land informally with a selling agreement letter verified and signed by a local leader, usually the Ten Cell leader (Table: 3.4). Even those few landowners who had ‘title deeds’ processed them after having acquired land informally. One respondent who acquired land through the military ‘Nguvu Kazi’³¹ campaign had this to say:

³¹ ‘Nguvu kazi’ is based on the Human Resource Deployment Act of 1983 in Tanzania, that represents the CCM Party slogan that, ‘every able person should work’, as a translation from Kiswahili: ‘Kila mwenye uwezo wa kufanya kazi na afanye kazi’. It was a state campaign determined to align ideology with reality, for it had “the simple aim of relocating the urban unemployed back to the rural sector where they could be gainfully engaged in agricultural production” (Sommers M., 2001: 91, *Fear in Bongoland: Burundi refugees in urban Tanzania*, Berghahn Books, the British Library).

Box 3.5: A respondent allocated land through military order

“I was allocated land by the military (the employer at that time) as a ‘shamba’ through the military programme for implementing the ‘Nguvu Kazi’ campaign. Almost all soldiers were allocated a ‘shamba’ to cultivate. The land belonged to the military and we used it as tenants although it was free. As time went by, civilians started to encroach upon part of the military land, squatting next to our land. Later, the military administration decided to transfer land ownership to us as well as civilian squatters. Thus, we and the civilian squatters became the sole owners of the land we occupied. The military declared that every soldier who rented land in this area would become a landowner with respect to the specific boundaries provided. This is how the transfer of land to us from military happened. However, the military drew a strict boundary to demarcate the military land with a decree to demolish any further squatting beyond the restricted line”.

Interview with Mr. Masama on 07th May 2010

3.3: Methods through which respondents accessed land

Means of acquisition	Number of plots	Percentage
Bought	37	86.0
Inherited	5	11.6
Allocated by employer	1	2.4
TOTAL	43	100.0

Table 3.4: Type of plot ownership

Means of land transfer/ Land ownership	Number of plots	Percentage
Informal letter authorised by local leadership	35	81.4
Title deed ³²	3	7.0
Others ³³	5	11.6
TOTAL	43	100.0

The involvement of local leaders, mostly the Ten Cell leaders, during the transfer of land was very important. The transfer contract was written and it had to be signed by the seller, the buyer and their witnesses. Ten Cell leaders signed and stamped the contract and kept copies for official documentation. The buyer kept the original selling contract whilst the seller kept a copy. In line with this informal transfer procedure, one respondent noted that:

Box 3.6: The process of informal land transfer

“During land transfer it is important that all adjoining landowners are present to verify the boundaries in order to avoid misunderstanding or land conflicts at a later stage. Further, often respected elders who know the local residents and the Ten Cell leader ought to be present. A letter of transfer is written and stamped by the Ten Cell leader upon payment of the amount agreed by the buyer. The buyer and seller pay a token service fee to the Ten Cell leader”

“The presence of the Ten Cell leader, his confirmation of transfer contract, the verification of neighbours for authenticity of ownership of the property bought and recognition of the buyer as the new property owner in the Sub-Ward is enough to ensure secure tenure of the new owner’s plot”.

Interview with Mr. Mwasanga on 17th May 2010

There were also some cases where people sought land in areas where the city administrative structure, especially the Sub-Ward administration, was not yet in place perhaps due to remoteness and the small population. In those cases people had to devise certain means for secure tenure and property transfer procedure that were relevant to

³² The plot survey for registration and acquisition of the title deed was processed after the land was acquired informally.

³³ Some respondents acquired land through inheritance. There was also a case where the land was acquired through the military order without any written document.

local values and norms aimed at preventing potential disputes concerning property ownership in the future. In this regard, one respondent had this to say:

Box 3.7: The adaptation of local values in informal land transfer

“When I bought this land in 1994 it was almost in the bush and very few people were living in this area. The area was more or less like a village. The few people who occupied land were mostly engaged in agriculture. In that case there was no formal Sub-Ward or Ten Cell leadership. That made the land transfer different from the current process where the Sub-Ward and Ten Cell leadership are often involved.”

“At that time, there were respected elders who had lived in the area for a long time. Because of their long stay in the area, they commanded respect and had good knowledge of local residents and the nature of local property ownership. Therefore, these elders were used as agents to verify the transfer of land ownership, which increased the authenticity of the transactions. Their importance was that they knew all genuine land owners and thus their approval of transfer could not be disputed. This was important for avoiding buying land from con people who could sell land that didn't belong to them, leading to potential land conflicts. As a matter of fact, I used the same method myself”.

Interview with Mr. Mbwana Laki on 10th May 2010

At the time of interview, however, the population and development in the area had already intensified. The author was informed that the local government at Sub-Ward level had been established in the area since 2000. In this way, the land transfer method had switched to the popular method, in which the Ten Cell leader was involved. In this way, most landowners interviewed had informal ownership status, which was that the informal contract was signed and stamped by the Ten Cell leader. However some landowners would like to improve their ownership status by officially registering their land registration in order to secure the title deed. That path did not seem to be clear as narrated by one respondent:

Box 3.8: Residents' readiness to formalise and hitches surrounding titling

"We bought the land for 'shamba' purposes in 1986 using the traditional procedure, with the land seller and his witness, me and my witness and the CCM Party³⁴ Ten Cell leader comprising the team that concluded the land transfer deal. The land transfer letter was signed by me, the seller, our witnesses and the Ten Cell leader, and the Ward secretary stamped it to verify the transfer. This was sufficient assurance of ownership of the land we bought".

"However, around 1995 we started processing a legal survey in order to acquire a title deed. We filled in all the necessary forms and made payments. Surveyors from the Ministry of Land, Housing and Human Settlements Development came to conduct a physical survey of our plot, but after then the paperwork for us to get the title deed never ended. I made a number of visits to the Ministry offices where I often ended up being told that the process was still going on until I got tired of going back. That is how the legal surveying process got stuck, it has never ended although we paid and filled in all the necessary forms".

"Probably now that the government has brought the programme for regularization of informal properties to our area we may get a successful legal survey of our plot".

Interview with Mr. Audax Rutta on 7th May 2010

3.3.3 Security of tenure

It was observed that security of tenure was relatively high and development on plots was being carried out with a lot of confidence. Owners had made huge investments in plots, depending on their capacity or resources available. As a result, people had devised their own security system and convenient means for accessing, owning and developing the land. They were thus using resources and tools locally available to achieve those goals. For instance, they used formal and informal means to get access to information on the real estate market, they used the formal city structure such as the 'Mtaa' office to officialise their informal contracts of land transfer and they developed land from their own sources of funding. The survey indicated that the

³⁴ During the single party democracy, the Ten Cell leader represented the ruling Party, Chama Cha Mapinduzi (CCM). Since multi-party democracy was introduced in 1985, 1986 was still a transition period and thus not much had changed in political structure. Currently, the Ten Cell leader, as a political position, can represent any party and thus the party-oriented image is no longer emphasized so that all people are served, irrespective of their political affiliation.

involvement of Ten Cell leaders, although not mandatory, in land transfer agreements was convenient and enhanced security of tenure (Table 3.4) and as reported by a respondent (Box 3.6). The local leadership was also involved in ensuring that properties on the land would result in a unified community that was convenient and liveable in, at least to the level that was within the capacity of the resources available.

3.3.4 Actions and reactions on settlement space organization

The shaping of the settlement happened in piecemeal fashion and involved a number of actors. The land speculators or sellers might have played a significant role in this. They could, for instance, subdivide the land into small plots without providing access roads or paths, which could result in an infrastructure provision problem for the prospective owners. However, some land speculators sub-divided plots and provided road access to each plot, which would result in a more convenient layout. On the other hand, owners of plots also reacted by reorganising the undesirable spatial and environmental conditions in groups or individually. The respondents revealed some of these reactions. For instance, reacting to the lack of access road and water supply, Mrs Sarungi joined with ten neighbours to share the cost of constructing an access road and connecting water to their houses. Mr. Mashaka joined with five neighbours to share the cost of a water pipe³⁵ about 200 metres long in order to speed up the process of connecting water to their houses by Dar es Salaam Water and Sewerage Cooperation (DAWASCO). Mr. Rutta's road access was blocked by two plots, which were sold by their previous owners without providing for an access road. He had to buy land for his access road from his two neighbours. However, land in most areas was sold as 'mashamba' at the beginning and so access roads and some other community infrastructure were not in great demand. When 'mashamba' were gradually transformed into residential use, residents

³⁵ Mr. Mashaka and five neighbours applied to DAWASCO for a water connection to their houses but they were told that the company had a shortage of water pipes and so they should wait. Anticipating that waiting until DAWASCO procured water pipes may take years, they decided to share the cost of buying the pipe themselves and company connected the water to their houses thereafter. By doing so, they speeded up the water connection process to their houses.

started to organise the provision of access roads and other community infrastructure.

The author was also informed by Mr. Mbena, a Ten Cell leader at Michungwani Sub-Ward, that a number of landowners sold their land without providing for road access, leading to access problems for the adjoining plots. This led to an increased number of complaints by citizens about the blockage of roads and paths. It was finally decided, at Sub-Ward level, that no person should sell land without providing an access road. Short of that, the Ten Cell leaders would not authorise the transfer if they were involved. Therefore, these were some actions and reactions of actors at various times in trying to organise urban space at different levels. However, a series of individual actions and decisions appeared to dominate due to the fact that there were limited established mechanisms for coordinating fragmented individual efforts to acquire, organise, service and develop plots in the area.

3.3.5 Plot formation

Plot sizes and shapes were different as sub-divisions were made to meet individual requirements, as there were hardly any regulations or coordinated efforts or authority. Thus, the decisions on the size and shape of plots were made individually.



Figure 3.8: Plot formed informally in one block in Kimara Settlement.

Plots are irregular with different sizes



Figure 3.9: The corresponding development in every plot in Figure 3.8.

Source: 2005
Aerial view from MLHHS

The respondents indicated that land sellers had greater power than the buyer in determining the size and shape of the plot (Table 3.5). Therefore, a buyer would take the available size and shape upon being satisfied with the location and the price. The size of the plot was usually measured by viewing it³⁶ or by pacing, and it ranged between 400 and 1000 square metres. The prospective buyer would organise and plan the development on it within the limits of the prevailing shape and size. It was, however, possible for some respondents to extend their plots by buying more land from the seller or other neighbours. This was only possible if the land for sale was next to the owner's plot.

A few respondents (7 percent) had the luxury of deciding on the size of plot they wanted to buy. However, statistics show that such freedom of choice by the buyer is very limited, especially in a heated land market like Kimara settlement. Through discussions with various informants and observations the author found that owners with an abundant amount of land used the opportunity of the high demand for land to sub-divide their land into specific sizes, usually around 20 to 30 metres or 600 square metres, usually rectangular in shape, with road access to each plot being provided and a fixed price for each plot. Prospective buyers may buy one plot or combine several plots to make one big plot, depending on their financial capacity. This arrangement

³⁶ Upon the boundary lines being identified, most buyers could tell by looking at plot size that it may or may not meet his or her requirements without the need to take physical measurements.

allowed varying income groups to access the plots as buyers could buy the size of plots they could afford.



Figure 3.10: Mrs Amina's House built to the design and size desired.

It was built in three phases and most finishing has not yet been done. The house is built in such a way that space for outdoor activity is left despite the small size of the plot.



Figure 3.11: Satellite image showing Mrs Amina's house (in circle) in its cluster.

See also Figure 3.13.

Source: 2010 Google Map

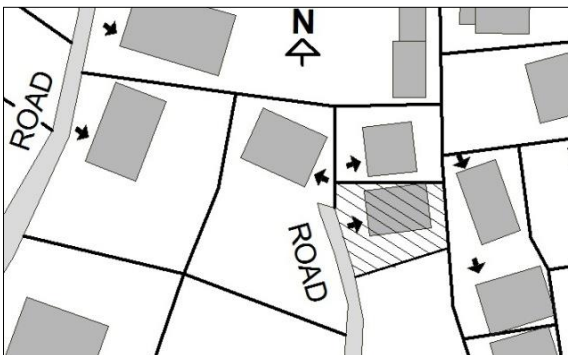


Figure 3.12. Mrs Amina's plot (shaded) and neighbouring plots, house locations and orientation.

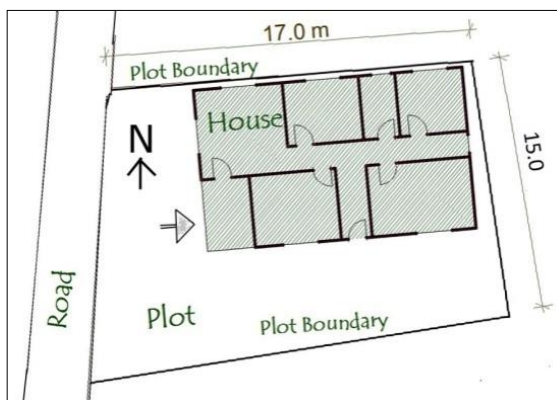


Figure 3.13: Mrs Amina's house plan on plot.

They bought the size and shape of plot offered by the seller. The plot size is about 260 square metres.

Figures 3.10, 11, 12 and 13 are examples of Mrs Amina's development on a plot among other developments on adjoining plots. Plot sizes and shapes were decided by the sellers in most cases (Table 3.5). The resulting plot configuration depicts this approach. Developers had to accommodate their development requirements within the limits of their plots. If plots were sub-divided into small sizes, the resulting building layout was congested, making it difficult for the provision of services, such as vehicular access road, drainage channels, mains water and others.

Table 3.5: The extent to which plot buyers decide on plot size

Plot size determination	Number of plots	Percentage
Took the size available for sale	31	72.0
Took what one could pay for	3	7.0
Took the size of one's choice	3	7.0
Increase the size incrementally	5	11.6
Allocated by the one's employer	1	2.4
TOTAL	43	100.0

As pointed out earlier, land was sub-divided informally by the owners, which might have been driven by various motives, depending on the nature of land ownership.

Firstly, some landowners who were in need of immediate funds could sell part of their land to meet that end. In this case the landowner might have only a moderate amount of land and was therefore pushed to reduce it to the minimum and sell the rest. Kombe

(2000: 67) notes that poverty often puts landowners in the trap of being exploited by land speculators, as many sold their land at a price far below the market price. Secondly, others were mostly farmers who owned an abundant amount of land for cultivation and keeping animals and chickens. When the land market heated up they seized the opportunity to informally sub-divide and sell their land. Thirdly, land speculators used the opportunity of the heated land market to make huge profits. They would buy land in various places and sell it later to make a profit. Mostly, those who sold land in considerable quantities organised the layout sub-divisions with defined plot sizes and provided roads to each plot. This was done to increase their marketability as prospective buyers would not only be attracted to location but also to the convenient layout and accessibility to plots.

This plot formulation and organization induced by market forces and other individual and collective logics encompass complex levels of actions and reactions that contribute significantly to the production of informal urban form.

3.3.6 Types of development

The type of development carried out by new occupiers of plots was mainly residential (Table: 3.6). Table 3.6 shows that, in each category, the residential component was the main requirement. The development of land for residential purposes at the time of the interview could change in the future due to the addition of space for commercial or any other extra use, since strategic changes at plot level were pervasive in informal land developments (Box 3.9). The commercial activity in this respect involved all income-generating activities, including renting, but with the exception of agricultural activities. It was observed that agricultural activities were consistently declining, and were being replaced by an increasing number of residential, commercial and other urban investments.

Table 3.6: Plot development purpose

Purpose of development	Number of plots	Percentage
Residential	20	46.5
Residential and commercial	18	41.9
Residential and agriculture	5	11.6
TOTAL	43	100.0

Because land was still available in the suburban areas it meant that land seekers from various income groups had access to it. In addition, land prices were attractive to various income groups as the land could be supplied in a variety of sizes, shapes and locations. In some cases, depending on negotiations and the agreement between parties, it was possible to pay in instalments.³⁷ Further, the flexibility provided by the informal environment made it possible for individuals to take investment opportunities as time went by, as one respondent revealed:

Box 3.9: Future investment plans on the plot

“As you see this place is currently only residential in function. This does not mean that it will remain only residential because I am thinking of doing something extra on this plot in future to generate some income. The empty land you see on the other side of the house is the land that I bought later to extend my property. My intention is to develop something commercial on that side when I am financially able. Currently, my idea is to develop that area as a bar or guesthouse. However, this may change, depending on when I get the money and what will be a more profitable investment opportunity”.

Interview with Mr. Mwasanga on 17th May 2010

The first development project for most respondents was their residential houses, which were mostly constructed incrementally. Since the construction of most houses was incremental, some respondents added rooms for rent later. This was a strategy to utilise part of the plot space to generate income. Apart from rooms for rent as the main means of income generation, others could be the provision of a shop, workshop, a grocery, a kiosk, or for keeping domestic animals and poultry. For instance, one respondent who was a mechanic used his yard as a working garage. So he fenced and gated his yard to allow mechanical work to take place within the yard, while some cars waiting for to be serviced parked outside. Another respondent had constructed a pub on his plot and was constructing a number of rooms for renting as shops.

³⁷ This may not be taken for granted in a heated land market. However, I was informed that in the areas where the demand was high it could be possible to pay in instalments but within a very limited time. In some areas where the demand was not high or where the seller was desperately in need of cash, payment in instalments could be for a year or more.

3.4 The plot contents and its contribution to block or neighbourhood.

3.4.1 The plot content

The main practice by individual actors in creating an informal settlement was to build residential houses with or without space for income-generating activities. The additional functions depended on the plot owner's resources, the availability of space on the plot, family requirements and strategies for mobilising resources. The buildings were designed according to the purpose and financial capacity of the developer. At times, the design was personalised to depict one's preference, taste and architectural character. Developers with limited financial capacity would concentrate more on meeting basic household needs with little emphasis on aesthetic considerations, which may lead to higher costs. It should also be noted that incremental development was the common approach used by almost all income group actors to achieve their development and investment plans. Therefore, time was an important factor as it allowed for the mobilisation of financial resources, albeit in small quantities. This process went on over a period of time depending on the developer's plans, income flow and the size of the structure. Relying on the incremental development approach, some plot owners seem to have preferred plot development plans that were beyond their financial capacity. For instance, Mr. Masama at that time had a plan to construct a house measuring 130 square metres but, as a soldier with no rank, his income was only his basic salary. This means he needed much more time or years to complete the construction of the house.

Most house plans adopted the conventional requirements for most residential units, consisting of a living room, dining room, kitchen, rooms for boys and girls, master bedroom, and toilet. Wash rooms and kitchens in some designs were kept outside the main house. In some cases, pit latrines had to be used because of inadequate water supply, one of the critical problems in Kimara area. Additional houses or rooms for rent were part of long-term plot investment plans in some cases. The common materials used are concrete blocks for walls, timber for doors and window shutters and corrugated iron sheets for roofing. The size and design of buildings, and the type of finishing depended on the owner's financial capacity and preferences as well as

plot size. In this way, a rich mixture of different building types relating to different social groups generated the unique urban architecture of the area.

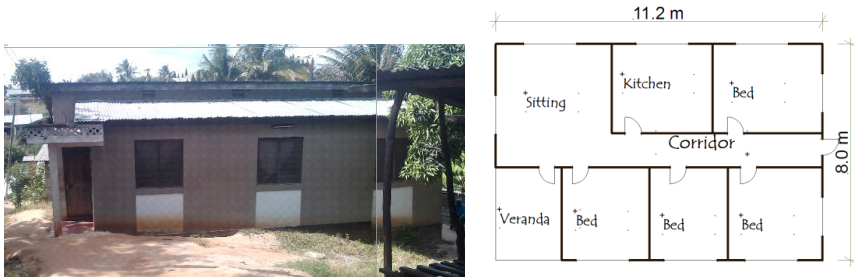


Figure 3.14: Mr. Mangole's house image and its floor plan (Figure 3.19 and 3.20).

The house faces the main access road. 'Mafundi' were involved in its design and construction. The plot was bought in 1991 and the construction of the house started in 1993. Mr. Mangole's family moved into the house in 1998 before the house was complete, as the doors, floor screeding, wall plaster, ceiling finish and painting had not yet been done. Finishing was done while the house was occupied, reflecting the incremental development phenomenon.

Like the *Swahili* house plan³⁸, the plan consists of a corridor leading to rooms on both sides, a sitting room where the corridor terminates and a veranda. Washrooms and kitchens are in the outer structure. The room indicated as a kitchen may be used only if it is not occupied.



Figure 3.15: Mr. Masama's house facing the main access road and its side

³⁸ The *Swahili* house plan is characterized by a veranda facing the street, a central corridor opening on to the veranda and the back yard, with rooms on both sides of the corridor and the back yard with washrooms and optional extra rooms.

facing the path.

The house is on the edge of the plot near the footpath, which the residents intend to upgrade to a road. The timber hut beside the road is used for storage and as a kiosk for selling charcoal. Few properties in this area are fenced because of the small plot sizes and lower income status of the developers. The planted and naturally growing trees, lawn and shrubs provide an appealing green landscape in Kimara area.

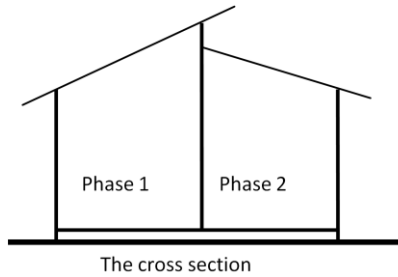


Figure 3.16: Mr. Masama's house in *Figure 3.17* was designed with consideration for functional and constructional implementation requirements.

The design facilitated the construction of the house in two phases as illustrated in cross-section diagram.

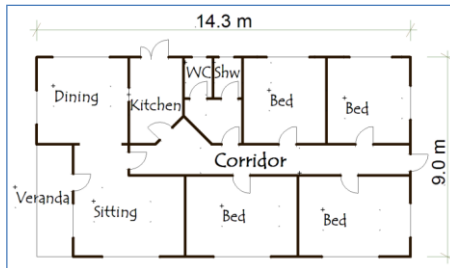


Figure 3.17: Mr. Masama's floor plan was made to facilitate the incremental development process (*Figure 3.16*).

Phase one was carried out between 1996 and 2000 and constitutes the dining room, kitchen, washrooms and two bedrooms. Phase two was carried out between 2000 and 2003.



Figure 3.18: The yard within Mr. Masama's plot facing the main house and two houses for rent, indicated as 'B' and 'C' in *Figure 3.19*.

The rest of the plot area, indicated as 'D' in *Figure 3.19*, is left empty for future development.



Figure 3.19: Mr Masama’s and Mr. Mangoles’s Plots.

Mr. Masama’s main house ‘A’, two houses for rent, ‘B’ and ‘C’, located on his plot. At the front facing the road is a kiosk for selling charcoal. The footpath indicated by freehand lines from the road through the plot boundaries is being considered for upgrading into a road by neighbouring settlers. Plot ‘E’ belongs to Mr. Mangole (*Figure 3.14*).

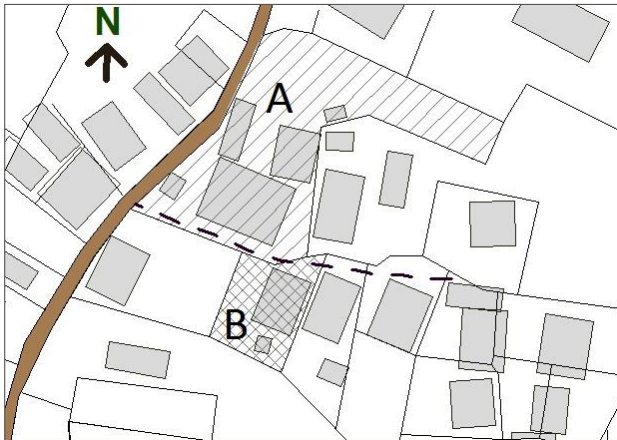


Figure 3.20: Mr. Masama’s and Mr. Mangole’s plots within the layout of the cluster.

Mr. Masama’s plot marked ‘A’ with his residential house, two houses for rent and a kiosk for selling charcoal. Mr Mangole’s plot marked ‘B’ with his residential house. The dotted line represents a path to be upgraded to an access road by residents. The main access road appears as a major public

space and a uniting element.

Source: 2005 Plot layout by MLHSD and Buildings positioning by 2010 Google Earth (Figure 3.19)



Figure 3.21: The image of Ms. Agnela's house.

The house is closely surrounded by abutting houses as indicated in the satellite image.

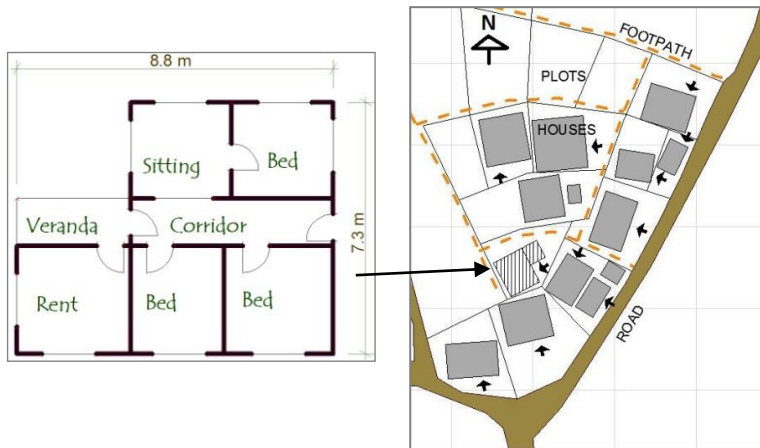


Figure 3.22: The floor plan and plot location of Ms. Agnela's house.

As the plot layout indicates, the plot was so small that only the owner's houses could fit into it. Plots in this particular area were sub-divided, making them very small and so the outdoor space was also very limited. Ms. Agnela's house and some other houses can only be reached by footpaths, although they are a short walking distance from the vehicular road.

Ms. Agnela's floor plan consists of a sitting room, bedrooms and one room for rent. Cooking is carried out in the corridor. The washroom is outside the main house.

Source: Google Earth with 2010 Satellite image and Author's construction

Planning of houses on sites depended on factors such as plot size and shape, the building size, buildings design, number of buildings on the plot, the type of development on adjoining plots and access to plots. Since these factors were constantly changing and individual developers' requirements were different, plans for plot were entirely dependent on the individual developer's needs. The orientation of the house as a functional requirement was also important for defining the form. It was not uncommon to find houses with access oriented towards the road. If access was by footpath, buildings would be oriented towards in that direction. It should be noted that, over time, some footpaths could be upgraded to vehicular roads. Buildings are oriented towards the access road or footpath to connect such public space to the semi-public part of the plot and the building, such as the front yard, front veranda and living room.

In small plots, houses may cover almost the whole area. If small plots were grouped in one cluster, the area results in a congestion and accessibility problem. In congested areas, the resulting small space between buildings is common to all users and plot boundaries lose their meaning. In such areas, footpaths become the main means of access. The congestion and access problem is minimal in areas with bigger plots, where plot boundaries are significant. In such areas, a lot of space between buildings can also facilitate the provision of access roads and some other community infrastructure, such as piped water, power lines, storm water channels and public sewers.

Generally, the resulting form of cluster or block depended on how decisions by individual developers had balanced the influencing factors which were within their control and those which were out of their control. This could be determined by how the developer had met his requirements, and to what extent he had not prevented other developers from meeting their requirements. For instance, if a developer built on the area normally used as a road, path or storm-water channel, even if they were within his plot, he might enter into a conflict with other developers and users, who depended on those facilities, thereby disturbing the functioning of the cluster or block. A situation of this kind rarely happened because the orderly functioning of the cluster or block was in the interests of all developers and thus each developer would try his best to balance individual and collective

interests when developing his plot. In some events, as discussed before, developers would cooperate to create a better environment in their cluster. However, access roads and footpaths were influential elements on the way individual developers planned their plots.

3.4.2 Shaping development ideas on plot

Since the urban form in informal settlements depend on how individual developers shaped their plots with respect to their requirements, the form could be perceived as a collection of individual plot units and their contents that extend to create urban form. The planning on the plot depicts the opportunities the plot can offer, the demand of specific individual projects, the resources available to implement the project and the owner's preferences. In this way, development on a plot could be organised in such a way that over time optimum utilization of plot would be achieved as displayed by most respondents.

A relevant example of form at plot level could be mapped from respondents' accounts of what they had decided to do on their plot both in the long and short term. For instance, one respondent, Mr. Msalaka, wanted to invest in a residential house and income generating projects. At the time of interview, he had already erected part of his residential house, a part of commercial rooms for rent, a thatched roofed open hall for public functions and a small structure for a pub. These projects in progress depict a physical form that will be ultimately achieved. Talking about his plans for investment he noted:

Box 3.10: Exploitation of opportunities for income generation

“This place has recently become the final destination of public transport commuting between here (‘Kimara Kingongo’) and ‘Kimara Mwisho’. And if you look around, you will see that this area is growing fast, and many people are building houses and moving in. Therefore, the demand for business space is growing and that is why I will build a number of commercial rooms for rent. I will also put up and run some businesses myself because the opportunities for some types of business are apparent. Thus, I have built this roofed open hall on this corner for hire for people conducting parties or any social gathering. I have built a small structure beside the hall as a pub with counter for selling drinks, a store and space for fast-food preparation. On the other side, I will construct nine rooms for commercial rent. I may also construct five commercial rooms for rent on the other side along the road. The first room has been completed and is operating while the second room is under construction.”

“My future plans, which also depend on my financial position, are to build an indoor social hall here. I will see if it is possible to include the current open hall as a part of an enclosed hall. The problem is how to get enough space for parking. Maybe I will use the front part of the plot for a parking area. You never know, if the situation allows, I may build a suspended hall above and provide a car park below.”

Interview with Mr. Msalaka on 30th November 2010

While Mr. Msalaka was developing his plot, he indicated that the chance of making alterations in the future cannot be ruled out if financial resources and other socio-economic circumstances allow. In this way, there was hardly any specific form that would hold and thus the form could depend on how the space is utilised. The sketches below are part of the probable images of form on Mr. Msalaka’s plot.

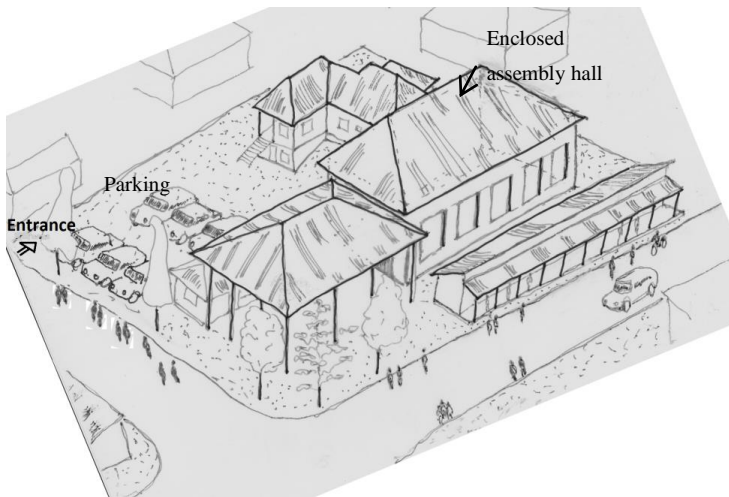
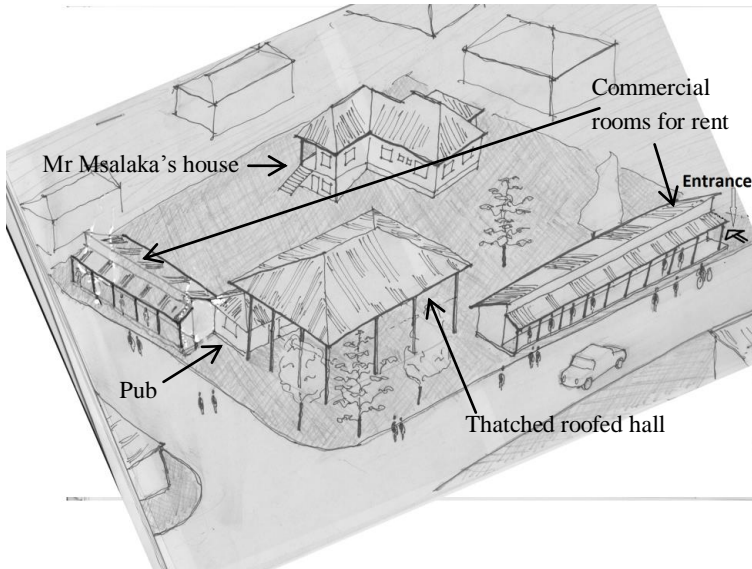


Figure 3.23: Visual impression produced as per respondent's narration of his development ideas.

The first idea involved 14 commercial rooms for rent, a pub and a thatched roofed hall. The second idea involved the addition of an enclosed social hall and provision for car parking. This indicates how the form was not specific but tended to generate and regenerate. This depicts how flexible and amorphous the form in the informal settlements can be while the main idea is to meet utilitarian requirements.

The overall plot development and the actual progress made on site are further presented in figure 3.44. This aimed to give a clue as to the contribution of the plot development to the settlement form.

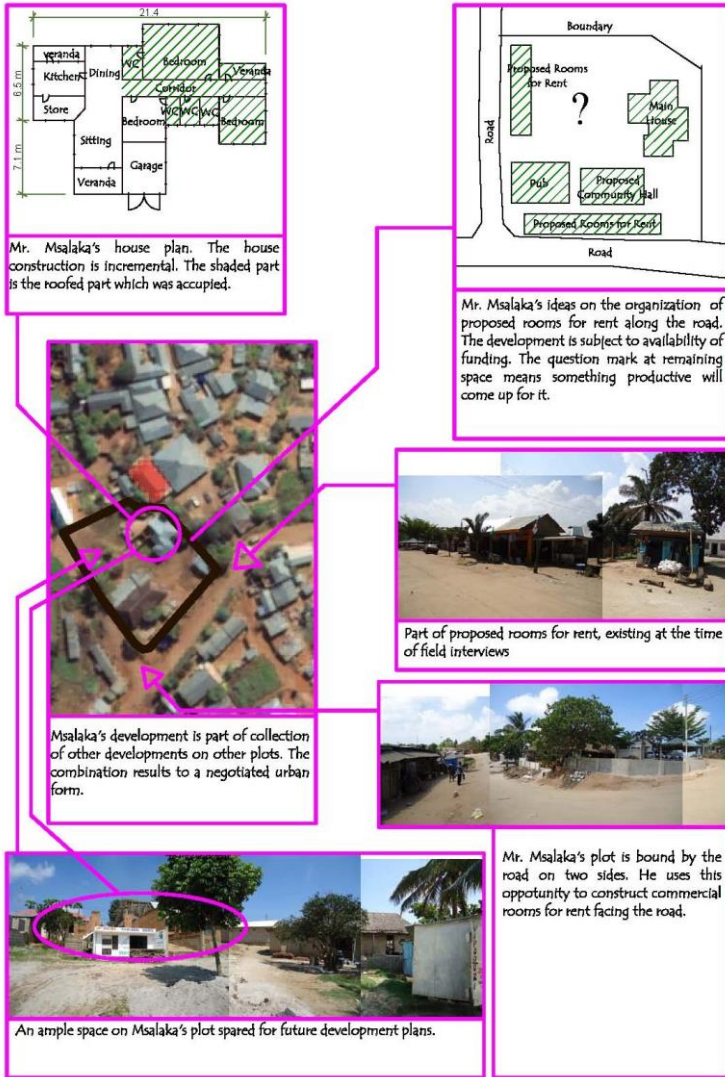


Figure 3.24: Individual plot development is a key element in building up the settlement form.

The plot owner, with regard to his vision and requirements, proposes the plans and attempts to implement them.

Mr. Msalaka's plot development plans reflected his requirements as well as the prevailing socio-economic context in the sense that he has already captured some income-generating opportunities and he had partially completed his house for him and his family to use. In a further interview he appeared to have had several ideas based on what he expected to achieve in regard to his plot development:

Box 3.11: Factors affecting the developer's choice of specific plot

"I wanted for a place where I could build a residential house of my own. I wanted a plot which is big enough for my house and some income-generating activities."

"Therefore, when I was searching for a plot the broker showed me a number of plots for sale in different locations in Dar es Salaam. I rejected a number of them because they did not meet my requirements. For instance, in Ubungo Kibangu I rejected a plot offer because it was too small for my needs. I rejected another offer at Ubungo Msewe which appeared to be big enough but it was on a sloping site which could result in costly development. At last I chose this site because it was what I wanted."

"When I bought this plot in 2002 the place had no proper road connection and very few people had moved into the area. Yet I could see the investment opportunities, because of the increase in the population and the provision of services."

"Currently, there are a lot of development activities in this area and more are coming. We constructed the road and connected the power line through our own initiatives. Therefore, the area is ripe for living and trading."

Interview with Mr. Msalaka on 30th November 2010

Generally, Mr. Msalaka represents the majority of informal developers, who make a series of spatial organization decisions that depict the technical, social and economic context of the informal city. Thus, the combination of individual and collective efforts within the socio-economic context result in the physical form of the informal city.

3.4.3 Varied motives accommodated in settlement

There seems to be a considerable difference in prioritizing factors before the choice is made. For instance, there were some migrants whose decision to find their own place in which to live was influenced by the inconvenience of living as tenants. Such people would not take much time to explore and assess the options open to them but would rather take the immediate and affordable offer of a plot available. In this way, a number of suburban migrants with varying motives for the choice of location found themselves leaving next to each other, creating a complex urban community. Apart from varying motives that influenced the choice of their locations, they also had the common objective of developing a residential dwelling as their main activity on the plot. Figure 3.25 shows some development plans of individual developers as units in achieving the form of the informal city.

As displayed in Figure 3.25, Mr. Modest did a personalised design of his residential dwelling. He had roofed part of the house for the family to move into while construction continued. At the time of interview, the construction of the house had been suspended. The emphasis was on constructing rooms for commercial rent along the boundary line facing the road, where four rooms had been completed and were in operation. He was planning to add two more rooms for commercial use.

Mr. Mwasanga had also moved into his house while its construction was still under way, as shown in Figure 3.25. The plot was too small to accommodate buildings other than his residential dwelling. He thus bought another plot next to his former plot for the purpose of investing in income-generating activities when he got funds to do so. He had the idea of investing in a 'guesthouse' at the time of the interview. However, the decision on a specific investment would finally depend on the opportunities that would unfold over time.

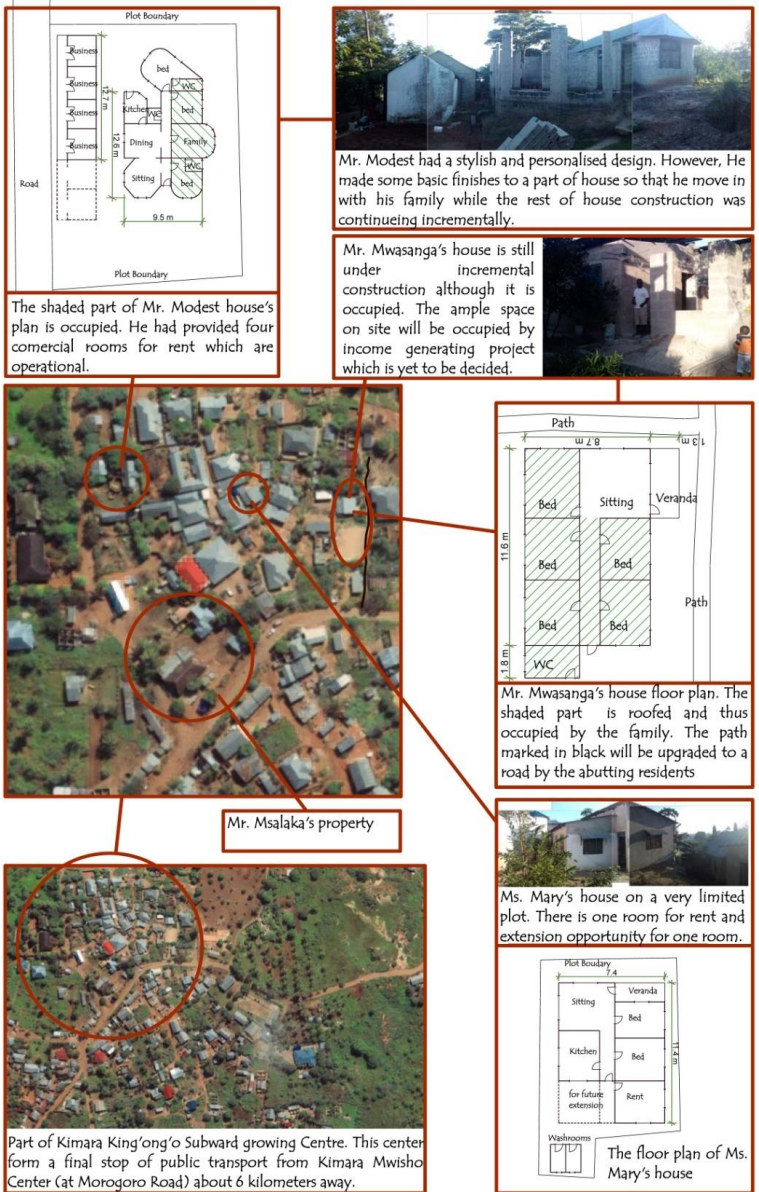


Figure 3.25: The contribution of individually developed plots to the moulding of the settlement.

Individual development plans and strategies constitute a process with different as well as common elements shaping the city form.

Source: Google Earth with 2010 Satellite image and Author's construction

Mrs. Mary has a small plot that accommodates only their residential house (Figure 3.25). The area was among the highly congested housing areas in the settlement so that Mrs. Mary complained about one of her neighbours blocking their access path which crossed their property, making them use an alternative long access path. Due to the limited space, their plot accommodated only their house and external washrooms. Apart from the area for the family, they had one room for rent and provision for another room in the future.

These were some of the individual paths, observations, strategies, plans and actions that were organised to create a diversified and heterogeneous informal settlement. However, the actions of developers displayed differences and similarities, which depicted the physical city form, the system of buildings and the space between them.

3.5 Development of a block

In the urban layout where plots are individually developed incrementally in fragments, informally and organically, it is difficult to demarcate a physical specific urban block. For the sake of convenience, the block was considered as a group of individual works at plot level, whose composition created the continuity of urban space with certain rationality. This ‘continuity of urban space’ was presumably the result of the joint collaboration of agents of change.

3.5.1 Social contact for spatial organization

Individual decisions on urban transformation were often limited to individual plots. The lack of an effective public organ to handle matters relating to the public interest at block level led local residents to devise alternative means for taking care of the situation. It was thus considered that the people, especially the neighbours, should have had certain means for bringing them together for the purpose of coordinating urban matters to serve their collective interest. It was hence found that a social relationship among neighbours existed to a great extent, which was claimed to be enhanced by the cultural norms and values of Tanzanian people that encourage neighbours to associate and socialise (Table 3.7). Also, it was noted that the

advantage of good relations could be used to sort out matters concerning land development that would meet their collective requirements. The few respondents who indicated having rare social relations with others acknowledged that they cooperated on matters concerning collective interests when organising the spatial layout of the settlement.

Table 3.7: Residents' associations

Contact among neighbours	Number of plot owners	Percentage
Contact exists with neighbours*	37	86.0
No contact but may cooperate on sad or happy social events**	3	7.0
Very limited contact***	3	7.0
TOTAL	43	100.0

* Contact among neighbours was warmer. Neighbours could meet, greet, chat and visit each other frequently.

** These are cases where respondents claimed having almost no contact with their neighbours. Such neighbours were mostly gated and would rarely meet, greet or chat. Social events especially bereavement may cause them to meet.

*** These are cases where respondents would have occasional contact with their neighbours, such as occasionally meeting, greeting and chatting.

It was also considered that in a situation where individual decisions were made on a plot-by-plot development basis without a mechanism for mediating them, potential conflicts among neighbouring plot owners were inevitable. The clash over individual actions by neighbouring property owners did not seem to pose a serious problem. Most respondents did not expect smooth relations with neighbours, especially on matters concerning the external effects of developing and maintaining their properties. Some would say in Kiswahili, "*Hayo ni mambo ya kawaida kwa majirani kukwaruzana. Ni sawa na sehemu zilipo chupa nyingi haziwezi kuacha kugongana*", which translates as, "As bottles in a bundle will hit each other, it is normal for neighbours to quarrel sometimes." Therefore, in case of

serious effects or conflicts, they would often find a way to solve them in an amicable manner.



Figure 3.26: Uncoordinated developments require certain negotiations and collaboration among individual developers to generate a holistic continuity that safeguards collective interests.

Table 3.8: Effects of individual decisions on plot development

<i>Negative effects of neighbours' plot development activities</i>		<i>Number of plot owners</i>	<i>Percentage</i>
<i>Adverse effects</i>	<i>Solved amicably</i>	<i>13</i>	<i>30.2</i>
	<i>Caused conflict</i>	<i>3</i>	<i>7.0</i>
	<i>One party kept quiet</i>	<i>2</i>	<i>4.6</i>
<i>No adverse effects</i>		<i>25</i>	<i>58.2</i>
<i>TOTAL</i>		<i>43</i>	<i>100.0</i>

There are few cases where individual actions caused serious conflicts to the point of causing hostility among neighbours. More than half the respondents indicated that there had been no serious effects among neighbours as each individual would develop his or her plot with respect for others' properties. This might explain the fact that the plot owner was not the only and the first agent of change. A number of decisions had already been made by the previous owners. For instance, a plot seller may have already decided on the plot size, shape, access route and others. Thus, the buyer of a plot as the successor makes his development decisions within the limits of the preceding decisions, because he may not develop the plot beyond its boundaries or create another access route. While the new owner accepts the conditions of the plot bought, he has to develop the plot without causing an adverse effect by acting silently or collaborating with neighbouring plot owners in the cluster or block.

3.5.2 Meetings

On the issue of rational spatial development, it was considered that groups of plot owners would sort out some of the common development issues through formal or informal contact or meetings, which, it was presumed, would be influenced by the people themselves or the local leadership. However, most respondents indicated that the local leadership had more influence in convening meetings for settlement development purposes than the residents themselves (Table 3.9). Meetings were mostly initiated by the Ten Cell leaders, who would normally hold formal meetings with their people to deliver information and discuss issues of interest to their community. Considering the difficulty of summoning all their people at a time, the Ten Cell leaders would alternatively hold a number of meetings with groups of people or individuals at their convenience in order to convey, campaign and discuss issues of significance to their common welfare. Normally residents do not on their own initiate formal meetings or contacts among each other regarding their collective interests. However, the respondents revealed the existence of good relations among neighbours. This was a powerful tool not only for collaborating in social events but also for cooperating on regulatory matters concerning the organization of spatial development at plot level and beyond in the settlement.

Table 3.9: Residents' collective initiatives for development purposes

Meetings for development purpose	Number of respondents	Percentage
Meeting initiated by residents	6	20.0
Meeting influenced by local leadership	11	36.7
Informal discussion without formal meeting	2	6.6
Never met	11	36.7
TOTAL	30	100.0

As already noted, plots were developed by most individuals for residential purposes, which reduced the risk of conflicts that could arise from different types of development on adjoining plots. An example of conflicts arising from mixed development activities was observed in one area where a guesthouse had been built in a residential area. Because of the nature of a guesthouse, it disposed a

lot of waste water, which flowed into neighbourhood compounds. This nuisance caused complaints from neighbouring residents. The matter was forwarded to the Sub-Ward leaders, who instructed the guesthouse owner to construct a proper system to handle waste water. The owner complied with the instruction and the problem was resolved. In a situation with varying land uses taking place in an informal settlement, external effects were more likely to occur. This required mechanism to collaborate in order to proactively handle such cases.

3.6 Design and construction of home-buildings

3.6.1 Use of professional services

Most respondents used local artisans (*mafundi*)³⁹ to design and build their houses. The author's survey showed that almost 70 percent of respondents used '*mafundi*' from the design stage to the construction stage (Table 3.10). In this way '*mafundi*' played an important role in designing and constructing buildings in suburban areas. Most houses were single storey buildings, the design and construction of which '*mafundi*' had accumulated extensive knowledge and they knew what construction techniques would cut down the costs. Therefore, most respondents appeared to have great confidence that '*mafundi*' would meet their design and construction requirements. The use of professionals to design and construct their houses was regarded by some low income respondents as an additional cost and irrelevant to the type of design and method of construction which had been appropriately mastered by '*fundi*'. When the author asked one respondent as to why he would not use professionals (wataalamu), he said in Kiswahili, "*Sisi tunajenga nyumba za kiswahili ambazo hazihitaji wataalamu, hivyo uwezo wa mafundi wetu hawahawa unatosha sana*"⁴⁰, which translates into "We build local houses which do not require input from experts and thus the skills of our '*mafundi*' can appropriately handle them". The design was usually discussed by the owner and the '*fundi*' until the preferred design was arrived at. The design could involve the entire building

³⁹ 'Fundi' is the Swahili word for 'artisan'. 'Mafundi' stands for plural.

⁴⁰ An interview with Mr. Goza, a resident in Kimara settlement in Dar es Salaam city on 05th February 2010

requirements of the owner although the construction of the house might be incremental with respect to the income of the owner. A few rooms could be constructed up to a stage that was relatively suitable for human habitation. At that stage the family could move in and the rest of construction could take place while part of the house was being occupied. In this way, construction could take place whenever funds were available and stop for a certain period of time when they were not available.

Table 3.10: Use of technical services for plot development

Technical services	Number of houses	Percentage
Use of professionals at design stage only	9	21.0
Use of professional at design and construction stages	2	4.6
Use of 'mafundi' at design and construction stages	30	69.8
Design and construct by oneself ⁴¹	2	4.6
TOTAL	43	100.0

Some respondents used professional services to design their house only. After that, they would proceed with construction using 'mafundi'. However, at some stage, the respondents could still ask for professional help to ascertain if the construction by the 'fundi' was up to the required standard as pointed out by one respondent below:

Box 3.12: Use of professional services to construct buildings

"I employed an architect to design and do architectural drawings of my house only. After this, I used 'mafundi' for construction. However, I used an engineer, who is a relative, to frequently inspect the construction progress and advise my 'fundi' accordingly. I paid the engineer a token as a thank you. Therefore, I consider myself fortunate to have got the consultancy service free of charge and, of course, he was happy to help me as a relative".

An interview with Mr. Rutta on 07th May 2010

Respondents who were also 'mafundi' used their skills to build their own houses. One respondent who was a 'fundi' (a mason) noted

⁴¹ These were artisans (*mafundi*) who used that advantage to build their own houses and thus save some labour costs.

that he worked for his employer but used his free time to build his house. He said that sometimes he would put on a light and work on his house during the night. In this way, he could build his house without having an adverse effect on his source of income.

Table 3.10 also shows that two respondents employed professionals from the design to the construction stage. They employed professionals for the design work and engaged contractors to build their houses. However, this is not common among most residential developers, even among the high income group of today, who would normally employ professionals to design and supervise the construction work. They would supply materials and employ '*mafundi*' to construct their houses. Nonetheless, their status at that time might have had allowed them to use that method of house construction. One of these respondents built his house in 1975 when he was running a successful business. Another respondent built his house in 1988 when he and his wife had high posts as civil servants. It is probable that their income level and the socio-economic conditions at the time allowed them to use this approach.

3.6.2 Determination of house size

In determining the size of the house, the size of the family was one of the main factors. However, the standard plan was adopted in most cases, which would consist of a sitting room, dining room, kitchen, master bedroom, girls' room, boys' room and washroom. Guest rooms were not included in most house plans observed. Tenants are normally provided with external washrooms for convenience. However, due to the water shortage in some areas, washrooms in some family houses were kept outside. Most developers consider guests and extended family members as family members and thus they could be accommodated within the available space in the main house during their period of stay. Mrs. Sarungi had this to say on determining the size of the house:

Box 3.13: Determining the size of house

“Guests have to be considered when one builds a house in the city. Relatives coming to the city would not stay in a guesthouse while their relatives have accommodation in the city. There are a lot of reasons that bring relatives and guests to the city that include children going to school or staying for leave, a sick relative coming to the city for medical treatment, some come to the city trying to find a job and others come because of other commitments. All these types of guests cannot be avoided if you live in the city”.

Interview with Mrs. Sarungi on 9th February 2010

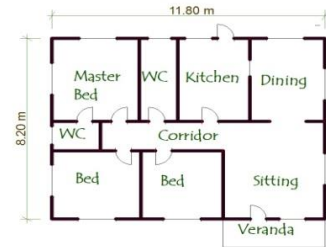


Figure 3.27: Mr. Mganga’s block house plastered and painted.

Figure 3.28: Mr. Mganga’s house floor plan.

Modern floor plan was adopted to meet the family’s needs.

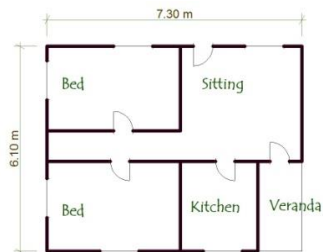


Figure 3.29: Mr Edgar’s house is made of wattle and mud walls which were smooth finished and whitewashed.

Figure 3.30: Mr. Edgar’s house floor plan.

The decision on house size depended on family size and income.

Figures 3.27 and 28 show the layout of Mr. Mganga's house with functional spaces of sizes to meet the family's needs. Apart from considering his family's size, his financial capacity was also a factor determining the size of the house. Mr Mganga was a civil servant and he had some income-generating activities at a different location in Kimara. This income was a contributory factor in deciding on the size of house and hence its construction. In contrast, Mr. Edgar got his income from vending activities, and so it was little and unstable (Figures 3.29 and 30). Due to his meagre income and having a smaller family, just a wife and a baby, he came up with a smaller design and construction techniques that matched his income. One of such techniques was to construct walls made of poles and mud but smoothly finished and whitewashed (Figure 3.29).

There were cases where the head of the family was responsible for taking care of the extended family. Thus, in some ways, the house design had to accommodate such needs. Mr. Sakafu had this to say in relation to this situation:

Box 3.14: Extended family as determinant of size of house

"In determining the size of the house, consideration went beyond family size. I built a house with five bedrooms that could easily accommodate my family and a number of our relatives. In the beginning the house was full of family members and relatives. Later, some rooms were rented out when some relatives moved out".

Interview with Mr. Sakafu on 12th May 2010

3.6.3 Building duration

In general, the development of individual plots, including the construction of houses and any income-generating projects, was mainly done incrementally. The 'time' factor was one most important aspect concerning the transformation at plot level but which also made a cumulative contribution at the urban level. When managing the construction process, almost all the respondents bought the building materials themselves and employed '*mafundi*' at an agreed labour charge. In the case of the incremental building process, the '*fundi*' was engaged for one phase after another but not for the entire structure. Often the construction phases were broken into: the construction of a

few rooms into which the family could move in; the addition of the remaining rooms; and finally doing the finishes.

The time it would take to complete the house depended on the availability of financial resources to carry out the work. In most cases the flow of financial resources was not consistent. For instance, Mr. Mashaka moved into his house in 2000 before it was complete but he finished the construction in 2007 when he received a lump sum payment on his retirement⁴². Therefore, the construction period varies among respondents (Table 3.11). About 58 percent of the respondents completed their houses within three years. The levels of finishing the house were also different. A number of families had moved into their houses while they were not yet completely finished. The house finishes such as wall plaster and painting, ceiling finishes, floor finishes, landscaping and the like would be done later or in some cases were skipped altogether.

Table 3.11: Construction duration

	Construction duration	Number of houses	Percentage
1.	Less than 3 years	25	58.1
2.	More than 3 years	18	41.9
	TOTAL	43	100.0

These construction durations were a summation of the time taken to construct a house that would in a condition provide the minimum standard for habitation.



Figure 3.31: The house being incrementally constructed.

Part of the house is occupied while the construction of the other part continues.

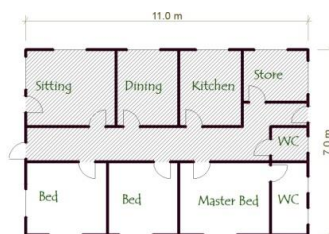


Figure 3.32: The Plan of the house image on the left.

The shaded part has not yet been completed

⁴² An interview held with Mr. Mashaka on 20th February 2010.

Figures 3.31 and 32 show Mr. Bashir's house under incremental construction. Mrs. Bashir said that the three rooms occupied at that time were built within six months in 2006 before they moved in. Since then, they have been raising money until 2010 when they started constructing the remaining rooms. However, at the time of interview in May, 2010, construction had been suspended again.

3.7 The cost of development

3.7.1 Mixed income groups

A clue as to the cost of plot development was also sought through looking at the owners' employment characteristics. It was revealed that their employment greatly varied depending on the development characteristics⁴³ (Table 3.12).

Table 3.12: Plot owners' type of employment

<i>Type of employment</i>	<i>Number of persons</i>	<i>Percentage</i>
<i>Civil servant</i>	8	18.6
<i>Employed by private sector</i>	9	21.0
<i>Self-employed</i>	8	18.6
<i>Vendor</i>	9	21.0
<i>Retired employee</i>	7	16.2
<i>unemployed</i>	2	4.6
<i>TOTAL</i>	43	100.0

This observation represents the presence of mixed social groups in Kimara informal settlement. Each group sort out its own way of getting into the area and strategies for developing it. Each group is developing their land although the intensity and scale can be different. Some have stable and higher incomes, meaning that they can afford to develop a relatively expensive property. Those with unstable or low incomes can manage smaller plots and cheaper development. Yet they all share the same concept based on individual plot to plot development in the quest to create a liveable urban environment. However, the groups live side by side and in some cases they have to

⁴³ Conceptually, the development process was more or less the same regardless of income difference, that is, incremental development depended on the flow of funds for the purpose. The major difference relates to the duration and intensity of the development.

work together to sort out matters affecting their collective interests in the urban environment.

3.7.2 The cost of plot development

To develop a plot, no matter how small, costs money and so plot developers had to inject a considerable amount of their resources to achieve their investment goals. It was anticipated that amount of cash spent in relation to the project size and type had a considerable effect on the development process in general.

It was difficult for most respondents to reproduce the actual cost of their plot development because the processes were mostly slow, incremental, disjointed and distributed in phases lasting several years. In that regard the project activity would resume or stop depending on the availability or unavailability of funds for plot development. Despite the difficulty of keeping records of the construction costs, one respondent, Mr. Msalaka, had recorded the quantities of materials he used for construction, which provide some clues as to the costs incurred:

Box 3.15: Cost of development

*“The concrete floor consumed 137 iron bars 12mm in diameter and 142 bags of cement as well as unrecorded quantities of sand, gravel and water for that piece of work. The refilling of the foundation trenches and floor base was entirely done using sand amounting to 20 trips of 7 tonne trucks. I bought 15,000 stabilised soil interlocking blocks at TShs 550/- (US\$ 0.37) each. The blocks had to be transported from the workshop to the site by the 7 tonne trucks taking 15 trips that was another cost. I decided to use stabilised soil interlocking blocks to save the cost of bonding mortar. But given the small size of the block compared with its price, the weight demanded for a strong foundation, as well as extra truck trips and specialised construction methods led to the cost being more than would have been incurred if the normal concrete blocks had been used. I regret my decision to use stabilised soil interlocking blocks and I have thus decided to finish the remaining parts of the walls with the normal concrete blocks”.*⁴⁴

Interview Held with Mr. Msalaka on 30th November 2010

⁴⁴ At the time of interview in November 2010, the cost of a 50kg bag of cement was at TShs. 13,000; a 12m long Iron bar of 12mm diameter at TShs. 12,500. At that time the exchange rate was around TShs. 1,500 per US\$. However, these prices were much lower when the respondent started to build the house in 2004 since, according to Ministry of Finance Medium Term Strategic Plan 2004 – 2009, in February 2004 the exchange rate was TShs 1,120 per US\$.

From the observation of the project and the respondent's narration, though the construction activity was suspended for some years due to lack of funds, it is obvious that Mr. Msalaka invested a substantial amount of money in the early stages of the construction of his house⁴⁵. His ambition was to produce a house which was properly designed and constructed. In order to do this he used professional services from the design stage to the construction stage⁴⁶. Moreover, the size of the house that had almost 200 square metres of floor area was part of reason for the high costs incurred. The author's first visit to Mr. Msalaka was when he was roofing the part of the house comprising four bedrooms, so that he could move in with the family. The second time the author visited him, the family had already moved in. The house was reorganised so that two rooms retained their function as bedrooms while one was turned into a kitchen and the other into a living room. It was very unfortunate that, despite heavy investment in the project in its early stages, Mr. Msalaka could not predict how long it would take to finish his house. However, Mr. Msalaka had a pub and two rooms for a retail shop to rent on his plot as income-generating projects, though not yet completely constructed. Mr. Msalaka showed the researcher some photographs that demonstrated the process in practice, the feeling of the costs involved and the nature of the professional input employed:

⁴⁵ Commonsense would lead us to argue that "why invest heavily in a big house that one could not afford?" If Mr. Msalaka had used a better approach, he would have invested in a smaller house which he would have finished with his smaller available budget. However, this is not the way most people perceive the plot development approach in an environment where the means of funding relies entirely on the developer's sources. Therefore, people would start executing their 'dream' projects with what they have to hand and see to what extent it could move the project. The next stage is usually 'sorted out later' depending on how soon the funding for executing the following stage is acquired. This has become a common practice in informal or formal settlements in Dar es Salaam perhaps because most prospective house owners have low, moderate or unstable income sources. But, again, the lack of affordable credit for housing may be another reason.

⁴⁶ Contrary to traditional practice in informal settlements where most plot developers, especially the low income group like Mr. Msalaka, use 'mafundi' and very minimum professional services, Mr. Msalaka utilised almost full professional services.



Figure 3.33: Steel fixing in progress.

The work is inspected by an engineer.



Figure 3.34: Producing, pouring and moulding



Figure 3.35: Conveying and pouring concrete into the foundations.



Figure 3.36:
Interlocking soil
stabilized
blockwork under
way.

Some respondents devised strategies to reduce construction by collecting sand⁴⁷ deposited on or around their plots for construction purposes. Some noted that it was cheaper to employ a person to make concrete blocks on site rather than buying ready-made blocks, especially if the sand could be collected for free from the site. Nevertheless, some of the costs provided could not present a clear picture for comparison with current construction costs because some could be as old as 15 or more years. For example, Mr Mbwana Laki bought his plot of about 600 square metres for TShs 275,000/- in 1995. The cost of a plot of the same size at the time of the field study, in November 2010 about 15 years later, was around TShs 2,000,000/- to 4,000,000/-. Another example was part of the construction costs disclosed by Mr Mohamed Goza:

⁴⁷ Dar es Salaam soil is sandy. However, that does not mean that sand of the suitable quality for construction can be found in every part of Dar es Salaam. Thus, in areas where proper sand is available, residents would collect it from their site with the aim of making concrete blocks and for other construction purposes. The provision contributes a substantial boost to reducing the cost of construction for some financially starved people in Dar es Salaam.

Box 3.16: Incremental development

“In 1976 I bought this plot of around 400 square metres for TShs 600/-. My salary at that time was TShs 600/- . However it was difficult to keep track of all the construction costs because the development process took place incrementally. Nonetheless, I recorded the precise cost for the construction of the first three rooms of my house in 1977 which cost me TShs 11,000/-.⁴⁸ From that point, I could not track the construction costs incurred in subsequent phases. The next construction was the addition of two rooms in 1985, four rooms in 1993, three rooms in 1996, four rooms in 2000 and in 2003 I built a fenced wall. The construction process took a total of 26 years in six phases. In order to reduce the construction costs I had to hire a block maker to produce concrete blocks at my site. I had to collect sand from my site to make the blocks, which was cheaper than purchasing ready-made concrete blocks”.

The interview with Mr. Goza on 7th December 2010

The 33 year-old construction costs revealed by the Mr. Goza are insignificant compared with current construction costs. However, he maintained that the construction process was not that easy since, and as Mr. Mbwana Laki did 18 years later, he also had to cut costs by using sand collected from his plot to make concrete blocks and construction mortar. He also had to construct in phases due to his low income. Further, he had developed his plot over 26 years accommodating and responding to various social and economic opportunities and challenges. However, the process remained the same⁴⁹. These revelations explain that despite the cost difference in Shillings at different times of development execution, access to finance, material acquisition, the development strategies and the cost against income seem to have remained the same.

⁴⁸ The house had a cement floor, unplastered concrete block walls, roofed with corrugated iron sheets, fixed with timber windows and external doors.

⁴⁹ The strategies and processes by which people develop their plots appear not to have changed much over time. This indicates that the relationship of the plot development costs and income has remained the same. Therefore, what may seem to be the lower cost in the past loses that position when compared with the income. Mr. Mohamed Goza built a three roomed house for TShs, 11,000/- in 1977 when his salary was TShs. 600/-. That cost is more than 18 times his salary which explains the possible relationship between income and the development costs in the current situation.

18 times the current (2010) minimum wage of TShs. 104,000/- can do the same today (The current minimum wage was picked from <http://www.ipppmedia.com/frontend/index.php?l=17960> accessed on 13th September 2010).



Figure 3.37: A corridor through to various rooms or courtyards.



Figure 3.38: A courtyard for domestic activities for both tenants and owner's families.



Figure 3.39: The completed house of Mr. Goza that comprised a series of rooms and fenced wall resulting from six construction phases that took about 26 years from 1977 to 2003.



Figure 3.40: The Satellite image indicating the nature of building organization of the cluster including Mr. Goza's Property.

The house consolidation is high. Having constructed the fenced wall Mr. Goza, increased privacy and security and extended the living space for his family and tenants. However, the fenced wall was not built until 2003.

Source: 2010 Google Earth

Responses, observations and the author's own experience show that the costs were not only direct. For instance, at times developers had to make hard cash payment to purchase a plot, building materials, labour and others. But also there were other indirect costs, which usually are not counted as costs because they are not paid in hard cash, such as collecting free sand from the field as noted by some respondents, using free water from the stream or harvested rainwater, and the owner working as a skilled or unskilled labourer during house construction. This combination of cash and non-cash resources meant that a number of low-income plot owners could afford shelters that matched their social and economic status.

3.8 Financing plot development

The costs incurred in developing the plot came from the developers' incomes. Thus the attempt was to acquire a conceptual understanding of the sources of project funding as one of the ways to capture their effects on the project development process.

3.8.1 Source of plot development funding

Concerning income sources, almost all respondents financed their development projects from their own sources of funding⁵⁰. They

⁵⁰ Since there is no strong housing finance system (or one would say it 'does not exist') in the country, people aspiring to construct their residential houses depend on their own sources of

raised money from various sources including their salary, business, farming produce, sale of property such as ‘shamba’, domestic animals and others. Since most residents in Kimara were on a low or middle income status, raising the funds required for plot development was quite a challenge for most of them. As noted earlier, plot development took a long time to accomplish. Sheuya’s observations on sources of funding illustrate this further:

It is estimated that 70 percent of house construction in developing countries is incremental. In addition, most houses are built without sourcing any of the housing finance options described above. Low-income households rely mostly on informal sources of finance, and Stein and Castillo describe these as including: “. . . savings, informal loans from friends and family, remittances from family members working abroad and the sale of whatever assets they have.” Other sources similarly list: “. . . own savings; loans from friends/relatives and common savings schemes; loans or grants from employers, cooperative societies and credit and savings societies”, and “. . . borrowing from friends or family members, inheritance, sales of inherited land or jewellery and savings in informal credit associations.” (Sheuya, 2007: 442).

However, a few respondents had access to credit through their employers. One respondent noted that his employer had obtained a credit facility from ‘Tunakopesha Company Ltd’. He used that opportunity to buy building materials. He noted that the credit played an important role in facilitating the completion of the early phases of construction of the house. The credit facility was noted to be very important as one way of raising funds but due to their limitation because of meagre salaries, they had to raise funds from other sources. Mrs. Lusuva’s narration depicts various sources of finance including the credit facility sponsored by her late husband’s employer:

funding. This scenario applies to all prospective housing investors without regard to whether their potential locations fall within informal or formal settlements.

Box 3.17: Sources of funding for plot development

“On the one hand, the sources of funds for plot development were my husband’s salary and allowances. The nature of my husband’s work involved a lot of official trips and so his travelling allowances were very significant. On the other hand, my husband had a ‘shamba’ in his home village in Mbeya region where he cultivated maize and beans. He also had another ‘shamba’ where he grew tea in Iringa region. He inherited the ‘mashamba’. After harvesting maize, beans and tea, he would transport them to Dar es Salaam city for selling. The profit made from the agricultural produce supported the family financially as well as plot development activities. My husband also got credit sponsored by his employer. Under the credit, he could acquire a loan from his employer to finance the plot development and other family commitments, and pay back the loan through monthly salary deductions”.

The interview with Mrs. Lusuva on 07th December 2010

3.8.2 Plot as an asset for self-financing

It has been noted that there are cases where business projects on the plot generate income. However, if an income-generating project was completed in advance and started to generate income, it was possible to use the income to fund development on the same plot. Then, the space developed on plot could be used as a part of income generation.

Mr. Msalaka built a basement room for immediate use as a stationery shop while the rest of the house was still under construction. In addition, he had a structure on the plot which was used for a pub. The structure included an open and thatch roofed hall, which was also hired out for social functions such as weddings, bereavements and other social gatherings. The respondent reported that he had entered into partnership with an investor⁵¹ who had to put in his money to refurbish the hall and pub in order to improve and expand the business⁵². The costs incurred by the partner would be

⁵¹ The investor was probably attracted by the location and the level at which the owner had invested in the pub. The pub and the thatch roofed open hall were already built by the owner. The investor had to refurbish the facility and start the business.

⁵² This plot developer had reached a point where he could convert his assets on the plot to finance development on the same plot. This responds to Sheuya’s (2007: 454) view that, *“in the initial stages of house construction, ‘developers’ use their own savings. In the later stages, however, it is not the savings that finance the housing developments but, rather, the mobilization of a mixture of the assets ‘developers’ command.”*

deducted from the rent when the business starts. Furthermore, the respondent had plans to use part of his plot along the road for commercial rooms for rent. At the time of interview, two rooms were under construction and one was operational. The respondent further reported that he could construct as many as nine rooms for rent. The rent per room at the time of interview was at TShs 45,000/- (US\$ 30.00) per month.

Another example concerned Mr. Goza who constructed several rooms for the purpose of renting. At one time, he had eleven rooms rented, while he used four rooms for his family. The number of rooms available for rent declined as the children grew up since they had to occupy some of the rooms. At the time of interview, only three rooms were rented out. The rest of the rooms were used by his family members including a son who was married and thus had a family. Normally grown up family members do not pay rent even if they are able to pay. The rooms were rented out for TShs 25,000/- (US\$ 16.67) per month.



Figure 3.41: Renovation of one of the rooms for rent at Mr. Lusuva's house.

Financing of the rehabilitation work was mainly acquired through a one year advance payment of the rent by the tenant.



Figure 3.42: The renovation in progress. Mrs. Lusuva's house as seen when approached from outside.

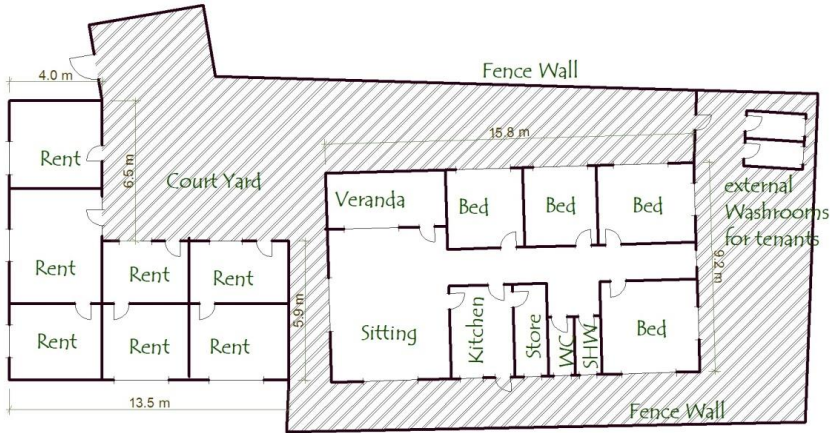


Figure 3.43: Mrs. Lusuva's house and rooms for rent floor plans

In addition, Mrs. Lusuva had seven rooms for rent at the time the author interviewed her (Figure 3.43). She had three tenants, two of them rented two rooms each and one tenant rented three rooms. She was earning a total of TShs 220,000/- (US\$ 146.67) per month in rent. At the time of interview, she was also renovating three rooms for rent. The funding for the renovation was partly acquired from a year's rent paid in advance by the tenant who wanted to occupy the rooms.

All these income-generating strategies on plot space show how the plot's potential could be used to develop it further but also serve other living costs. These initiatives of developers to use part of the plot space to generate income become an important source of plot development.

3.9 Social services and infrastructure

3.9.1 Social services in general

One of major deficiencies facing informal settlements in most countries is the lack of social services. In that regard, Kimara informal settlement was no exception. Hence, most social services in Kimara were mainly provided by the people themselves. Some commercial services such as kiosks, shops, groceries, beauty salons, barber shops, butcheries, boutiques and markets were part of residents' livelihoods opportunities. Most such services are provided within walking

distance of most homesteads. No wonder most respondents felt that they had little or no complaints about social services. The level of services varies in different locations. For instance, the type and variety of services available were better at Kimara centre along Morogoro Road than in some inner areas away from it. It should be noted that most services were provided on private plots and thus were part of individual plot development. Some of the social services such as health centres, schools, community halls, and worship places (churches and mosques) were either available within walking distance or in distant locations. Further, the author observed two informal pre-school facilities operating rudimentarily on individual properties meant for residential use (Figures 3.44-47). Each informal school had three classes with 30 to 60 pupils. The schools' investors had taken advantage of the lack of nursery schools, especially 'English medium schools', in the area as an investment opportunity. The schools services, no matter how rudimentary they are, were filling the service gap that the public provider had failed to provide, especially in informal settlements.



Figure 3.44: The structure used to run the elementary School.

The structure is in a poor condition but it houses the school and provides income for the owner.



Figure 3.45: Another residential house used to run the Pre-school.



Figure 3.46: Pupils in one class in the structure in Figure 3.44



Figure 3.47: Pupils in another class in the structure in Figure 3.44

There were also respondents who pointed out the weakness of a number of services such as bad roads, lack of solid waste collection, lack of security in some areas, and poorly equipped health centres. However, despite complaints about poor services, it is important to acknowledge the role played by the residents in service provision. One example was about security initiative that in some part of Kimara people had to organise themselves in groups to do patrols around their area in order to maintain security against robbers, thieves and trouble makers.

Box 3.18: Urban service preference

“The shortage of water is a grave problem here in that a 20 litre container of water sells for as much as TShs 300/-. However, the most important service to me is having good roads and a health centre within the Sub-Ward. I am saying this from my experience when I was pregnant, as I nearly died on the way to hospital to give birth. This is because the road is in a poor condition and the health centre is far from our Sub-Ward”.

Interview with Mrs. Mary on 17th May 2010

Initiatives for improving infrastructure provision could be organised under the local leadership or in small groups of neighbours with special interest. A respondent, Mr. Shaban Modest, a resident in Kimara King’ong’o since 2001, informed the author that residents under the Sub-Ward leadership offered land for road construction and a plot for the construction of a Police Post. This was done as a prerequisite for the City Council to provide a road and a Police Post. However, at the time of interview, he noted that residents were complaining about the failure of the City Council to fulfil its

obligations after the residents had done their part. Some had organised to construct roads to areas which had no vehicular access and to repair some roads which were in a bad condition.

Infrastructure such as roads and footpaths were organically created, which resulted from the fact that plot developments were done in a piecemeal fashion, organically, successively and without coordination. The importance of roads and footpaths for shaping, connecting and unifying elements of the settlement remained important even in the informal development process where individual decisions dominates. All local and access roads in Kimara informal settlement were earth roads and were the result of residents' initiatives with limited external support. Although there were cases where concern had been raised at Sub-Ward and Ward levels about the need for landowners to provide roads and footpaths when they sub-divide their land for sale, most roads and footpaths were provided by individuals through collaborating with plot developers. Because of poor coordination or lack of enforceable development regulations, not all houses were accessed by vehicular roads, but at least each house could be reached by a footpath.

3.9.2 Water supply

The water shortage in Kimara was what people complained about the most and it appeared to overshadow other equally important social services. There were a great number of houses connected to the public water supply but with no running water for a long time. Those people who happened to be connected to the water supply with running water while at the same time being close to health centre, main road and other services claimed to have no complaints about infrastructure and services.

Box 3.19: Poor portable water supply

“If you have a water tap with running water for 50 percent of the week, you should not complain at all because there are parts of Dar es Salaam or even in the same Ward of Kimara where people have experienced dry water taps for a year or so”.

Interview with Mrs. Sarungi on 09th February 2010

Recently, a new water supply system was installed by Chinese contractors, as part of the rehabilitation of the City water supply

system. The water supply system was thus commonly referred to by the residents in Swahili as ‘Maji ya Wachina’ (meaning ‘water supplied from the system constructed by the Chinese’). There were complaints in various parts of Dar es Salaam that such a system had no running water, except a few areas where water could run for few days in a week or a month. In this regard, most residents obtained water through buying it from water vendors.

Table 3.13: Social services

The most pressing social service lacking	Number of plot owners	Percentage
Water supply	20	54.1
Most social services and infrastructure are unsuitable	12	32.4
No complaint	5	13.5
TOTAL	37	100.0

Most respondents were connected to a system with dry water pipes. Very few were lucky enough to get an erratic water supply. Thus, they would buy a 20-litre container from water vendors at a cost of between TShs 200 to 700/- (US\$ 0.13 – 0.47) depending on the location and demand. The average cost of water per household per day was TShs 1000 – 5000/- (US\$ 0.67 – 3.33)⁵³. This amounted to TShs 30,000 to 150,000/- (US\$ 20 – 100) a month. In response to the water shortage, some respondents chose to use external pit latrines and limited the use of interior water-borne toilets to special functions. Some respondents had built underground water tanks to harvest rainwater. This saved the households a considerable amount of money, especially during the rainy season. The author was also told about some ‘back door’ means that some people would use to reduce the cost of obtaining water, as disclosed below by one respondent:⁵⁴

⁵³ These costs are given without including some determining factors such as family size, location, price per unit, water demand and others. The aim is to show how residents contribute to the provision of water despite their low incomes.

⁵⁴ The respondent required the author not to disclose the source of this information about illegal connections of water.

Box 3.20: Other means of sorting out water shortage

“It was disclosed that the old water mains, which had water, were not removed when the new water mains were installed. As a consequence, some residents have secretly connected service lines to the old water main in order to get reliable and free water, as they are not connected to water meters. Some of the people with illegal connections are selling water to other residents. The water reading meters are connected to new water connections which usually are in short supply. However, it was alleged that the former employees of DAWASCO are involved in the ‘illegal water connection plot’”.

3.9.3 Power connection

Electric power supply was not a pressing issue because the supply was a stable at that time but a bit expensive to get connected. In this regard, out of 43 respondents, 20 were connected to power and 15 were connected to both power and water supply. Most respondents were connected to the prepaid power supply system. They mostly used electricity for lighting and other household needs such as TV, radio and ironing. However, most settlers do not use electricity for cooking because it was still the most expensive type of energy. It was noted that, despite complaints that the cost of charcoal was going up, it was the main source of energy for cooking. However, with the increased availability of gas in the local market, some residents opted for gas for cooking.

3.9.4 Solid waste management

The collection and disposal of solid waste was still a problem since there was no effective coordinated system. In response to the ‘Keep City Clean Campaign’ initiated by Kinondoni Municipality there was a plan to improve solid waste management in Kimara. According to the plan, residents had to pay a fee of TShs 1,500/- (US\$ 1.00) per month in order to get their solid waste collected. However, this plan failed because its implementation was poor and consequently residents were reluctant to pay the solid waste collection fee. In that way, solid waste collection and disposal is a matter which is sorted out by individuals. This results in solid waste being dumped randomly. Households with an open area on their plots have resorted to dumping it in a pit dug on the plot. Some have contracted youths to collect waste on a regular basis. They transport and deposit solid waste to various destinations.

3.10 Summary

This chapter has revealed that the growth and condition of urban form in suburban areas is primarily contributed to by the fact that privately owned land facilitates the convenient acquisition of land by most land seekers. Acquisition of plots is flexible, open to various social and income groups, involves methods which are less restrictive and plot transfer is simply concluded as soon as agreement is reached between a seller and a buyer. Where, when and why one occupies land in a suburban area depends on the preferences of individual land seekers. Such preferences determine how the plot acquired is developed, hence contributing to the organic form of the neighbourhood. Land security of tenure is communally developed through associations of people, their relationship with the land⁵⁵ as well as their association with the local leadership, especially at Ten Cell and Sub-Ward levels. The shape, size and the way the plot is accessed are mostly determined by the plot seller or the context of development activities in the neighbourhood.

The involvement of professionals and local artisans in the construction of buildings resulted in varying building designs and forms reflecting mixed elements of urban form. Low or unstable incomes and self-financing of development also contributed to varying development plans. The varying plot shapes, sizes and means of access coupled with the individualised approach of plot development tend to lead urban form to becoming an organic and fragmented whole. The urban fragments are ameliorated by communal creation when individual developers collaborate to meet collective requirements. The intervention and involvement of local leadership, especially Ten Cell and Sub-Ward leaders, contribute to harmonising individual and common interests. Demands made by such leaders of plot sellers and developers to observe some locally established norms for plot development enhance the resulting layout and hence the form

⁵⁵ The people's relationship with the land can depend on how land or the plot is perceived in this context. Despite the growing land market in the city, land may not directly be perceived as a commodity for capital creation or valued directly in money. This may be justified by the land prices which may vary significantly even within the same location. One would say land prices depend on the agreement between sellers and buyers and not directly on the market value. Further, land security of tenure is communally determined where the recognition of landowner by the community may be sufficient to guarantee genuine ownership. This communally determined land security of tenure may be strong enough to disqualify a Title Deed obtained against communal norms of land arrangements.

of neighbourhood. The incremental development at plot level is replicated at the urban level where the form moulds incrementally. The need for plots for residence but also as a source of livelihoods significantly influenced the form. This demand intensifies plot development to meet such needs, which result in higher density and thus less outdoor space. This results in stressed open space, roads, paths and other areas for community facilities. Generally, the combined efforts of residents at grassroots level and local leaders are the important drivers in the production of urban goods and services in informal settlements.

Chapter 4: Collective and Institutional Efforts on Informal Urban Space Change

4.1 Background

In chapter three we saw how individuals, through their isolated plot development efforts, based on the plot-by-plot approach, achieve their urban spatial requirements while at the same time engender urban form. Despite the weaknesses that could be identified, there were within the processes an organizing logic that involved various actors and steps during and after plot development, servicing and occupation by developers. These involve the various decisions and actions of actors, including landowners, speculators, plot buyers and sellers, and local leaders. The organizing structures are largely based on social institutions and norms mostly set by actors at grassroots level, and at times they borrow some tools and practice from formal traditions. This chapter explores the role beyond individual actions at plot level that involve the collective initiatives of residents, sub-ward initiatives, the Municipal Council and the Government acting both formally and informally to organise urban space including the contested public space.

4.2 The informal public space

The development process was mainly dominated by individual actors confined within individual plots, although other levels of processes seem to extend to public space involving groups that depended on vested interests in space. Nonetheless, open space set aside for public use was hardly available in informal settlements. In fact, the land value was rising and thus most developers attempted to maximise the utilization of their plots leading to very limited public space. The space left over by individual developers or speculators was

usually made into roads and pathways as de facto public space. Most roads, apart from those used for the circulation of people and goods, could also be used as meeting places, social gathering arena, playgrounds for children, trading areas, or parking spaces. Space on private land that had not been developed, if not fenced, could also serve as open space for as long as it remained undeveloped. On the other side, the currently growing and mushrooming vending activities had appeared to invade most public space, especially the road reserves. As a result, competition for public space had arisen among the vendors and space owners, members of the public or urban authorities. For instance, most road reserves at Kimara Mwisho centre are occupied by vendors, which has largely denied members of the public access to public space such as areas for walkways, parking and waiting. People have to squeeze and negotiate through the besieged space to meet their need for public space. It also causes strained relations between the vendors and the City Authority or TANROADS because they are using space for an unauthorised function. However, despite space drawbacks caused by the mushrooming of vendors in this area, their services seem important enough to the public as they often attract many customers. This observation has significant implications for the form because the acceptance of vending activities by the residents encourages their expansion. In turn, this paints a specific character of the urban form by the formation in public space of centres of makeshift stalls, trading activities in the open air and temporary trading activities.



Figure 4.1: Most roads and pathways left between buildings after informal development become de facto public space.

4.2.1 Public space occupied by informal actors

There were situations where formal public functions had been illegally changed by the informal actors into informal activities to enable the informal actors to access benefits resulting from specific space value. For instance, some vehicular streets in Kariakoo⁵⁶ have been changed by informal actors into vending places, pushing vehicular movements out. Efforts by the City and Municipality to evict them have proved futile because they usually come back a few weeks after eviction. The persistence of informal actors in Kariakoo area might be caused by factors that make Kariakoo a distinctively valuable space standing as a big market area, which attracts a large population for trading. This situation triggers a scramble over the benefits resulting from space value where those who are economically powerful operate formally⁵⁷, in enclosed spaces and within the formal urban boundaries, and those who are economically weak operate informally in open public space occupied by force in violation of urban regulations. Such processes have contributed substantially to the urban image and form of cities in Tanzania and the same is happening in most cities in developing countries.

⁵⁶ Kariakoo is one of the oldest settlements in Dar es Salaam city forming part of the city centre. It was planned in gridiron road network by the German colonial power in the early 20th century to accommodate Africans whose population was at that time increasing following increased rural-urban migration. The settlement, with gridiron road network maintained, is currently rapidly transforming into multi-storey buildings replacing the historical single storey 'Swahili' houses.

⁵⁷ Formality in the case of Kariakoo settlement development process is used more comparatively than distinctively because Kariakoo settlement itself had not been entirely developed formally. According to Moshi (2009: 116), combined individual decisions and agreements of new developers and outgoing original plot owners override to a certain extent the prescriptions and preconceptions of Kariakoo plans from the municipal authority in Dar es Salaam.



Figure 4.2: Private plot owners along the roads take the opportunity to invest in trading stalls.

Vendors in makeshift stalls also take the opportunity alongside the road.



Figure 4.3: Most public space is occupied illegally by vendors.

However, they often play a significant role as they provide services that attract many customers.

Public space, especially private plots along the roadside, in prime areas provide opportunities for investing in social services such as shops, hardware stores, boutiques, butcheries, barber shops, beauty salons, and tailoring outlets. Landowners usually invest in such service areas, although these business activities went alongside vending activities on public space and roadsides. The diversity of trading activities at different levels, types and locations operating in various areas form their own urban character. Moreover, some of the public space occupied by vendors was not easily accessed, and often the process involved a struggle by competing groups with stakes in a specific space. In this respect, Kimara informal market was taken as an example of competition for informal space involving various actors taking place in public territories to achieve a certain purpose but also contributing to urban space transformation.

4.3 Creation of informal market in Kimara

The people of Kimara through their local government requested the Municipal Council to provide them with an area for a market because there was no market in Kimara. This idea emerged from petty traders who were operating randomly on public space and facing imminent eviction. So they needed a space where they could operate properly without the risk of eviction. In response, the Municipal

Council provided the land for the market. The local government was supposed to supervise how the market would be established and operated, but it failed to do so, mainly because of the lack of the relevant resources.



Figure 4.4: The market is in a highly congested street with private shops, street side vendors, food stalls and all other types of trading.

Source: Google Earth



Figure 4.5: Display of foodstuff in Kimara market. **Figure 4.6:** Display of foodstuff outside the market.

Some elders who were residents of Kimara took initiative and agreed with local government leaders to establish the market and allowed some petty traders to use it as tenants. The elders took control of the land and started to allocate portions to vendors and to collect rent. Although the tenants were paying rent, the organisers had not improved the area, such as not providing water, electricity, sanitation,

and collection of solid waste. The market area was treated as private property as part of it was sold to private developers.

4.3.1 Vendors reorganising for control of market space

In the long run, the vendors were not happy with the way land for the market was being managed as private property while it was supposed to be public. They felt it was unfair that public land was being used by a few individuals. The group of vendors therefore consulted with the local government authority to help them transfer market ownership from the group of elders to the market management installed by the vendors. Because the land was the elders' main source of income, it could not be given up easily. They felt that they were entitled to the rights over the land since they had handled market affairs for some years. Despite the elders' resistance, the group of vendors succeeded in taking control of the market space from the group of elders because they stood united. Of course, the local government, which had some political interests, was behind them and they seem to represent wider public interests rather than private ones.

The vendors also realised that their market had not yet been officially recognized by the Municipal Council, which left them at risk of losing their business since the land was exposed to other uses, especially if the Municipality decided to change its use. So they started to apply for the land to be officially designated for market use. Furthermore the market had to be registered with the Association of Market Owners in Dar es Salaam region (MUMADA)⁵⁸ as a precondition for recognition by Kinondoni Municipal Council. After registration and recognition the market was legal and thus operators had to pay the market fee to the Municipality. Further, they prepared a constitution in which the operation and management of the market were clearly identified. According to the constitution, vendors were market members and the market management comprised a chairperson, vice chairperson, secretary and treasurer. The management team was elected from the market members.

⁵⁸ MUMADA is the Swahili abbreviation for: 'Muungano wa wenye Masoko mkoani Dar es salaam' which can be translated in English as: 'The Association of Markets owners in Dar es Salaam Region'.

The land sold to private developers was difficult to recover when the group of vendors attempted to repossess it since it had already been privately developed and thus became part of informal development which could not be expropriated without compensation. The market chairperson declared that:

Box 4.1: Land occupied informally may not be expropriated without compensation

“The market was running as a private enterprise by a group of elders who had control of it to the extent that they sold a considerable part of the land to private developers. When the market was recovered by the vendors, it was difficult to recover the part of land that had been sold to private developers. The owners of the land which had been sold had already developed it and so their houses could not be demolished to pave way for the market. We thus concentrated on recovering, protecting and maintaining the remaining small amount of land for the market.”

Interview with Ms Kipatwa, the Kimara market chairperson on 10th July 2010

4.3.2 Market space transformation

Turning to the evolution of market, the elders took the control of the market in 1973. In 1984 a group of vendors took over the market as informal public property⁵⁹ and installed their first market leadership. The market was registered by MUMADA and officially recognised by the Municipality in 1996. The market was in a bad condition, it was also dirty, disorganized and lacked basic services. The vendors started organizing the working environment and evolved strategies for solid waste management. Since there was no public solid waste collection system, they had to make arrangements for their own system whereby each member of the market had to participate in cleaning and the removal of solid waste. The market had no proper structure, but a number of makeshift temporary huts constructed by individual vendors.

⁵⁹ It can be ‘informal public property’ in the sense that, despite the space not being registered, it was allocated by the Municipality for the public function as a market. The market activities were also organized informally by vendors.



Figure 4.7: Open shed for market at Kimara Mwisho.

The construction was done by erecting steel posts that support the roof structure. The trading stations are organised under the covered space.



Figure 4.8: Display of foodstuff inside the roofed Kimara market.



Figure 4.9: The service road between the 'legal' and 'illegal' markets where motorists, cyclists, pedestrians and customers strive for space.

In 2002 the temporary huts were demolished and in 2003 the market shed was built through the efforts of the vendors themselves. Funds were raised through agreement by vendors with Kinondoni Municipality, which gave them tax exemption for the whole construction period so that the money meant for tax could be used to construct the shed. Each vendor paid TShs 100/- (US\$ 0.15) daily to the market management as a market tax. In turn, the market management paid 85% of the collected tax to the Municipal Council monthly and retained 15% for the market. During the construction period, the market administrators retained all the money to construct the market.

4.3.3 'Legal' and 'illegal' market space⁶⁰

Certain vendors invaded the road reserve outside the market where they conducted their vending activities. These were treated as 'illegal' operators in the beginning but when it proved difficult to evict them, they became part of the 'legal' market. They had to be tolerated although they are better placed to benefit from exposure to more customers than the 'legal' vendors inside the market. This is primarily because there are many potential buyers walking or driving who find it more convenient to buy along the road than inside the market. The market chairperson had this to say about the situation:

Box 4.2: Managing 'legal' and 'illegal' market operations

'There are vendors who operate outside the market on the road reserve. Those people should not be there because they are informal and have better access to customers than vendors inside the market. They block customers from getting into the market and thus affect sales inside the market. However, we cannot evict them because we don't have that authority. We tried to ask the Sub-Ward administration to help us evict them because they are affecting our business and above all they are not paying market fees. The Sub-Ward administration promised to contact the Municipality to help evict them but that has never happened. Thus, we decided to work with them on condition that they would pay market fees, become market members, comply with the market rules and regulations, and organise their working spaces properly. The fee collected from them is not paid to the Municipality but it becomes part of the market fund for maintenance'.

Interview with Ms Kipatwa on 10th July 2010, the Kimara market chairperson since 2005

⁶⁰ The 'legal' part of the market is within the land allocated for the market by the Municipality and fulfils other legal procedures such as payment of market fees to the Municipality and registration with MUMADA. However, apart from being part of informal development, the operation of the 'legal' market is administered informally. The 'illegal' market is on invaded land outside the market on the roadside.

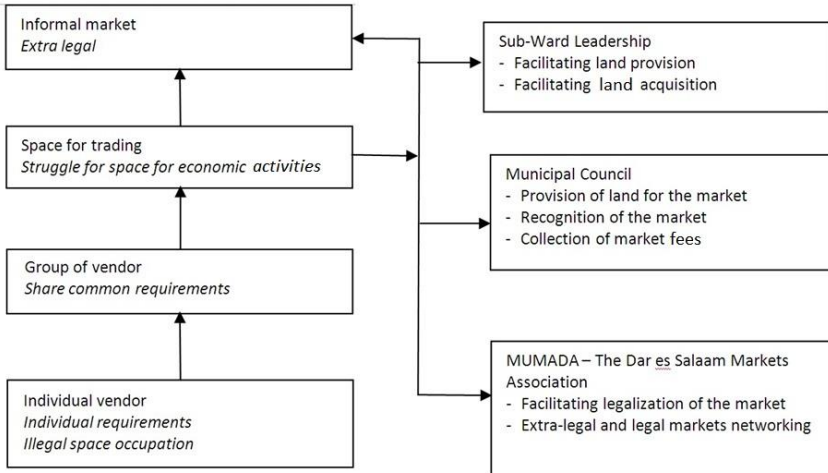


Figure 4.10: Informal process of creating Kimara informal market space

The author was informed by the market chairperson that development under the current leadership includes the installation of electricity in the market instead of it depending on a temporary connection from neighbours. Other developments include opening of a bank account and building toilets at the market.

Generally, the formation of Kimara market has shown the initiative of residents' groups with varying interests competing to organise space to meet specific social and economic requirements. On the side of the actors involved, the transformation of the market involved not only the traders and market organisers, who had competing interests, but also the Kimara Matangini Sub-Ward, Kimara Ward, Kinondoni Municipality and MUMADA. The demand for the market in Kimara area, the need for trading space by vendors as a source of income, the responsibility of the Kimara Ward for the welfare of its citizens and the authority of Kinondoni Municipality over urban land are the factors, together with vendors' initiative, that contributed to transforming the marketplace.

4.4 The Kimara informal market traders

The market chairperson pointed out that most vendors operating at the market were living within the walking distance. Some vendors who live about three or four kilometres away depended on public transport. The cost of commuting between work and home at TShs

600/- (US\$ 0.40) per day had little effect on their business income. Vendors noted that the location of the market was highly suitable and they were doing good business because the market attracts many people from different parts of the city. However, one vendor lives about 45 kilometres from the market and pays TShs 2000/- (US\$ 1.33) daily for a fare. Upon being asked why she commutes such a long distance, the vendor said that she was impressed by a friend who was doing good business at Kimara market. But because she could not secure a working space in the 'legal' market, she invaded a working space outside in the 'illegal' area. Although she incurs transport costs and travelling time, she noted it is fine. Despite travelling a long distance and paying dearly for transport, she was making more profit selling foodstuff at Kimara market than she would have made had she operated a market stall in her home town, Kibaha, where she lived.

Four of the respondent vendors had been trading at the market for more than three years and two had been trading in the market for more than five years. This suggests that vending at the market was a reliable source of income and thus they made it their permanent place of work. In this case, they paid the market fee accordingly and were involved in keeping the marketplace clean since there were no public services for that purpose. The vendors acknowledged that they made a considerable income from their trading activity but quickly maintained that the income made was only enough to meet their basic domestic requirements and family needs.

Securing a place for doing business in the 'formal' market was analogous to that of accessing land. Information on the availability of land was mainly accessed through informal social networks. In this way, one could get information through relatives, friends, neighbours, co-workers and others. With regard to trading space in the 'formal' market, one respondent noted, *"The way I got a place for business in this market is that I got information from my friend trading within the market that there is someone who wanted to move out. We agreed that he would introduce me to the market management and explain to them my desire to join the market as a trader. So he introduced me to the market management and I hurriedly took the opportunity to make an application for the trading space even before the person holding it had left. I was allowed to take the trading space at the market. I also*

paid fees for registration, working space and other services and this became my permanent workstation. I have been operating my business in this place for three years”.

It was further observed that traders in the market were mainly the low income persons. Although it involved a struggle to make it more open, democratic and a public facility, the market provided the opportunity for the low income group to shape, control and use the space to make a living. In addition, most traders in the market were women. Responding to why there were more women traders in the market than men, the Chairperson, who was also a woman, noted that *“women work hard to help supplement the dwindling family income for the purpose of improving their lives and eradicating poverty. If women stayed at home while they also have needs that cost money, they would contribute more to poverty”.* It is common in most African countries that women do not have access to the means for countering life’s challenges. In some societies, they are considered housewives and their role is to take care of the children, the house and the family; this is, however, changing.

However, in the context of city life, contrary to rural areas, where access to basic needs, such as housing, land, water, and energy is difficult and costly, women can no longer be housewives and depend on the meagre income of their husbands. In this regard, Kimara market is an example of a low income group represented by a gender group that has taken opportunity to control, shape and use space to generate income.

4.5 The contribution of Ten Cell Unit to settlement physical development

Because people generate and organise most of the physical growth and form character of settlements, the Municipality, apart from its administrative and political influence, is not playing a leading role in guiding the growth of informal settlements in its area of jurisdiction. Processes such as land sub-division, allocation, servicing and development that ought to be managed and guided by the state or urban authorities, are mostly organised and administered by informal institutions at the grassroots. People have developed a self-reliant stance due to the failure of the local authority to play a leading role in

the first place. One important aspect observed was the significance of the Ten Cell Unit leadership, especially their active involvement in social, administrative and development matters concerning land acquisition, transfer, servicing and plot development. The Ten Cell Unit forms part of the organizational structure of the local government as illustrated by Kombe and Kreibich (2000: 44):

For administrative purposes, the Wards are constituted by a number of Sub-ward areas which are called '*Mtaa*' (meaning 'street', plural '*Mitaa*' in Kiswahili). The Ward Executive Officer and the Sub-ward or *Mtaa* Leaders are the government representatives in their local area. The Ward Executive Officers are appointed by the government, while the Sub-ward Leaders are elected by residents living in their *Mitaa*. (At present, there are also appointed officials (*Mtaa* Executive Officer) at Sub-Ward level – Author's addition). The size of a Sub-ward area varies according to the geographical size of the ward and its population distribution.

The Sub-ward or *Mtaa* areas are divided into Ten Cell Units. They are the smallest political-administrative units put in place during mono-party era in Tanzania. Some of the primary objectives of establishing Ten Cell Units were to ensure party supremacy (TANU, now CCM) at grassroots. Ten Cell Units are supposed to be composed of 10 houses; in reality, however, their size varies between 8 and 15 houses⁶¹. Ten Cell Leaders are like *Mtaa* leaders elected by the household members constituting the cell.

⁶¹ It was observed that, in Kimara, almost every Ten Cell leader represented more than ten houses. There was one case where a Ten Cell leader had almost 50 houses. This happened because the rapid increase in the number of new houses in the area. In a situation like this, the *Mtaa* Office has to redistribute and expand the area into more Ten Cell Units. This process had not taken place at the time of fieldwork.

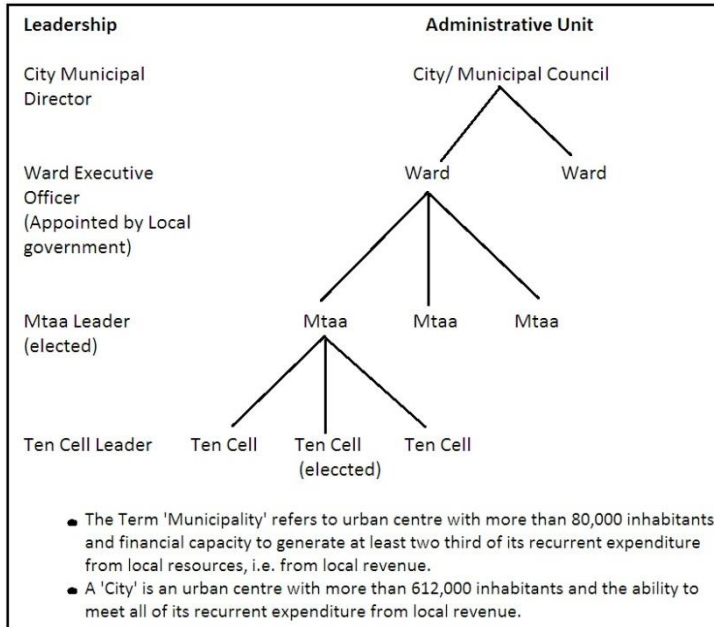


Figure 4.11: The administrative structure of local government in Tanzania

Source: Kombe and Kreibich (2000: 45)

Despite being part of the organization of the local government, the Ten Cell Leaders, (commonly referred to as *Wajumbe* in Kiswahili or singular *Mjumbe*), also work in various capacities as social leaders helping people access common goods. Therefore, the Ten Cell Unit or the Mtaa appeared to have a strategic position in terms of the welfare and expansion of a settlement. Further, *Wajumbe* were also an important link with people at the grassroots, the Ward and the Municipality. Thus some Ten Cell leaders were instrumental in pushing urban authorities to respond to, among other things, the needs of their people.

Wajumbe were instrumental in social aspects as well as in influencing spatial development. Their position encouraged social relations which helped build the social capital required to influence physical development. *Wajumbe* were also involved in social matters, such as arbitrating domestic and community disputes, supporting government campaigns on health, self-help and related matters, and they also provide referral letters to local members for various matters.

The *Wajumbe* interviewed at different times underlined their duties, which are summarised as follows:

We are responsible for the security of the area and keeping a peaceful living environment. We are involved in the development of the area and in sensitising inhabitants to participate in development projects, especially in contributing to the provision of community infrastructure. We communicate with our people through visiting house to house but also by convening meetings whenever necessary. We also act as mediators in settling conflicts arising among residents at domestic and community levels. Being local leaders who know our people and their property and, because of our position as political party and government representatives, most residents in our areas of jurisdiction involve us in contracts of transfer of property. Our role in property transactions increases the legitimacy and legality of transactions. We also act as a bridge between the Municipality, the Central Government, the political party and the people at the grassroots. We report the peoples' grievances and opinions to the Sub-Ward leadership, which in turn report to the government organs. We also receive Government and Municipality directives through the Sub-Ward and we implement them. For example, with regard to the government programme to formalise and upgrade informal properties we, as Sub-Ward leaders, mobilise people in our area to cooperate in identifying properties and their boundaries. Since the registration of properties requires owners to pay land rent and property tax, the Sub-Ward leaders are involved in educating residents on the importance of paying such taxes.

When they were asked if they are involved in individual plot development matters, they noted:

We consider the development at plot level as personal business and thus we have no mandate to interfere unless the developments affect negatively the needs of other residents in the area. However, residents usually involve us voluntarily in the transfer of land or any other property as a way of increasing the security of tenure of the property. There are no formal requirements for Sub-Ward office to enforce regarding individuals developing their plots. However, people are advised to involve Sub-Ward leadership when they start developing their land in order to avoid conflicts with neighbours especially on the

issue of access roads or paths which are the main problem in most cases.

When they were asked to elaborate on whether there were any official requirements that needed their attention, which would require them to see that individual developers observed them, they had this to say:

There are no official requirements for guiding individual developers but our Sub-Ward leaders may intervene in plot development in order to safeguard public interests at cluster or neighbourhood level. For instance, some of our Sub-Wards have advised residents to involve the Sub-Ward leader in land transfers to ensure that access roads are provided from the beginning. Such a resolution was reached after some plot buyers found themselves locked in land without access.

Overall, *Wajumbe* work closely with their communities. Good social relations were beneficial not only in social aspects but also as social capital and a potential tool for promoting spatial organization. Although *Wajumbe* would not interfere directly in the development of individual plots they were still in a better position to advise and arbitrate disputes over physical development. Their position was also instrumental in protecting the collective requirements of plot developers in the neighbourhood.

4.6 Professional planning interventions in informal settlements

Almost 80 percent of Dar es Salaam City area comprises informal settlements, which have been proliferating in terms of density and expansion (Foster, 2010: 136). Informal urban development in most cities in Tanzania grows faster than formal development. Current reactive measures adopted by most developing countries and supported by UN Habitat for intervening in informal development are based on the participatory approach whereby planners work with local residents and the local leadership.

The accepted best practice for housing interventions in developing countries is now participatory slum improvement. However, so far, these have mostly been adopted on a limited scale or are demonstration projects. The interventions are intended to work for the very poor, often in situations where there are no

markets. The best examples are holistic approaches to neighbourhood improvement, taking into account health, education, housing, livelihood and gender. Government largely adopts a facilitative role in getting things moving, while maintaining financial accountability and adherence to quality norms. It is now good practice to involve the communities from the outset, often through a formalized process, and to require a contribution from the occupants, which gives them both commitment and rewards. The more sustainable efforts appear to be those that are the main plank of a city development strategy with planned, rolling upgrades across the city and a political commitment to maintenance (UN Habitat, 2003: 132).

Thus, the state and urban authorities have to provide the relevant enabling environment for residents to take the opportunity to contribute to the planning, design, guiding and development of their urban environment.

This section presents part of the upgrading programmes that were carried out by the government in collaboration with people in Kimara settlement based on the participatory approach. Since the individual residents' actions have been presented in the previous chapter, this part concentrates on the role of government in collaboration with local actors in developing the settlement. The upgrading programmes in Kimara were administered by the MLHHS⁶².

4.6.1 Regularization programme in Kimara

Kimara was included in the master plan as a residential area and, though not planned, it was eligible for the regularization programme within the planning of the city as whole. It is acknowledged that development by people with respect to city growth was ahead of the government's capacity to plan in advance. In this regard, the government had to opt for regularization and legalization policies that allowed the minimum intervention in urban informality. In this case, it was important to avoid interrupting the informal setup

⁶² Most of discussion in this section is the result of the responses from the Planning Officers of the MLHHS in charge of the regularization programme in Kimara settlement, revealed in a number of interviews held between him and the author between May and December 2010.

in order to minimise the planning costs but also to reduce the disruption of social ties and the displacement of people.

It was noted that, as an important part of the regularization programme, landed properties had to be identified and registered in a number of informal settlements in Dar es Salaam city including Kimara. The regularization programme involved the provision of minimum services and infrastructure but also offered owners a renewable two-year residential licence, which helped elevate their property rights as a formal transferable economic asset. Securing a residential licence provided the best grounds for the owners to pursue a formal survey of plots. This regularization programme seems to be a progression of the property registration programme citywide as noted below:

It is estimated that there are 400,000 plots of unplanned housing in Dar es Salaam. This (Property Register for Unplanned Urban Settlements in Dar es Salaam) is a two-year project commenced in 2004/05 with the objective of gathering data for all unplanned plots, issuing Residential Licences under Section 23 of the Land Act and building a Computer Register of the properties in the three (3) Local Government Authorities of Ilala, Kinondoni and Temeke. The project uses high resolution satellite imagery to produce mapping at a scale of 1:1,500. This image is used to identify properties and natural and man-made features. Data on the properties is gathered on the ground using questionnaires. ... Public Awareness Campaigns are conducted and residents are encouraged to apply for Residential Licences. In Ilala Municipal Council to date 16,830 Residential Licences have been issued, 12,929 to males (73%) and 3,911 to female (23%).

In Kinondoni Municipal Council a total of 17,422 Residential Licences have been issued, 13,551 to males (72%) and 4,871 to females (28%). To date the project has mapped 220,000 properties and issued 47,000 Residential Licences. In Ilala District eleven (11) property owners have obtained Bank Credit using their Residential Licences and in Kinondoni 3. It is also reported that Savings and Credit Cooperative Societies (SACCOS) are providing credit to their members using the Residential Licences and even private rich individuals are reported to be advancing credit to residential Licence holders at interest of 16% compared to bank interest rate of 22%. The Residential Licences are also

used as security for University student Loans and as surety for court bail⁶³.

UN-Habitat (2010) notes that 90,000 residential licences have been collected so far out of the targeted 220,000 in phase one. Moreover, experience revealed that the two-year duration of residential licensing was too short to provide a credible economic boost as it was not useful for securing a long-term loan. Thus it was extended to five years.

However, whilst appreciating official attempts to promote owners' property rights, the practicability of using the residential license to access finance for plot development, residential improvement and others was still uncertain since most respondents were still developing their plots with funds acquired from their own sources. One important aspect of regularization and formalization is to recognise an area as part of the city. This is complemented by providing the area with minimum community infrastructure (as necessary formal requirements) such as access roads, open space, education facilities, health facilities and others. The upgrading programmes may also be introduced as urban authorities' and the state's appreciation and support of residents' ingenuity in creating the city. Therefore, while the regularization programmes mainly contribute administrative, logistical, technical and organisational support, residents are still playing an important role not only in creating an urban environment relevant to the socio-economic context but also in producing the character of urban form.

4.6.2 Planning at the grassroots

It was pointed out that the formalization and regularization of informal settlements involved the people affected by the change. The leaders at Ward and Sub-Ward levels were mainly involved as representatives of the people in sensitizing and mobilising people to re-orient their plot development and other urban activities to conform to the regularization philosophy. For instance, apart from complying with the proposed regularised layout of the settlement during plot

⁶³'Tanzania Land Policy and Genesis of Land Reform Sub – Component of Private Sector Competitiveness Project' on siteresources.worldbank.org/RPDLPROGRAM/.../S7_Hayuma.doc accessed in October 2011.

development, developers had to contribute land for the provision of community infrastructure such as access roads. It was observed that most developers were cooperative as they were ready to provide land for public facilities whenever possible. The proposed regularised layout also provided the opportunity for potential applicants for Title Deeds to conduct official plot surveying. At the time of fieldwork, the cost of plot surveying was TShs. 550,000/- (US\$ 367) per plot. However, the costs of surveying were being reviewed since the current charge was a problem for most residents. Residents were also advised to carry out plot surveying in groups in order to reduce the cost. Despite these efforts, residents had not taken the initiative to survey their plots. It was observed that not only was the cost of plot surveying unaffordable but also there were hardly any incentives associated with it. As pointed out earlier, this is because security of tenure or access to credit rarely depended on titling in informal settlements⁶⁴.

The observation and response from residents indicated that the drive for settlement development came from the initiative of residents rather than the Government or Municipal authority. Even with the involvement of residents in implementing regularization programmes, the government has not been prompt in responding to the specific needs of the residents, especially regarding the provision of social services and infrastructure. There were cases where respondents had complained about the failure of the government to fulfil its obligations when they had fulfilled theirs, as agreed. For instance, in Kimara King'ong'o Sub-Ward, people wanted a Police Post and the main access road. It was then agreed that the people would provide land and the government would build the police post and provide personnel and provide the equipment to grade the road. The people provided the land for the Police Post and the road but the government, for more than a year now, has not yet implemented its part.

4.6.3 People at the grassroots are 'planners'

⁶⁴ Using a title to secure loans from banks still has drawbacks such as lack of infrastructure, unfavourable locations, dubious quality of property and others that could make the property value too low to attract the prospective lending institutions.

Based on the current situation where settlements are created by residents without or with minimum professional input, one can acknowledge that people are planners and designers of neighbourhoods since they conceived their design problems, set priorities, make decisions, organise their requirements accordingly and execute their plans. It is through this spirit that local residents are involved during regularization and formalization interventions. Local residents are in a better position to understand their needs and perhaps how best they can be organised and thus they are of great assistance to planners during the planning and implementation of regularization programmes. In some instances, they can advise planners on their priorities concerning community facilities and other requirements.

It was further noted that some property owners are reluctant to accept compensation for expropriation to allow for planning to take place. The rejection of the compensation is largely because of the low amount paid by the government compared with the market value. On the contrary, people may accept compensation and move to another location to establish another informal settlement in the expectation of being compensated later if development plans extend to the area. This aspect of 'planning' by the people shows how developers can use some mistakes by Municipalities and Government to their benefit. This implies that the expansion of a city is likely to be dominated by individual requirements based on plot-by-plot development where public interests, which are crucial in urban life, are overshadowed.

4.6.4 Proposed maps for upgrading plans

On the aspect of planning guidance in informal areas, it was noted that the 1995 Human settlement policy, Land Act number 4 of 1999, Town Planning Act number 8 of 2007 and the Millennium Development Goals (MDG's)⁶⁵, which discourage demolition and promote the regularisation of informal settlements, were relevant. Kimara Ward is an informal settlement accommodating mixed social groups (low, middle and high income groups). That variety of income groups represents diverse investments of different individuals that

⁶⁵ The Planner emphasized on Millennium Goal 7, target 11; where Goal 7 requires to: Ensure environmental sustainability. And Target 11 requires: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers (UN Habitat 2003: 7)

impact substantially the socio-economic condition of the city community. The upgrading programmes avoid disrupting such social diversity to prevent any devastating effects on social, economic and political conditions.

It was noted that a Map using satellite images, displaying the existing development situation, was used to prepare the proposed layout for upgrading Kimara informal settlement. Within the configuration of existing plots, community services and infrastructure, the proposed layout of the formalised informal settlement was prepared. The form and shape of most existing plots, community services and infrastructure were retained. Thus, the individual product of plot configuration, with slight improvements, was more or less retained, except that considerable planning regulations had to be enforced. It was noted that there was hardly any room for open spaces and wherever space for a public facility was necessary, land for its provision had to be provided by residents, either free or with compensation. It was also noted that various public facilities operated by local private investors were officially recognised and were, in fact, included in the proposal as officially recognised social service facilities. The critical aspect to note in the proposal was the provision of vehicular roads to every plot. Proposing access roads to existing plots with no vehicular roads would depend on the plot owners' readiness to offer part of their land for that purpose.



Figure 4.12: A Map of 'Kimara Mwisho' centre.

Plots are irregular and some houses are not accessed by vehicular roads. The Map was prepared to obtain landed property details for the purpose of community infrastructure upgrading, residential licensing and other planning issues.

Source: MLHHS



Figure 4.13: Proposed upgrading layout plan for the part of Kimara informal settlement as prepared by the MLHHS.

The plan indicates the existing plot layouts, spaces for community services, road networks and more importantly vehicular roads to each plot.

Source: MLHHS

The implication of the regularization programme for informal settlements, which are not necessarily the products of impoverished residents striving to make a living in the city, is that it may not make much of a difference to the physical form of the provision of community infrastructure and services. Kimara informal settlement involves developers from low, middle and high income social groups, which characterise the diverse availability of potential resources for settlement development at plot and neighbourhood levels. These are observed in varying intensity of investment in plots as well as initiatives for the provision of community infrastructure in the neighbourhood. Basic community services such as housing, access roads, water supply and others were mostly provided by the residents themselves. It was also observed that most services such as shops, schools, dispensaries, community halls, and others were provided by private investors. These initiatives covered to a greater extent an element that required the regularization programme to provide minimum community infrastructure and services. In this regard, the regularization programme contributed mainly to raising the awareness of developers to regulate their development actions so that they conform to urban development conditions. The recognition of developers' properties (as transferable assets for the creation of capital in the formal system) and the provision of the proposed layout for the regularised settlement (as formal guidance for development activities at plot and neighbourhood level) were incentives for developers. The proposed layout also stands as a benchmark for formal surveying if plot owners are prepared to bear the cost of formal titling.

Furthermore, the programme worked with local leaders at Ward and Sub-Ward levels such as Ward Councillors, Sub-Ward Chairpersons and Ten Cell leaders. This provided such leaders with convenient tools to more efficiently guide and supervise developments at plot and neighbourhood level. In this way, the regularization programme had a significant effect on the settlement development process and the outcome (the form). The identification of community infrastructure locations in the settlement provided a more convenient position for developers at plot level to respect them. For instance, the identification of routes for vehicular roads prevents new plot developers from blocking or constricting access roads. This results in

a neighbourhood with an access road to every plot, which is less dense, has more public space (in terms of streets) and is more convenient for provision of community infrastructure such as water, electricity, storm water channels, and others. However, there were some challenges to the implementation of the proposed layout for the provision of community infrastructure and services for some densely packed communities. For instance, in some of these communities, some plots were too small and in some cases fully developed so that it was difficult to provide community infrastructure such as vehicular access roads. This may result in some plots in densely packed communities existing without vehicular access roads, contrary to the proposed regularization layout that provides for access roads to each plot.

4.7 Summary

Due to the limited availability of space for public purposes, the space allowed by informal developers for roads and paths became *de facto* public space for extra public activities rather than for the movement of people and goods. Space for public services in informal settlements could not easily be allocated because of dominating individual practices on private space. In this way, actors could use strategies such as creating groups with common interests to address certain social needs by using formal and informal processes through which they could access public space for social or economic benefit.

The creation of public space and public facilities in informal settlements could also be facilitated through intervention by government bodies responsible for urban design and planning with relevant professional and financial resources. In a situation where the government was too financially deficient to act accordingly or too slow to deliver, grassroots institutions could form a partnership with local formal structures such as Sub-Wards and Ten Cell Units to mobilise residents' limited resources to optimise the development and transformation of public space. This complex combination of efforts by various individuals, groups, associations and institutions at various levels of capacity and action resulted in a negotiated informal urban form of its own character which was still being moulded and remoulded

Chapter 5: Urban Space as a Product of Spontaneous Residents' Practices

5.1 Background

The two preceding chapters concentrated on the processes in which various actors engage to produce relevant urban products. Chapter three focused more on the processes initiated by individuals to produce various urban contents especially those associated with strategies for developing plots to suit the socio-economic context. On the other side, chapter four dwelt more on processes undertaken through the collective efforts of residents as well as institutional contributions especially those related to acquiring public space or community service provision. Having explored the urban processes in a more specific way, an attempt is made in chapter five to outline the urban products that shaped the physical form in presenting and accommodating the urban contents as result of transformation processes dominated by local individual actors. Strategies and plans made before and after the occupation of suburban space are analysed to connect them with the type and shape of the resulting built environment created at individual level and their repercussions for urban form at block or neighbourhood level. Further, the types of space created and their related socio-economic connotation to urbanity are assessed to provide a general understanding of inherent localised social aspects of urbanity. The chapter opens with a general look at the creation of suburban settlements.

5.2 Creation of settlements

The multiple linear urban structure of Dar es Salaam city is largely influenced by the four roads of Bagamoyo Road, Morogoro Road, Nyerere Road and Kilwa Road. It is however now losing its prevalent distinction as it was once the exclusive city growth phenomenon. This is because currently the city is rapidly filling the

gaps that were left by the multiple linear developments that were a result of consolidation and increased land value of areas along the roads. In turn, this is pushing residential land development and other land use further to the inner areas, away from arterial roads. Kimara settlement, which once had most of its development concentrated along Morogoro road, is currently attracting rapid land development in the outer areas of the settlement.

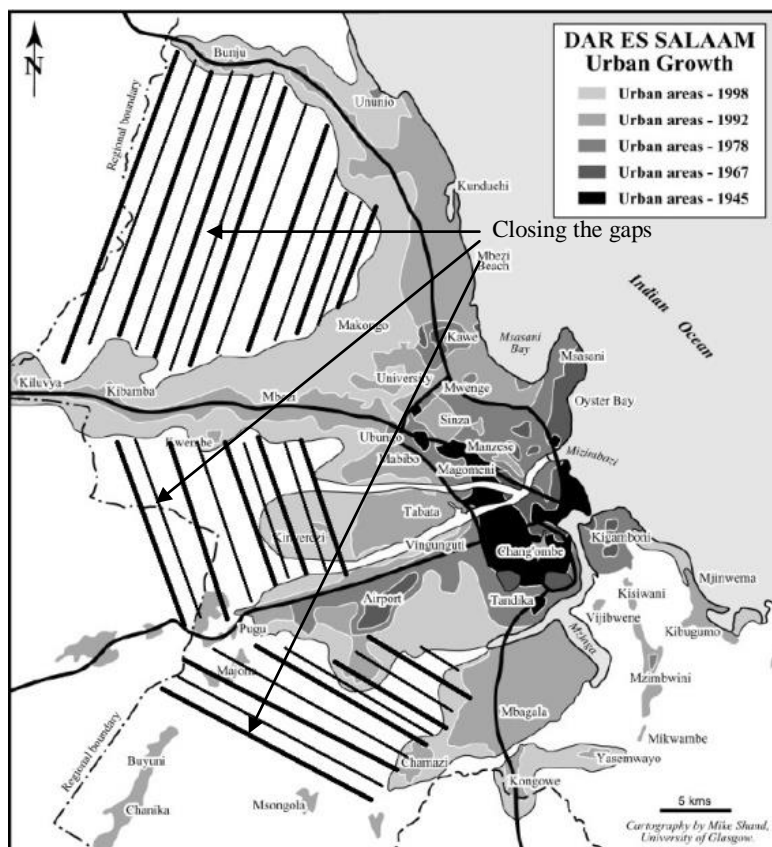


Figure 5.1: Urban developments are closing the gaps which were created by concentration of developments on four major roads.

Source: Brennan J. and Burton A. (2000) and Author's construction.

Land developments in the inner areas of Kimara seem to offer developers the choice of proper sites for development. It may be argued that the concentration of urban development along the road was due to more commercial opportunities and services provided by

the road while development in the inner areas was largely driven by the need for land for residential buildings and farms. This was supported by responses from the settlers, most of whom said they chose locations after being satisfied that the area was suitable for agriculture, but it gradually became more attractive for residential land use. The choice of sites by different developers for various urban development purposes, whether residential or commercial, created physical morphology with a specific character. For instance, mixed urban functions are accommodated and open areas are continuously and spontaneously being filled. It should be further noted that residential, institutional and commercial opportunities, which used to be concentrated along Morogoro road, are currently increasingly moving to the inner areas of Kimara as the population grows and the residential development intensifies. Some physical morphology in the area indicates that the locations chosen by developers are mainly the buildable sites, upper land and accessible locations. Thus, as far as the topography is concerned there was tendency by developers to avoid valleys and steep slopes as seen in Figure 2A and 2B.



Figure 5.2A: Built up and unbuilt up areas of inner areas away from Kimara Mwisho centre.

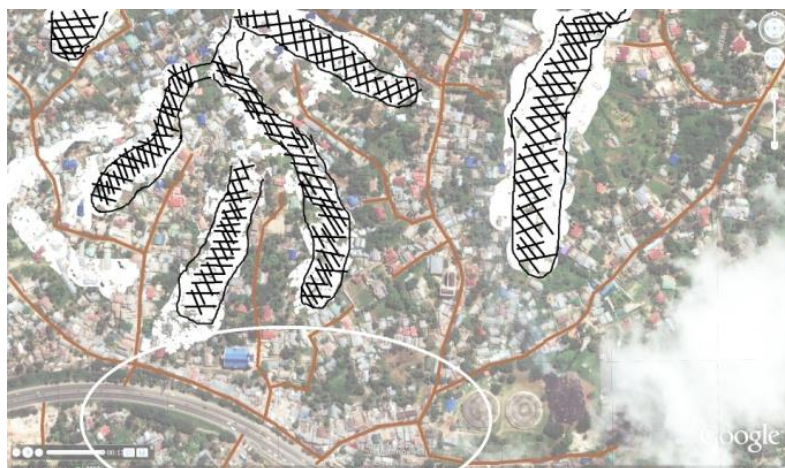


Figure 5.2B: Same map as in Figure 5.2A but with shaded sloping sites and valleys representing some of the unbuilt up areas.

Source: Google Earth with 2010 Satellite image and the author construction

Topographically, Kimara is hilly with some valleys, which act as natural storm drainage. Most areas are covered by natural grass, shrubs and scattered trees that prevent the soil from being eroded. Some parts of Kimara area have clay soil which pose problems in building structures because of movements caused by its state in dry and wet conditions. Home builders were aware of the properties of soil and how to counteract their effects. For instance, Mr. Msalaka, whose plot had clay soil, had to import sandy soil to backfill the foundations to stabilise it in order to avoid potential damage to the whole building. However, some areas have sandy soil which was stable and good for building structures. In sandy areas developers collected freely deposited sand from their plots for building purposes. To some extent, the urban morphology of Kimara area is influenced by the topography and natural features, whereby the upper land and less sloping areas were preferable⁶⁶, whilst steep slopes and valleys were often avoided.

⁶⁶ It is a normal practice that the best geographical locations are usually the first to be occupied in the newly immersing suburban settlements even in the situation where the central control system on urban growth is almost non-existent. The occupiers who are mostly the low income earners would wish to exploit the associated benefits of reduced cost for developing and maintaining the property on the upper land and non-sloping sites. However, the location choices



Figure 5.3: Part of Kimara settlement with mixed development on the upper land and along the gentle slopes.

The image of natural and planted vegetation made the place look like the countryside but the land has been increasingly built on while farming is rapidly disappearing.

5.2 The urban block

In informal settlements, defining an urban unit such as a plot could be as difficult because the organization is irregular, and the boundaries are not explicit. The plot size and shape can be made according to the seller's decision. In turn this could influence the siting of the house. Also, social and economic conditions can influence plot size, location and type of house. For instance, plots could be smaller on land in some high value areas or larger in low value areas. Also, the plot could be smaller not because the price is high but because buyers are too poor to afford larger plots. Yet, areas where the land value is low may rise after increased house construction resulting in density. Numerous socio-economic factors influence the decisions and actions of individuals, which in turn influence the emerging informal city form. However, despite the various influencing factors, the main development activity on individual plots was residential based on individual requirements regardless of plot size or income group. However, plots are not dedicated to residential requirements only but also to income-generating activities. Therefore, the plot was mostly considered as space for residential purposes and, in many cases, an important source of livelihoods. These were more or less the bases on which plots,

and the associated benefits may be compromised by the low income earnings of the plot seekers in the event of land scarcity and high land cost.

constituting a block, a neighbourhood and hence a city, were composed. Plot developers with their own development targets and interests together made a composition that could be referred to as cluster, block or neighbourhood. Awareness of one another's existence, respect for each other's development activity and readiness to work together on collective concerns provided a sense of community that contributed to the creation of a considerably readable shape, form and function of the settlements (Figure 5.14A and B).

The Figures 5.14A and B show a block in *Kimara Michungwani* comprised of two ten cell units shaped by individual developments at plot level. The attempt was made to indicate the different levels of units composing an urban component. The smallest unit was the plot, where the residential house as the main development was sited, but with several other investments. Further, a group of plots and their contents formed a cluster with common facilities, such as access road, a corner shop or the smallest political entity of Ten Cell Unit. Again, several such clusters formed a block or neighbourhood, which might be characterised by a common service centre, a market or the political entity of *Mtaa*. The composition of urban units in informal urbanity was complex and at times contradictory and thus difficult to delineate clearly based on conventional urban design standards. The plots and houses were not only irregular in terms of shape, size and design but were also organised irregularly without formal guidelines. In this case, a sense of space was valued by the services it offered the users and this determined how the form was perceived. Similarly, the provision of services like a market or a corner shop did not follow standardized determinants but they found their locations with regard to their informal utilitarian convenience. In this way, the plot in the informal urban environment, although irregular in shape and in size, was the determinant element of the form.

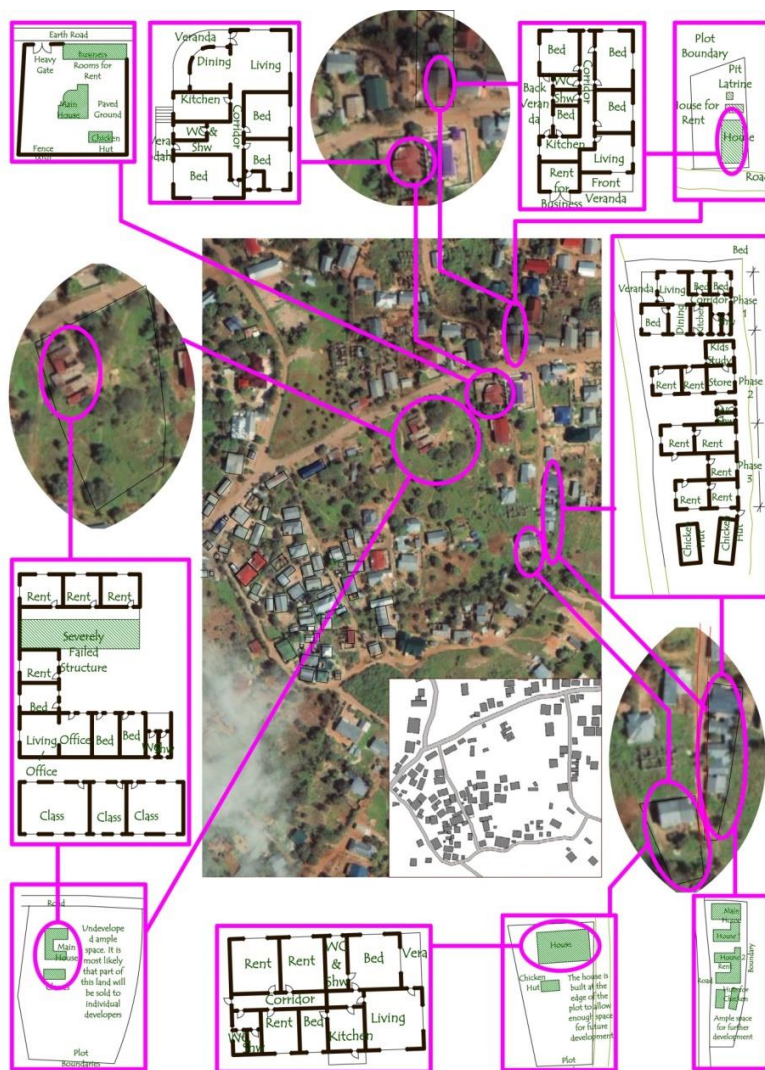


Figure 5.4A: A block in Kimara Michungwani presented with plot layouts and house plans.

The organic creation of the city in the informal settlement hardly follows the hierarchy of urban space such as plot, cluster, block, neighbourhood and others with their associated services and community facilities. The block follows the boundary roads and shows the combination of plots, owners' residential houses and some income-generating activities on the plot.

Source: Google Earth with 2010 Satellite image and Author's construction

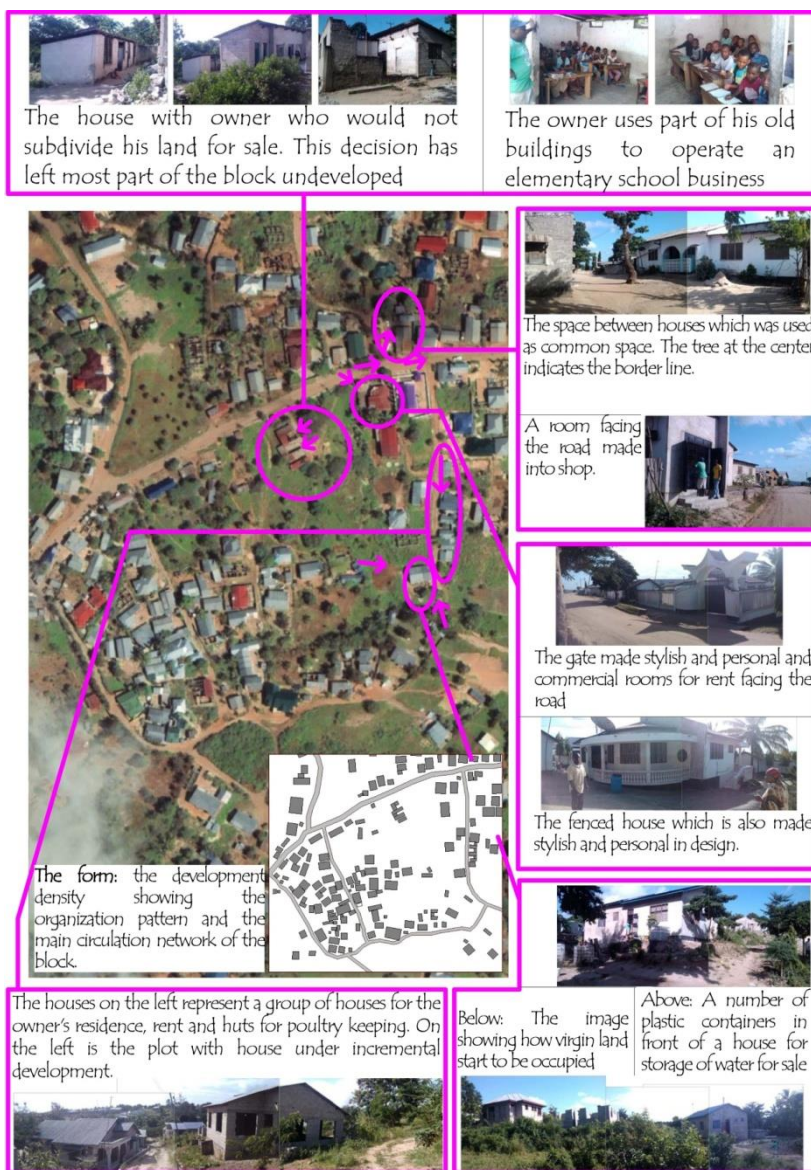


Figure 5.4B: The plot and block contents differ depending on individual needs, resources and opportunities available.

Source: Google Earth with 2010 Satellite image and Author's construction

At block level in *Figures 5.14A and B*, streets were formed organically, usually begun as footpaths or negotiated by plot

developers. Not every plot was accessed by road but at least each one could be accessed by a footpath. Plots that could not be accessed by road were within a few minutes' walking distance to the road. In one part of the block, buildings were densely situated without a clear pattern of organisation, which is a common phenomenon in informal settlements. This was a result of small and irregular plots being subdivided by individual owners for sale. Each buyer planned and built on the plot according to individual requirements and at his or her own convenience. However, collective requirements had to be negotiated among neighbours. Mr. Jakaya, one of the Ten Cell Leaders at *Kimara Michungwani* area represented in *Figures 5.14A and B*, noted that most land in one part of the block initially belonged to about three or four owners who gradually sub-divided it into small plots for sale. Such decisions resulted in a densely developed space in one location, while some parts of the block was less dense as a result of a few plot owners not sub-dividing their land for sale.

The resulting blocks were in many ways fused and irregular. The blocks' appearance varies remarkably depending on house orientation, size, form, shape, the plot location and the nature of adjoining properties. Roads provided an important uniting element, which seemed to pull together the varying sizes, shapes and orientations. They constitute a crucial element defining the block as well as distinguishing public space from semi-private and private space. Vegetation cover that includes trees, shrubs and grass that is retained or grown by plot developers improves the scenery by providing space with a natural image, which enhances the living environment.

5.3 Local centres

In preconceived urban forms, centres are predetermined locations where major neighbourhood services are provided and the types of services provided are specified as per neighbourhood conventional design standards⁶⁷. In this way, centres could become

⁶⁷ Duany and Plater-Zyberk (1993) looks at neighbourhood as one of fundamental organizing elements of new urbanism. They point out that, despite the difference in various aspects of neighbourhood models constructed by different urbanists, there is a general agreement that a neighbourhood, as a model of urbanism, is limited in area and structured around the centre. Further, they note that: *'Like the habitat of any species, the neighbourhood possesses a natural logic that can be described in physical terms. The*

space specific with defined services provided with regard to defined population density and community needs. Conversely, in informal developments, services as essential requirements in urban agglomeration emerged as integral to the expansion of informal settlements albeit without clearly defined social or economic design attributes⁶⁸. The difference is that centres as space-specific entities are not the case in informal settlement because different services could be negotiated and provided at any available location, perhaps depending on the availability of space, the preference of the service provider and the value of the space. Service provision was also a part of informal development at individual level, where the plot owner could provide a service as a strategy to generate income. It was not uncommon for an individual plot developer to provide one or more services, such as a shop, a boutique, a beauty salon, a grocery, a community hall, a bar, a school, or a parking lot as an income-generating project on his plot. This makes most plots located along main access roads potential areas for commercial activities. This could be proved by what was observed in the field where most commercial services were on plots along the major circulation networks or strategic locations.

There were cases where certain urban conditions attracted the concentration of certain services in a specific location in informal settlements. This could be caused by the existence of urban elements that attract crowds, such as a bus stop, market or road junction. Crowd tend to attract trading and related services of all kinds on different scales. This made 'Kimara Mwisho' one of the centres of this kind, probably encouraged by factors such as its location along the Morogoro Road, roads meeting Morogoro Road from inner areas of Kimara, the market and the bus stand which attracted the movement of people and goods. It also attracted the trading and vending of all

following are the principles of an ideal neighbourhood design: 1) The neighbourhood has a center and an edge; 2) The optimal size of a neighbourhood is a quarter mile from centre to edge; 3) The neighbourhood has a balanced mix of activities-dwelling, shopping, working, schooling, worshipping and recreating; 4) The neighbourhood structures building sites and traffic on a fine network of interconnecting streets; 5) The neighbourhood gives priority to public space and to the appropriate location of civic buildings'.

⁶⁸ It has to be acknowledged that social and economic attributes are the key factors in influencing the occurrence and growth of informal centres. However, since the informal city grows spontaneously, the social and economic characteristics involved in the process cannot be predicted and thus the informal centres could hardly be determined in that line.

kinds: shops, stores, restaurants, bars, social halls and others. There were also churches, mosques, dispensaries and schools, to mention a few.



Figure 5.5: Several services at Kimara Mwisho Centre.

Source: Google Earth with 2010 Satellite image and Author's construction

The emergence and growth of centres like *Kimara Mwisho* located along major roads can be related to the social and economic benefits of such locations. It has been observed that, as the settlement grows inward from the Morogoro Road, new important roads heading towards new areas emerged. The road from *Kimara Mwisho* through *Kimara Michungwani* to *Kimara King'ong'o* settlements is one such road. The growth of *Kimara Michungwani* and *Kimara King'ong'o* settlements, which are about 10 kilometres apart, led to an increase in the population in the area, resulting in many socio-economic activities and hence the increased movement of people and goods between these areas and *Kimara Mwisho*. The field study revealed⁶⁹ that *Kimara Michungwani* and *Kimara King'ong'o* were established as sub-ward administrative areas after 2000 by Kinondoni Municipality, primarily because of the substantial growth of the settlement and rapid population increase. Influenced by other inner adjoining settlements connected to it, *Kimara Mwisho* however retained its importance as a key centre and a transit point to other city destinations. This, in turn, has created the opportunity for public transport activities that have recently started to operate between *Kimara Mwisho* and *Kimara King'ong'o* through *Kimara Michungwani*.

The socio-economic developments evolving in the area has made the road connecting these points (*Kimara Mwisho*, *Kimara Michungwani* and *Kimara King'ong'o*) an important link, thus creating opportunities for emerging centres along it. Field observations showed that the place where *Kimara Michungwani* and *Kimara King'ong'o* sub-ward offices are located comprise some of the emerging centres along this new local road. The significance of this road was recognised by Kinondoni Municipality and so it upgraded it to city level status. Probably the importance the road had acquired led Kinondoni Municipality to upgrade its status and rehabilitate it following a request by both *Kimara Michungwani* and *Kimara King'ong'o* sub-ward leaders.

⁶⁹ Some information was gathered through contact with various informers including the *Mtaa* chairmen, Ten Cell leaders, residents and officials at Kimara Ward office.



Figure 5.6: The road that connects three Sub-ward head offices:

Source: Google Earth with 2010 satellite image and author's construction



Figure 5.7: Streets along centres attract business that may also include a series of makeshift stalls with all kind of goods for sale.

Spaces like these are mostly created on private land although in some cases they may happen on public land. This creates the form and architecture that function within the socio-economic context.

It should be noted that the roads that had gained certain importance (it could be the result of urban synergies) had not been preconceived for the purpose they were currently serving. They were also developed through informal contacts, collaborations and negotiations among individuals, groups of developers and local

leaders. It was also disclosed by some respondents that one road was upgraded from a popular footpath between *Kimara Michungwani* and *Kimara King'ong'o* to the road as it was considered necessary to meet traffic demand.

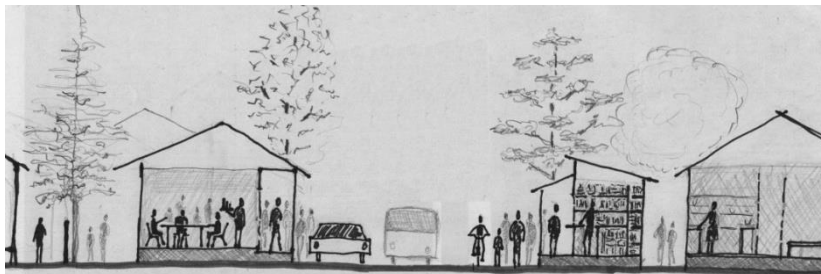


Figure 5.8: Often plots along roadsides have rooms for commercial use.

5.4 Roads and paths

Roads and paths as essential urban features and elements form media for spatial linkages and communication in informal settlements. Roads and footpaths were provided spontaneously through individual initiatives. It was pointed out earlier that roads and footpaths were among the services provided by individual developers through negotiation and concessions as they develop their plots. We have also seen that as settlements grow and the population increases, some roads begin to play the important role of connecting key areas, including service centres, and are also important for the movement and distribution of goods. The network of roads and footpaths connect various sections of the settlement, although not every plot was connected to a road, but at least each was linked to a footpath. It was necessary that each plot is reachable by a vehicular access road, primarily to extend public space and reduce congestion. However, one of the shortcomings of an informal settlement that has grown organically is that it may not guarantee vehicular access to each plot.

Roads and footpaths in the settlement were not the product of preconceived design or planning but the result of efforts and practices of individual developers. The roads and paths were mainly to facilitate accessibility although they also stand as key public space. Since they evolved spontaneously, they formed an organic and irregular street

network, which hardly conforms to conventional neighbourhood, block or cluster standards in the settlement. An attempt to use boundary roads to delineate blocks has not proved helpful, because of the lack of consistence of size, shape and composition of roads and the internal structure of elements that constitute the settlement⁷⁰. Apart from the few roads that happened to adopt more or less normal standards, most roads were narrow and inconsistent in size and shape. This happened as a result of individual owners optimising the utilization of their plots, leaving very little space for the roads and footpaths.



Figure 5.9: Irregular and organic road network develops as the settlement grows. The road represented by thick line indicates the major road as presented in Figure 5.16.

Source: Google Earth with 2010 satellite image and author's construction

⁷⁰ The block is conventionally an indispensable element for the structuring of the city and thus associated with preconceived city forms rather than organic developed forms. Further, Panerai *et al* (2004: 162) point out that 'the block is a part of the urban area 'isolated' from neighbouring parts of the territory by streets. Thus the block is not an architectural form, but a group of interdependent building plots'.



Figure 5.10: Roads provided are usually narrow as each individual developer attempts to maximize the utilization of his plot.



Figure 5.11: A road can also be a shopping terrace, a pedestrian walkway a meeting place and any other public activity.

5.5 Private and public space

As pointed out earlier, there was no predesigned hierarchy of public or private space such as recreational areas, open space, circulation systems and others in informal settlements, but spaces evolved organically as part of the spontaneous informal process. Residential developments, which were dominant in the study area, emphasized private space as developers concentrated on their plots.

Since streets or roads were mostly public space, they were accessible by everybody and thus provided a sense of demarcation between private and public space. The production of public space, as for private space, was mainly for utilitarian purposes. This explains why most public space appeared to be part of communication routes such as roads and paths. Space which was under the control of individuals was limited to their plots and the extent of their control depended on how plot boundaries were demarcated. It should be noted that most plots were not fenced and thus were exposed physically and visually. This makes them flow between buildings which also made their access open to all community members, at least the residents in the particular block or cluster.

In some cases plots were too small, and abutting houses too close and so the right to use the space between houses could hardly be claimed by any of the specific owners. Space became either semi-private or public and, in some cases, there was blurring distinction between private and public space, since it is where driving, cycling, walking or some domestic activities happened. Developments on larger plots and fenced plots created far more distinction between public and private space. The complex coexistence of various categories of space with a blurring distinction between one another in informal settlements allow equal but complex access to and use of space. The shared space and close siting of buildings can reduce the privacy of the individual but could also increase the social interaction of residents, which in turn could enhance efforts to protect such space from encroachment or abuse. This can be exemplified by one of the narrations that show how the nature of informal space organization could enhanced social integration. He said:

Box 5.1: Shared space created shared responsibilities

“There was a time when we had persistent robberies in our area and we felt that we had to do something about it as a community. We arranged with our Ten Cell leader and established security guard groups composed of residents who volunteered to conduct night security patrols. We also agreed to watch during the daytime so as to take note of any stranger strolling around our area. You know, people know each other in this area, and so a stranger can easily be spotted. The exercise was successful because most strangers we seized wandering in our area during the day or night could not explain why they were in our area and thus we threatened to take stern legal measures against them and forbid them from being in our area. It seems the exercise was a success since home robbery is no longer a grave problem.”

An interview with Mr. Pius on 20th February, 2010

This above excerpt shows the latent potential in the form of social capital that exists in informal settlements, which have not, however, been effectively tapped to shape urban form. Private and public space was created depending on the nature of how individual developers had developed their plots with respect to their location. For instance, a small plot located in a densely developed area may not be fenced to allow for convenient circulation. The majority of developers had not fenced their plots, which allowed space to flow without restriction or demarcation between private, semi-public and public space. Small plots and densely built areas made it difficult for the owners to erect fences even if they wanted to do so.



Figure 5.12: The densely located buildings in informal development created flowing space merging private, semi-public and public spaces

For plot owners with resources and the opportunity to erect fencing walls, private space and public space were clearly demarcated. The separation was made clear physically and visually. Fenced walls helped eliminate unnecessary trespassing, increased privacy and

security but reduced social interaction. Mr. Goza had this to say about the impacts of erecting a fencing wall:

Box 5.2: Space character resulting from erection of boundary fenced wall

“Before I erected this fence we used to keep our eyes open for security reasons because our property was fully exposed. I would not say that theft was rampant in this area but it was important to take precautions. However, we had a record of being robbed of some things in the past because we did not take proper precautions. Thus, we had to make sure important items are kept inside the house. For instance, clothes hanging for drying had to be taken inside before dark. Further, we had almost no privacy and whatever we did on our plot was open to viewers outside. Sometimes people would cross our property and we could not stop them because most of them were neighbours. After building the fencing wall, we have all the space for ourselves to use during the day and night. We also have much more privacy and, above all, we have improved our security against robbery.

Apart from benefit of improved privacy and security, the fencing wall has unfortunately isolated us from our immediate neighbours. Before it was erected, we could meet and chat at any time since there was no barrier between us. But now we can spend several days before seeing each other and this have reduced our social interaction to a certain extent.

An interview with Mr Goza on 07th December, 2010

For his part, Mr. Rutta erected a fencing wall on one part of his plot in order to prevent neighbours from dumping garbage on his plot. He said:

Box 5.3: Boundary fencing to prevent trespassing

“You know, because my plot is big, it is difficult to keep a close eye on every corner. Therefore, it happened that one of the corners of the plot was turned into a dumping area by some of my neighbours. I tried to talk to a number of them to stop dumping litter on my plot but they kept denying being responsible for the act. I thus decided to build the fencing wall along the area in order to prevent them from dumping waste in the area. Fortunately, after erecting the wall the act of throwing garbage on my plot stopped.”

Interview with Mr. Rutta on 7th May, 2010

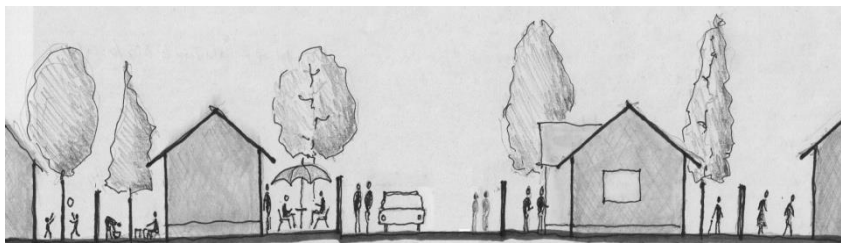


Figure 5.13: The fenced dwellings had enough space to create useful spaces after the fence was erected.



Figure 5.14: A solid wall fenced house demarcating private space.



Figure 5.15: Hedge demarcating private space.

5.6 Summary

The attempt to study the form of informal settlements based on the conventional conception and hierarchy of space has not provided convenient grounds for its perception. The form of the informal city is not a result of decisive and preconceived intentions. Thus, incremental individual development practices were considered relevant to describe its peculiar form although its complexity made it difficult to understand. This complexity arises primarily from varying socio-economic factors and other attributes that influence the process. The form is a result of irregularly sized and shaped plots, developed by different individuals, various actors from different income groups, with different time durations, and varying needs, interests and visions. This in turn has given rise to unbalanced access to community infrastructure and social services. The complex form of informal urban space operated under locally established norms and values. These are embedded in individual needs and decisions to move and settle in the distinctive urban area. The distinct and disjointed efforts and initiatives of the individual actors at plot level, coupled with intervention by grassroots leaders, especially in promoting common welfare, generate city form that reflect the requirements, expectations and aspirations of the residents.

Chapter 6: Conclusion

The study has emphasised the role of urban residents in creating relevant urban space in the situation of a weak formal structure. Based on a specified locality, it has revealed that the unconceived physical urban morphology is the result of negotiated socio-economic practices of the various actors involved in the transformation process. Two out of three main questions of this study are: ‘*How do individual practices in urban space influence the resulting urban form?*’ And, ‘*What kind of urban spaces are created and how are they organised, used and maintained?*’ Chapters three, four and five have each answered both questions at different levels depending on the respective area of concentration. Each of these chapters has dealt with both the *process* and the *product*, which answered questions *how*, *why* and *what*. Chapter six presents the concluding reflection on the empirical study put forward in the preceding chapters. Responding to findings resulted from empirical study, the reflection is also made on the third main question: ‘*How best can intervention in unconventional urban processes be carried out?*’

6.1 Reflection on findings

The general observation of the process of creating urban space that shapes the urban form, at least in the suburban areas in the case of Dar es Salaam city, can be credited to the socio-spatial practices of urban residents. It was found that a certain urban culture of confronting real practical urban spatial matters was being built through experience of succession and the continuing practices of residents in their everyday urban life. Stories told gave some clue as to how perceptions of and attitudes towards city life changed over time, with their associated socio-economic consequences. This had a substantial impact on how urban space was organised to accommodate

various spatial practices embedded in urban functions such as residing, working, recreating and circulating.

An attempt was made to understand urban form through the transformation practices of individuals at plot level. These have revealed the impact individuals have on the form at urban level although their decisions and actions were more or less influenced by other actors at various levels and other prevailing socio-economic forces. The basic practical activity of transforming the urban space by the residents involved the construction of their own residential dwellings. Meeting the need for community services was another challenge that was faced and confronted accordingly at individual or community level. Yet, urban life was not only about housing and community services but also about being able to make an income that would meet the costs of urban life. In this way, urban space, which was meant for individual residential development, could partly be used as a source of livelihoods. The diversification of investment in individual plots is one of the strategies to optimise the exploitation of space value, thus creating a basis for income generation. However, individuals could not act in isolation from the larger urban level in transforming urban space but could work with fellow developers as well as the norms instituted by the local administration at the grassroots in order to promote collective urban requirements. Professional inputs sponsored by the urban authority and the state had little impact on the local transformation practices determining city form.

The common understanding provides that the responsibility for conceiving, designing, planning and implementing of the city plans is entirely on professionals under the auspices of the city authorities and the state. This conception, as revealed by this study, is rarely successful in creating the city that meets social, economic and cultural expectations and needs of urbanites in this context. The notion has left professionals, city authorities and the state in a bleak situation as the results of their designs and plans impact very little to the real transformation of the city. The practices of residents acting on individual basis, in groups or in collaboration with local leadership in transforming the city have significant impact to the form. Thus, the making of city in this context should take on board the potentials held

by residents in the process of making the city during conceiving, developing and implementing the professional city designs and plans. Urban residents as critical actors in transforming the city are crucial partners in the whole process of professional practices in transforming the city of today in Tanzania and Africa at large.

The nature of urban form in suburban areas in Dar es Salaam is influenced by the fact that land is owned privately. This facilitates a flexible access to plots by varying social income groups. Plot development requirements are less restrictive and adaptive to varying needs. Different needs regarding plot development lead to organic form of the neighbourhood. Land ownership and modalities for development at plot level and neighbourhood level are communally developed at local level. For instance, land transfers are made swiftly as soon as agreement is reached between a buyer and a seller, land secure tenure is communally developed and requirements for plot development are flexible and less restrictive.

Both formal and informal strategies for building up the settlement are used. For instance, both professionals and local artisans (*mafundi*) are employed in design and construction of buildings. Also, both public utility companies and local initiatives are involved in provision of community infrastructure and services. The development projects on plots are self-financed by developers leading to varying development plans and hence an organic and fragmented urban form. Most development process at plot level progress incrementally and this is replicated to the growth at neighbourhood, district and city level. The need to use plots as a source of livelihoods, apart from residential purpose, result in higher density in some areas and lead to less outdoor space. Generally, the combined efforts of residents at grassroots level and local leaders are the important drivers in the production of urban goods and services in most informal settlements.

In most cases, the dominating individual practices overshadowed the need for provision of community infrastructure and services. For instance, vehicular access roads to some plots were not provided and land for community services such as market, schools, parks and others was hardly provided. Due to the limited availability of public space, roads and paths was partly *de facto* public space. In

this way, actors could use strategies such as creating groups with common interests to address certain social needs by using formal and informal processes through which they could access public space for social or economic benefit. For instance, the formation of Kimara informal market by the collaborative efforts of group of vendors and the Sub-Ward leaders is one example of such a strategy. The upgrading programme conducted by the government was also exploited by residents on improving their property rights and contributing to provision of community infrastructure.

Regarding the study of Kimara suburban area, the findings can be generalised as follows:

- Spaces created represented a collection of individual requirements with their qualities embedded in their use;
- Suburban migration was part of urbanites' strategic means of stabilising and consolidating their urban life;
- The escalation of informal urban practices has led to rise of grassroots institutions that manage transformation operations;
- The political elements through Sub-Ward and Ten Cell Unit leaderships play an important role in making the operations at the grassroots level work.

6.1.1 Spaces created represented a collection of individual requirements with their qualities embedded on their use

Spaces created were the result of an amalgam of individual requirements situated within the wider set of individual and collective knowledge of urban socio-spatial conditions with their qualities embedded on their use. This collective knowledge afforded a relative balance and certain rationality displayed by the urban spatial organization.

Plot development, with all the decisions and actions associated with its integration into urban space in Kimara settlement was carried out individually, as described in Chapter Three. The activities at individual plot level were usually a part of other numerous individual activities in the block or neighbourhood. In this way, the development activity in one plot took place while recognising that of the others,

which thus dictated each other's moves even without direct contact or confrontation. This also indicates that each individual developer had a goal to achieve in his development project, although there were 'unspoken' common goals that all developers were aiming at. Among others, in recognition of the destiny of the common urban environment the spatial implication would be shared. For instance, some respondents acknowledged that they chose their location in the areas already occupied by a substantial population so that they could exploit the benefit of living in a group or cluster, such as sharing the cost of the provision of services, security benefits and others. Further, recognition of their differences in their development activities and their use of space made them tolerant of such diversified urban transformation practices. This recognition of developers' position in relation to others, which could not necessarily be directly communicated to each another, perhaps enabled the means by which tolerance and balance between public and private space was achieved.

Each individual plot developer had a plot use, on which development purposes were set that were respected by all as long as one's plot use would not interfere with others. Further, the public space created through negotiation came out of the demand for its use. The reason why public space was used for roads and paths was because they were needed for access to various plots. Further, the creation of Kimara Mwisho market as a public space was based on the demand for trading space by vendors as well as shopping space by the community in Kimara settlement and the city as a whole.

The quality of space was evaluated by its use rather than physical aesthetics. Panerai (2004: 159) discussing urban tissue by recalling early cities where the aesthetics were secondary points out that: *'it is on the grounds of qualities for the user that we have become interested in the old city and in the analysis of its tissue'*. He further notes that:

Building the city today could mean the wish to find again, perhaps with different forms, the qualities of proximity, mixture and the unexpected, i.e. a public space accessible to all, a variety of mixed activities, a built up area that keeps adapting and transforming itself in unplanned neighbourhoods (Panerai, 2004: 159).

This observation challenges the conventional ideas of isolation of activities, long distance between different functions and inflexibility in adopting change. The qualities of proximity, mixture and the unexpected are closely related to space categories found in Kimara settlement, although they may be more incidental, circumstantial or spontaneous products than the old cities' spatial categories. Although the process of space creation in this case may not be directly linked to old cities, it may conceptually relate to the nature by which the quality of space was appreciated based on its use, with characteristics, such as how related activities could be accumulated in proximity, how flexibly it could handle different conditions and how unexpected circumstances could be accommodated.

In this way, the building of a common understanding among developers in the process of creating a settlement like Kimara through negotiations, succession, concessions and the balancing of private and public space in relation to its convenient use, results in the physical organization of urban space that may not reflect aesthetics, standardized conditions or regular codes, but rather non-standardized conditions, irregular codes and spontaneous processes based on real everyday life's demands. The rationality of urban space organization and use in this case may, therefore, be based on to how convenient various actors involved in space production have reconciled the distribution of space categories and their associated uses.

6.1.2 Suburban migration was part of urbanites' strategic means of stabilising and consolidating their urban life

Suburban migration was not only the most affordable and flexible means for urbanites with different needs to access urban space but also the strategy to stabilise and consolidate their varied socio-economic positions in urban life. Suburban areas in the city of Dar es Salaam are growing and consolidating. Contrary to the escalation of suburban areas in some Western cities, which involve the privileged social class, the growth of suburban areas in Dar es Salaam involved a mix of social income groups. As reported in chapter three, suburban areas like Kimara settlement have been transformed from an agricultural into an urban area. The land was owned privately by farmers or speculators from whom the land seekers could buy. The processes of land acquisition and tenure arrangements were open,

accessible and flexible so that people from various walks of life would be attracted to acquire land and invest accordingly.

Contrary to the neoliberal conception of urban space as a means of capital production or of creating a marketable commodity for immediate exchange, urban space in the Kimara suburban case was used by most plot developers as an important means of, apart from owning residential homes, acquiring an urban livelihood. The dominant plot-by-plot development of most individual developers was residential dwellings. The residential dwellings, which were usually constructed incrementally, were the sole property of the owner and thus rarely commoditized as a property for immediate exchange. Even the plot development plans of most owners were based on the permanent occupation of space rather than short-term targets for capital creation. The permanency of plot owners' occupation of property was primarily based on their incremental mode of production of investment, which had no specific time duration. Secondly, it was the owner's diversified investment in the plot involving his residential dwelling and other income-generating investments that consolidated the owner-space attachment. Perhaps the idea of commoditization of ordinary landed property could be viable when a continuous supply of a variety of landed properties would be available so that they could be accessed by people from all income groups or, possibly, when the capitalist mode of production would make sense in a culture where not every value is represented by money.

The central investment in this permanently occupied space was the owner's residential home, which signified his social position, status, identity and reputation. Therefore, any available investment opportunity on the owner's plot was captured through mobilising any resources at hand. Further, investment in a residential dwelling, apart from its social implications for the owner, was an economic boost to urban life as it saved the owner and his family the costs they would have incurred in rent.

The social respect that the owner acquires on occupation of urban space is a quality that may not be easily evaluated in monetary terms. This may emphasise the bond of the owner to the space as a home. Apart from the owner's diversified investment in the plot for

income generation, the plot could also, on some occasions, be used as an asset to raise funds for development on it based on some informal arrangements. For instance, an agreement can be made with a third-party investor to invest in a plot for a given period of time before the investment reverts to the owner as pointed out in chapter three. Thus, diversified motives associated with the owner and his property transcend the perception of urban space based on physical measures to complex social and cultural dimensions, which together could be captured to facilitate one's transformation strategies.

6.1.3 The escalation of informal urban practices has led to the rise of grassroots institutions

The escalation of the socio-spatial practices of urban residents has led to the formation of grassroots institutions that operate and manage the informal urbanization processes by, for instance, managing the acquisition, transfer and ownership of property, handling plot development projects and organizing the distribution and diverse use of public and private space.

The informal development of settlements in most suburban areas in Dar es Salaam, Kimara settlement being one of them, takes place spontaneously as displayed by the irregular plot layouts and diversified land use. The irregularity of the layout and diversified land use depicts the associated diversity of demands by residents and the individualised means for accessing them. Despite what seems like the irregular or chaotic organization of space or activities, there is still an organizing logic that enables space occupiers to operate within limits, to be able to live and operate side by side, to eliminate potential squabbles or uncertainties and to check and balance the harmonious access to and use of space.

Urban areas in this context are places where public facilities are rarely provided by the state. This has led the urbanites to acquire great collective knowledge based on experience of prevailing urban conditions as a result of growing maturity in urban life. Thus, most provisions for creating a conducive environment for access to and use of urban space in informal areas were under the control of urbanites with limited support from the state.

The process through which the land seekers pass through to acquire land was handled through a developed tradition that has become part of everyday life in urban areas and has been built through the experience of the residents in their socio-spatial interaction in the informal settlements. The process involves various people in the network at various levels working under the control of the urbanites themselves in the form of grassroots institutions. In the absence of state control and guidance for informal development, grassroots institutions using both formal and informal means maintain order and establish a mechanism by which decisions and actions of different actors at different levels are checked and balanced. For instance, information on the availability of property in the market was held by the community and could only be retrieved from it by members of the community whenever they needed it. Further, security of tenure could be socially attained by a person known to own property in his or her community without the need for written evidence. This enabled property transactions between parties to take place confidently without causing disputes, thus contributing to a smooth transformation process. The experience shared by Hamdi (1995: 13) below provides a convenient account of the nature of grassroots institutions pointed out here:

In time, people gained a substantial body of experience about how best to build, to connect to utility lines, to profit from or dodge the authorities. It is a process of doing and learning built up through individual experiences and passed on to others in a variety of formal and informal ways. If things go wrong or do not work as well as expected, no-one needs to step in with elaborate explanations. People will usually know, or will have a theory about what works and why and what does not work or what they need or do not need.

If it was land invasion – squatters – that got a development started, someone will have prepared plans setting out a few simple rules for who will get what and where, reserving lines of least resistance for invasion and building. Otherwise these rules may have been set through the sale of agricultural sub-divisions, which will regulate the pace and form of development. With this general framework, which itself consolidates and become specific over time, people will device rules and improvise services as they go

tailored to needs, aspiration, income and profit. The marketplace, both formal and informal, will have much to say about what happens, as will respected elders and rituals (Hamdi, 1995: 13).

It was also found that knowledge had been accumulated on local construction methods, so that in most cases people were informed, for example, that soil conditions had an effect on the foundations of the house and how to counteract the situation. Further, construction techniques were devised to cut costs and to take account of low or unstable incomes, which meant '*continue to build as you earn*'. This implies that the settlement's growth was also incremental.

The development at individual plot level was interactive in the sense that it happened alongside other developers with whom a certain spatial organizing logic had to be created. This interaction, not necessarily direct, was built on the collective knowledge that created norms, values and ethics that managed and balanced individual operations or the expected operations of others in private and public territories. This study indicated that a number of development interactions took place, especially recognising the importance of neighbours who share a common goal of integrating into urban life, each in his own way yet living side by side, respecting one another. It was through this spirit that a number of residents came together in a neighbourhood to live next to each other, taking the opportunity to provide for their individual requirements and engage in the provision of collective requirements such as roads, paths, water supply, solid waste collection, storm water channels and others. As such processes were taking place, grassroots institutions were being built and rebuilt.

6.1.4 The political elements through Sub-Ward and Ten Cell Unit leaderships play an important role in making the operations at grassroots level work

The political administration at the local level, with the Sub-Ward and Ten Cell leadership as the lowest units of the administrative structure, are part of grassroots institutions. The role of Sub-Ward and Ten Cell leadership in the development of urban space at the local level in the suburban areas was highly significant. Practices that impact space change were part of those factors of significant political interest, thus closely involving the local political leadership. Ten Cell

leaders and Sub-Ward chairpersons were elected from people in their areas of jurisdiction. This made such leaders, as political leaders, do their best to meet the expectations of their voters.

Ten Cell leaders were involved in land transfer more as *'legal'* officials, but most importantly, as local leaders who were conversant with the property ownership conditions in their area. This position of the local leadership mostly boosted security of tenure, which encouraged serious investment. This also provided the Sub-Ward and Ten Cell leadership with the mandate to get involved in mediating quarrels between people, most of which involved plot boundaries in their area of jurisdiction.

Local leaders were not directly involved in individual development at plot level as they had no mandate or resources to interfere but they could provide logistical support if needed and their presence made an impact as representatives of authority. The involvement of local leadership in space development was based on their being part of the local community and not because there were official city guidelines stipulating their involvement. Apart from involvement in people's matters concerning space change, local leaders also were well placed to understand the social, economic, political and cultural needs of the people, which enabled them to deal with them at the local level or to refer them to authorities at higher levels.

6.2 Relevance to cities in Tanzania

Most land development outside the central parts of cities in Tanzania is carried out informally. The informal process covered in Chapters Three, Four and Five are examples of what is taking place in many such areas. The result of such informal practices dictates the form and the way in which the city functions. This study has demonstrated how informal actors, especially ordinary city residents, contribute to the development of the city on a larger scale by looking at individual development practices at plot, cluster and block levels. Despite the challenges confronted by informal actors in the process of transformation, such as the lack of expertise and resources for planning and the provision of some urban public facilities, a substantial amount of organization of space at urban level was being

achieved. Although individuals concentrated on developing their own plot, they were also concerned about how they were connected to the larger city (at least at block or neighbourhood level) and so they devised some strategies to achieve that purpose. The organic organization of the city layout was the result of the amalgamation of fragmented and incremental decisions made by individual developers at plot level or by groups of actors at various spatial levels of the city.

The strategies devised, mostly by individual developers and local city administrators at Ward and Sub-Ward levels to organise and utilise the space, had a substantial impact on the neighbourhood. The issue of achieving a balance between individual and public interests as regards space was observed. Dependence on disjointed individual decisions for creating balance between the two resulted in more emphasis being put on private interests and therefore less space was provided for public purposes. The criteria for deciding on the provision of public space and facilities were based on the demand at cluster, block or neighbourhood level. In this way, most public space was covered by the public facilities provided through residents' initiatives. In this regard, access roads and paths (which were mainly the products of local initiatives), apart from providing the means for circulating, were *de facto* public space where other public functions such as social gatherings, playing, trading and parking could take place. Despite the development by individual developers of an instrument for organizing the urban environment in their communities, they did not have sufficient resources, capacity or expertise to make decisions on providing enough public space, which was important for organising space in the city on a larger scale.

The success or failure of the continuity of spatial organization at district or city level has to depend on how a variety of spatial organizations achieved at neighbourhood level are connected to each other. This is the point at which, despite the observed positive spatial elements resulting from individual practices for organizing urban space informally at neighbourhood level, the informal process of organising space to achieve a relatively functional city may have limitations. The city is a system where different parts have to be reconciled so that it works as one. The fragmented organised neighbourhoods as a result of isolated informal processes may not

connect properly to each other to bring about continuity and hence a functional city. At this point, professional input in the form of intervention by public institutions, such as municipal councils and the state, may become necessary. Such intervention has to be informed by the socio-economic context and the real practices of key actors in the process. While most transformation activities are carried out by individual developers in informal settlements, public institutions and professional intervention should aim at facilitating the integration of the isolated spatial organization achievements by people at the lower urban level into the larger city.

It is clear that public institutions do not have sufficient resources to provide infrastructure and services to a whole stretch of urban areas to match the demand. However, the fact that urban residents provide themselves with most urban services, though incrementally and rudimental in some instances, this should be a relief to the public institutions, as resources for some service provision are provided directly by residents. Likewise, public institutions and professional efforts can also adopt the incremental process in their transformation operations as a convenient means of coping with their resource deficiency as well as building the culture of *'design and planning by learning from the field'*. This may give public institutions the opportunity to keep pace with the informal development process and also maintain its presence and influence.

Regarding the lack of resources and capacity by individual developers to provide public space and facilities that may cater for continuity of the functional city on a larger scale, the public institutions and professionals have to take that role. The public institutions and professionals can plan for the provision of basic urban facilities by predicting the trend of informal transformation activities and designating space for them in advance. The public institutions may achieve this by utilising more appropriately the designing and planning potential of residents and their local administration of Sub-Wards and Ten Cell Units as revealed in this study. The hazardous space and natural resource areas could also be identified to deter

informal development taking place there⁷¹. The actual public facility may not be provided instantly but as long as space for it is specifically indentified and protected, it may be provided later, even after informal development has intensified in the area. The prior identification and protection of space for public facilities and the incremental arrangement for their provision will ensure that essential services are provided in the informal settlement and, most importantly, an integrated system of public space at city level will facilitate the proper integration of various neighbourhoods to form a well connected functional city. This arrangement may also reduce the cost of providing public facilities through avoiding compensation for expropriating the property of owners.

6.3 Relevance of informal urbanity in African city

It should be noted that until the informal sector was recognised as a substantial contributor to the economy operating side by side, or sometimes merged, with formal sector, the negative attitude to informal practices and their contribution to urban development, including the production of urban space informally, has changed somewhat. This recognition of informal urbanity as an integral part of the city extended the boundaries of social space to include not only the poor as a social group with the right to the city but also other avenues of production of urban space were made open to the whole urban population. Eventually, this encouraged urban residents, especially the poor, to devise creative means for consolidating and improving their living environment from bad to better conditions. Again, it provided better-off residents with alternative means for accessing urban space in a situation of weak and unreliable formal urban structures. In this way, the poor were also recognised as substantial contributors to the city economy as Freund (2007: 155) notes:

The parasites, the shack-dwellers, the unemployed women instead of being seen as dragging down healthy forms of development in the city, began to be looked at as the authentic builders of African cities, as part of a process of development from below. . . .

⁷¹ The informal development takes place in safe and prime areas in the early stages. But as the development intensifies and the land become scarce, hazardous areas such as flood-prone areas are also occupied. This also puts natural resources such as drainage routes, and water sources, such as streams, in danger of being destroyed by informal development.

. . . Far from being parasites, such poor dweller in the city are there for a reason, to make themselves and their families a better life; they perform important services, create their own employment and make useful contribution to the economy. Such people, far from dragging down the economy, are actually engaged in building it up (Freund, 2007: 155).

This enabled informal developers to survive and enjoy certain rights to the city that created the potential for improving their property. The question was how the informal contribution to the production of urban space and the formal process could be integrated to form the overall urban programme, representing sustainable urban development.

The misconception of urban design (especially the way the zoning approach is conceived in this context) was, and still is, part of the dominant orthodox of most African cities, whereby the city is considered as a *product* rather than a *process*. Conceiving city as a product requires that ready-made products are available for its citizens to consume to their satisfaction. However, the ‘designed’ provisions are mostly irrelevant to users because they hardly respond to real world needs nor do they accommodate the associated urban processes. This leaves most convenient provisions to be sorted out informally by the urban residents themselves.

The polarised notion of informal, usually considered illegal and residual, and formal, considered legal and real, has continued to overshadow the practices of professionals in urban authorities and states. Therefore, real professional efforts to deal with serious design and planning issues concerned with the local reality of urban conditions have not yet given them their full attention. As it was observed in Kimara, the attention is mostly limited to regularising and formalising the informal setup taking place in very small sections of the city and which greatly depended on dwindling external funding that led to sustainability problems for most projects of this kind. On the other hand, professional formal design and planning has hardly succeeded in creating a city that meets the demand of all urban citizens for accessing urban space, but instead their design approach still encourages the division of social groups. In what Davis (2006: 96) termed as ‘Hausmann in the tropics’ representing the creation of

a dominant social class associated with the segregated planning of African cities, he noted that:

These polarized patterns of land use and population density recapitulate older logics of imperial control and racial dominance. Throughout the third world, postcolonial elites have inherited and greedily reproduced the physical footprints of segregated colonial cities. Despite the rhetoric of national liberation and social justice, they have aggressively adapted the racial zoning of the colonial period to defend their own class privileges and spatial exclusivity (Davis, 2006:96).

Apart from criticisms directed at African urban professionalism or even the adopted urban policies for their failure to provide inclusive rather than polarised urban space, African professionals and policy makers have mostly limited themselves, probably unconsciously or overshadowed by their western education background, to western urban models in approaching the African urban design problem. The urban design based on the zoning approach that divides cities into four functions and three densities derived from the ‘city as a machine’ model is one approach that is still embraced for addressing the urban design problem in African cities. The idea of the model was to capture the modern scientific innovations developed during the industrial revolution in order to solve the urban design problems of industrial cities. The city had to be divided into isolated zones of residence, work and recreation, connected by transport corridors for automobiles and public transport to ferry people, goods and services. These projects were highly dependent on the technological and financial resources of industrialised economies of the West.

The modern urban products in the African context have hardly achieved the purpose of their design. The modernist urban plans that remain locked in city municipalities’ office drawers are the evidence of their utter ‘impracticability’. In response, natural urban growth that takes into account the real local socio-economic conditions takes place incrementally and successively through the initiatives of urban inhabitants. Kimara settlement represents an informal process in which residents were involved in the production of urban space tailored to their needs, aspirations, income and others. The mechanism

for space production was complex due to the heterogeneity of the groups involved and the outcome expected.

This complexity could be revealed by the resulting informal city with relatively substantial continuity, rationality and functionality as per the socio-economic context despite the individual mode of production in the plot-by-plot development process. The people planned and designed the city in their endeavour to solve the prevailing practical problems, by using their practical experience, conducting experiments and sharing their knowledge of the field in terms of incremental progression. The space created was valued more for its convenience than its physical form. The essential part of the results was the relevance of the private and public space created to associated community services and certain opportunities created in the process for employment and income generation. Furthermore, most urbanization projects were financed by the meagre resources accumulated by the residents themselves.

This implies that urban residents have the capacity to act accordingly with tacit knowledge of local urban conditions, which can make a substantial contribution to the urban transformation discourse, as affecting the city of Dar es Salaam or other African cities. Although the informal process of producing urban goods and services is appreciated, there is still the challenge of achieving a comprehensive urban spatial development with isolated and ill-equipped ordinary urban residents. From this point of view, the professional input and the policy implication in this case have to be based on an approach that enhances the residents' efforts to provide their own relevant urban space by protecting public interests, creating a mechanism for the connecting parts to the whole and providing room for the incremental provision of community services and infrastructure.

6.4 General conclusion

It has been revealed that the practices of informal actors in organising urban space were not necessarily spontaneous or irrational. The development strategies of developers individually or in groups at plot, cluster, block and neighbourhood levels revealed substantial rationality in sorting out spatial requirements that met the prevailing

socio-economic conditions. It has also been revealed that the space created by informal actors was not only designed to accommodate specified functions but also the means by which livelihoods could be acquired. Given the fact that a majority of actors belonged to the low income social group, various strategies were devised to exploit the value of urban space as much as possible to transform it into various ways of generating an income.

Moreover, it has been revealed that cities, especially the settlements escalating on the periphery, are created incrementally by the deployment of the meagre resources of actors the majority of whom are low income earners. The urban form is thus the result of a combination of negotiated individual decision making and transformation practices. This has led to irregular and organic organization of the physical layout of the city which, although it mostly met the requirements of the users conveniently, it may not attract professional observers, who regard regularity and standardization of physical form as the criteria for a proper city. While modern design and planning of cities mostly provide for rigid, standardised and specific space use, informal space production was dynamic, responsive and adaptive. This provided for the meeting of various needs and capacities of different developers, which thus attracted most developers from all social income groups.

It has been further revealed that the creation of cities in this context may not necessarily depend on huge expensive projects with extensive dependence on professional input as may be demanded by conventional tradition. Small uncoordinated individual projects carried out without or with minimum central control, but in recognition of basic rules and codes developed informally to guide individual urban transformation practices, could be an alternative approach by which a relatively sensible city could be created. The experience gained from the practices of various actors participating in the transformation process was consciously or unconsciously building up of a lot of local knowledge that governed the process. Even the authorised bodies empowered to design, plan, control and regulate the terms of urban transformation were governed by the transformation practices of the residents. The regularization process being carried out in Kimara settlement by the MLHHSO could be an example of the

influence of residents' transformation practices on the actions of bodies entrusted with designing and planning the city.

The local knowledge on 'what, how and why urbanites organise space the way they do' is sometimes ignored or underrated by modern designers and planners. This may explain why the design and creation of a city should not be managed entirely by professionals sponsored by city authorities or government that usually use a top-down approach, which usually fails due to the lack of adequate and appropriate information on the real condition of the prospective users. This study has revealed that it is difficult to predict the future of urban form if its creation depends on the deployment of the meagre resources of urban residents. Even individual developers did only the plans and implementation of projects they could afford at the present time. They usually attempted to make a provision for future incremental development that would depend on 'what comes out of the future'. Generally, any professional design and planning proposals may have to take these uncertain, complex and unpredictable situations into consideration in order to accommodate the key requirements, expectations and aspirations of the residents in the context where fewer relevant urban products and services are expected from the city authorities or government.

The positive elements observed in the production of urban content in this study were recognised with respect to the socio-economic context in place. Despite the positive elements observed there existed challenges that demanded the coordination of management and professionals that could be sponsored by the city authority and the government. Although services were mostly provided by individual developers in isolation or in groups, they were not equipped enough to be able to identify and provide sufficient community infrastructure and services efficiently. For instance, there were some excessively narrow roads, some parts of the neighbourhood were not easily accessed by vehicle, and space for the provision of public facilities was not provided in some cases. Therefore, it was difficult to achieve a balanced distribution of urban services or in some cases individual requirements overshadowed public requirements, leading to some conflicts between residents in the block or neighbourhood. The dependence on incremental and successive

development by residents could only lead to an ill-connected neighbourhood that could lead to mobility problems, difficulties in providing services and management complexity at a higher city scale. The great challenge is, therefore, how to integrate efficiently the ingenuity of residents' transformation efforts and government institutions' strategies to create a city that balances appropriately the private and public requirements at all city scales.

Bibliography

Abebe F. (2011), *Modelling Informal Settlement Growth in Dar es Salaam, Tanzania*, Masters Thesis, University of Twente, Netherlands.

Acioly C. (2007), *The Challenge of Slum Formation*, in Land Lines, Cambridge, Lincoln Institute of Land Policy

Anyamba T (2006), “Diverse Informality” *Spatial Transformation in Nairobi: A study of Nairobi’s Urban Process*, Doctoral Thesis, The Oslo School of Architecture

Bahendwa F. (2005) *Improving Outdoor Living Spaces, An account of spatial qualities and activities, A Case of Buguruni Mnyamani Informal Settlement in Dar es Salaam City, Tanzania*, Masters Thesis, SEARCH Programme, Oslo School of Architecture and Design, Norway.

Bentley I. (1999) *Urban Transformations, Power, people and Urban design*, London, Routledge

Berry S. (2002) *Debating the Land Question in Africa*, in *Comparative Studies in Society and History*, Vol. 44: pp 638-668, Cambridge Journals online

Brennan J. and Burton A. (2007) *'The emerging metropolis: a short history of Dar es Salaam, circa 1862-2005.'* in Brennan J., Burton A. and Lawi Y. (eds.), *Dar es Salaam: Histories from an emerging African metropolis*. Dar es Salaam, Mkuki na Nyota, pp. 13-75

Burgess R., Carmona M. and Kolstee T. (1997) *The Challenge of Sustainable Cities: Neoliberalism and Urban Strategies in Developing Countries*, Zed Books, London

Burra M. (2004) *Land Use Planning and governance in Dar es Salaam: A Case Study from Tanzania*, in **Hansen, K. and Vaa, M. (eds)** *Reconsidering Informality: Perspectives from Urban Africa*, Nordic Africa Institute

Castillo J. (2000) *Urbanism of Informal: Spatial Transformations in the Urban Fringe of Mexico City*, Doctoral Thesis, UMI Dissertation Services, Ann Arbor, Michigan

Claudio A. (2007) “The Challenge of Slum Formation” in *Land Lines*, Cambridge, Lincoln Institute of Land Policy

Coupland A. (ed) (1997), *Reclaiming the City: Mixed use Development*, Routledge

Creswell J. (1994): *Research Design: Qualitative and Quantitative Approaches*, London: Sage Publications, Inc.

Cuthbert A. (2006): *The Form of Cities*, Oxford, Blackwell Publishing

Cuthbert A. (eds) (2003): *Designing Cities: critical readings in urban design*, Oxford, Blackwell Publishers Ltd.

Davis M. (2006) *Planet of Slum*, Verso, London

De Soto H. (2000): *The Mystery of Capital: Why Capitalism Triumph in the West and Fails Elsewhere Else*. Basic Books, New York

Dear M. (2000): *The Postmodern Urban Condition*. Oxford, Blackwell Publishers

Dovey K. (1999): *Framing Places: mediating power in built form*, London: Routledge

Downton P. (2003), *Design Research*, RMIT University Press, Melbourne

Duany A. and Plater-Zyberk E. (1993), *The Neighbourhood, the District and the Corridor*, in LeGates R. and Stout F. (eds) (2007), *The City Reader*, 4th Edition, Routledge, London and New York

Durand-Lasserve A. & Selod H. (2007) “*The Formalization of Urban Land Tenure in Developing Countries*” paper presented to World Bank’s 2007 Urban Research Symposium, May 14 - 16, Washington DC

Elleh N. (1997): *African Architecture*, New York, McGraw-Hill

Fernandes E. and Varley A. (1998): *Illegal Cities: Law and Urban Change in Developing Countries*, London: Zed Books Ltd, London

Fitzpatrick D. (2005) “*Best Practice Options for the Legal Recognition of Customary Tenure*” in *Development and Change* 36(3): 449 – 475

- Foster V. and Briceño-Garmendia C. (eds) (2010)** *Africa's Infrastructure A Time for Transformation*, A co-publication of the Agence Française de Développement and the World Bank
- Freund B. (2007):** *The African City*, Cambridge, Cambridge University Press
- Gauthier P. (2005):** *Conceptualising the social construction of urban and architectural forms through the typological process*, in *Urban Morphology* (2005) 9(2), 83 - 93
- Gillham B. (2000)** *Case Study Research Methods*, Continuum, London.
- Gugler J. (ed).(1997):** *Cities in the Developing World*, Oxford University Press
- Gugler J.** *Urbanization in Africa South of the Sahara: New Identities in Conflict* in **Gugler, J. (ed). (1996):** *The Urban Transformation of the Developing World*, Oxford: Oxford University Press
- Habraken N. (1998):** *The structure of the ordinary: form and control in the built environment*, Cambridge, MIT Press
- Hamdi N. (1995)** *Housing Without Houses: Participation, Flexibility, Enablement*, Intermediate Technology Publication, London
- Hansen K. and Vaa M. (eds) (2004),** *Reconsidering Informality: Perspectives from Urban Africa*, Nordic Africa Institute
- Harvey D. (1986):** *Consciousness and the Urban Experience*, Baltimore, The Johns Hopkins University Press
- Harvey D. (1997)** *Contested Cities: Social Process and Spatial Form*, from Jewson N. and MacGregor S. (eds) *Transforming Cities*, in LeGates R. and Stout F. (eds) *The City Reader*, 4th Edition 2007
- Harvey D. (2000):** *Spaces of Hope*, Berkeley: University of California Press
- Hill R. (1948),** *Designs and their Consequences: Architecture and Aesthetics*, Yale University Press,
- Huchzermeyer M. and Karam A. (2006),** *Informal Settlement: A Perpetual Challenge*, UCT Press, Cape Town
- Ibhawoh B. and Dibua J. (2003)** *Deconstructing Ujamaa: The Legacy of Julius Nyerere in the Quest for Social and Economic Development in Africa*, *Africa Journal, Political Science* Vol. 8 No 1

- Jenks C. (ed) (2004)**, *Urban Culture: Critical Concepts in Literary and Cultural Studies*
- Jenks M. and Burgess R.(eds) (2000)**, *Compact Cities: Sustainable Urban Forms for Developing Countries*, Routledge
- Kasarda J. and Parnell A. (1992)**, *Third World Cities: Problems, Policies and Prospects*, by Sage Publications
- Kimaryo J. (1996)**, *Urban Design and Space Use: A study of Dar es Salaam City Centre*, Doctoral Thesis, Dept. of Building Functions Analysis, School of Architecture, Lund University
- Kironde L. (1991)**, *Sites and Services in Tanzania, The Case of Sinza, Kijitonyama and Mikocheni Areas in Dar es Salaam*, in *Habitat International* 15 (1-2), pp 27-38
- Knight A. and Ruddock L. (eds) (2008)**, *Advanced Research Methods in the Built Environment*, Wiley-Blackwell
- Kombe W. and Kreibich V. (2000)**, *Informal Land Management in Tanzania*, Spring Research Series No. 29, Dortmund
- Kombe W. and Kreibich V. (2006)**, *Governance of Informal Urbanization in Tanzania* Mkuki na Nyota Publishers, Dar es Salaam, Tanzania.,
- Kostof K. (2002)**, *The City Assembled: The Elements of Urban Form Through History*, Thames & Hudson Ltd, London
- Laguerre M. (1994)**, *The Informal City*, St. Martin's Press,
- LEAP Core Team (2005)**, *Perspectives on Land Tenure Security in Rural and Urban*
- Lefebvre H. (1991)**, *The Production of Space*, Oxford: Blackwell
- Limbumba T. (2010)**, *Exploring Social-Cultural Explanations for Residential Location Choices, The Case of an African City - Dar es Salaam*, Doctoral Thesis, Royal Institute of Technology, Stockholm, Sweden
- Locatelli F. and Nugent P. (Eds) (2009)**, *African Cities: Competing Claims on Urban Spaces*, Koninklijke Brill, Leiden, The Netherlands
- Lupala J. (2002)**, *Urban Types in Rapidly Urbanizing Cities: Analysis of Formal and Informal Settlements in Dar es Salaam, Tanzania*, Doctoral Thesis, Royal Institute of Technology, Stockholm

- Lynch K. (1960)**, *The Image of the City*, Joint Center for Urban Studies, Massachusetts Institute of Technology, London
- Lynch K. (1981)**, *A Theory of Good City Form*, Massachusetts Institute of Technology, London
- Madanipour A. (2003)**, *Public and Private Spaces of the City*, Routledge
- Malbert B. (1998)**, *Urban Planning Participation: Linking Practice and Theory*, Chalmers University of Technology
- Manji A. (2006)**, *The Politics of Land Reform in Africa* Zed book, London
- Mayer P. (1971)**, *Townsmen or Tribesmen: Conservatism and the Process of Urbanization in a South African City*, Second Edition, Oxford University Press, London
- Mng'ong'o O. (2004)**, *A Browning Process, The case of Dar es Salaam city*, Doctoral Dissertation, Division of Urban Studies, Stockholm, Sweden
- Moshi E. (2009)**, *Urban Transformation: Changing Building Types in Kariakoo, Dar es Salaam, Tanzania*, Doctoral Thesis, The Oslo School of Architecture
- Moudon A. (1997)**, *Urban Morphology as an emerging interdisciplinary field* in *Urban Morphology* 1, 3-10, International Seminar on Urban Form, Journal
- Mrema L. (2008)**, *Public Open Spaces as Everyday Architecture: Msasani Makangira – An Informal Settlement in Dar es Salaam*, Doctoral Thesis, Royal Academy of Fine Arts, Copenhagen
- Murray M. and Myers G. (2007)**, *Cities in Contemporary Africa*, Palgrave Macmillan, New York
- Nachmias and Nachmias (1996)**, *Research Methods in Social Sciences*, New York: Worth Pub.
- Nguluma H. (2003)**, *Housing Themselves: Transformations, Modernisation and Spatial Qualities in Informal Settlements in Dar es Salaam*, Tanzania, Doctoral Thesis, Department of Infrastructure Division of Urban Studies, KTH, Stockholm
- Nkya T. (2002)**, *Many Plans but no Planning: Whatever Happened to Planning for Informal Settlement in Tanzania*, in Kreibich V. and Olima W. (eds), *Urban Land Management in Africa*, SPRING Research Series No 40, Dortmund

- O'Connor A. (1983)**, *The African City*, Hutchinson & Co. Publisher Ltd, London
- Panerai P.; Castex J.; Depaule J. and Samuels I. (2007)**, *Urban Forms: The Death and Life of the Urban Block*, Architectural Press, Oxford
- Parker S. (2004)**, *Urban Theory and the Urban Experience*, London, Routledge
- Peattie L. (1987)**, *Affordability*, Habitat International, Vol. 11, No. 4
- Rakodi C. (1987)**, *Land Layout and Infrastructure in Squatter Upgrading, the Case of Lusaka*, in *Cities* 4 (4), pp 348-370
- Rakodi C. (1996)**, *The Urban Challenge in Africa: Growth and Management of Its Large Cities (Mega-city)*, United Nations University Press,
- Rapoport A. (1976)**, *The Mutual Interaction of People and Their Built Environment. A Cross Cultural Perspective*, Aldine
- Rapoport A. (1977)**, *Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design*, Pergamon Press, Oxford
- Rapoport A. (1982)**, *The meaning of the built environment: a nonverbal communication approach*, University of Arizona Press
- Rapoport A. (2005)**, *Culture, architecture, and design*, Locke Science Pub. Co.
- Robbins E. (1989)**, *Culture, Policy, and Production: Making Low-Cost Housing in Sri Lanka*, in **Low S. and Chambers E. (eds)** *Housing, culture, and design : a comparative perspective*, University of Pennsylvania Press, Philadelphia
- Robbins E. (2008)**, *Formalization of Land and Housing Tenure to Empower the Poor: Simple Nostrum or Complex Challenge* in **Banik D. (ed)** *Rights and Legal empowerment in Eradicating Poverty*, pp 175 – 200, Ashgate
- Ross F. (2005)**, *Urban Development and Social Contingency: A Case Study of Urban Relocation in the Western Cape, South Africa* in *Africa Today*: 19-31
- Rossi A. (1997)**, *The Architecture of the City*, London, The MIT Press

- Roysten L. and Narsoo M. (2006)** *Land, markets and informal settlement policy in South Africa*, paper presented to the International Colloquium At the Frontier of Land Issues
- Rykwert J. (2000)**, *The Seduction of Place: The City in the Twenty-First Century*, Pantheon Books, New York
- Salm S. and Falola T. (2005)**, *African Urban Spaces: in Historical Perspective*, University of Rochester Press, Rochester, USA
- Sanga C. (2004)**, *Land Sector as an Impediment to Mortgage Lending in Tanzania*, 3rd FIG Regional Conference, Jakarta, Indonesia, October 3-7, 2004
- Shane D. (2005)**, *Recombinant Urbanism: Conceptual Modelling in Architecture, Urban Design, and City Theory*, John Wiley & Sons Ltd, West Sussex
- Sheuya S. (2007)**, *Reconceptualising housing finance in informal settlements: the case of Dar es Salaam, Tanzania*, in *Environment and Urbanization* 19: pg 441 - 456, Sage, online version <http://eau.sagepub.com/content/19/2/441>
- Short J. (2006)**, *Urban Theory: a critical assessment*. New York, Palgrave Macmillan
- Simone A. (2004)**, *For the City Yet to Come: Changing African Life in Four Cities*, Duke University Press
- Simone A. and Abouhani A. (eds) (2005)**, *Urban Africa: Changing Contours of Survival in the City*,
- Smith D. (1992)** *Urban and Regional Change in Southern Africa*, Routledge
- Sofer C. and Sofer R. (1955)**, *Jinja Transformed, East African Studies*, East African Literature Bureau, Nairobi
- Sommers M. (2001), *Fear in Bongoland: Burundi refugees in urban Tanzania*, Berghahn Books, the British Library
- UN-Habitat (2003)**, *The Challenge of Slum: Global Report on Human Settlement*. Earthscan, London.
- UN-Habitat (2007)**, *Situation Analysis of Informal Settlements in Kampala, Cities without Slums*, Sub-Regional Programme for Eastern and Southern, UN Habitat, Nairobi

UN-Habitat (2010), *Citywide Action Plan for Upgrading Unplanned and Unserviced Settlements in Dar es Salaam*, United Nations Human Settlements Programme, Nairobi

Wirth L. (1938), *Urbanism as a Way of Life*, American Journal of Sociology, in LeGates R. and Stout F. (eds) (2007), *The City Reader*, 4th Edition

Yin K. (1994), *Case Study Research: Design and Methods*, Sage Publication inc, London.

Appendices

Appendix 1. Issues for Field Data Collection

Appendix 2. Guiding Questions to Residents and Areas of Observations

Appendix 3. Part of summary of residents' responses and reflection to questions on field study

Appendix 4. The Process of Individual plot development: Some detailed Interview Summary

Appendix 5. Some of Interview summaries held with vendors in Kimara informal market

Appendix 6. Property tax demand note for Mr Msalaka

Appendix 7. Letter for research permission

Appendix 8. Residential house drawings for one of Kimara's residents.

Appendix 1. Issues for Field Data Collection

Data collection at plot level development

This study seeks to address the impact of urban residents' practices on the emerging urban form in Dar es Salaam city and its consequences for citizens' urban lives. The aim is to describe the engagement of urban residents in informal transformation of urban form in suburban areas with a view to understanding why and how these processes are taking place and their architectural implications. The selected suburban area, with almost all the transformation processes dominated by residents, will be studied in depth as a case study by analysing the urban transformation from the plot level to its implication at urban level. Issues to address in the analysis are: peoples' key preferences for choice of suburban locations, the process of plot acquisition, the mode of plot ownership and plot development, the method of developing urban block, the process of acquiring social services and infrastructure and the involvement of other actors in the development process.

It is considered that an understanding of processes of actors in relation to urban transformation in the informal environment may contribute to the formulation of a better policy to cater for better utilization of residents' transformation efforts and contribute to the intellectual debate on the subject.

Judgments on moving to suburban areas

A sketch of a person's reasons for moving to a suburban area may provide a clue as to what factors influence the resulting form. Suburban areas may not be considered attractive places for urban life since, among other things, they are usually cut off from the central city and lack the services and infrastructure which are not availed in advance. However, a growing number of residents' activities create settlements in such areas. Thus, answers to the following questions will be sought to achieve this objective:

- *How do people get acquainted with suburban areas?*
- *Why do people move to suburban areas?*
- *Where do they come from? (rural urban migrants, city centre- suburban migrants, or both)*

- *What are the criteria for choosing the location in suburban areas*
- *Are family or ethnic connections important in creating suburban communities?*
- *Is the availability of urban infrastructure and services important?*

Ownership and Development on individual plot

This is one of the most important aspects of the study that connects urban residents' practices and the production of the content of urban form. The form is captured from the increment of various individual practices at plot level. The development takes place based on individual requirements, which result in the form responding to the same individual wishes but also contributes to needs that expand from plot level to urban level. This results in heterogeneous form creation and population growth that contribute in different ways, leading to the emergence of complex urbanity. In this way, this study will endeavour to answer the following questions:

- *How is the land acquired and transferred?*
- *What is the mode of land ownership?*
- *Who is the owner and what does s/he do for a living?*
- *How is the size of plot decided?*
- *What is the purpose of plot development?*
- *How is development planned/organised on the plot?*
- *How does the building process take place?*
- *What is the building size, plan, material, type, quality and cost, what are the architectural considerations?*
- *Who are involved in design and building production?*

Development of cluster or block

The study aims to look at the building up of urban form from individual plot level to the urban level. It will attempt to shift from concentrating on individual interest at plot level to some extended interest of the public at urban level. In order to make this process possible, efforts will be made to identify clusters or blocks which will be important for describing the city in all scale. In order to achieve this objective the study should answer the following questions:

- *How do neighbours relate?*
- *How are clusters or blocks developed?*
- *How do people collaborate to solve or avoid conflict among neighbours?*
- *What comprises a cluster or a block and how it is perceived?*

Social services and infrastructure

It is not uncommon for informal settlements to lack essential services and infrastructure, which may affect the resulting form. However, since adequate social services and infrastructure are important for creating a livable urbanity, this study attempts to find out what efforts are made by individuals and other providers to acquire services and infrastructure in the process of development. The study will thus attempt to answer the following questions:

- *What are the main urban infrastructure and services?*
- *How are urban infrastructure and services provided and who provides them?*
- *To what extent are the present urban services and infrastructure meeting the demand?*
- *How do services and infrastructure affect the process of form production?*

Involvement of governmental and non-governmental institutions

The institutions' recognition of substantial informal innovations in various development programmes may be the contributory factor for their involvement in informal transformation processes. Further, the escalation of informal development challenges in the developing world has attracted various national and international institutions to work directly or indirectly with residents to assist in various efforts of informal sector improvement. Moreover, in some cases, residents have organised themselves in groups of CBO's in order to mobilise resources to improve their urban environment. Regarding these issues, answers to the following questions will be sought:

- *How do actors regard urban institutions and state in their transformation practices?*
- *What and how are the institutions involved?*
- *How useful are the institutions to the transformation process?*

Data collection at an urban level

The study at urban level will take into consideration that the space created by individuals is within the level of human scale. Thus, the analysis within that scale will involve the key patterns of urban space, services and infrastructure, and the circulation of which in combination will give architectural configuration of the area. This will be done mainly through observation, analysis of aerial maps with complementary information from key informants. An attempt will be made to capture any direct or indirect arrangements initiated by the residents to organise urban functional space to suit any local purpose and to assess the architectural character of the form achieved in the process.

Since the informal environment does not distinguish between dwelling, working, shopping and recreational activities, they will be treated as part and parcel in reading the hierarchy of space from private, semi-public to public space. The study will endeavour to capture the collective results which emerge from individual efforts at plot level. It will further try to understand the individual components injected in public space but which meet various individual and public requirements. However, the collaborative efforts of individuals, the local community and public institutions will be appreciated and acknowledged. The combination of such different efforts of different actors will be questioned as to whether they create relevant space suitable for the urban community.

Appendix 2. Guiding questions and areas of observations

Judgment on moving to suburban areas

- i. How long have you been living here?
- ii. Where did you come from and when did you move here?
- iii. What did you consider when choosing this specific location?
- iv. Was there a person you knew when you moved to this area?

Ownership and development of individual plot

Observations:

A sketch of the existing site layout should be made. Any future development learnt from the interview may also be added to the layout. The building type should be identified

Questions:

- i. How did you acquire the land?
- ii. How was the transfer made?
- iii. What mode of land ownership are you using?
- iv. How credible is the mode of ownership you are using?
- v. How did you determine the size of the plot?
- vi. What is the purpose of developing the plot?
- vii. If 'residential', is there any provision for income generation on your plot?
- viii. Did you involve professionals in designing your building?
- ix. How did you manage the construction process?
 - x. Did family size determine the size of your design?
 - xi. How long did it take to finish the construction?
If the construction is not finished, how long has it taken to reach the current stage?
- xii. Did you do the construction right to the end or did you do it in phases?
- xiii. How did you acquire construction finance?
- xiv. What do you do for a living?

Development of cluster or block

Observations:

Identify a number of houses and any other services defined by road as block or identify any other defining elements of the cluster or block if roads do not provide a clue.

Questions:

- i. Do you have any kind of contact with your neighbours?
- ii. How did the development on your site affect the development of your neighbours and vice versa?
- iii. Have you ever met with neighbours to discuss the development issues which affect your collective interests?

Social services and infrastructure

Observations:

To list the type and quality of services and infrastructure available in the specified study areas

Questions:

- i. Is any public service lacking in this area?
- ii. Are you connected to any public services?
Are the connected services reliable?
- iii. Where do you go for shopping, market, worship, medical treatment, school, recreation, and the like?

Involvement of government, city municipal and NGO's

Observations:

List of institutions involved in developing the settlement and the areas of their involvement.

Questions:

- i. What support do you get from the government, the municipality or any NGO for developing your plot?
- ii. Do you get any support from the 'mtaa' or neighbourhood leadership as far as your plot development is concerned?

Guiding Questions for Neighbourhood leadership

- i. What are your duties as far as land development is concerned in your area?
- ii. Are you supposed to be involved in individual plot developments in your area?
- iii. Is there any official requirement for your attention that individual developers have to observe when they are developing their plots?

Guiding Questions for planners

- i. How do informal settlements fit into your daily practice of urban planning in Dar es Salaam?
- ii. Since Kimara area is an informal settlement, to what extent are you involved in its design and planning?
- iii. Are any efforts being made by your design and planning department to ensure certain development coordination in informal settlements is achieved?
- iv. Since most land developments are the results of residents' own efforts, is it fair to regard these people as designers and planners of their own urban environment?
- v. Are there lessons that city planners could learn from residents' own practices in organising urban space?
- vi. Do you think designers, planners and urban residents can possibly work together to build a better urban environment?

Appendix 3. Part of summary of residents' responses and reflection to questions on field study

Judgement on moving to suburban areas

- i. Q: How long have you been living here?

Summary of responses:

Range of years when a respondent moved to his location in Kimara

<i>Year</i>	<i>Number of plot owners</i>	<i>Percentage</i>
<i>1971 - 1980</i>	<i>6</i>	<i>14.0</i>
<i>1981 - 1990</i>	<i>6</i>	<i>14.0</i>
<i>1991 - 2000</i>	<i>15</i>	<i>34.8</i>
<i>2001 - 2010</i>	<i>16</i>	<i>37.2</i>
<i>TOTAL</i>	<i>43</i>	<i>100.0</i>

The rapid expansion of settlements in suburban areas has been a recent trend. The interview, though from a small sample population, showed that in the 70's and 80's the growth of suburban settlements was small but there was a sharp increase in the 90's and into the millennium. This indicates that the number of settlements in the city centre is growing, causing pressure to move to suburban areas. Noisy environment, congestion, pollution and the urge to reduce the rent cost by owning a house were among the factors mentioned by respondents as reasons for deciding to move to suburban areas.

With reference to UN Habitat (2003: 17), the rudimentary analogy to this phenomenon may be the theory of spatial schema of Chicago School that saw the internal spatial organization of cities as an outcome of 'ecological' competition for niches between social classes who behaved like different species in terms of their endowments and wants, and who would compete for different land uses, with the strongest groups taking the most desirable positions and the weaker groups occupying the residual space. This can be caused by the congestion and deterioration in living standards in the city centre that may push rich people towards the suburban areas where they can benefit from a better living environment since they can afford higher rents, higher land prices and higher transport costs. The city centre is replaced by the urban poor who can tolerate the congestion

and lower living standards but yet enjoy cheaper rents and lower transport costs.

Further, relating the Chicago School's theory of spatial schema and the theory of rent gradient of declining land prices and rents, UN Habitat (2003: 17) adds that:

The Chicago schema was put on a more rigorous footing with the advent of neo-classical economics, – in particular, the Alonso-Muth-Mills model, which demonstrated how the 'rent gradient' of declining land prices and rents away from the centre could be calculated from first economic principles, and the location of various groups could be predicted. In the model, residents are considered to have a trade-off between transport costs or time and living space. Each group has a 'bid rent curve' for the amount that they are prepared to pay per square metre for particular locations, and the group with the steepest curve will win. Poorer people, for example, could beat the rich by taking much smaller plots of land at a higher price, accepting higher crowding as the price for location. The poor are where they are because, even with their low incomes, they are outbid by the rich for the areas in which they live, and they pay more than the rich would be prepared to pay to live there (UN Habitat, 2003: 18).

However, the spatial movement in the context of Dar es Salaam city is complex and hardly responsive to the above-mentioned theories. The movement of people from the city centre to suburban areas involves all social classes regardless of their status or whether they are poor, middle class or rich. The land in suburban areas is cheaper and the official planning and building controls, which usually increase the land development costs, are almost non-existent, which means it is definitely accessible by people from all social classes including vulnerable groups such as poor people. Apart from the availability of land at lower cost, there is considerable flexibility in

land acquisition and its development, which makes it affordable for the poor but also attractive to other well-to-do social groups. The low land price in suburban areas creates certain distribution according to social groups' capacities so that the rich may choose to purchase more land and enjoy a better living environment while the poor may acquire smaller plots and modest development in accordance with their limited income. On the aspect of travelling costs, the rich can afford the higher travelling cost to the city centre but the poor, since they are mostly not formally employed, may find informal employment within the vicinity of their residences.

The city centre also includes the enclaves of the rich and the precarious standard settlements of the poor. However, the land value in the city centre is higher than that in suburban areas as supported by the 'rent gradient' model that represents declining land prices and rents away from the centre.

ii. Q: Where did you come from when you moved here?

Summary of responses:

<i>Previous accommodation</i>	<i>Number of plot owners</i>	<i>Percentage</i>
<i>From renting at other location within Dar es Salaam city centre,</i>	33	76.8
<i>From living with parents in the city centre,</i>	2	4.6
<i>From living with a relative in the city centre,</i>	2	4.6
<i>From employer's house in the city centre,</i>	3	7.0
<i>From own house in another location in Dar es Salaam,</i>	1	2.4
<i>From other upcountry regions</i>	2	4.6
<i>TOTAL</i>	43	100.0

The general trend of migration to the suburban areas is that people move more from the city centre than from any other places to the suburban areas. Even the survey in this study with such small sample population clearly supports such a trend.

iii. Q: What did you consider when choosing this specific location?

Summary of responses:

Calmness, availability of public transport, allocated by employer as a farm, just for a 'shamba' (but later the motive changed), inherited, nothing considered but it was important to own land, availability of water supply, power, freedom from congestion of the city centre, escape the landlord nuisance, better living environment.

Mr. Mapunda said: "I checked to see if there was any allocated public function on the master plan before I bought this place... (See Box 3.4)

Mr. Masama said: "I was allocated the land by the military (the employer at that time) as a 'shamba' through the military programme for implementing 'nguvu kazi' campaign... (See Box 3.5)

Ownership and development of individual plot

i. Q: How did you acquire the land?

Summary of responses:

Statistics on how respondents acquired their land

<i>Means of acquisition</i>	<i>Number of plots</i>	<i>Percentage</i>
<i>Bought</i>	<i>37</i>	<i>86.0</i>
<i>Inherited</i>	<i>5</i>	<i>11.6</i>
<i>Allocated by employer</i>	<i>1</i>	<i>2.4</i>
<i>TOTAL</i>	<i>43</i>	<i>100.0</i>

The general trend indicates that land is acquired through the extensive informal land market dominating in suburban areas. Thus the land is principally acquired through buying as indicated by the majority of respondents.

Owners with a lot of land influence the urban configuration by partitioning their land into many small plots of around 20 by 20 metres for sale with a fixed price for each. Land seekers with little money can buy a single plot while those with more money can buy as many plots as they can afford, which they combine into one big plot. Upon selling so many small plots it may result in consolidated

developments with limited space so that infrastructure may be difficult to provide.

Another observed scenario is that land speculators influence to a certain extent the outcome of the development of the buyers. It was revealed that some plot sellers allocate space for roads and paths when they partition their land for sale. The land buyers would not tamper with the provision of paths and roads during the development of their plots since they are beneficiaries of the services. The fact that such service provision is not counted as a part of the land bought contributes to their survival when the plot owners develop their plots.

However, some owners with a lot of land have not fallen into the trap of partitioning and selling. They have maintained their land and developed some of it leaving ample space for future development. Some of them keep part of the land for their children to inherit when they grow up. One example observed was where Mr. Edga, the son of Mr. Haule, built his house on his father's big amount of land. Although the father had cut part of his land and sold it to five other people, including one of his sons, the remaining land is still large enough to distributed to his three children if need be.

Another example was observed at Mrs. Luongo's plot, where her son has built his house on her land and there is no boundary between the two.

Mr. Yahahya said: My parents moved to the city of Dar es Salaam from Kigoma region in 1972. They brought with them the younger children and left behind the elder children of whom I was the oldest...(See Box 3.3)

ii. Q: How was the transfer made?

Summary of responses:

<i>Means of land transfer/ Land ownership</i>	<i>Number of plots</i>	<i>Percentage</i>
<i>Informal letter authorised by local leadership</i>	35	81.4
<i>Title deed</i>	3	7.0
<i>Others</i>	5	11.6
TOTAL	43	100.0

Mr. Joel Mwasanga said: “During land transfer, it is important that all neighbours are present to verify the boundaries in order to avoid misunderstanding at a later stage... (See Box 3.6)

Mr. Mbwana Laki said: “When I bought this land in 1994 it was almost in the bush and very few people were living in this area... (See Box 3.7)

iii. Q: What mode of land ownership are you using?

Summary of responses:

36 respondents had an informal letter authorised by the Sub-ward office in the presence of some local witnesses, which is considered sufficient security of tenure.

3 respondents cemented their tenure security by surveying their plots to acquire title deeds

Mr. Audax Rutta said: “We bought the land for ‘shamba’ purposes in 1986 using the traditional procedure where the land seller and his witness, me with my witness, the ten cell leader and the ward secretary made a team that concluded the land transfer... (See Box 3.8)

iv. Q: How did you determine the size of the plot?

Summary of responses:

<i>Plot size determination</i>	<i>Number of plots</i>	<i>Percentage</i>
<i>Took the size available for sale</i>	<i>31</i>	<i>72.0</i>
<i>Took what one could pay for</i>	<i>3</i>	<i>7.0</i>
<i>Took the size of one’s choice</i>	<i>3</i>	<i>7.0</i>
<i>Increase the size incrementally</i>	<i>5</i>	<i>11.6</i>
<i>Allocated by the one’s employer</i>	<i>1</i>	<i>2.4</i>
<i>TOTAL</i>	<i>43</i>	<i>100.0</i>

v. Q: What is the purpose of developing the plot?

Summary of responses:

<i>Purpose of development</i>	<i>Number of plots</i>	<i>Percentage</i>
<i>Residential</i>	<i>20</i>	<i>46.5</i>
<i>Residential and commercial</i>	<i>18</i>	<i>41.9</i>
<i>Residential and agriculture</i>	<i>5</i>	<i>11.6</i>
<i>TOTAL</i>	<i>43</i>	<i>100.0</i>

Note: For land developments which were only for residential purposes at the time of interview could change in future by the addition of space for commercial or any other extra use since strategic change at plot level is pervasive in informal land development. The commercial activity in this respect involves all income-generating activities including renting but with the exception of agricultural activity. It was observed that agricultural activities are consistently declining while being replaced by increasing densification of residential, commercial and other urban developments.

Land for 'shamba' in suburban areas bought in early times by residents who lived in the city centre was meant to supplement the food supply and provide extra income. In the 1990's the use of the land began to change gradually as more people were attracted to migrate to suburban area, which made 'shamba' owners consider making their 'shamba' their potential home as a refuge from increasing costs and other worsening conditions in the city centre. Secondly, when the farm owners saw fellow farm owners changing the use of their land to residential use, they followed their example. Those owners with abundant land started to partition their land for the purpose of selling it to land seekers who were mainly in need of residential space. Some continued with farming after moving to reside in their gardening land. However, currently owners are complaining about depletion of the fertility of land as they can no longer harvest abundant crops as they used to in the past

Mr. Mwasanga said: "As you see this place is currently only residential in function. This does not mean that it will remain.. (See Box 3.9).

vi. Q: Did you involve professionals in designing your building?

Summary of responses:

<i>Technical services</i>	<i>Number of houses</i>	<i>Percentage</i>
<i>Use of professionals on design stage only</i>	9	21.0
<i>Use of professional on design and construction stages</i>	2	4.6
<i>Use of local artisan (mafundi) in design and construction stages</i>	30	69.8
<i>Design and construct by oneself⁷²</i>	2	4.6
<i>TOTAL</i>	43	100.0

'Mafundi' play a major role in the design and construction of buildings in suburban areas. Most houses are single storey buildings of which 'mafundi' have accumulated extensive knowledge in their design and construction and they do not involve many technical complications. In this way, most respondents appeared to have great confidence in them to meet their design and construction requirements. The use of professionals in design and construction was considered an additional cost of production which could be reduced by using the 'fundi' without losing much of the design and construction quality. When I asked one respondent as to why they would not use experts (wataalamu), he said in Kiswahili, "Sisi tunajenga nyumba za kiswahili ambazo hazihitaji wataamu, hivyo uwezo wa mafundi wetu hawahawa unatosha sana"⁷³, which means "We build local houses which do not need input from experts and thus the skills of our 'mafundi' can appropriately handle them". The design is usually discussed by the owner and the 'fundi' until the right design is agreed upon. The design may involve the whole building if required by the owner. However, the construction of the house may be incremental with respect to the income of the owner. A few rooms may be constructed in the first stage that would be suitable for human

⁷² These were artisans (mafundi) who used that advantage to build their own houses and thus save some labour costs.

⁷³ An interview with Mr. Mohamed Sudi Goza, a resident in Kimara settlement in Dar es Salaam city on 05th February 2010

habitation. At that stage, the family may move in and allow the rest of the construction to take place while part of the house is being occupied. In this way, the construction activity can take place whenever funds are available and can stop for a certain period when funds are not available.

Mr. Audax Rutta said, "I employed an architect to design and do architectural drawings for my house only... (See Box 3.10)

vii. Q: How did you manage the construction process?

Summary of responses:

Almost all respondents buy the building materials themselves and employ a local artisan (fundu) at an agreed labour charge. In the case of the incremental building process, the fundu is engaged whenever a specific construction phase is under way. Professions with varying capacities may be engaged.

viii. Q: Does family size determine the size of your house?

Summary of responses:

Family size is partly considered, although the standard plan is adopted in most cases, which consists of a sitting room, dining room, kitchen, master bedroom, girls' room, boys' room and washroom. Guest rooms are not included in most house plans observed. Tenants may be provided with external washrooms for convenience. However, due to water shortage in some areas in Kimara, washrooms for some family houses were kept outside. Most developers considered that guests and extended family members who may visit or stay for some time may be accommodated within the available space as they are considered members of the family during their period of stay.

Mrs Sarungi said: "Guests of all kind have to be considered when one builds a house in the city... (See Box 3.11)

Mr. Sakafu said: "in determining the size of the house, consideration was made beyond the family size.. (See Box 3.12).

Appendix 4. The Process of Individual plot development: Interview Summary

The preliminary interview conducted with a bigger number of people gave the general idea of the informal transformation process and the overall nature of individual roles in the process. It was then considered relevant to gather detailed information on the individual endeavour to establish himself in urban space. The aim of this part of the interview was to supplement and strengthen the preliminary interviews by filling in any gaps arising in individuals' efforts to establish themselves in urban settings as far as urban form is concerned. Unstructured interviews were adopted to allow respondents to narrate freely in order to gain obtain as much information as possible. The respondents were chosen among the previously interviewed respondents in the preliminary study. Conceptually, the experience gained from the preliminary interviews showed that the informal process by which individuals acquire and develop their land was similar regardless of the difference in their incomes. Therefore, the choice of respondents for in-depth interviews was based on location rather than income status. Thus, the political division of Kimara ward was used as an advantage for distributing the location of respondents in different sub-wards as they were interviewed in the preliminary study.

The interviews were guided by the following areas of emphasis:

- The plot owner's details
- the costs involved in plot development,
- financing development on the plot,
- strategies for making part of the plot a means of income generation,
- relevance for formalising the property,
- the owner's role in the acquisition of basic services and infrastructure, and
- the socio-economic position attained as a result of plot development.

Below are summaries of the results of interviews with respondents

Mr Mbwana Laki

Mr. Mbwana Laki is a property owner. He has built a four-bedroom house with a kitchen, Living room, dining room, washroom and a front veranda. Though the house was built in stages, the main house was almost complete when the author held the interview with him.

The cost of plot development: The cost of constructing the house was difficult to figure out because the construction took place slowly, incrementally and in phases. Even the progress of each stage depended on the availability of funds designated for construction. So the process was such that when there were enough funds for even one bag of cement and a few concrete blocks, work would resume on the building. He noted that it was very fortunate that most sand was collected for free from the field around the site which thus saved substantial construction costs.

During the construction of his house in 1995, there were no road, but since people had started to move into the area, some rudimentary roads were created to enable trucks to bring building materials to various sites.

Design of the house: he employed his secondary school classmate who had a diploma in Architecture from Ardhi University, at that time being Ardhi Institute, to draw a house plan for him as per his requirements. He paid him a token since he was a friend. Having the house plan, he proceeded by himself hiring '*mafundi*' for the construction stage, which was done in phases and incrementally.

Financing the plot development: According to him, most of the construction finance came out of his salary. In addition his employer had a contract with a credit facility company known as 'Tunakopesha Ltd'. He used that opportunity to take out a loan. With that facility, he bought building materials on credit from the company under the guarantee of his employer. That arrangement facilitated the hasty completion of the early phases of construction of his house. The employer would make a small monthly deduction from his salary to reclaim the money he owed the company. He said that the majority of

employees used this opportunity to top up the finance need for the construction of their houses.

However, he noted, that the deducted salary did not make life easy because, although he enjoyed the progress being made on his house construction, it was difficult to distribute what remained of his monthly salary to various family needs. He said that most expenses had to be cut down on in order to survive.

Income-generating projects on plot: He had built two rooms at the back of his house for rent which were not rented out for a long time. It should be noted that this respondent was retrenched recently from his employment. Therefore he had to quickly repair those two rooms and rent them out right away as a new source of income. Each room was rented out for TShs 20,000/- (US\$ 13.13). He also had provided one room in the main house facing the road for business renting. However, since he was currently at home, he had to use it for himself for a shop. He noted that, since the regular salary was no longer available at that moment and the current source of income was lower, he had to change his lifestyle to respond to the prevailing situation.

Formalization of land tenure: He considered that it was costly to conduct a formal survey of his plot and thus he had never considered doing so. His priority was to invest in development of the plot rather than its formalisation. He acknowledged that formalisation of his property was important because it made it legal, it gave him the security of tenure security and it could enable him to acquire a loan from a bank.

He reported that some officials from the MLHHS D had visited a number of houses in his area including his house to assess the house details such as location, quality, size, function, owner and others. The aim was to register the house for the purpose of tax payment.

Basic services and infrastructure

Water supply: he reported that water was acquired in their area through buying it from water vendors. The new water supply system in most parts of Dar es Salaam city including Kimara area were installed by Chinese contractors about two years ago. There were complaints from various parts of Dar es Salaam that the system had no running water except in a few areas where water run for a few days in a week or a month.

The respondent's house was connected to the same water system but with no running water. Thus, they bought a 20 litre container of water for TShs 250 – 300/- (US\$ 0.17 – 0.20). The estimated water budget per day was TShs 2000 – 3000/- (US\$ 1.33 – 2.00). This amounted to TShs 60,000/- – 90,000/- (US\$ 40 – 60) a month. In addition, he built an underground water tank of about 10,000 litres for rainwater harvesting. He therefore saves the considerable water cost during the rainy season.

Due to the shortage of water, he limited the use of interior water-borne toilets to special functions. They were mostly used at night to reduce the inconvenience of people going out to external pit latrine in the middle of the night.

Power: He was connected to the power line using the pre-paid system. Their monthly expenditure was about TShs 20,000/- (US\$ 13.33). They used power mostly for lighting but very little for cooking. Since cooking required a greater amount of energy, charcoal was mostly used. In that particular period when the owner was jobless, he had suspended entirely the use of electricity for cooking. Only charcoal was used for cooking.

Charcoal was also not that cheap. He provided an estimate cost of charcoal of TShs 1000/- (US\$ 0.67) that was sufficient for a day. This put monthly charcoal expenditure at around TShs 30,000/- (US\$ 20.00). However, I wondered whether the use of charcoal for cooking was cheaper than using electricity. However, from his experience of electricity tariffs, it was still cheaper using charcoal for cooking. He revealed that these few expenses made it difficult to make it to the end

of the day or a month since the costs revealed through our discussions were not that easy to meet.

He noted that they use electricity for lighting. The normal incandescent lamps were usually used because they were cheaper although they consume more energy. However, the lower energy lamps were much more expensive than incandescent lamps. The normal incandescent lamps ranging between 40 – 100 Watts were sold for TShs 300/- (US\$ 0.20) while the low energy lamps ranging between 10 – 30 Watts were sold for TShs 3000/- (US\$ 2.00) to 5000/- (US\$ 3.33). Therefore, considering the limited income of the people, the higher energy lamps would mostly be used.

Solid waste collection: the service is not available in their area and thus they address the situation by excavating a pit into which they throw the solid waste. Currently, they have a temporary solution that someone has a site with a deep valley which he would like filled. He has thus told residents they can throw their solid waste on his plot to fill it up. Thus, residents near the plot are currently throwing their solid waste in that area.

Community development initiatives: Some years back around 1998 people in the area organised themselves in order to address the deficiency of social services and infrastructure such as roads, water supply, schools, health centre, police station and others. At that time, the sub-ward leadership which could take care of social development was not yet established in the area. Thus, a committee was elected to supervise and administer the identified development needs in the area. Among the development strategies for the provision of social services and infrastructure was for the people to contribute in the form of physical effort and cash, involving local political leaders and government officials, and convincing the utility companies to install services such as water and power. The elected committee had the duty to ensure that strategies devised by the community for development were implemented.

One of the committee's actions that the respondent could recall was the call made for residents to participate in and contribute to the building of their primary school. Residents were required to contribute in the form of building materials, labour or cash. The plot for the

primary school was allocated and people responded by clearing the site for the construction of a primary school. However, it was very unfortunate that the site happened to be privately owned and the owner emerged to claim his property. That was the end of the attempt, as far as the respondent could remember, of the community initiative that brought residents together to acquire a community facility.

However, the respondent's general observation was that the community initiatives for development produced some results, such as the construction of the road, though rudimentary, the establishment of a sub-ward in their area, the installation of power and, later, the provision of water supply system, though with more dry pipes than those with running water. It was, however, very unfortunate that the committee elected to coordinate the community development broke down after what was presumed as the development of corrupt conduct among members that created differences between them.

He pointed out that they had the road improved under the sub-ward leadership. Further, he said, vested political interests in the provision of infrastructure and services were sometimes common. For instance, their local road was for many years in bad shape but because 2005 was the general election year, the road was extensively repaired in June while the election took place in October 2005. When the road was bad, pick-ups and mini-trucks were used as public transport at a fare of TShs 500/- (US\$ 0.33). But when the road was extensively repaired mini-buses replaced the pick-ups and mini-trucks for public transport at a fare of TShs 250/- (US\$ 0.17).

The socio-economic position attained: He considered that he had made a significant development as he recalls from the time he started working while living with relatives to the current position in his home. He was happy to have a plot, his independence and a house of his own, which all explains his social reputation. He further considered that all he had achieved up to this point was through the proper allocation of his resources. He tried to imagine that, if he had been living in a house for rent at the time when he was jobless, it would have been a disaster psychologically, socially and economically. But by then he was in his house, and so he considered himself far better off.

Mr Msalaka Ismail

Mr Msalaka Ismail was a property owner. He had a relatively big plot on which he had a number of developments taking place including his residential house. Other developments were the improvement of the bar and its thatched covered sitting hall and the construction of rooms for rent for business purposes along the plot boundary adjoining the road.

The cost of plot development: It was not easy to provide the construction cost of the house although the construction was still under way when the author visited the site. The respondent pointed out that he started tracking the cost at the beginning of the construction but then he lost track as the construction process was intermittent. However, he had some records on the quantity of materials he used that he thought would give some clue as to the costs incurred. He noted that the concrete floor only consumed 137 iron bars of 12mm diameter and 142 bags of Portland cement apart from unmentioned quantities of sand, gravel and water consumed for that particular piece of work. The refilling of foundation trenches and the filling of the floor base were done entirely using imported sand amounting to 20 trips of 7 tonne trucks. He added that he had bought 15,000 stabilised soil interlocking blocks at TShs 550/- (US\$ 0.37) each. The blocks had to be transported from the workshop to the site by the 7 tonne truck in 15 trips which was another cost. He notes that he decided to use the stabilised soil interlocking block to save the cost of bonding mortar. But because the blocks were small compared with their price, and because of the weight needed for a strong foundation, the extra truck trips and specialised construction methods it meant that the cost was more than what would have been incurred if the normal concrete blocks had been used. This was the respondent's observations regarding the experience he gained from the construction of his house, which made him regret his decision to use stabilised soil interlocking blocks. Because of this he decided to finish the remaining parts of the walls with the normal concrete blocks.

Financing of plot development: At the time of interview, the respondent had finished his employment contract as a driver which was not extended. He reported that he currently had no job. On financing his project, he noted that when he was still employed he

used part of his salary and allowances for the construction of his house. He claimed to have other means of generating income that add to the financing of his plot development but he would not disclose them. He said:

'A person in a situation like mine, who did not go far enough in education, has to struggle hard. I am struggling hard in a number of areas to make an income. Whenever I make a considerable sum of money, I commit some of it to financing plot development while the rest takes care of family needs and other equally important requirements.'

Most income-generating projects designed to be constructed on the plot had not yet been completed. Those few which had been completed were contributing to financing the plot development.

Income-generating projects on plot: He finished one of the basement rooms to immediately operate a stationery business while the rest of the house was still under construction. In addition, he uses a structure he had constructed on the plot for a pub. The structure includes an open and thatch-roofed hall for the pub but it can also be hired out for parties. He reported that he has entered into a partnership with a certain investor who had to refurbish the structure in order to improve the business. The partner had put in his money to refurbish the property and the costs incurred would be reclaimed from the rent when the hall and the pub become operational. Furthermore, he has plans to use the prime part of his plot along the road to construct rooms for businesses to rent. At the time of interview, two rooms were under construction and one was operational. He reported that, with the space available, he will construct up to nine rooms for business renting. The rent of a room for business at the time of interview was TShs 45,000/- (US\$ 30.00) per month.

Formalization of property: on the question of formal surveying of his plot, it appeared that this matter was not in his foreseeable plans. However, he pointed out a project sponsored by JICA for conducting formal plot surveying. They were informed of the project by the sub-ward leadership but with insufficient details. He would like to use the opportunity provided by the project to survey his plot and process the title deed. However, he noted that very few

project activities were taking place that made him to wonder whether the project was real. He further pointed out that he had followed up the progress of the project by talking to one of the employees at the MLHHSO, where he found that the project was running short of funds. Nonetheless, he considers that since he bought the land with the blessing of the sub-ward office, his security of tenure of his land was good despite the lack of title deed.

Basic services and infrastructure

Water: they acquired water through purchasing it from water vendors. A 20-litre container was sold for TShs 300/- (US\$ 0.20). He pointed out that the amount of water they consume is considerable, costing around TShs 5,000/- (US\$ 3.33) a day. He considered that using the interior water-borne toilet increases the water consumption dramatically as a single person might use nearly 20 litres of water for a single flushing. Being seven in the family one might imagine the scale of water consumption for that particular activity while there were other unmentioned numerous functions that needed water.

Power: he was connected to power on the prepaid system. He noted that the power bill was normal and he had nothing to complain about. They mostly used electricity for lighting and other electronic equipment such as TV, radio and iron. However, he did not allow electricity to be used for cooking because it was still the most expensive type of energy. Then, in order to save the power cost they used charcoal or gas for cooking. The gas they used was the 3kg cylinder sold for TShs 15,000/- (US\$ 10). On giving the duration of gas, he cautioned that it depended on the discipline of using the gas cooker. In that respect, where the discipline was properly maintained the gas might last a month with regard to the scale of their family cooking demand.

Appendix 5. Some of Interview summaries held with vendors in Kimara informal market

Date of interview: 17. 07. 2010

After the researcher was informed on the informal process that led to the existence of Kimara informal market, he conducted interviews with vendors operating in the market to verify and build on the information provided by the market chairperson. Further, the purpose was to ascertain the relevance of the market in fulfilling the expectations of the vendors' needs, its contribution to public services and its role in the production of urban space.

Guiding questions

- i. Where did one live
- ii. How did one get the business place
- iii. Whether the business place was permanent
- iv. How long had one been doing business
- v. How did one get to the business place
- vi. If the cost of commuting affected one's business. If one could get a place of business closer to one's home
- vii. If one had ever changed the type of business
- viii. If one was making a profit. If not, how did one sustain one's business
- ix. If one depended on the income earned from the business for entire family needs
- x. If the income was sufficient for one's domestic and other needs or otherwise
- xi. (If the vendor occupied a public space) What would happen if the space was claimed by the owner

Mr. Rajabu Ahmad Wengy:

He was a vendor in Kimara informal market where he sold groceries. He lived in Kimara Matangini and thus walked between home and workplace. He had been operating in the market for 3 years. Before that he was involved in a different business in other parts of the city. He stopped operating the previous business because of the security problem he faced (he had suffered theft of his merchandise

several times) and the long distance he had to commute to the workplace as well as the associated cost implications.

His business at that time was making a profit. He had a wife and a small child. He depended on that business to meet all the financial obligations of his family. However, he added that he had put his wife into art and craft school in the expectation that she would use the skills gained after completion to supplement their income. He pointed out that the income he generates from his business was sufficient for his basic needs.

The way he got a place in Kimara market was that he got information that someone was moving out of the market and so he made an application to the market administration to occupy the vacated place. He was accepted and had to pay all the necessary fees for membership registration, working space and other services. After fulfilling all the procedures and complying with the regulations set by the market's members, a member's working space was permanent unless he wished to move out at any point in time.

Ms. Sara Mombo:

She is a business vendor in Kimara informal market. She lives in Maili Moja in Kibaha District in Pwani Region about 45 kilometres from the city of Dar es Salaam. She commutes daily between Kimara and Kibaha Maili Moja at a daily one way fare of TShs 1000/= (US\$ 0.66). She claims to be doing good business at Kimara informal market so that the cost and time of daily commuting does not have a significant effect on her profit making. She sells more foodstuff in Kimara than she could sell in Kibaha Maili Moja. She has been working in Kimara market for three years. Before that she was running a flour business in Kibaha Maili Moja.


She is making a good profit. She has a husband and two children. She does not depend entirely on her income to meet all domestic and other needs since her husband, who is a mason, takes care of most of their family financial responsibilities. She claims that their incomes meet their basic needs but they cannot yet afford the luxury life.

Further, Sara is located on the road reserve area outside the 'legitimate' informal market. She grabbed her working space in the beginning when the space had not yet been invaded. The vending area outside the market was later included as a part of the 'legitimate' informal market in order to control the frequent fighting for working space among vendors. The informal market administration had to register all vendors on the outside, allocate them a permanent space and ensure that they abided by the market regulations, including payment of membership fee and other stipulated fees.

Although the vendors on the outside are included in the 'legitimate' informal market, the fact that they are operating within the road reserve cannot be denied. The city authority may clear the road reserve area and thus evict all intruders including the vendors operating on the outside. Sara understands very well the risk she is taking and she thinks that if she is evicted, she would have to move to another place where she could run as good a business as she is in Kimara.

Appendix 6. Property tax demand note for Mr Msalaka

Note: payment of property tax by residents in informal settlement was regarded by some of them as government's recognition of the authenticity of their plot ownership and thus enhanced the status of their security of tenure.


KINONDONI MUNICIPAL COUNCIL
HALMASHAURI YA MANISPAA YA KINONDONI
 P.O. Box 31902 Tel: 2170173, Dar es Salaam

NAME OF OWNER: Msalaka Family Centre **STREET:** KIMARA MATANGINI
TAXPAYER ID: 254862 **PLOT NO:**
PROPERTY REF. NO: **BLOCK:**
WARD: KIMARA **HOUSE NO:** KIM/MAT/4437

Date: May 03, 2007
Demand No: 300711

PROPERTY TAX DEMAND NOTE 2007

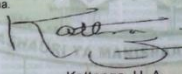
The Kinondoni Municipal Council acting under the Urban Authorities (Rating Act No 2 of 1983 and Kinondoni Municipality Property Rate (By Laws) of 2002, imposes Property Tax for the properties included in the flat rate register. This is to notify you that your property described below is included in the register and property tax of TShs. 10,000 is due. This demand should be settled in full within 30 days of receipt. Failure to meet this demand will result in the Kinondoni Municipal Council implementing the recovery procedures provided in the above legislation.

Method of Payment
 The payment of property tax in respect of this demand note should be made in favour of the Municipal Director, Kinondoni Municipal Council through the Finance Department offices situated in the District Commissioners office at Magomeni, Ward Executive Officer or through the following Banks and Banks account numbers:
 (1) NMB Magomeni Branch, Account No. 6502000025 (2) NMB Bank House Branch, Account No. 20112200010 (3) CRDB Kijitonyama, Account No. 01J1013377000 (4) DSM Community Bank Mnazi Mmoja Branch, Account No. 1012000015 (5) CRDB PPF Tower Branch, Account No. 01J1043000400.
 For those who will pay through Bank Accounts, after the deposit, the property owner should forward the bank pay in slip to the Property Tax Collector at respective Ward Executive's Office where the Official Municipal receipt shall be issued.

HATI YA MADAI YA KODI YA MAJENGO YA MWAKA 2007

Halmashauri ya Manispaa ya Kinondoni ikizingatia Sheria ya Kodi ya Majengo ya Mamiaka za Miji ya mwaka 1983 na Sheria Ndogo ya Kodi ya Majengo ya Halmashauri ya Manispaa ya Kinondoni ya mwaka 2002 imeweka kodi ya majengo yaliyopo katika viwango milingano. Hivyo Halmashauri inakuufu kwamba Jenjo lako lililotajwa hapo juu lipo katika orodha ya Majengo na Kodi ya Shs. 10,000. Zinzotakwa kulipwa ndani ya siku 30 baada ya kupewa hati hii ya madai. Kushindwa kulipa kodi hii kutafanya Manispaa kuchukua hatua zinazostahili ili kupata malipo hayo kwa kuzingatia Sheria ya Kodi ya Majengo zilizotajwa hapo juu.

Jinsi ya Kulipa
 Malipo ya kodi hii yalipwa kwa Mkurugenzi wa Manispaa ya Kinondoni kwenye ofisi za idara ya Fedha zilizoko kwenye jengo la Mkuu wa Wilaya ya Kinondoni. Ofisi za Kata au moja ya Mabenki na akaunti zifuatazo:
 (1) NMB Tawi la Magomeni, Akaunti Na. 6502000025 (2) NMB Tawi la Bank House, Akaunti Na. 20112200010 (3) CRDB Tawi la Kijitonyama, Akaunti Na. 01J1013377000 (4) Benki ya Wananchi wa DSM Mnazi Mmoja, Akaunti Na. 1012000015 (5) CRDB Tawi la PPF Tower, Akaunti Na. 01J1043000400.
 Kwa wale watakoilipa benki moja kwa moja, baada ya malipo mipaji atakabidhi stakabadi ya benki (Bank Pay in Slip) kwa mkusanyaji kwenye Kata husika ambapo atapewa stakabadi (Official Receipt) ya Manispaa.


 Kattanga, H. A.
 Municipal Director
 (Mkurugenzi wa Manispaa ya Kinondoni)

Outstanding Amount (Limbikizo la kodi): 0 Principal Amount (Kodi ya mwaka huu): 10,000
 Rateable value Tshs. Tax Rate (%): 0.15 Amount Payable Tshs. 10,000
 GRR No. Collector..... Signature.....
 Payer (Mlipaji)..... Signature(Sahihi)..... Date (Tarehe).....

(Hand this Slip and Cash to the Collector in exchange for a receipt/Mkabidhi Mkusanyaji fedha)

Certificate of occupancy of surveyed plot for Mr. Lusuva

Note: the certificate was processed years later after the plot was acquired informally

Page 1

TITLE NO. 36247
 REGISTERED 25-MARCH-90
 AT 12:30 PM
 Land Form 33
Lusuva
 THE UNITED REPUBLIC OF TANZANIA
 THE NATIONAL REGISTER OF TITLES
 TANGANYIKA STAMP DUTY ACT
 Stamp Duty Was 20/-
 and Revenue Receipt No. 9/77885
55-89
Lusuva
 Stamp Duty Office
 Dar es Salaam
 L.P. No. 140288
 THE UNITED REPUBLIC OF TANZANIA
 Stamp Duty Was 36/-
 and Revenue Receipt No. 9/77885
55-89
Lusuva
 Stamp Duty Office
 Dar es Salaam
CERTIFICATE OF OCCUPANCY
 (Section 9 of the Land Ordinance)
 The 25th day of March
 nine hundred and ninety
 THIS IS TO CERTIFY that JOHN EMIL LUSUVA OF P.O. BOX 9230 DAR ES SALAAM.
 TITLE No. 36247
 (hereinafter called "the Occupier") is entitled to a Right of Occupancy (hereinafter called "the Right") in and over the land described in the Schedule hereto (hereinafter called "the Land") as from the 25th day of April thirty three years from the First day of April eighty nine according to the true intent and meaning of the Land Ordinance and subject to the provisions thereof and to any regulations made thereunder and to any enactment in substitution thereof or amendment thereof and to the following special conditions:—
 1. The Occupier having paid rent up to the thirtieth day of June, 1989 shall thereafter pay rent of shillings seven hundred and thirty two (Shs. 732/-) a year in advance on the first day of July in every year of the term without any deduction PROVIDED that the rent may be revised by the Minister for the time being responsible for Lands (hereinafter called "the Minister") on the first day of July in each of the years 1999, 2009 and 2019 or within three years thereafter in each case.
 2. The Occupier shall—
 (i) Maintain on the land buildings (hereinafter called "the buildings") in permanent materials designed for use in accordance with the conditions of the Right and which conform to the building line (if any) decided by the Dar es Salaam City Council (hereinafter called "the Authority");
 (ii) At all times during the term of the Right have on the land buildings as approved by the Authority and maintain them in good order and repair to the satisfaction of the Commissioner for Lands (hereinafter called "the Commissioner");
 (iii) Not erect or commence to erect on the land any building except in accordance with building plans and specifications which shall have been first approved by the Authority;
 (iv) Be responsible for the protection of all beacons on the land throughout the term of the Right. Missing beacons will have to be re-established at any time at the Occupier's expenses as assessed by the Commissioner for Surveys and Mapping.
 Approval of plans of any building by the Authority shall not imply that the construction of such a building will satisfy the Occupier's obligation under the conditions of the Right and shall not imply waiver or modification of any condition in the Right.

3 (i) The Occupier shall not subdivide the land or assign sublet or otherwise dispose of or deal with the whole or any part of it or of any building on it without the previous written consent of the Commissioner PROVIDED that the consent of the Commissioner shall not be necessary to a single sub-letting of the whole of the land where the Sub-lease contains conditions sufficient to ensure compliance with the conditions of the Right;

~~as a sub-letting of the whole of the land or of the whole or any part of any building on it, where the sub-lease contains conditions sufficient to ensure compliance with the conditions of the Right.~~

(ii) Occupation or use of the whole or any part of the land or buildings on it by any person other than the Occupier or his employee or agents or contractors or members of the household shall be deemed a dealing with the land or buildings.

4. Except as hereinbefore provided the Commissioner shall have an absolute discretion to give or withhold consent under condition 3.

5. The Occupier shall pay to the Minister on demand made by the Commissioner on his behalf:—

- (i) any further fees or stamp duties which may be discovered to be payable by the Occupier in connection with the Right;
- (ii) an amount equal to any contribution in lieu of rates which may be payable by Government for the land during the term of the Right;
- (iii) such sum as the Commissioner shall assess as a proper share payable for the land of the cost of making up the road or improvement of same upon which the land fronts, abuts or adjoins, whether such demand is made before during or after such making or improvement thereof. This condition does not oblige the Government to make or improve roads.

6. The land and the existing buildings thereon shall be used for residential purposes only. Use Group A; Use Classes (a) and (c) as defined in the Town and Country Planning (Use Classes) Regulations, 1960.

7. The President may revoke the Right for good cause or in public interest.

SCHEDULE

That land known as Plot No. 20 Kimara Matangini Dar es Salaam City containing Nine hundred and eighty (980) square feet shown for identification only edged on the plan attached to this Certificate and defined on the registered survey plan numbered 23874 deposited at the Office of the Commissioner for Surveys and Mapping at Dar es Salaam.

GIVEN under my hand and seal and by Order of the Minister the day and year first above written.

(Signature)
COMMISSIONER FOR LANDS

O P Dem 1853/8-84/60/147

I the within-named JOHN EMIL LUSUVA hereby accept the terms and conditions contained in the foregoing Certificate of Occupancy

SIGNED and DELIVERED by the said JOHN EMIL LUSUVA who is known to me personally/ identified to me by

(Signature)

the latter being known to me personally in my presence this Nineteenth day of March, 1990.

Witness's: Signature:

Postal address: P.O. Box 9230 Dar es Salaam

Qualification: Senior Land Officer

LAND DEVELOPMENT SERVICES,
P.O. BOX 9230,
DAR ES SALAAM.
Date: 3/5, 1989

Ref. No. LD/140288/2/AAI
TO: J. E. LUSUVA
P.O. BOX 9230
D. SALAAM

Sir/Gentlemen/Madam,

RE: PLOT 20 BLOCK KIMARA
MATANGINI D. SALAAM CITY

Your application for a long term right of occupancy (later in this letter called "the right") over this plot has been approved by the plot allocation committee meeting held onvide Agenda No..... on receipt of the fees and information requested below I will send a certificate of occupancy for you to sign containing the following main conditions:-

- (i) Term: 33 years from 1/4/89
- (ii) Rent shs. 732/= year revisable after every ten years.
- (iii) Premium shs.
- (iv) ~~Use:~~ The Land shall be used for RESIDENTIAL purposes. Use Group (A) Classes (A) & (C) as defined in the Town and country planning (Use Classes) regulations, 1964, only one main building/dwelling house together with the usual and necessary out-building shall be built. Commercial use shall not include the sale of vehicle fuels.
- (v) Building to be in permanent materials:-
 - (a) plan to be submitted to Dar es Salaam City Council within six months from the commencement of the right.
 - (b) building to begin within six months of approval of plan.
 - (c) building to be completed within thirty six months from the commencement of the right.
- (vi) The occupier must pay further fees, charges etc, and refund any contribution in lieu of rates which may be paid by the government
- (vii) The occupier shall be responsible for the protection of all boundaries on the land throughout the term of the right. Missing boundaries will have to be re-established at any time at the occupier's expenses as assessed by the director for survey and mapping.
- (viii) No sub-division or assignment without the previous written consent of the director for land development services.

2. The following information is required by me:-

- (a) your full name in block letters. No request to have the certificate of occupancy issued written in the name of a person or persons other than the offeree shall be entertained.
- (b) your full residential address giving house number, name of street and your P.O. box number (if any).

2/4/89

(n) whether you wish to hold the right as joint tenants or tenants in common, if it is the latter indicate the share to be taken by each of you. In the former case the right of deceased joint tenant passes automatically to the surviving joint tenant while the share of deceased tenant in common passes to his/her/their according to law. whether the certificate will be signed in Tanzania or abroad and if a company the manner of sealing.

5. The amount payable on acceptance of the right is:-

Fee for Certificate of Occupancy	shs. 300.00
registration fees	shs. 75.00
Survey fees	shs. 125.00 <i>9/16</i>
Fees for deed plans	shs. 42.00
Stamp duty on certificate and Duplicate	shs. 56.00
Land Rent for the period from 1/4/89 - 30-6-89	shs. 183.00
Premium	shs.
TOTAL	shs. 881.00

The sum listed above should be paid in the following manner; the total sum of shs. 881.00 being fees should be paid to the Director for Lands and the remaining sum of shs. 257.00 being stamp duty and Land Rent should be paid the Internal Revenue Officer of Sales. The original Exemption Receipts so obtained should then be sent to me with the information requested above.

UNLESS this offer is accepted and all fees paid within thirty days from the date of this letter the offer shall lapse. After this period the plot will be disposed of as the Committee seems fit without any further reference to you.

I am, Sir/Mr/Ms/Ms/Ms,
your obedient servant;

[Signature]
DIRECTOR OF LAND DEVELOPMENT SERVICES

Copy to:- The City Land Officer,
DAR ES SALAAM.
" " The Internal Revenue Officer,
DAR ES SALAAM.

This must not be accepted after 2/6/89 without my authority.

IKOGA WA DAR ES SALAAM

LAND DIVISION,
P.O. BOX 9230,
DAR ES SALAAM.

Kumb.Na. LD/140288/3/MSKK

Tarehe: 12-5-1989

Afisa wa Ardhi wa Jiji,
S.L.P. 9084,
Dar es Salaam.

KIWANJA NA. 20.....KIMARA
MAIANGINI...DSM...CITY

Rejea baru ya Kumb.Na. LD/140288/2/AAI..... ya tarehe 3-5-89 yahusika.

Npenda kukujulisha kwamba Mpangaaji wa Kwanja hicho amekwishaipia malipo yote kama ifuntavyo:-

	She.	STAKIBIDHI
Ada ya Haki ya Hati	300.000
Ada ya Usajili.....	25.000
Ada ya Upimaji.....	125.000	9/007150
Ada ya Ramani.....	42.000
Ushuru wa Serikali.....	56.000
Kodi ya Kwanja kuanzia tarehe <u>1-4-89</u>
.....mpaka <u>30-6-89</u>	183.000	9/778851
Malipo ya mbalo.....
JUMLA:-	<u>881.000</u>

? Malipo yalifanyika tarehe 5-5-89..... kwa hiyo endelea na kuangalia jalada lake. JINA KAMILI NI: JOHN EMMIL LUSUKA.....

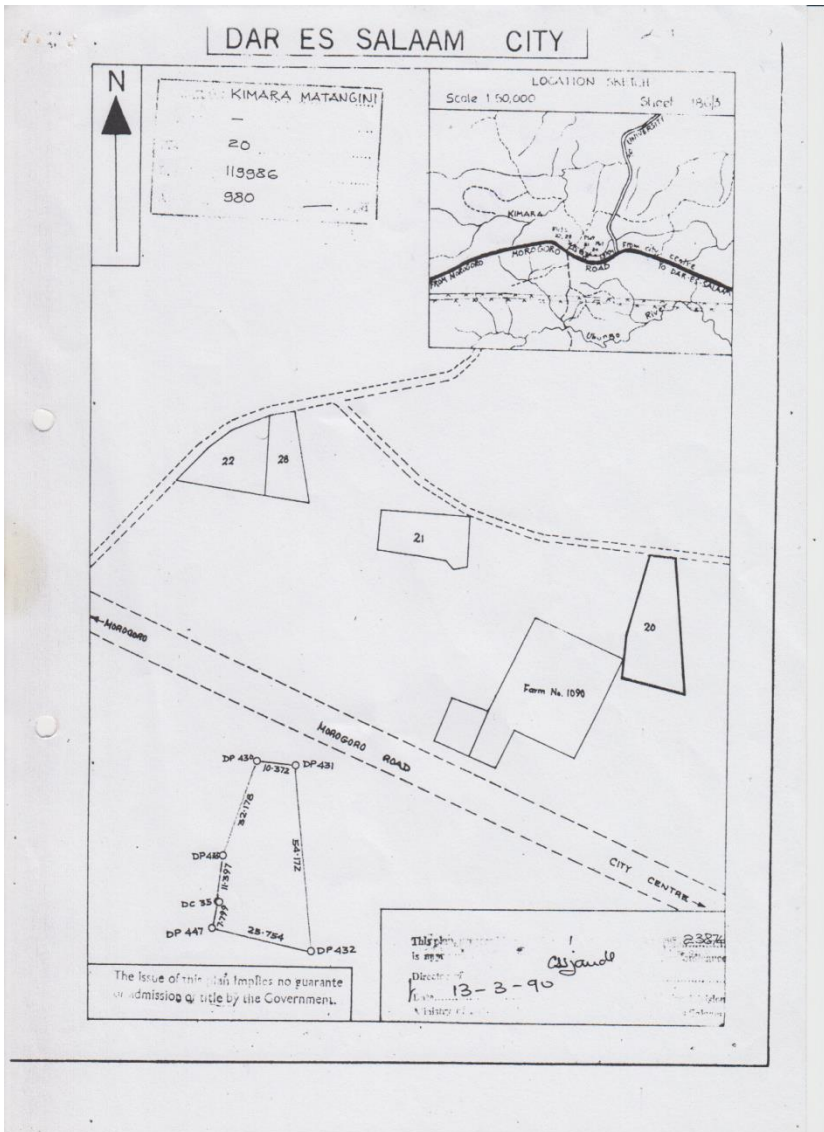
K.n.y: MEKURUBENZI TAMBUKWA YA ARDHI.

Makala kwa: Hdugu.....
J.E. LUSUKA
.....S.L.P. 9230.ASM

Makala kwa: Internal Revenue Officer,
Dar es Salaam.


Makala kwa: District Land Officer,
ISINONANI...
Dar es Salaam.

J/TOM.



Appendix 7. Letter for research permission

HALMASHAURI YA MANISPAA YA KINONDONI
BARUA ZOTE ZITUMWE KWA MKURUGENZI WA MANISPAA

Simu Na: 2170173 Fax Na: 2172606		MKURUGENZI WA MANISPAA MANISPAA YA KINONDONI S.L.P. 31902 DAR ES SALAAM
Unapojibu tafadhali taja: Kumb.Na. KMC/F.6/5VOL.11/136		TAREHE 10/02/2010

Mr. Fortunatus Bahendwa
Ardhi University school of Architecture.
P.O. BOX 35176,
DAR ES SALAAM.

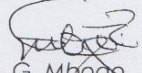
RE: FIELD ATTACHMENT

Refer to the above heading.

I am pleased to inform you that your above request has been considered by the Municipal Director, and has offered you a place in his Council for field.

Upon receipt of this letter, please report to WEO – kimara for commencement of your Field practice.

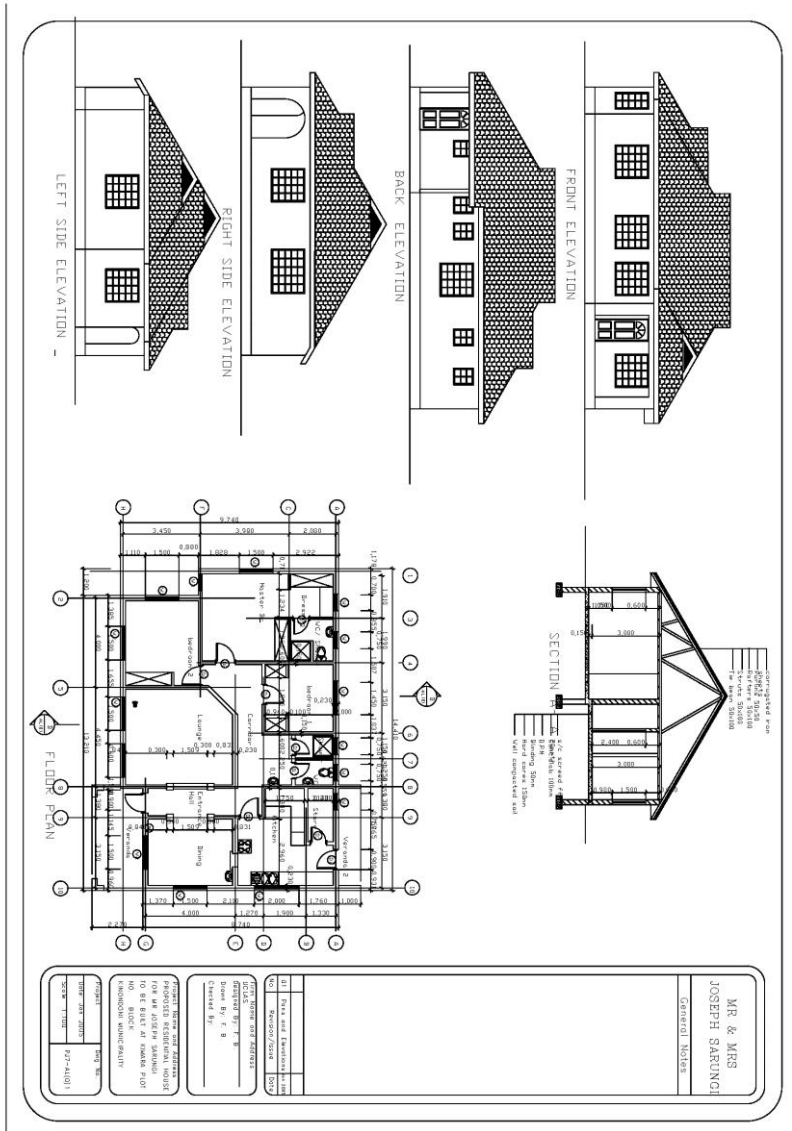
Hopping to see you soon.


G. Mbogo
For: **THE MUNICIPAL DIRECTOR**
KINONDONI

COPY: Head of Department
Ardhi University,
P.O. BOX 35176,
DAR ES SALAAM

Appendix 8. Residential house drawings for one of Kimara's residents.

Note: This represent involvement of professionals in construction.



The house represented in architectural drawings above years later after completion



The location of the house in Kimara informal settlement

