







MASTER'S PROGRAMME IN URBAN MANAGEMENT AND DEVELOPMENT

(October 2006 – September 2007)



The Dynamics of Land-Use in the Lahore Inner City: A Case of Mochi Gate

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Rotterdam, 17th September 2007

Summary

The Lahore Inner City core comprises 11th century Walled City and areas immediately around it such as the expansion along Circular Road. Not only is this Lahore's historic but also its commercial centre, with Punjab's largest market of wholesale and a web of related activities and land-uses.

Over the past three decades, the Walled city has seen a transformation of its urban and social fabric and a widespread dilapidation of its building stock. Today the greater Walled city-Circular road area is typified by the manifest symptoms of 'decay' such as dilapidating infrastructure, deteriorating building stock, traffic congestion, noise and air pollution, visual clutter, and management-related issues.

Paradoxically however, while there are 'visible' gaps, there is an 'invisible order' which enables the Walled City-Circular Road complex to play a central role in Lahore's daily functioning and contribute to it's economy in terms of trade and employment. Conventional upgrading approaches are not rooted in an understanding and appreciation of this existing 'system' and its broader issues. Given the pool of multiple actors and stakeholders and the complexity of land-uses and activities, the specific orientation of any upgrading effort needs to be rationally determined

Assuming there is a need for improvements, the objective of research has been to develop a conceptual framework for a 'successful' upgrading of the area. Taking the Mochi Gate area as sample, the thesis explores the Walled City-Circular Road complex as an urban phenomenon with its overriding roles, needs, and functions, in order to understand this existing 'order'. The problem definition hence leads to the main research question: What is successful upgrading in the context of the study area? In order to determine this, two subquestions explored the existing system, and the gaps within this system. The research is a qualitative exploratory case-study, based on the interviews of primary actors, rapid survey, and observation, and supported by photographic documentation.

Research findings indicated that land-use is determined on the basis of need and locational advantages. Secondly, the needs of actors are being catered to through various 'enabling' mechanisms, such as informal networks, social support, and the institution of collusion. Thirdly, the physical propinquity of different inter-related land uses is typical of the small-firm economy; if these parts are separated in space, the system would not be able to function.

Successful upgrading implies improvements in the existing conditions and uses of the area. Above all, this would require an actor-centred approach that is based on an understanding of the contribution of all actors and stakeholders to the 'system', and incorporates the area's existing functions with both their inter-zonal and city-wide linkages. The research also determined that the current arrangement of land-uses is ad-hoc and results in physical and management-related gaps for the larger 'system', and a re-organisation of land uses is needed to create greater efficiency in the system, and minimize conflict between residential and commercial uses.

Key Words: land-use, existing system, actors, function, management, commerce.

Acknowledgements

No words are enough to thank God for all His favours.

I would like to thank NUFFIC for providing me with this opportunity, and IHS and my colleagues for their kindness and contribution in making this a most valuable time.

There are countless people, interactions, and experiences which inspired my interest in this topic. For all these I am grateful.

I would like to specially thank Arif Hasan, Amir Butt, Ismail Jatol, and Punjab Urban Resource Centre without whose help this work may not have been possible.

I would like to thank my parents for their moral support; my thesis supervisor Jacko van Ast for pushing me to do better; Khalid Bajwa, Saleha Qureshi, Rabia Nadir, Irfan Ghani, Claudio Acioly and Pervaiz Vandal for taking interest in my work despite their busy lives; Asma Ezdi for always being willing to help; and Zahra Amir and Perween Rahman for their encouragement.

Most of all I am indebted to the people of Mochi Gate and Circular Road, in particular the interviewees who despite their suspicion of why an 'outsider' was taking so much interest in a place they call theirs, treated me with warmth and generosity and allowed me a glimpse of how they run their daily lives.

Foreword

The city is hailed as a manifestation of civilization, and the stage of revolution, emancipation, and culture. The relatively sudden jump to civilization has occurred 6-7 times in history, and has always been accompanied by the appearance of cities. But the city is also the ground for conflict, injustice, and strife. In the words of Lynch, it is then "a 'great place', a release, a new world, and also a new oppression".

Many factors are held responsible for what is termed the 'crisis' of the third world city: inefficient use of resources, poverty, illiteracy, debt, and so on. None of these problems are new, and with increasing urbanisation may in fact become worse. How do we as citizens see the future, and how do we intend to change things? An important clue to answering this question is: who shapes the city, and how can we make it humane? It is certainly not influential planners and administrators alone, but the people who create and sustain the city.

Today's global urban development paradigm is talking of creating 'world class' 'competitive' cities driven by economic growth through privatization, de-regulation, and mega-projects. The many negative repercussions of this model, such as rising poverty, evictions, and environmental degradation, are however being disregarded. It is important to step back and re-evaluate our thinking, and assess whether we are in fact solving the 'crisis', or deepening it.

When governments due to whatever limitations are unable to provide, people are left with no choice but to fend for themselves. Needless to say, it is the poor that are the most vulnerable in such a situation. And so it is that by default the people organise for themselves systems of survival, and in the end not only live and work in the city, but make a great and largely unacknowledged contribution to it economically, spatially, and culturally. It is on this phenomenon that this thesis is based, taking the case of Mochi Gate, the underlying idea being that since it is towards the collective well-being of *people* that we want to target 'development', it is only common sense to base it on an understanding of their reality, priorities, and systems of survival. Because it is from this reality, that we the planners are often divorced, and perceive it at best as an inconvenience.

Abbreviations

GFA: Goods Forwarding Agency

LDA: Lahore Development Authority

PEPAC: Pakistan Environmental Planning and Architectural Consultants

SWCP: Sustainable Walled City Project

UN: United Nations

Glossary of Terms

Adda.....Station or 'Point'

Anjuman.....Association

Bazaar.....Market

Badshahi Masjid.....Royal Mosque

Beopari.....Middleman

Bhatta.....Bribe taken for the informal use of space or services

Bhai-Chara.....Brotherhood

Biraderi.....Tribe

Challan.....Fine

Chaukidaar.....Watchman

Chehlum......Religious event marking 40th day after death

Ching-Chi......Motorcycle-driven passenger vehicle

Galli.....Street

Kanal......Local unit of space equal to 2000 square feet

Kabari......Recyclable solid waste worker

Kucha.....Neighbourhood

Mandi......Market

Marla....Local unit of space equal to 220 square feet

Mazdoor.....Labourer

Mithai.....Traditional Sweet

Nazim......Mayor

Nikah.....Civil marriage

Ramazan......Muslim Holy month

Rickshaw......Motor-driven passenger vehicle

Shia.....Muslim religious sect

Tajir.....Trader

Tajiraan.....Traders

Thara......Platform, usually used for sitting and socialising

Tonga......Horse-drawn-cart

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Chapter 1: Introduction, Problem Statement, and Research Framework

1.1 Introduction

1.1.1 The Inner City

Most cities of the world have an older nucleus, from where the city has originated and grown spatially. In Lahore this older area is its 11th century Walled city, surrounded by the areas that developed around it in the 19th and early 20th century, and forming today the Inner City core. This includes the expansion along Circular Road, the lower Mall, and Anarkali. The Lahore Inner city is Lahore's historic and commercial heart, comprising not only historic heritage but also Punjab's largest market of wholesale, small-scale manufacturing, and many related activities and land-uses. Although in a physically dilapidated state today, it is a bustling hub for the city economically, culturally, and socially.

1.1.2 Inner City Decay

The decay of the Inner City is a recognized urban phenomenon, with varying causes and processes leading to deterioration. In the developing world context, Verma (1990) defines decaying inner city areas as 'zones of old residential or mixed development which, due to physical obsolescence and socio-economic change and the accompanying out-migration of well-to-do people and firms, have remained starved of the resources necessary to maintain an essential minimum level of reinvestment in the built form and neighbourhood services. As a result of this they demonstrate a high incidence of a range of physical, social, and economic problems...'

1.1.3 Land Use and Its Dynamics

By and large, all urban functions and activities are based in land-use. In turn, land-use generates an intricate web of dynamics, such as actors and the roles played by them, multi-layered economic, social, and physical relationships, and positive and negative repercussions on the broader urban framework.

1.1.4 The Walled City and the Expansion Along Circular Road

The Walled city is a dense settlement about 2000 years old covering an area of 2.5 square kilometres (Ali 1986). It is situated in Lahore's North West, on a historical mound approximately 1.5 kilometres from the river Ravi.

The 'Circular road' runs along the edge of the Circular Gardens surrounding the Walled City and forms a 'ring road', connecting the City with Lahore's major urban roads.

The area and its environs is a dynamic, multi-layered hub of the city. Originally a mix of residential and commercial usages (Akhtar 1992), with an evolution of land-uses and the development of locational advantages for commerce, Southern Circular Road has organized itself into the largest wholesale market of Punjab Province (Bajwa 2007). Commerce and

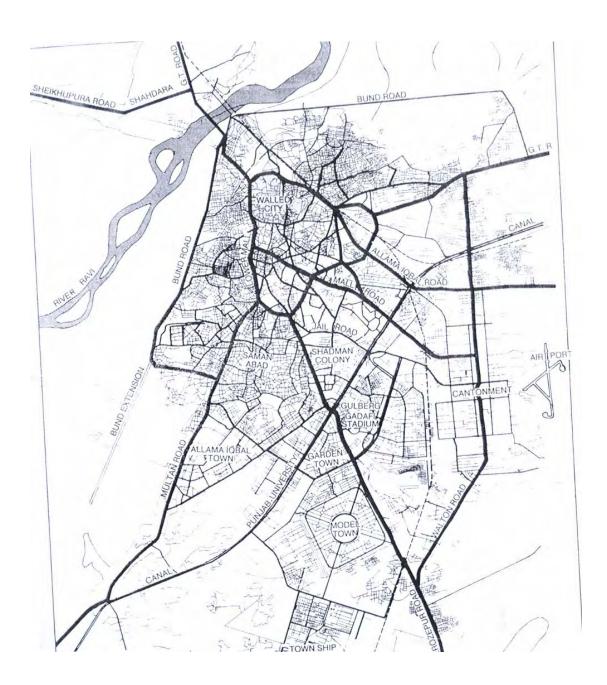


Figure 1: Map of Lahore

Courtesy LDA

manufacturing activity within the Gates of the Walled City continues to thrive and is deeply inter-linked with wholesale and transport activity outside at Circular road. According to a survey in 1980 by the Lahore Development Authority (Walled City Upgrading Report 1980), in property taxes alone the Walled City contributed nearly 4 million rupees a year to the national exchequer and provided shelter and employment to 8% of the metropolitan population. The existence and function of the Walled city-Circular road entity is of prime importance as it has both an economic and cultural value for the city and the country. The

Walled city is seen as a historic and architectural 'jewel' with a 'living culture' and built heritage dating to the Mughal, Sikh, and British eras and beyond (Kron 1998). At the same time the area's commercial activity contributes to local, regional, and national markets and to the livelihoods of many.

The Walled City and Circular Road are intrinsically linked and for all functional purposes comprise a single inseparable entity. Activity in the area covers the many faces of urban life, comprising high-density residence, religious and cultural heritage sites, some of the city's main transport related-infrastructure, small-scale industry, and social infrastructure such as hospitals and universities.

1.1.5 Mochi Gate

The Walled City and its precincts are known by the names of their thirteen historic Gates. The broad theme of 'land use dynamics in the inner city' is based on the case of Mochi Gate, situated in the South of the Walled City within an intense commercial hub (See Chapter 3). To explore the various phenomenon forming the theoretical framework of the thesis (Chapter 2), the study area covers both the Mochi Gate settlement 'within the walled city' and its expansion on Circular Road 'outside the wall' (See Map x). A detailed description of this area can be found in 'Chapter 3'.



1.2 Problem Definition and Research Framework

1.2.1 Problem Statement

Over the past three decades in particular, the Walled city has seen a transformation of its urban and social fabric and a widespread dilapidation of its building stock (Ali 1986). Today the greater Walled city-Circular road area is typified by the manifest symptoms of 'decay' such as dilapidating infrastructure, deteriorating building stock, traffic congestion, noise and air pollution, visual clutter, and management-related issues. All these issues are rooted in the organization and management of different land uses.

Paradoxically, while there are 'visible' gaps there is an 'invisible order' (Qadeer 1984) which plays a central role in the daily functioning of Lahore (Kron 1996) and makes a major contribution to its economy in terms of trade and employment. This 'order' or 'system' is rooted in a variety of formal and informal land-uses, from which springs a web of physical, economic, and social relationships. It is operated by formal and informal-sector *actors*, who together utilize the area for commerce and residence, manage its various functions, and provide essential services. Conventional upgrading approaches are not rooted in an understanding and appreciation of this existing 'system' and its broader issues.

1.2.2 Justification for Research

In general, the processes of planning and decision-making in Pakistan lack a broad-based representation of citizens and interest groups, making urban development largely un-informed and often out of touch with ground realities. Also, an often incomplete research-base leaves many essential issues un-tackled by plans.

The Walled City Conservation Plan developed by the PEPAC in 1986 according to Vandal (2004) was not based in a people-centered process, or in the words of Kron (1996) 'prematurely started restoration work before active degradation is even stopped or slowed'. The 'Sustainable Walled City Project' 2006 envisions the Walled City principally as a cultural and architectural artifact, and can be criticized for giving far less consideration to its key urban functions. Further, there are occasional discussions within government about 'problems created by the wholesale market' and prospects of its removal, such as the announcement in 2004 to shift Akbari Mandi made and greatly resisted by traders. The Punjab Department of Archeology has also spoken of plans (Ezdi 2005) to 'shift the General Bus Stand', 'remove the industrial units', and 'close-off a section of Circular road' due to the damage being caused to heritage sites by air pollution. In general, the majority of proposals are ad-hoc, non-participatory, and do not integrate intended land-use changes with larger urban realities. Further, Verma (1990) discusses the inappropriateness of the approach that has typified renewal efforts in the developing world, in its preoccupation with "manifest" symptoms of urban decay, such as structural dilapidation, infrastructural inadequacies, traffic congestion, etc. In the case of Lahore's Inner city, it is also the symptom-based approach as opposed to a more comprehensive cause-based approach to upgrading and improvement that has been undertaken. Many of these shortcomings translate into flawed plans and their outcomes create new viscous cycles of decay.

Given the pool of actors and stakeholders and the complexity of land-uses and activities, the specific orientation of any upgrading effort needs to be rationally determined. This cannot be done without an understanding of the existing 'order' and the inter-play of its actors and land-uses.

1.2.3 Objective of Research

While the predominant interest of scholars, individuals, government and foreign agencies has been in the historical and architectural value of the Walled City, the thesis explores the Walled City-Circular Road complex as an urban phenomenon. Based on a study of the existing physical, functional, and managerial dimensions of land-use in the Mochi Gate area and an overview of existing gaps, the objective of the thesis is to develop a rational basis for the upgrading of the Walled City-Circular Road Inner City area, assuming that there is a need for 'improvement'.

1.2.4 Research Questions

The problem definition leads to the main research question:

'What are the requirements of 'successful' upgrading for the Mochi Gate area?'

In order to determine this, two sub-questions are framed:

- 1. What is the existing system and how is it operated?
- a) What are the general land-uses in the specimen area and the respective inter-linkages between them?
- b) What are the roles of primary actors in the specimen area and how are they carried out?
- 2. What are the physical, functional, and managerial gaps in the specimen area according to primary actors?

1.2.5 Assumptions

The research is premised several assumptions, the fundamental one being that there is a need to achieve relevant, realistic, and sustainable improvements in the area, and that the understanding that the needs and roles of primary actors must be accommodated to meet this ends. Secondly, as discussed above, despite apparent visual decay and managerial and infrastructural gaps, an existing 'system' enables the area's functions and activities. Thirdly, land use is the main determinant of activities. To unravel the existing system, the physical, functional, and managerial dimensions of land use require analysis. Finally, primary actors are defined as people with the greatest impact on the area's current function, and include residents, formal and informal sector workers, and government agencies.

1.2.6 The Scope of Research

The scope of research includes the Mochi Gate area and its land-uses and actors. Exploratory research of this type has not been carried out in recent years, and can form a useful and important knowledge base for future interventions in the area.

1.2.7 Research Methodology

The research is a purely qualitative exploratory case study. While interviews form the principal research method, additional methods of mapping, observation, rapid survey, photographic and video documentation will also be employed.

Research Question '1a'	What are the existing land-uses in the focus area and the respective inter-linkages between them?
Premise	A realistic and representative problem-analysis is the first step in the 'successful' upgrading of the area
Aim	To understand the existing system
Research Method	Mapping, Observation, Rapid Survey, video and photographic documentation
Units of Analysis	Three-dimensional space and its different uses

Research Question '1b'	What are the roles and needs of primary actors in the focus- area and how are they carried out?
Premise	A realistic and representative problem-analysis is the first step in the 'successful' upgrading of the area
Aim	To understand the existing system
Research Method	Interviews, rapid survey, video and photographic documentation
Units of Analysis	Actors and their respective activities

Research Question 2	What are the physical, functional, and managerial gaps in the focus-area according to primary actors?
Premise	Analyzing existing physical, functional, and managerial gaps from the broad-based representation of actors is the second step in formulating the basis for 'successful' upgrading
Aim	Understanding the existing physical, functional, and managerial gaps from the point of view of primary actors

Research Method	Semi-Structured Interviews, Rapid Survey
Units of Analysis	Actors and their testimonies

1.4 Thesis Structure

Chapter 1 introduces the thesis topic, defines the problem, discusses need for the given research, and states the research framework and methodology. Chapter 2 reviews literature and provides the theoretical and conceptual framework for the issues explored in the thesis. Chapter 3 describes the research area in detail and places it in context of its historical evolution. Chapter 4 discusses and analyses research findings. Chapter 5 concludes draws broad conclusions on the research and gives recommendations for a conceptual framework for upgrading.

Chapter 2 Theoretical Framework

Introduction

This chapter is divided into three parts. Part one presents a theoretical framework for the central themes and phenomena being explored in the research, part two discusses gaps in conventional approaches to Inner City revitalization and upgrading, and part three highlights key features of Inner City studies and revitalization experiences relevant to the thesis.

2.1 Central Themes of the Thesis

2.1.1 Urban Decline and Regeneration

Human settlement is not a chance occurrence (Lynch 1984), and prosperity, decline and regeneration are natural processes in all living environments and agglomerations. The need for constant change and renewal of the fabric of cities is a manifestation of their response to the social and economic pressures placed on them, thus in the historical context urban renewal is not a new issue (Hanley 1991).

The management and development of cities is hence a multi-layered task involving a number of actors and formal and informal institutions. Rapid urbanisation experienced in most developing countries today, enhances the importance of cities in the national development process (Acioly 1999) and emphasizes the need to prioritize issues and develop relevant strategies that deal with the many challenges facing cities like Lahore. Weak public sector and municipal institutions, deficiencies in infrastructure, informal urbanisation, obsolete norms regulating the real estate market and land occupation, and a lack of financial resources are common bottlenecks that impede a well functioning city (Acioly 2007).

While on the one hand Lahore is an important component of the national economy, on the other it is experiencing a rapid population growth most of which is the cause of poverty-induced migration. By early 1994, approximately 32 percent of all Pakistanis lived in urban areas, and according to the population and housing census of 1998, the population growth rate of Lahore was 3.32% and average household size was 7.1. Unmet human needs such as housing, land, infrastructure, and public services are manifested in urban poverty, and growing issues of environmental, economic, and social sustainability. The thesis is based on a case which epitomises these issues.

2.1.2 Order and Chaos in Third World Cities

The phenomenon of 'order within apparent chaos' forms one of the pivotal themes of the thesis.

Undeniably, third world cities are replete with symptoms of weak governance and management such as inadequate urban services, infrastructure breakdowns, disorderly traffic, and signs of poverty and inequality such as slums, disease, and unhygienic living conditions. A common street scene in Lahore particularly in one of its less developed parts, will have the uncovered manhole, encroachments along pedestrian footpaths, dense housing areas with few open spaces, sub-standard buildings employing low-quality materials, loud sounds of vehicle-

horns, commuters packed into buses, pedestrians racing across weakly controlled traffic, the odd family of four fitted onto the single motorcycle, solid waste piled along the edge of the road, and so on. The majority of these elements are perceived as unseemly eye-sores at best.

To a large extent these cities are compared and contrasted with the developed West in terms of image-related variables of development and modernisation, such as wide roads, orderly traffic, efficient urban services, high technology, modern architecture, and so on.

While gaps in governance, management and finance mechanisms are undoubtedly grave in third world cities, at the end of the day these cities provide urban services, shelter, employment, education, and recreation to millions of people, and have a competitive economic base that co-exists in the national and international economy. Qadeer (1984) adds that 'many of these cities are thriving centres of learning, arts, and sciences'.

This apparent contradiction is termed by Qadeer as 'the paradox of invisible order and visible chaos'. It is this phenomenon that the thesis, basing itself upon the case study of the Lahore Inner City, seeks to explore.

'The point is that these are vibrant, pulsating, and even innovative places in their own way. Such places could not be merely conglomerations of disorganized humanity. There is an order and regularity; an order that may exact heavy social costs, yet order it is... This order may not be efficient or just, but the existence of an order cannot be denied...

'Thus, the first task for a researcher of a Third World city is to uncover the indigenous order and to outline its evolving form. Only by knowing the structure of a local social order can one begin to predict and direct the change' (Qadeer 1984).

The thesis is based on the understanding that while many facets of this existing 'system' are undesirable, it is essential to uncover and understand the workings and determinants of its 'invisible' or 'indigenous' order (Qadeer 1984), to be able to effectively guide its improvement.

2.1.3 The Inner City

While there is general agreement about the characteristics of the inner city, Bromley and Jones point to a lack of consistency in the definition of its location. "In North America, the inner city is commonly defined as 'the area that conforms geographically to the political limits of the old central city at the core of the metropolis' (Bromley and Jones; Yeates, 1990). However, other definitions are more vague and describe the inner city as 'an ill-defined area close to the Central Business District....' (Bromley and Jones; Johnston, Gregory and Smith, 1994) or as a transition zone which 'surrounds, but excludes, the city centre' (Bromley and Jones; Diamond, 1991)".

This variation in the locational definition of the inner city indicates two facts:

- a) The inner city entity stems through the urban development process. Most cities, specifically those of North America and Asia, differ fundamentally in both the historical and economic processes that have shaped them
- b) Rather than being a spatial entity specific to location, the inner city is a phenomenon characterised by its physical, economic, and social value for the city at large, and by processes and patterns of change and decay that have taken place within its boundaries over time.

Lahore has an inner core, or an area from where the city has taken its origin historically and spatially. In most cities, this 'core' has a deep-rooted historic, social and economic base and has for a large part of the city's life been or continues to be the 'hub'. Because this inner core was the earliest part of the city to undergo urbanisation, it is now derelict, its housing conditions have deteriorated, its infrastructure has outgrown its life cycle, and it may manifest symptoms of economic and social deprivation- summarised as 'decay'. At the same time, the importance of the inner city is immense: 'If cities are the motor of development, the inner cities should be regarded as a pivotal constituent of this engine' (Acioly 1999).

Referring to the UNCHS (1991) Al-Saheb sees the 'inner city' as a 'dynamic entity... its boundaries change continuously according to the pressures resulting from the location advantages of being close to the centre of economic activities'.

2.1.4 Inner City 'Decay' and Differences of Context

In the context of developing countries in general, Verma (1990) defines inner city areas as 'zones of old residential or mixed development which, due to physical obsolescence and socio-economic change and the accompanying out-migration of well-to-do people and firms, have remained starved of the resources necessary to maintain an essential minimum level of reinvestment in the built form and neighbourhood services. As a result of this they demonstrate a high incidence of a range of physical, social, and economic problems...'

While inner city decay is a phenomenon known to cities of both the developed and developing world, in the latter the issue has received much research and political attention, while in cities of the less developed South it has been a relatively less explored phenomenon. Further, the causes of what is termed 'decay' have varied considerably from context to context. Although in general most cases of decay are hence 'relative' rather than absolute, two broad distinctions of 'developed-world' and 'developing-world' can be made in terms of the urban context within which inner city decay occurs, as done by Couch (1990) and Verma (1990).

Couch emphasises that cities of the developing world are in a different stage of urban growth and governance that differs considerably from those of the developed world. While cities of developing countries are experiencing rapid urbanization and rural-urban migration, cities of the developed world are de-industrialising and losing population. Secondly, the degree of decentralisation and local government autonomy is far greater in developed world cities that in those of developing countries. Thirdly, in developed world cities, urban revitalization depends on large scale companies with intensive capital investments, while small-scale labour intensive enterprises are the 'pillars' of rehabilitation in developing world cities (Al-Saheb 2003).

Verma (1990) notes that cities of the developing world differ fundamentally from those in the developed world in terms of the factors that condition their growth, their spatial structure, the decay of their inner areas, and the practise of planning. Pointing to the inadequacy of renewal efforts in South Asian cities, she identifies two factors: a) a limited perception of the problem as merely an issue of the manifest symptoms of urban decay (structural dilapidation, infrastructural inadequacies, and traffic congestion) rather than in terms of the causes and processes of 'decay', and b) weak implementation of policy and planning.

2.1.5 The Corporate Economy and the Small-Firm Economy

Making an important note of the way the city economy is organised and its impact on urban development, Verma emphasises the distinction between the two basic types of economic organisation made by UNCHS (1984): the corporate economy and the economy of small firms.

'In the corporate economy, the interdependent parts of a given economic activity are vertically linked through an organisational hierarchy and can be separated in space. The city centre associated with the corporate economy is a cluster of office buildings and the characteristic separation of functions may produce and emptying out of neighbourhoods around the centre.

'On the other hand, in the economy of small firms, interdependent parts are linked via current transactions. In one place, perhaps a slum apartment, a small group of people may manufacture parts and carry these to another small firm which assembles and then sells to a different firm which then does the distribution. These necessary linkages require physical propinquity, particularly so in the absence of adequately evolved transport technology. So the city centre and the inner areas surrounding it come to demonstrate dense, mixed land-use patterns in which pressures on land are high and there is an active market for housing, but the market mechanisms will not ensure building upkeep and structures are degenerating. Both public and private abandonment of such areas is a common consequence of the (lack of) interest in redevelopment' (Verma 1990).

In conclusion, Verma classifies the American city as one dominated by the corporate economy, and the Indian city as one characterised by the economy of small firms.

In the inner cities of America and England, decay has been part and parcel of the depopulation of inner city areas, resulting from traffic congestion and environmental decay making areas physically unattractive to well-to-do residents. In American cities this created the potential for suburban growth facilitated by the development of transport links to the suburbs, and the development of the garden city concept and a deliberate dispersal of population to satellite towns in England (Verma 1990).

In developing countries on the other hand, the inner city serves the dual purpose of housing the poor and being the location of the small firm economy. 'The continued demand for inner city housing stems from the omission rather than commission of public sector endeavours'. While formally supplied housing usually provides ownership housing and caters to upper and middle income groups, lower income groups are left with the choice to settle informally in un-serviced city outskirts or take rental housing offered by private landlords in the inner city. According to Verma the latter has certain locational advantages, greater tenurial security, and perhaps a higher status value. On the other hand, along with continuing demand for housing, 'there is a tendency in the small firm type of city economy for economic activities to gravitate to central areas' (Verma 1990).

Discussing the characteristics of decay, Acioly notes that decay may come in various forms, with characteristics such as social unrest, devaluation of real estate properties, and a decrease in economic activity due to the departure of small businesses, petty industries, and manufacturers to more prosperous areas where development opportunities exist due to better services and infrastructure, accessibility, and customers. This example however does not hold true for the case of the inner city area of Circular road. Another range of 'decay' characteristics discussed by Acioly include 'the change in character and function of a neighbourhood as well as the gradual shift in the profile of the inhabitants, caused by social mobility, highlighting the phenomenon of ghettos and the appearance of dilapidated sites. In

this case there may be sub-renting, overcrowding and high population densities which are directly associated with a process of spatial, social and economic segregation. Violence, criminality and drug trafficking may not be excluded. The scarcity of financial resources and decrease in public and private investments are important factors that contribute to the loss of urban vitality and to the deterioration of the urban heritage. Public spaces and configurational qualities intrinsic to the built-up environment are severely affected. There is a noticeable fall in the attractiveness of the locality' (Acioly 1999). While not all of these symptoms are found in the Lahore Inner City area under study, some such as a 'shift in the profile of inhabitants, sub-renting, over-crowding and high population densities, and a scarcity of financial resources' are common characteristics.

2.1.6 Regeneration, Renewal, Revitalization, Rehabilitation, or Upgrading?

Inner city policies have seen a shift in the last decade; whereas the earlier emphasis was on outward growth, the focus has moved to inward restructuring (Acioly 1999). Acioly (1999) defines urban revitalization as 'an urban renewal approach that intends to reverse the process of physical deterioration and social and economic decline that prevents urban areas and their inhabitants from being an integrated part of the current urban development process'.

The terms renewal, rehabilitation, revitalization, and regeneration are often reciprocally used in urban literature (Al Saheb 2003), however there are differences of approach in each. While regeneration and revitalization are concerned with restoring urban functions and economic life, urban renewal is concerned with the clearance and reconstruction of the urban fabric of cities (Al Saheb 2003), and rehabilitation is based on the assumption that there are elements and parts of the existing area which have deteriorated and need to be brought back to life with various changes.

Urban revitalization approaches have ranged from the 'polar' or 'extreme' to the 'intermediate' or middle-path. On the one extreme exists the 'conservation' approach promoting gradual adaptive measures, stressing urban renewal that responds to social and economic demands without bringing substantial changes in the original character of the built environment. This concept is generally associated with restoration and historic sites within inner cities. On the other extreme, the approach of 'redevelopment' is based on a radical process of urban renewal that promotes the demolition of obsolete structures and urban artefacts and the imposition of new uses, functions, buildings, and even regulations. The redevelopment approach aims to meet new social needs and economic demands emerging in the city. In keeping with the process of globalization, this approach aims to attract private investment in order to create a visually attractive physical environment, 'transforming the personality and character of the locality and creating a new physical, social, and economic profile which fits in with an idealised image of urban modernity' (Acioly 1999).

The 'rehabilitation' approach on the other hand, takes a middle position vis-à-vis conservation and redevelopment. It is based on a renewal effort characterised by a gradual process of physical/spatial, economic, and social transformation that responds to well-defined needs and priorities. It preserves social, cultural, and physical features and the genuine characters of sites, buildings, and local economic development processes. At the same time it may launch redevelopment initiatives which help to integrate them into the overall urban development process of the city' (Acioly 1999). Upgrading, regeneration, and rehabilitation are interchangeable terms used to describe the same phenomenon.

In clarifying another nuance of revitalization, Al Saheb (2003) points out that the revitalization of neighbourhoods differs from that of central business areas or downtown revitalization. While the first is concerned with integrating neighbourhoods with the social and economic networks of the city, the latter is concerned with achieving broader impacts of development on a city-wide scale. The parameters of revitalization hence include the broad framework of local community, physical environment, context, attitudes, forces, and internal and external ties (Al Saheb 2003).

This thesis research undertakes the 'rehabilitation' upgrading position on inner city revitalization as the most appropriate, and aims to explore local needs and priorities, in determining the best uses for the area, given the current trends and ongoing processes.

2.1.7 What is 'Realistic' and 'Successful' Upgrading?

In 1980, in its projection of the future of the Walled City, the Walled City Upgrading Report 1980 concluded that 'if present trends persist, the deterioration of utility services, water, sewerage, refuse disposal, electricity and gas and the dilapidation of buildings will continue to accelerate...as the quality of the environment deteriorates, more and more of the wealthier sections of the population will leave; the pace of renewal will be reduced until the entire Walled city will be inhabited exclusively by the very poor, who will be crowded more and more into the ever decreasing stock of buildings, and continue to live on in increasingly unhygienic, unsanitary, and structurally unsafe conditions...nowhere else would they find accommodation as cheap and as close to their place of work...property values may begin to fall (and) powerful business interests will step in to buy up large areas and clear them for redevelopment...'

The first step in answering the above question, is determining the elements and characteristics of decay specific to the inner city area under study. Although the study area is seen as a thriving economic and cultural centre, various existing physical, social, and economic conditions as well as ongoing trends and processes have been outlined in chapter 1, forming the problem definition. Theses are based on the researcher's knowledge on the matter prior to research. The source of this knowledge has been background desk study and interviews.

2.1.8 Porter's Theory: The Comparative Advantage of the Inner City

The entity of the Circular road inner city does not operate in isolation. Not only is it affected by the advantages offered by the location within which it is situated, it in fact exists and thrives because of these advantages. It is this phenomenon that Porter too elaborates upon in his relatively modern model of inner city revitalization, in which he proposes to rethink inner cities in economic terms rather than social terms. Porter emphasized that the inner city is not an 'economic dinosaur' but a critical part of the local economy (Milwaukee Journal Sentinel Online 2003).

Although his model is based on revitalization in America's inner cities, Porter's theory highlights a phenomenon that is applicable to inner city areas in general- namely, the 'comparative advantage of the inner city'. Porter notes that within the changing nature of the world economy, if low-cost labour and cheap real estate are their only advantages, inner cities will not be able to compete. He instead argues that the actual or 'genuine' competitive advantage of inner cities lies in four factors: the strategic location of the inner city, its integration with regional clusters, unmet local demand, and human resources. Interestingly,

all of these advantages apply to Lahore's Circular road wholesale market, which makes it a thriving economic centre for the city and the Province alike.

The strategic location of the Circular road area such as its links and proximity to the 'inter' and 'intra' urban roads and transport systems, have enabled it to grow economically. This not only enables effective trade to take place, but integrates the market regionally as well, facilitating the flow of produce into the area, as well as outwards into the region. Being the largest wholesale market not only in the city but in the entire Punjab province, accounts for unmet local and regional demand. And fourthly, the easy availability of cheap labour within the Walled city and other neighbouring localities makes it the ideal location from a business point of view.

At the same time, needless to say, the inner city has intrinsic drawbacks which, if overlooked can lead to aggravation of existing gaps and problems.

2.1.9 An Issue of Urban Management

Urban management is defined as a 'set of instruments, activities, tasks and functions that assure that a city can function. That one gets water at home, that a road can transport goods and people, that land is safeguarded against individual and firms' interests and that repairs are carried out on infrastructure networks before it starts affecting people's lives. (It) assures that basic urban services are provided for the population and the various private, public and community stakeholders perform and maximise their intrinsic roles in a harmonious manner...' (Acioly 2003)

In the broader context therefore, the Circular road issue is not merely a problem of physical and environmental indicators of degradation, but one of urban management. Acioly (1999) summarises the management dimension of the inner city by pointing that on one hand, 'the poor management and inadequate maintenance of the existing infrastructure networks and services highlight institutional inefficiencies and the lack of finance. On the other hand, the overall process of physical deterioration that follows reveals inefficient urban management and the incapacity of local governments to deal effectively with the problem. Local government interventions are required in order to reverse the process of urban decay and the deterioration of housing and environmental conditions'. Needless to say therefore, the resolution of inner city issues demands 'the establishment of an efficient urban management system which can steer conflict resolution, mobilise adequate resources, and guide urban development in a participatory manner'. The given research is a preliminary diagnosis of the issues at hand, for the development of a rational and participatory basis for improvement and upgrading.

2.1.10 Land-Use

Inarguably, the use to which land is put is the basis of all activity in three-dimensional urban space. Land-use planning has its roots in the desire to protect the public interest, and determines the qualities and uses of the built environment, in turn affecting the way people act and interact. Housing characteristics, land-use patterns, transportation choices, and architectural or urban-design decisions affect the quality of life and the efficient function of cities. In turn, land-use decisions have social, economic, environmental and health impacts (Jackson and Kochtitzky 1996). One of the key objectives of planning is therefore to ensure the integrated development of cities, making effective use of land resources (Hanley 1991).

Land-use itself has 'ripple' effects (Jacobs 2007). It is the generator of multiple layers of social, economic, physical and political actions and relationships in the city. These vary in complexity and impact, with some affecting the immediate context, and others having a 'multiplier' impact on the larger urban domain within which they exist and function.

In the study area, it is the multiplicity of land-uses which allows the function of the system at hand, however at the same time a lack of regulation of land uses is responsible for many of the areas problems such as traffic congestion and air pollution. While the role and importance of land-use in shaping the functions of cities and the lives of its people is widely acknowledged, conflict exists over the factors that determine land-use. In today's world within the backdrop of the neo-liberal paradigm and pressure on third world governments to compete globally, land-use is being increasingly determined on the basis of land-value, rather than social and environmental considerations. Hasan argues that if urban land-use was determined on the basis of the larger urban plan as opposed to ad-hoc processes, and decided by social and environmental considerations as opposed to land value, many of the issues of inner cities would not arise (Hasan 2005).

2.1.11 Actors: People & State, Formal & Informal

A major shortcoming of third world governments has been the failure to effectively meet the basic needs of citizens, the vast majority of whom comprise low-income families. In Pakistan, various factors can be attributed to this, such as lack of financial capacity, weak governance, and the fact that the majority of the annual development budget is spent on defence expenditure and debt-servicing. The result of this inability is a vast demand-supply gap in the provision of fundamentals such as housing, employment, transport, solid waste management, water and electricity to name a few, leaving the populace with no option but to cope on its own. By default, these deficiencies have given rise to the so-called 'informal sector'- a collaborative enterprise between the informal service providers and state institutions who collude with the latter in exchange for bribes. 'Often referred to as 'mafias' the informal sector operates through a powerful nexus with bureaucrats and politicians, which further weakens the state institutions or, indeed, makes them redundant' (Hasan 1998).

The most common 'informally provided services' in Lahore include housing, transport, electricity and solid waste management. Importantly however, the term informality pertains not only to informal service provision, but includes trade and micro-enterprises- acting as essential channels for self-employment for the poor income earner. The informal 'economic' sector hence includes workers such as hawkers, workshop mechanics, and day-wage labourers that contribute to a major portion of the revenue base of the urban economy.

The International Labour Organisation introduced the term 'informal sector' in 1972, in a study which stressed the importance of this sector in employment creation for the poor. Van Dijk stresses the role of the informal sector as an engine of economic growth, while Stren (2005) argues in favour of incorporating informality in urban development policies to deal effectively with the issue. Van Dijk further emphasises that the informal sector is the most important part of the private sector, contributing to roughly one-fourth of the Gross Domestic Product (GDP) of developing countries, making it second only to agriculture and employing approximately 58% of the non-agricultural labour force.

The informal sector involves the flow of money and people not acknowledged in statistics or on paper, but known to many people- where labour is allocated, investments are made and raw materials are used without really being measured for almost half of the economy (Van Dijk). In the nineteen-nineties the concept of the informal sector's 'flexible specialisation' was used to stress the importance of factors like inter-firm relations, innovative capacity, and the role of clusters and networks in its function. The theory of flexible specialisation rightly emphasises that the inter-linkages between small firms creates a combination of speciality, creativity, flexibility, and strength, and that clusters of enterprises are appropriate for an exchange of ideas, and their physical nearness makes the development of institutions and their interventions more easy and effective.

The informal sector accounts for a large part of employment and service provision in the Circular road area. The flexible specialisation phenomenon explains the locational and organisational characteristic of the Circular road wholesale market, and the essential role of the informal private sector in the development and daily operation of this market.

At the same time, it is important to note that it is not only the end-product, but the informal nature of the processes that are employed in its production or delivery that constitute the dynamics of informality. In the words of Sadiq (2003) with reference to Karachi's inner city area of Saddar Bazaar, in order to safeguard the city centre from further degradation, it is important to analyse the inherent informal and formal processes of change.

Van Dijk concludes that 'the informal sector has great dynamics and a remarkable ability to adapt to different circumstances. It can contribute even more to production, employment, income, and even to tax revenues. This requires that the government creates an enabling environment for the development of the informal sector'.

2.1.12 The Participatory Process in Planning and Decision-Making

It is clear although largely unrealized (Jackson and Kochtitzky 1996) that the more each member of society is able to participate and contribute, the better off society is. Achieving a balance between the different goals of a successful city implies the need for a representative political and administrative system through which the views and priorities of citizens can influence policies and actions both within the district and neighbourhood, where they live, and at the city level (Hardroy, Mitlin, & Satterthwaite 1993). 'Good governance' therefore becomes critical for successful cities as it provides the means through which citizens reach agreement on how to meet multiple goals (Hardroy, Mitlin, & Satterthwaite 1993). This implies democratic and inclusive planning and decision making processes. However, while processes and tools for the participation of citizens in development is an established practise in developed countries of the West, in many of the less developed countries of the South such as Pakistan public consultation and participation are still at an elementary stage and are largely discouraged by government.

Planning and decision-making in Pakistan's urban development is generally undertaken by narrow non-representative interest groups such as politicians, government planners and foreign consultants (Vandal 2007). As a result, planning is largely 'un-informed' and is not streamlined according to the needs of citizens. Independent development professionals agree that if the failures of the past are to be avoided, political decision making regarding development in general, and development projects in particular, must be 'informed' (Hasan 2006). 'Given the wealth of information, knowledge and practical experience available with Pakistan's academic institutions, professionals, organised community networks and NGOs, it is essential that a system of consultation between them and the decision makers is established'.

It is in the absence of effective and representative governance including the institutional means to ensure that infrastructure, services, and pollution controls are provided, that environmental problems are greatly exacerbated (Hardroy, Mitlin, & Satterthwaite 1993).

2.1.13 Urban Environmental Issues in Developing Countries

A successful city is one which meets multiple goals (Hardroy, Mitlin, & Satterthwaite 1993). These include healthy living and working environments for its inhabitants such as i) 'water supply, the provision of sanitation and garbage disposal, drains, paved roads, and other forms of infrastructure and services essential for health and for a prosperous economic base', and ii) 'a sustainable relationship between the demands of consumers and businesses and the resources on which they draw'.

Lee (2006) classifies urban environment-related problems into three kinds of cities: poor cities, rich cities, and industrialising cities, arguing that because the nature of environmental issues is different in each, the classical model of environmentalism cannot be applied homogenously to all. Citing the key environmental challenges in the city of the developing country, he identifies sanitation, clean water, air quality, and housing for recent migrants. This classification applies aptly to the case of Lahore, which is struggling to meet the mentioned challenges, with limited finances and inadequate governance. The Circular road area is a perfect example of these phenomena.

Among the issues that signal the need for upgrading in the Circular road area, is the problem of traffic congestion on Circular road, and its by-product of severe air and noise pollution-making it one of Lahore's worst-off areas in terms of environmental indicators.

According to the Devolution plan 2001, the Lahore City District Government has the task of achieving ambient air quality in Lahore which it has failed to meet due to 'the absence of a transport policy, institutional and organizational impediments, change in land use policy by the Government of Punjab, and poor monitoring and management of air quality (Aziz & Bajwa 2002). Aziz and Bajwa (2002) note that in Lahore's most heavily congested areas of Mall road, Circular road, Circular road Yakki gate, and Shalamar, the lead level in the blood of traffic policemen and school children is $35 \mu g/dl$ (microgram per delite) and $38.0 \mu g/dl$ respectively, against the maximum accepted level of $20g/dl^1$ (The Pakistan Times 1993).

Taking the comparison of Karachi's central 'Saddar Bazaar' area which among commercial uses also functions as the main intra-city transport junction, researchers have noted severe adverse impacts on residents and workers such as alarmingly high levels of lead in blood through inhalation, and psychiatric ailments directly linked with air and noise pollution (Hasan, Polack-Sadiq, & Hasan 2002).

2.1.14 Inner City Revitalization and Urban Sustainability

In the 1980s, great importance was given to inner city regeneration programmes in developed countries. In recent years, a majority of urban renewal efforts in the United Kingdom and Europe in particular have placed high priority on wider environmental issues such as air quality, congestion, noise, and the city's contribution to larger global issues such as the greenhouse effect and acid rain (Hanley 1991). All of these characterise Lahore's environmental issues, in particular those of the Circular road area where environmental indicators are the city's worst.

Falk suggests three principles for successful regeneration, namely social justice, natural balance, and the minimization of waste. 'Social justice is concerned with responding to the needs of the least well-off and ensuring that they are not hurt in the process of change', however Falk notes that few development schemes have paid regard to the existing community. The second principal of 'natural balance' is derived from ecology, and is concerned with preserving diversity and the capacity to adapt to change. Third is the idea of minimization of waste proposing that if the existing built environment is gradually converted to appropriate uses, then conservation can also make economic sense. With reference to the three principles, the thesis places substantial weight on the consideration of the local community at the centre of the upgrading effort. Falk further makes a case for regeneration or balanced incremental development if the objective is to achieve sustainability, as opposed to what he calls the 'big bang' approach. This involves neither leaving the process completely at the behest of the market, nor expect the public sector to be the single actor, but a partnership between state and people.

Falk identifies several factors essential for the success of regeneration efforts. The first is a shared vision, or a 'plan for the area that provides a sense of direction'. Second is the need to respond to potential demand. And thirdly to strike a balance between social or environmental goals and benefits and the commercial need to make a profit from investment.

2.2 Gaps in Conventional Approaches

Since the late 1970s, attention has been paid to the Lahore Inner city, however most of this has focused on the historic preservation of the Walled City (See Chapter 4: 'Context, Evolution, and Description of Research Area').

Projects and plans have not yielded results, and have been 'more disappointing than encouraging' (Badar Alam 2006). A major reason for this has been the predominance of 'sectoral' approaches which are either looking to solve the problem from the perspective of a single sector such as environment or architectural heritage, or perceiving issues as 'local' rather than contextual.

2.2.1 The Contextual Dimension of the Inner City

Discussing the need to take the inner city issue in its contextual dimension, Verma argues that inner city decay today wrongly continues to be viewed as an inner city problem rather than an urban problem. According to Verma, problems related to inner cities in their urban context arise from the several ways in which inner city areas differ from the other neighbourhoods. Similarly, Hasan (2006) stresses the need to study and understand the linkages of inner city areas with the larger physical and economic dimensions of the city, so that each fits into a larger comprehensive development plan. This is presently lacking in Lahore's urban and development-planning process.

'In physical terms, inner cities have a different urban morphology for which routine

building regulations are not always appropriate. In terms of their context, they have unique locational advantages which have implications for the resident community as well as for overall city planning. In economic terms, they are dominated by informal economies, which are different from not only formal economies but also from informal economies in other city neighbourhoods in their larger scale and traditional occupations. This informal economy of

the inner city contributes greatly to the city economy, making for strong economic interests and conflicts. Thirdly in socio-political terms they have unusual circumstances due to the 'juxtaposition of different interest groups in potentially strategic locations'. Important to note, these socio-political issues manifest themselves in communal politics or in political interference in planning or other areas' (Verna 1990). This is predominant in the Circular road area where powerful traders associations have a strong role in influencing interventions in the area.

Verma summarizes the essential contextual perception of the inner city by stressing that it implies unique potentials and problems inner city rehabilitation interventions.

2.2.2 Symptomatic Analysis vs Cause-and-Process-Based Analysis

Verma (1990) discusses the inappropriateness of the approach that has typified renewal efforts in the developing world, in its preoccupation with ''manifest'' symptoms of urban decay, such as structural dilapidation, infrastructural inadequacies, traffic congestion, etc. In the case of Lahore's Inner city, it is the symptom-based approach as opposed to the more holistic cause-based approach to upgrading and improvement that has typified studies and proposed interventions.

Any integrated and sustainable solution must be based on the 'causes and processes' responsible for the existing system's strengths as well as weaknesses, and arise out of an understanding of the existing social, cultural, and economic fabric of the area. Many of the currently proposed land-use changes in the Lahore Inner city are ad-hoc, and are not based on a larger urban plan for the city. As a result, they are bound to adversely affect the livelihoods of low-and-lower-middle income groups which are dependant on them. More often than not, such non-representative approaches to planning are known aggravate existing issues resulting in new viscous cycles of 'decay'.

While the apparent symptoms of decay are observed, with a study of the system's current function and its gaps, the underlying causes and processes responsible for 'decay' in the area can be understood.

2.2.3 The Absence of a Participatory Approach in Planning

As discussed above (See '2.9'), the urban planning and decision-making process in Pakistan is largely non-representative. This is due to the absence of public consultation and broad-based interest groups from the decision-making process. The making of plans is hence limited to a narrow group of planners and professionals, usually government or expensive foreign consultants.

This lack of participatory planning translates not only into plans which do not fully reflect of the realities of the situations they aim to solve, but are hence also deprived of a rich knowledge-base present within stakeholders. As a result while government plans attempt to cater to the public interest, they often do not yield the desired results.

2.2.4 'Antagonist' vs 'Protagonist' Approach

Another shortcoming of the official as well as the professional's view of the problem has been what may be termed as the 'antagonist vs protagonist' approach, in which certain

'detrimental' actors and activities are identified as negative influences to the area, while another set of sympathetic actors is seen as those that are interested in the development of the area. The 'antagonist' is usually seen as the area's poor and lower-middle income users and businesses- traders, (workers and inhabitants, *tonga* and *rickshaw* operators)- as the causes of decay, while the protagonist is usually the academic or professional 'outsider'- architects, planners, government officials, and foreign consultants. Shehayeb and Sedky (2005) classify this approach or paradigm as the 'banner of modernity and a civilized look', where inner city areas are seen by professionals and city officials as being 'unseemly, backward, and uncivilized...(with) recurring attempts to modernize and sanitize the place...(and) hardly any thought of just improving the leaking infrastructure networks, and improving garbage collection with local taxpayer's money...'

It is in part due a blind rejection of those key actors declared the 'antagonist' rather than as important components of urban life, and the application of prescribed notions of how the Inner city should 'look', that there has been a failure to arrive at effective solutions.

2.2.5 Heritage Conservation as 'Beautification' and 'Museumification' for Mass Tourism

Pressures exerted by globalization and development paradigms such as 'city competitiveness' (Iain Begg, 1999) are forcing Pakistan's government to focus on city 'image'. Lahore's development is being geared towards the promotion of mass tourism, and the marketing of heritage and culture as saleable commodities. Local governments are obsessed by making cities "beautiful" to visitors and investors and catering to tourism rather than supporting local commerce (Hasan 2007).

The target group of the growth-oriented paradigm, is the outsider, foreign investor, or tourist, as opposed to the city inhabitant or citizen. Cosmetic or 'surface' beautification of historic areas, is hence taking place in various pockets of Lahore's Inner city, one of the repercussions of which is a rise in land prices and the onset of the gentrification process.

Shehayeb and Sedky (2005) cite cases of 'insensitive beautification' in Cairo's Inner city area, where "planners and designers maximize the 'aesthetic' value...while banning all activities that often have 'life-values'". The case of Lahore's historic 'Hazoori Bagh' situated in the heart of the Walled City, is typical of this practise of 'museumification', where after a year-long process of maintenance and remodelling, entrance to the Garden has been banned for all public, with the exception of high-profile events by the corporate and official sectors (Rabia Ezdi 2006). Aside from the fundamental contradiction in this action, Hazoori Bagh has for several decades been a centre of informal traditional poetry recitals, a cultural practise epitomizing the 'living heritage' which has henceforth been eliminated.

2.2.6 'Heritage Conservation' at the Expense of Livelihoods

Effective urban planning is concerned with the provision of livelihoods, housing, and transport to citizens. The Walled City Upgrading Report states that the Walled city alone (exclusive of the commercial area of Circular road) in 1980 provided shelter and employment to 8% of the metropolitan population.

In a similar vein, Shehayeb and Sedky (2005) discuss a scheme which carried out the 'removal' of textile workshops, perfume shops, and bookshops from a Cairo Inner city area

that had surrounded Al-Azhar mosque since the 10th century, which posed both a danger to the authenticity of historic areas, and a threat to the livelihood of its people.

2.3 Some Relevant Inner City Case Studies and Experiences

The following cases of Inner City studies and upgrading experiences taken from the developing world, are relevant to the thesis due to their comprehensive analyses of the issues at hand, and their participatory and multi-sectoral approach in resolving given gaps in Inner City areas. The Saddar Bazaar Rehabilitation Study looks at processes of decay of the Karachi Inner City. The Delhi Inner City India is intrinsically similar to the Lahore Inner City in its historic evolution as well as its present characteristics. Both the Quito Ecuador Inner City Revitalization and the Curitiba Brazil Inner City Revitalization employ a comprehensive Master Plan based approach as opposed to a single-sector approach. And the acknowledgement and incorporation of the informal sector in the improvements made in the city centre of Rio de Janeiro makes it a unique case inclusive of the broad range of stakeholders needs.

2.3.1 Saddar Bazaar Rehabilitation Study, Karachi

The Karachi Saddar bazaar rehabilitation study was carried out in order to formulate alternatives for revitalisation of Saddar and rehabilitation of its hawkers, encroachments and leased markets. The study conducted between November 2001 and August 2002, analyzed the process of Saddar's transformation, identified processes and agents of change, and gave suggestions for the area' future rehabilitation. Both the evolution of the Saddar area, as well as the exploratory approach undertaken by the study are coherent with the thesis research on Circular road. The summary of the study (below) is taken from the paper 'Addressing Informal Processes for the Rehabilitation of Saddar Bazaar' (Sadiq 2005).

Karachi is Pakistan's largest city with a population of over 12 million, British India's administrative and commercial centre, and post-partition Pakistan's capital from 1947 to 1958. It is a port city and the country's largest centre of trade and commerce. Over the centuries, its port's trading and defence potential has attracted merchants, colonials, feudal lords, intellectuals and political and economic migrants. These migrant groups in turn, have contributed towards the development and degradation of the city and its centre, 'Saddar Bazaar' (Sadiq 2005).

'In the early 19th century, Saddar was planned on gridiron pattern and developed with modern infrastructure and buildings to serve the high ruling military and administrative staff of the British Empire, traders, businessmen and some rich and influential locals. The influx of refugees at Pakistan's independence at 1947 caused people belonging to destitute backgrounds to squat on all available open spaces, grounds and parks in and around the old town and some areas of Saddar. This resulted in the degradation of the infrastructure and emergence of inner city slums'.

The next major change in Saddar's population and land-use came in 1958 when the administrative capital was shifted from Karachi to the newly planned city of Islamabad. Following this was the government's decision to resettle refugees living in Saddar to newly formed satellite towns. This resulted in a large movement of traffic through Saddar, as the

majority of resettled population had to move across the city to their jobs. 'This transformed Saddar into an unplanned transit zone and transport terminal, encouraging transport related infrastructure, wholesaling, storage and traffic to develop in the area. This resulted in noise and air pollution, difficult accessibility, lack of parking, exodus of elite and a social and physical degradation of the area (Figure 4). The middle class filled in the physical and cultural void left by the elite, keeping Saddar alive. This situation changed in the 1970's as the construction boom generated by Gulf money led to an emergence of high-density high-rise apartment buildings and commercial centres forcing out the middle class. Consequently, the area was taken over by real estate speculators, labourers and encroachments catering to the growing transport and construction sectors in Saddar.

'Today Saddar lies in the economic hub of Karachi and serves thousands of vehicles and transit commuters who pass through it. This has lead to the degradation of its facilities and fast disappearance of its cultural spaces. The absence of these in turn, is resulting in alienation amongst communities, ghettoisation of rich and poor areas and a cultural division of the city' (Sadiq 2005).

2.3.2 Delhi Inner City India

Due to a shared pre-partition and colonial history, the evolution, current socio-economic and physical profile, and the current issues signalling decay in Delhi's inner city are remarkably similar to that of Lahore's Walled City-Circular Road complex. The following summary is taken from the study 'Inner City Decay and Renewal in India' (Verma 1990).

The inner city or Walled city of Delhi is its historic core dating back to the seventeenth century. Over the last few decades this area has emerged as the major commercial centre for all of North India. The traditional form intended largely for residential and related usages, the area now suffers from usual inner city problems such as structural dilapidation, infrastructural stress, and acute commercial congestion.

In 1911, the Walled city's decline began as a result of the establishment of the new colonial capital (isolated from) the inner city. Consequently, population in the inner city continued to rise, and peaked at partition in 1947. Today the Walled City which was originally planned for a population of 60,000 'bustles with all kinds of unintended activities'. 'Its socio-economic characteristics have always been different from the rest of Delhi, owing in part to its significant economic role. But despite being such a money-spinner, it is primarily a city of the poor and has become the locale of an exploitative labour market where entrepreneurs from outside thrive upon cheap labour' (Verma 1990).

Like the inner city of Lahore, Delhi's Walled City plays a 'significant economic role as a major distribution centre for North India. It is the wholesale centre for a number of goods including dry fruits, grains, spices, cloth, bicycles, electric goods, plumbing supplies, etc. It is an extensive retail outlet. It is a manufacturing centre for shoes, wooden crates, motor spares, books, oils and perfumes, small scale metal components, woven cloth, plastic bangles, etc. It is a major location for cottage industry, book binding, and printing. It has handicraft industries like embroidery, leather, brass, copper, silver and gold jewellery, wooden and ivory crafts, cane furniture, drama costumes, etc. It is also a major recycling centre where newspapers are turned into bags, auto and machine parts are reprocessed, bottles are sorted and recycled to factories, tin cans become broom handles, and animal waste is recycled into fertilisers. Sunday Markets at the Red Fort and the Chandni Chowk are major informal markets of the city. To give a rough idea of the scale at which non-residential activities are

proliferating, there are some 150,000 commercial establishments in the Walled City (against 22,000 in 1961 and 55,600 in 1971) and about 7000 industrial units'.

2.3.3 Inner City Revitalization Quito, Ecuador

The historic centre of Ecuador's city of Quito is a 16th century Spanish colonial town and was placed on the UNESCO World Heritage List in 1978. High population losses occurred during the 1970s and 1980s on a scale equivalent to that in North American and European cities during the 1960s and 1970s. Prior to revitalization, the historic centre had a relatively older population, a higher proportion of retired, and a smaller household size than the outer city. Occupational status was generally lower, people were poorer, and housing tenure showed the predominance of renting, whilst housing conditions revealed a greater density of persons per room and poorer access to amenities (Bromley and Jones).

Since the earthquake of 1987, the city's historic city centre underwent physical, cultural, social, and economic changes, motivating local authorities to develop a comprehensive restoration programme in 1989. As opposed to a definitive answer, objectives of this programme included a flexible and dynamic Master plan for the historic district, addressing all aspects of the historic centre, including urban, socio-economic, and architectural concerns. The strategy involved the residents of the area.

Although the historic district has a rich architectural heritage, the municipal council did not limit itself to restoring historic monuments. Instead its aim was to rehabilitate all aspects of the historic centre and achieve an integrated urban development. This included the conservation of cultural heritage, land-use planning, improvement of the environment, potable water, transportation, tourism, commerce, housing, cultural and educational development, and community development. The Master Plan created in 1989 covered a period of two years with a budget of \$500,000. Its three phases cover a pre-evaluation period of data collection, an evaluation period, and the final proposal.

Today the development of Quito's inner city is renowned as one of the successful examples of inner city rehabilitation, with people moving back and the vice-presidency moving its office to the historic centre, the private sector returning and businesses once again investing, private homes being rehabilitated, and museums being developed (Mayor of Quito; Siena 1993).

With reference to the case of Lahore's inner city, the Quito Master plan's three most positive features are a) Making the Master Plan for the historic district a part of the larger Master plan of the Metropolitan district- the two becoming coherent and forming a whole, b) Making the Master plan a flexible tool and a continuous process, with a periodical revision and modification in response to new conditions, and c) A cross-sectoral approach in order to achieve integrated urban development.

2.3.4 Curitiba Inner City, Brazil

The Brazilian city of Curitiba is world renowned for its achievements in urban development largely by means of a Master Plan (1989). Among the two broad objectives of the Master plan, one was to decongest the inner city and revitalize its urban and architectural heritage. The strategy included the pedestrianisation of several inner city roads in order to make the city core attractive to pedestrians and less friendly to private motor cars, the redesign of public spaces, the provision of urban furniture, and the strengthening of traditional values.

Special attention was also given to 'visual de-pollution' of building facades and public urban corridors in order to make the area visually attractive to pedestrians (Acioly 1999). An interesting component of the plan was that its zoning defined commercial, residential, industrial and mixed uses linked with the desired population densities, and at the same time was made flexible by leaving openings for changes in case market response did not tally with the desired intentions (Acioly 1999). Acioly notes that the plan was successful because it was carefully implemented and underwent a process of constant monitoring by the Planning and Research Institute of Curitiba which was the operational arm and think tank of the local government.

The inner city plan was linked with the Master plan by encouraging new commercial developments out of the inner city and matching high-density residential areas with commercial activities and linking them with public transport. Another notable feature of the plan was the concept of 'swapping' properties; instead of the conventional method of government expropriation of properties marked for conservation, owners were given the option of donating property to the municipality in exchange for property with additional floor area ratios elsewhere in the city.

2.3.5 Rio de Janeiro City Centre, Brazil

Informal economic activity is a common feature of inner city areas, and is usually bracketed as illegal or undesirable despite its contribution to the urban economy and services sector. The city centre of Brazil's Rio de Janeiro was a congested commercial area due to the mixing of traffic modes and informal street hawking. An innovative practise has been introduced by the municipality through a process of negotiations between shop owners, local government, and street hawkers- whereby hawkers are legally provided with a specific time-slot to carry out vending activities in the evening, after shop activity has shut down (Acioly 2007). This organized 'time-slotting' rids the central corridors of the problem of congestion and conflict of interests, ensures the securing of livelihoods for poor street hawkers, and continues to serve their broad clientele. Importantly the practise has added to the municipality's tax net after vendors become tax-payers as part of the legally recognized system.

2.3.6 Participatory Development in Ilo Peru

The Peruvian city of Ilo is a widely recognized example of the success of participation in urban development. Ilo is a small-sized Latin American industrial port city which addressed its urban environmental issues though a participatory process of urban transformation. Ilo had a multitude of problem areas in the late 1970's and early 1980's, the most common of which was industrial pollution and a lack of government investment in basic infrastructure, translating into grave problems of environment and environmental health for inhabitants.

Ilo's methodology for change involved partnerships between Municipal government and Community-level Management Committees, the purpose of which was the joint management and financing of projects with Municipality, Federation of Squatter Settlements, and NGOs. Importantly, the process was supported by a dynamic and innovative Mayor who was in favour of a people-centred development process for the city.

Achievements included both tangible and intangible results over a period of seventeen years (1981-1998). Improvements were made in housing, water & sanitation, solid waste management, public works, air & water contamination, and green areas- evident in indicators

prior-to and post-transformation. A key feature enabling success was the establishment of strong organizational and institutional structures and their continuity through four consecutive terms for which the government was elected.

Recap

Conceptually, the thesis revolves around the theme of 'visible chaos and invisible order' in the third world city. An understanding of the existing organization of land-uses in the Walled City-Circular Road complex, is formed by the micro-economic prototype of the small-firm economy highlighted by Verma, and Porter's theory of 'the comparative advantage of the inner city'. Further, issues of urban and land-use management, participatory planning and decision-making processes, informality, and urban environmental sustainability form a central exploratory basis for 'successful upgrading' of the Inner City.

A discussion on 'gaps in conventional approaches' provides a starting point for the thesis, with the understanding that analyzing past experiences and learning from mistakes is as important for successful upgrading of the study area, as a study of achievements and renowned models of upgrading.

Finally, an overview of 'relevant experiences and studies' show that the ideological basis of the thesis is realistic and 'well-grounded', and has been the foundation of several realized studies and Inner City revitalization experiences across the developing world.

Chapter 3 The Walled City-Circular Road Complex

Introduction

The thesis is a location-specific case study. It is therefore necessary to view it in relation to its physical and socio-economic characteristics, its urban context, and the evolution of commerce in the area.

This Chapter first places the Walled City-Circular Road complex in the backdrop of Lahore and Pakistan, and then in its urban context within Lahore. Following this, a brief description of the Walled City's gates and their surrounding markets is given, leading to a general introduction to the Mochi Gate area. Finally, an overview of the evolution of its markets and commercial activity provides a background to its current conditions.

4.1 Administrative, Physical, and Demographic Features

4.1.1 Pakistan

Pakistan is located in a strategic position in South Asia, and has four immediate neighbours, namely India along its East, China at its North-East, Afghanistan along the Western and Northern edge, and Iran running along the South-West (See Map 1). The country is a Federation of four Provinces, of which Lahore is the capital of Punjab Province.

Pakistan has a current estimated population of 150 million, a per capita income of 720 US\$ (World Bank 2007) and an average family size of 6.6 persons.

The country's annual population growth rate is 2.28 per cent, the Human Development Index (HDI) ranking is 138 out of 173 countries in the UNDP's Human Development Report 2002, and its literacy is 33.64 per cent in the rural areas and 63.08 per cent in the urban areas (Hasan 2005).

4.1.2 Lahore Today

Lahore is situated on the left bank of the river Ravi on mildly sloping terrain approximately 215 metres above mean sea level (See Fig.). The total Lahore Metropolitan area spans 2,300 square kilometres (Khan 2006), of which the Walled City occupies an area of 2.5 square kilometres. To the North and West, Lahore is bordered by Sheikhupura District, to the South by Kasur District, and to the East by India (SEE MAP).

Lahore has been the capital of Punjab Province for well over 900 years (Ali 1986). Through the 'Local Government Ordinance 2001' Pakistan's larger cities such as Lahore are run as 'City Districts', and are sub-divided into 'Towns' and the Towns into Union Councils. Today there are 150 Union Councils (the lowest tier of government) within the Lahore Metropolitan Area. Lahore is Pakistan's second largest city, with an estimated population of 9 million. After Karachi, it is the largest centre of industry, trade, and commerce in the country (Government of Pakistan 1981), and historically the most important city of Pakistan. Today it has an urban population growth rate of 3.2%, and is expanding Southwards in the mode of 'sprawl'. Its present population densities in Lahore vary from over 1500 persons per hectare to 37 persons per hectare. This comes to an average density of 208 persons per hectare (Mumtaz 2007).

4.1.3 The Circular Road-Walled City Complex

The earliest records of the Walled City date back to the 11th century, although Its earliest evidence dates to between the 4th and 5th centuries A.D. The Walled City and its surrounding Circular Road fall within the administrative division of 'Ravi Town'. The population of the Walled city has been in a constant state of flux throughout its existence, with migration into and out-of the city taking place as a result of various historical changes. In more recent times, it has grown from 260,000 in 1980 to 600,000 in 2005 (Majeed Sheikh 2004).

In comparison with the average population density of Lahore, the population density of the Walled City is high at 1100 persons per hectare (PEPAC 1993). Within the Walled City there are however differences, with the northern and eastern sectors less densely inhabited that the southern (PEPAC 1993).

The Circular Road surrounds the Walled city, forming a 'ring' road and is one of Lahore's most congested roads, with traffic of varying speeds and types. Although spatially the two contexts- one 'within' and the other 'immediately outside the wall'- are distinct spatial forms, in functional terms they form a single deeply inter-knitted entity.

While the North of the Walled City-Circular Road is neighboured by Lahore's General Bus Stand ('Lari Adda'), industrial units, and major inter-city roads such as Bund Road and GT Road, the North-West is endowed with the World Heritage sites of the Lahore Fort and the Badshahi mosque. The South-East of Circular Road on the other hand holds the 11th century Data Darbar, Lahore's major religious site visited by thousands of pilgrims daily. The South-East segment which includes the Mochi Gate study area, is the hub of commerce and commerce-related activity, and is a part of Lahore's commercial triangle bordered by the Railway Station.

Within the Walled city land-use is an intensive mix of commercial, residential, warehousing, manufacturing, and circulation functions. There is a higher concentration of commerce and warehousing in the Eastern and Southern parts, with more residence and less commercial proliferation in the Western sectors. Southern Circular Road is dominated by commerce and wholesale, while the portion between the Western end of Brandreth road and Delhi gate is a freight terminus (PEPAC 1993).

4.2 Physical, Economic, and Social Context

4.2.1 Spatial Form

The Mughal period saw the Walled city's major development and expansion. The Walled city's spatial plan is based on well-defined domestic and community territories for ethnic and trade groups. The hierarchies of political power, social strata, caste, and calling were clearly represented in its physical structure, whose pattern of urban spaces and street systems is similar to those of other traditional cities in the Middle East and South Asia' (PEPAC 1993). Much of the City's current urban form and land-uses are rooted in these zones. The street system is structured according to progressively localized domains of privacy: a hierarchy of main spines (*guzars*), neighbourhoods (*mohallas*, *koochas*), streets, and cul-de-sacs (PEPAC 1993). And the hierarchy of bazaars radiates outwards from the centre (Qureshi 1988).

4.2.2 Urban and Economic Context

Lahore has wholesale, retail, and mixed markets (LDA 2004). Specialised wholesale and retail markets are most predominant in the Northern part of Lahore. Ali (1986) notes that the Walled City has business centrality and multiple and complex links with surrounding metropolitan commerce, and that its main economic activities serve regional and national markets. Its main contribution to Lahore is the supply of manpower, the supply of processed goods to the city through small-scale industrial manufacturing and production, the provision of storage space for these goods, and infrastructure for the transport of these goods into and out of Lahore.

Each location both within the Walled City, as well as on both sides of Circular Road is unique due to its own specialised wholesale and retail market, and hence its particular manufacturing activity types.

An intense commercial triangle is formed by the South of the Walled City-Circular Road, the areas north of the Mall Road, and the eastern axis between the Governor's House and the Railway Station. On Southern Circular road and within the Walled City economic activity ranges from wholesale and retail, to industrial, manufacturing, and freight activity. Commerce exists in the form of small neighbourhood shops and wholesale and retail shops (Shah Alami, Kashmiri, Akbari, and Delhi), and specialised wholesale markets on Southern Circular Road. Twenty distinct clusters of varying wholesale and retail trades exist on Southern Circular Road (PEPAC 1993). Industry or manufacturing activity ranges from the production and sale of steel, metals, paper, leather, fabrics and other industrially produced materials employing mainly manual labour. Other specialised centres of commerce and wholesale in the area's immediate vicinity are Beadon road, Hall road, and Brandreth road.

4.2.3 Inter- and Intra-Zonal Land-Use Linkages

Different components of the market are inter-linked and inter-supportive in commerce and service provision. The wholesale market is for example not functional without the complimentary goods transport companies. Similarly, banks located opposite Masti gate are essential for the large monetary transactions taking place daily. Further, a large population of local tourists also bring money into the city and are transported to and into Lahore via the General bus stand and informal transport stands along Circular road. The concentration of the wholesale and retail trade in this part of Lahore can in a large part be attributed to proximity with intra-city roads and transport systems (See Map x).

4.2.4 Social Profile

Over the past 150-200 years the Walled City has seen a major shift in its population; while the people who lived 150 years ago comprised the rulers and the affluent, today's residents include some middle-income and largely the urban poor. In terms of social integration and social indicators such as crime, the Walled City Upgrading Report 1980 remarks that 'socially, it is a well-integrated society, with roots and family toes which bind its members together in an intricate web of kinships, clans, fraternities, guilds, and ethnic and religious groups which provide every resident a sense of security and belonging. The incidence of crime is extremely low...'

4.2.5 Historic and Cultural Sites

A large number of Pakistan's architectural and religious heritage sites are located in the Inner City. These include Data Darbar the 12th century Sufi shrine, the Minar-e-Pakistan and Iqbal Park where Pakistan's Resolution of Independence was passed in 1940, and the 'World Heritage Sites' Badshahi Mosque and Lahore Fort.

4.2.6 Urban Social Services

The Walled city is well provided with an infrastructure of social services such as schools and dispensaries run by the local government. In addition four of the major hospitals of Lahore are located within the Walled city or in close proximity of it. Within the Walled city are 300 mosques, Iqbal Park and the remaining parts of Circular Gardens (Akhtar 1992). Open spaces at the neighbourhood level are however few in number.

4.3 The Study Area: Mochi Gate

The sample or study area of Mochi Gate was selected on the basis of certain typical or representative qualities of the urban phenomena being explored. In brief these were mixed land use, intense commercial activity, proximity to transport facilities, historic and social importance, physical and environmental issues such as traffic congestion and air and noise pollution. The scope of the study area includes the Mochi Gate settlement within the Walled City, as well as the expansion outside it on Circular Road.

Administratively, the Mochi Gate locality falls under Union Councils 27 and 28 of Ravi Town. Historically, the Mochi gate locality has been a political hub with the 'Mochi Bagh' being Lahore's prime venue of pivotal public meetings and rallies until the early 1990s. All basic urban services are distributed fairly evenly in the area, such as an electricity nrtwork, water supply, gas, and open sewerage drains. An open main drain or *nallah* runs along the former Wall. Interestingly, two police stations are located at Mochi Gate, one serving the Rang Mahal area, and the other serving Mochi Gate. Social infrastructure includes dispensaries and clinics, a large number of private and some government schools and colleges, dispensaries and clinics, and the Red Crescent hospital and Mayo hospital falling under Mochi Gate's catchment area. The majority of residents of the Mochi Gate area belong to the Shia community, as this is also a religious hub of processions during the month of *Moharram*. The incidence of crime in the area is relatively low. Commerce and its related land-uses such as warehousing dominate residential land use in the Mochi Gate area, and are said to be increasing.



Figure 3: The Mochi Gate Area

4.4 The Evolution of Markets and Commercial Activity in the Area

The development of market and commerce in the Walled City-Circular Road area broadly falls into five phases: i) Mughal period development of markets, ii) Urban and economic development during the British period iii) Post-Partition commercial development, and iv) the growth of commerce 1980s onwards.

4.5.1 Mughal Period Development of Markets

During the Mughal era, land-uses in the Walled City were mainly residential, commercial, service, and social and religious, punctuated by open squares and gardens (PEPAC 1993). Lahore grew as a trading node during Mughal rule in the sixteenth, seventeenth, and eighteenth centuries, when its Kashmiri Bazaar, Delhi Gate bazaar, and Akbari Mandi grew around their respective Gates, and were known for trading in grains, nuts, spices and other goods.

4.5.2 Urban and Commercial Growth during British Period

Lahore and Amritsar formed the administrative, commercial, educational, and industrial heart of British Punjab (Talbot 2006). The British annexation brought large scale urban changes in Lahore. For the Walled City this included the demolition of the Wall and the planting of Circular Gardens. For Lahore as a whole, one of the most impactful developments was the

construction of the Railway Station, setting up a whole new network of functional relationships with the Walled City such as creating the impetus for the dense commercial triangle of which Southern Walled City and Circular Road are a part today. Trading activity in Lahore grew particularly in the 1870s onwards, when Punjab was made the centre of crop production, and Lahore the agricultural trading node. Most interestingly as early as 1917 British planner Patrick Geddes notes the beginning of ad-hoc commercial development on Circular Road: 'the indiscriminate and planless erection of shops and other buildings...can only be described as an extreme and grievous case of the business process'.

4.5.3 Post-Partition Changes

Pakistan's Independence in 1947 brought large scale changes due to migration of refugees from India. This was particularly the case for the Walled City, where vacated residences of the richer Hindus and Sikhs were taken over by poor refugee families. Their densities increased within a few months due to the subdivisions of large homes and the occupation of open areas for make-shift residential accommodation (Hasan 2004).

Talbot (2006) notes that a large number of migrant families migrating to the Walled City at partition, had existing familial networks that enabled them to re-foster business and employment.

It is clear that commerce follows demand and economic advantages of location, such as required services and infrastructure. In the early-nineteen fifties, the Lahore Improvement Trust attempted to clear and redevelop the areas devastated by riots through the Punjab Development of Damaged Areas Act 1952. Shah Alami, originally a Hindu-majority residential area destroyed by fire, was redeveloped in 1956 as a low-density commercial strip along a broad vehicular street. Delhi Gate's destroyed area was rebuilt into a dense pedestrian market known today as Azam Cloth Market. This institutionalisation of commercial activity complemented already existing commerce in the area, and set the trend for its intensification in following years. The consequent growth of intra-city commerce went hand-in-hand with the spread of Goods Transport Terminals on South Circular Road. Today the largest Goods Forwarding Agency of Lahore was in fact set up in Shah Alami in the early 1950s. Gradually, other commerce-related needs such as warehousing space and services, began to locate themselves here through an organic process and induced the conversion of residential landuse into commerce, warehousing, and small-scale manufacturing.

4.5.4 The 1980s: Growth of Commerce and Related Activities

By the early 1980s, the Walled City-Circular Road was a well established wholesale and retail market serving regional and national markets. From the mid-eighties onwards, continuing degradation of the Walled city's built fabric as well as neglect and lack of maintenance, caused those financially capable to shift to newer locations outside. The vacuum left by out-migrants, combined with weak or non-existent government regulation (Bajwa 2007) was gradually filled by commercial interests and a largely poor rural migrant population. Despite one-off government efforts at controlling or stream-lining these land-use changes, organic and incremental commercial growth has taken place within the Walled City and along its periphery. The readily available cheap labour force, business centrality of the Walled city, multiple and complex links with surrounding metropolitan commerce, as well as relative anonymity which facilitates the evasion of much of national and local taxation, have

been the main advantages for commercial interests to be situated here (Kron). In the following decades, the shift towards non-residential land-uses has only intensified.

4.5 Major Government Studies and Programmes for the Area Since 1947

- i) Lahore Urban Development and Traffic Study 1979-1981: The JICA-funded LUDTS was one of Lahore's major urban studies, focusing on the infrastructure and land-development aspects of Lahore's growth, while emphasising on land, basic housing, social infrastructure, and utilities. Proposals for the Walled City included an action plan for building rehabilitation, repair, and renewal.
- ii) **Walled City Conservation Plan 1986**: The LUDTS recommended the preparation of a Conservation Plan for the Walled City, and in 1986 the local public-sector architectural firm Pakistan Environmental Planning and Architectural Consultants (PEPAC) began work on this Conservation Plan. A Traffic Improvement Programme for Circular road was also prepared.
- ii) Sustainable Walled City Project 2006: The World Bank funded Sustainable Walled City Project aims to conserve parts of the Lahore Walled City to its Mughal-era form, modelling it on the conservation of the Fez (Morocco) Medina and marketing it for tourism.

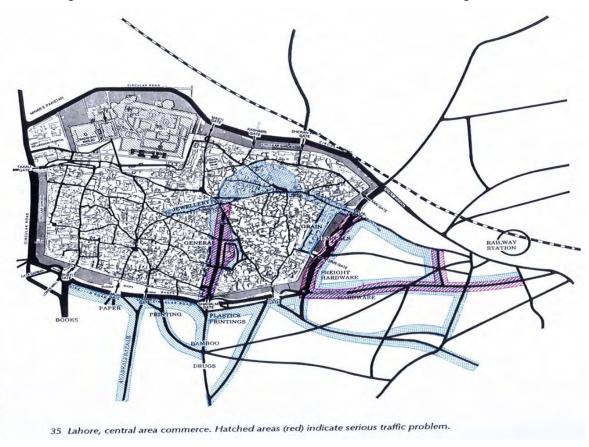


Figure 4: Commerce and Traffic

Courtesy: PEPAC 1993



Figure 5: Study Area within Larger Complex

Chapter 4: Research Findings and Analysis

The Existing System and Its Gaps

4.1 Introduction

Sub-Questions 1 and 2, namely 'what is the existing system and how is it operated', and 'what are the physical, functional, and managerial gaps in the Mochi Gate area from the point of view of primary actors', will be discussed collectively, as they encompass a range of similar land-uses and related issues.

4.2 Research Findings

4.2.1 Land-Uses, Actors, and Gaps in the Existing System

Each land use generates various activities, actors, and inter-actor relationships, and requires inputs for its basic function, maintenance, and regulation. Land-Use in the Mochi Gate area falls into four broad categories: commerce and its related land-uses, residence and its related land-uses, and services for both residence and commerce. Fourthly although 'circulation' space would generally fall under services, it is being treated as a separate land-use due to its wide usage. 'Table 1' below presents an overview of the basic land-uses in the Mochi Gate area, their related land-uses, and actors involved in the respective land-use activities.

Table 1: Overview of Land Uses and Actors

Land-Use	Related	Actors
	Land-Use	
Commerce	 Warehousing Transport Shop Urban Infrastructure Manufacturing Residence Social Infrastructure 	 Building and Property Owners Manufacturers Informal Service Providers/Workers Formal Service Providers/Workers Trader's Associations State
Residence	 Residence Urban Infrastructure Social Infrastructure 	 Building and Property owners State Informal Service Providers
Services	Commerce Residence	 Formal Service Providers Informal Service Providers State

 Transport of Goods 	Goods Forwarding Agencies	
 Circulation of 	 Hand-Cart Operators 	
People	 Animal-drawn carts 	
	 Rickshaws/Ching-Chis 	
	 Loader trucks 	
	 Motorcycles 	
	• Cars	
	Manual transport	
	 Circulation of 	 Circulation of People Hand-Cart Operators Animal-drawn carts Rickshaws/Ching-Chis Loader trucks Motorcycles Cars

4.2.1.1 Commerce

Commercial land use can be defined as all space used for the purpose of trade and business. While within Mochi Gate the commercial area largely caters to retail, on Circular Road wholesale is the predominant form. Most businesses are family-run, and in general a single trader plays the three-in-one role of shop owner, businessman, and manager.

Within Mochi Gate, Mochi market comprises small retail and wholesale shops of one to two storeys, arranged in row-development. The majority of these sell children's toys, sweets, decoration items, and the now banned fireworks and kite-flying equipment. Shops are complemented by storage space either directly above, or within residential area in the close vicinity. Taxes paid by shop owners in Mochi Bazaar include income tax, property tax, 'board' tax taken by the Parks and Horticulture Authority, and shop license fee. Commercial development exists on both shoulders of Circular Road outside Mochi gate on Circular Road (See Land Use Map). Of these two developments, that along the former Wall is in fact 'encroachment' on Circular Gardens and hence illegal. These low-quality structures have existed for the past fifty to sixty years and comprise attached row-development in the form of single and double storey shops (See Annex). While the ground floor is used for sale, the first floor is used for storage. Many shops on Circular Road are furnished with air-conditioners, also reflecting the paying capacity of shop owners. Commercial development along the Southern belt consists of buildings mostly three to four storeys in height, such as plazas¹ with rental shops, a vacant plot, and several banks. Although the majority of buildings along this belt are not 'encroaching' illegally on land, many of them are 'illegal' as their plans are not approved by the Lahore Development Authority (LDA). Encroachments in general also include semi-permanent structures protruding from the building line and extending onto the road.



The commercial building of Barkat Plaza on main Circular Road is constructed on land belonging to the Department of Auqaf. It's owner is a member of a political party, and pays rent to the Auqaf Department. In turn, he has given this property on *puggri* to traders and businessmen occupying shops within the plaza.

Box 1: Barkat Plaza

¹ 'Plaza' is the local term for a multi-storey commercial building with small shops

Employment

Three basic forms of employment exist in the area, namely the self-employed, contractor-employed, or owner-employed. The self-employed include both upper income businessmen, as well as low-income hand-card operators, hawkers, rickshaw and ching-chi owners and drivers. The contractor-employed largely include waste scavengers, *kabaris* and construction workers. Owner-employed individuals include shop assistants and workers at Goods Forwarding Agencies. The basic forms of earning in the area are monthly-wages, day-wages or *dihari*, and rent per unit of work such as distance covered, weight of transported material etc.

Occupancy Patterns

Occupancy of commercial property exists in three forms: rental-occupied, owner-occupied, and *puggri*. The majority of illegal commercial property on Circular Road is '*puggri*'- an informal system of long-lease in which a part of the value of property is paid by the lessee, and a minor rent paid each month. This serves both the owner of illegal property who recovers investment and a substantial profit and loses relatively less in case of eviction, and the occupier or lessee who gains from the commercial use of the space. *Puggri* ownership is usually on the basis of 'trust' or word of mouth, rather than written records.

Inter-Linked Land-Uses

Land-uses related to commerce are shops, warehousing, transport of goods, services, parking, manufacturing, space for the loading and off-loading of goods, and eateries for worker's meals (See 'Table 2').

All shops need warehouses. A major portion of formerly residential ground floor space in the inner Mochi Gate area has over the years been converted to storage and warehouses for shops. Formal and informal services required for commerce include hand-carts and goods transport terminals for transport of goods, banks for monetary transactions, urban services such as electricity and solid waste management, and roads and streets for circulation. The transport of goods is a major commerce-related activity, and its modes include hand-carts, animal-driven carts, and goods-transport trucks. Details of these will be discussed under 'Circulation' below. Parking in the area is deficient with reference to its actual need. As a result, a majority of parking for services such as *tongas* (horse-driven carts), trucks, pick-up lorries, and hand-carts, is done 'illegally', enabled only through the large amount of bribes paid to police. The main manufacturing activity in Mochi Gate was that of *guddi dor* or kite-string. According to interviewees, this has either subsided or gone 'underground' as a result of the government-imposed ban on kite sale and manufacturing. Some manufacturing such as that of traditional sweets is still done in the Mochi Gate area.

Actors

Primary actors related to commerce include traders and businessmen, owners of buildings used as shops and warehouses, the providers and workers of formal and informal services, and trader's and goods transporter's associations.

The workforce in the area comprises a mix of mainly two income groups- the upper income comprising traders, and the low-income comprising workers, while middle-income workers are relatively fewer in number. Age brackets range from middle-aged businessmen, young businessmen that have recently taken over family businesses, and the labour force which is

largely thirty years and above. Under-age workers include waste scavengers, shop assistants, and workers at eateries.

The majority of traders are not residents of the Mochi Gate area. Many who originally resided here have over time moved to higher-income residential locations outside the Walled City. Others are residents of nearby areas and have established business in the Mochi Gate area due to kinship ties. Trader's Associations are formed to look after the collective needs and interests of businessmen and are run through open contributions by shopkeepers.

Bhatta

'Bhatta' or bribes are taken by agencies such as police, in a relationship of collusion between users of informal space and services, and the concerned government authority. In the Mochi Gate area, the main such 'colluder' is police. A total monthly *bhatta* of Rs 500,000 to 600,000 is paid to police by shopkeepers selling banned items such as kites and fireworks in Mochi bazaar. Bhatta is also taken from those operating at informal *addas*, discussed in detail under 'Services'.

Inter-Linkages between Land-Use

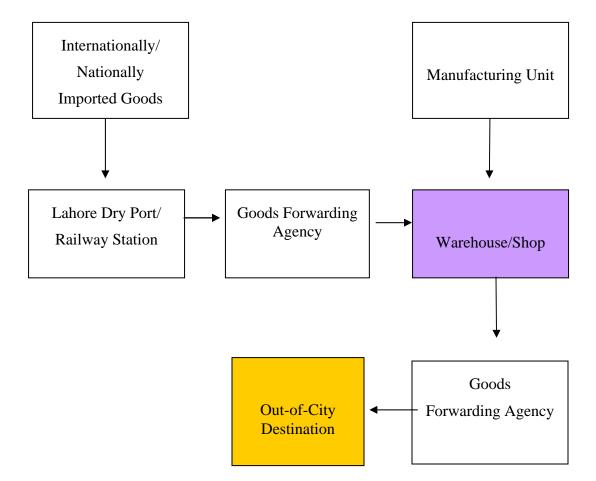
Commerce and residence form the two broad land-uses, which are in turn dependent upon a range of service-related land-uses and actors. 'Table 2' displays these relationships in the form of a matrix.

Gaps

Increasing commercialisation is seen as a problem by residents who claim that the area is now largely commercial and that if given a choice they would like to move out of the Walled City. Further, in the absence of state regulation, property owners exercise a considerable influence over the physical conditions of building stock, such as a lack of maintenance, demolitions of historic stock, etc. Also, the widespread practise of *bhatta* makes those working 'informally' relatively vulnerable to harassment by power-yielding agencies such as police.

Figure 6: The Flow of Goods

The diagram below explains the principal flows of goods within and outside the Walled City-Circular Road area.





Shakeel Ahmed has been the owner of a wholesale/retail outlet selling toffees, candles, and decoration items in Mochi Bazaar for 35-40 years. The warehouse for his goods is situated in the street behind the market, with 'only samples' displayed at the shop. He is himself a resident of Baghbanpura where the manufacturing unit for his goods is also located, employing 15-16 workers. Most of these goods are exported to cities of Punjab and NWFP. 'These days a sharp increase in Chinese products is replacing locally manufactured ones', says Shakeel Ahmed.

Box 2: Mochi Bazaar



Faisal runs his family's polythene wholesale business at Mochi Gate on Circular Road. The trade was taken up by his father in 1987, and the shop was obtained on *puggri*. Himself a resident of 'Defense', one of Lahore's upper income residential areas, Faisal commutes to work by car. On average his daily sale amounts to Rs 300,000.

Although previously his father also owned a polythene manufacturing unit, polythene is now purchased by them from a small factory at Bund road.

Most clients are from cities outside Lahore, such as Hyderabad, and even Kabul (Afghanistan). Orders are placed via telephone or in person, and payments are made either online, by credit card, or occasionally by hand. Material is transported to Goods Transport Terminals by donkey-cart, from where it is booked on the name of the client and transported to its destination.

Box 3: Polythene Wholesale at Circular Road

4.2.1.2 Residence

Residents of the Mochi Gate area fall into two main categories, namely those that have been settled here pre-dating partition (1947), and those that have migrated to the area in recent years. Residential occupation exists in the form of owner-occupied units and rental-occupied units, and comprises two distinct social 'groups': families and labourers.

While a large number of the primary or main streets of the inner Mochi Gate area are commercialised, secondary or collector streets forming inner *guzars* or neighbourhoods are predominantly a mixture of residential and warehouse space (See Land Use Map). The majority of homes that were originally 2-3 storey residences, have over the years been subdivided by their owners and put on rent as homes and warehouses. According to a rough

estimate, 60% of non-commercial land use in inner Mochi Gate is residential, while 40% is warehouse space.

Actors

In general, both owner and rental residents are satisfied with the supply and provision of basic urban services such as water, electricity, and gas. Electric infrastructure such as transformers and cables is however ill-placed and a large number of wires sometimes interfere with telephone and television infrastructure. An underground piped sewerage system does not exist in the Walled City and sewerage is carried through open drains at the street level. The main sewerage disposal in area is a *nallah* or main drain running along the periphery of the former Wall. Urban social services in the area's proximity include schools, colleges, vocational training institutes, clinics, and hospitals. A majority of schools and colleges are now privately set-up with only a few state-run institutions. The Mochi Gate population is served by the Mayo hospital, one of Lahore's larger medical facilities located within walking distance.

A large portion of labourers working in the Mochi Gate area also reside here in shared rooms with co-labourers, while others live in nearby localities such as Badami Bagh where cheap rents are available. The main non-work needs of resident labourers include food, rest, and recreation. Food is managed through local eateries which also act as platforms for socializing, while rest and recreation includes activities such as 'luddo' and other outdoor games that have been played traditionally in the streets of the Walled City. Such recreation is usually undertaken on Sundays which is the only local holiday. The main 'social pool' for labourers is either co-labourers or resident men of the area.

Recreational land-use exists in the form of Mochi Bagh park flanked along the Western belt of Mochi Gate, and the historic Mochi Ground along the its Eastern belt. All three of these, although now forming distinct and separate 'parks' are in fact remaining segments of the 19th Century Circular Gardens constructed by the British at the removal of the City's wall.

Mochi Ground has been the historic venue for major political rallies until the early nineteen nineties, and is today used largely as a cricket ground for the neighbourhood as political rallies are discouraged by government. Its adjacent part which was formerly used as a truck parking, has been recently developed as a park with recreational amenities. Western Mochi Bagh has substantial green cover and is in a well-maintained condition, being frequented by people throughout the day, such as residents during the early morning, resting labourers and the unemployed during work hours, and children in the evening. Because it is surrounded by both residential and commercial land uses, and being in full view of onlookers, it is a safe and well monitored public space.

Gaps

Residential sub-dividing has resulted in increased density and over crowding with deficient provision for light and ventilation in sub-divided units which on average span 1 marla². Further, the historic stock of the Walled City is deteriorating rapidly due to a lack of maintenance, and declining in numbers due to its replacement with new construction. The trend in building construction shows a continuing replacement of residential land-use with warehousing. Also, although by law all new plans are to be approved by the Lahore

² 'Marla' is a local unit of space equal to 220 square feet

Development Authority, this is by and large not the case. The design and quality of much of new construction is hence unapproved and unregulated.

Further, given the high population density of the area, smaller green spaces at the street or neighbourhood level are inadequate in number, especially with reference to the needs of women and children. In the words of one interviewee, 'more open spaces are needed for people to vent out their problems'.



Haji Rafique is a native of Mochi Gate, and the owner of the area's well known traditional sweet (*mithai*) chain. Senior inhabitants like Haji Rafique hold the Walled City's unique living culture and its *bhai-chara* (brotherhood) in great esteem.

Despite being a successful businessman and having a house in Lahore's Jauhar Town locality, Haji Rafique chooses to spend much of his time at his ancestral home in Mochi Gate.

Box 4: Haji Rafique

4.2.1.3 Services

Service provision caters to commerce and residence, and is both formal and informal. By and large, most informal services serve the commercial sector while formal service provision by the State is mostly used by residence.

Formal or State-Supplied Services

State supplied services include basic urban services such as water, electricity, sewerage and gas, and social services such as parks and playgrounds. The main agencies responsible for the supply and management of State-provided services in the area are the Punjab Transport Department, the Lahore Development Authority, the Lahore City District Government, and the Traffic Police.

The Lahore Development Authority is responsible for all new development in the Lahore metropolitan area, as well as the regulation of new construction for housing projects, private houses, and commercial development in the city. Among the major plans of the government of Punjab for the Walled city-Circular Road area, is the \$ 150 million 'Sustainable Walled City Project', a joint venture between the World Bank and the Punjab government. The project is estimated to span 6 to 10 years, and is targeted towards tourism in the area. Secondly, among the government's less-publicized plans for the area is the relocation of the Circular Road's wholesale market out of the city. According to the LDA, the horizontal expansion of Lahore is creating the need for not one but various 'small trade centres' and relocation of the Circular Road wholesale market is possible at the newly constructed trade centre at Jauhar Town.

The functions of the Punjab Transport Department relate to regulating the routes, qualities, conditions, and types of both public and private road traffic. Pertaining to the Mochi Gate area, this means the charging of fees from passenger, private, government and commercial

vehicles, and regulating violations such as 'illegal' parking. While the Department occasionally carries out 'operations' on illegal parking, and obtains route fees and vehicle fitness fees from passenger and private vehicles, ironically it does not procure fees from Goods Transport trucks. The reason given for this was that the Department intends to relocate Goods Forwarding Agencies from Circular Road, and a charging of fees would be akin to a legitimising of the existing GFA terminals.

The 'Town' Municipal Authority and Union Council fall under the City District Government. The TMA is responsible for the regulation and facilitation of development, and the planning, capital investments, and maintenance of municipal services. According to the Nazim, the Circular Road wholesale market caters to all of Lahore, and 70% of its traffic flow is related to the wholesale market, with traffic congestion being the most serious issue. The shifting of the wholesale market and the Sustainable Walled City Project will in his view solve many of the problems of the area, such as congestion. According to him, traders are aware of this project and no trader is happy with the existing problems on Circular Road; if given suitable place 'they will be willing to shift, however land and property mafias in the area will not be happy with the project'. Infrastructural development planned for the larger Walled City-Circular Road area includes the construction of 15 new water tube-wells, the carpeting and addition of service lanes on Circular Road, and the redesign of the General Bus Stand at Badami Bagh.

The Union Council is the lowest tier of local government. Citizen's day to day complaints regarding matters such as services and crime are lodged with the Union Council administration. While some of these matters fall directly under the Union Council, others are relayed to concerned departments (eg WASA). Among the basic service-related responsibilities of the Union Council are road construction and patchwork, street lighting, and solid waste management.

The Lahore Traffic Police is responsible for the regulation of traffic and action over traffic violations. From June 2007 however, the former traffic police system was revamped and replaced by new management consisting of 'traffic wardens'. A team of traffic wardens is designated on Circular Road, with shifts rotating at different points. All traffic wardens are equipped with motorcycles. The main issues highlighted by traffic police is the absence of traffic signals on Circular Road, a lack of parking areas, and encroachments.

Solid Waste Management is among the principal tasks of the local government. The CDGL solid waste squad consists of sanitary staff of the City District Government, and most workers assigned to the Mochi Gate area reside in localities close to the Walled City. Solid waste staff is deployed at the Union Council level, where each Union Council has a total of 160 sanitary workers, 4 supervisors, and 1 sanitary inspector. Within the streets and neighbourhoods of Mochi Gate, CDGL sweepers pick solid waste on a daily basis and transport this by wheel barrow to disposal bins on main Circular Road. Very little disposable waste is produced from shops, as most of this such as packing material is recyclable and is bought by kabaris. Like many other urban services of the third world city, solid waste management is a partnership between state actors and the informal private sector consisting of low-income workers. While the informal private sector plays the role of collecting, separating, and selling recyclables, the CDGL is responsible for maintaining cleanliness on roads and in and around garbage containers, and transporting non-recyclable waste to the landfill sites. The majority of CDGL-related 'cleaning' activity takes place in the early hours of the morning prior to the onset of commerce. The entire length of Circular road is 'swept' daily by CDGL sweepers, and cleaned every morning by a special 'water and brush' vehicle (See Annex). Waste is

found dumped both in and around CDGL containers. Sanitary staff transfer 'open' dumped waste into containers manually by means of a bucket. If and when a container is full, truck drivers are informed by wireless telephone, and waste is immediately transported by a truck to the main landfill site.

Of all the basic urban services, it can be said that solid waste management is the most complex (See Figure 4), as its process involves various steps from collection to dumping; it is integrated with other urban sectors such as transport, land, and recycling; involves various stakeholders such as waste scavengers and *kabaris*; and requires equipment such as trucks and fuel. Solid waste is managed per administrative 'Town', with vehicles and trucks parked at 'Town' offices.



Siddiq and Saeen are sanitary workers of the Lahore City District Government. Both are residents of the nearby Sanda locality.

They work every morning except Sundays, and are responsible for transporting solid waste by wheel barrow from the inner streets of Mochi Gate to the main CDGL bin on Circular Road. Once this bin is full, CDGL truck driver is informed by 'wireless', who then picks this waste and transports it to the landfill site at *Saggian Pull*.

Box 5: CDGL Sanitary Staff

Informally Supplied Services

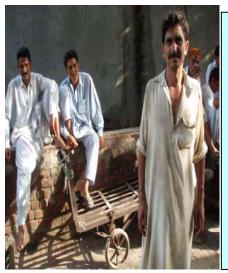
Informally supplied services can be defined as those requiring the informal use of land or infrastructure. In the Mochi Gate area, the majority of these are in the form of 'addas' and cater to the commerce sector. Adda literally translated as 'station', is usually an open space at a road or junction from where a service is made available. Addas in the area range from those of urban transport such as rickshaws and ching-chis, to addas for hand-carts, solid waste sorting, rental motorcycles, and trucks known as 'loaders'. The location of an adda is with respect to clientele, as well as access to infrastructure and technical requirements of service provision.

Three of the key service providers of the informal private sector are discussed below:

Hand Cart Operators

Hand-Cart Operators have a constant and consistent role in the area, with work spanning 14-15 hours daily, intense physical activity, and few breaks. Also, they have a major impact as 'actors' in the function of the area and its system, largely because they form a major proportion of traffic both in the inner streets of Mochi Gate and on Circular Road. Hand-carts are essentially designed for plying the narrow streets of the Walled City. Their services are hired, and are made available at the local hand-cart *adda* at Mochi Gate. Rents are charged in accordance with the distance travelled as well as the weight of goods transported. In specific, their job involves the transport of goods either *from* wholesalers/retailers to Goods Forwarding Agencies, or *to* wholesalers from Goods Forwarding Agencies. Goods less in

number and weight such as single packages are also transported manually by labourers. A major work-related concern of hand-cart labourers is the security of carts during night hours when work has ceased and carts are locked at the *adda*; where incidences of theft and confiscation by police occur occasionally, with return only on the payment of a bribe.



Originally from Sialkot where his wife and 5 children reside, Mohammad Shaukat came to Lahore almost sixteen years ago, purchased a hand-cart and began to work as a hand-cart operator in Mochi Gate. His work hours stretch from 8am till 10pm. 'Ours is *hawai rozi*' (insecure livelihood).

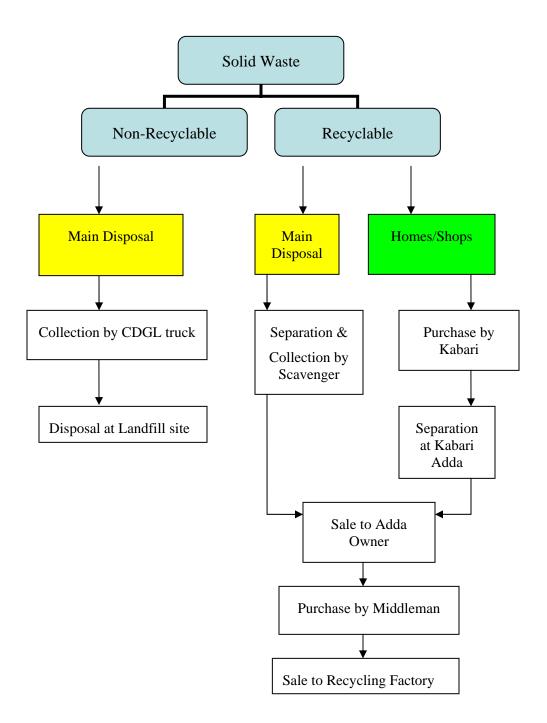
Currently a resident of Mochi Gate, he shares a 'quarter' with six other labourers, paying a rent of Rs 1800, and visits his family once every month. Like other hand-cart operators, he locks his hand-cart at the *adda* every night. 'Occasionally, the 'corporation' people take away our hand carts and return them only after the payment of a fine' His biggest problem is the increasing prices of basic commodities, such as food.

Box 6: Hand-Cart Operator

Waste Scavengers and Kabaris

As mentioned above, solid waste is the main by-product of commerce and residence, and is composed of a large amount of recyclable waste, such as card-board, polythene, plastic bottles, glass, and pieces of metal. The main spatial needs of kabari addas is space for the separation of recyclables, and warehouse space for storage. There are four *kabari addas* on Shah-Alami Mochi link-road including built as well as open make-shift *addas*, in addition to which space along the main drain is also used for waste separation and storage (see Land-Use Map). Recyclable waste is bought by kabaris and scavengers, sorted at the adda, sold to a middleman, who then transports and sells this to recycling factories mostly located at Bund road or in neighbouring cities such as Gujranwala (See Figure 7). The collection of recyclable waste is done in two streams: that which is bought by kabaris directly from homes and shops, and the other which is picked by scavengers from waste disposal points and landfill sites. Child waste scavengers visit dumps and disposal points during early morning hours before it is removed by CDGL staff. On the other hand, young boys and old Pathan women were seen to be actively involved in the activity during evening hours between 5-6 pm when commercial activity has for the most part ceased, and the day's accumulated recyclable waste can be purchased from shops or collected from their environs. Waste scavengers and kabaris working in the Mochi Gate area hence bridge the gap between waste collection and waste recycling, namely the separation of recyclables.

Figure 7: The Solid Waste Streams





Box 7: Kabaris

Mohammad Latif and his family are *kabaris*. *Kabari addas* have existed here for well over 25 years. *Kabaris* buy recyclables from Mochi Gate and nearby localities, sort them at the *adda*, and when enough has been collected, sell them to the *adda* owner by weight. The owner then stores these in his warehouse, and sells this to beoparis when a substantial amount has been collected, who then transport these recyclables to recycling factories on Lahore's Bund road and in neighbouring cities.

Metals and paper are mostly sent to Gujranwala, bread is purchased by *gujjars* (animal keepers) to feed buffaloes, while plastics are sent to factories in Rawalpindi and Gujranwala.

The main services required for this work are water and electricity, obtained from connections on the street, while meals are obtained

Goods Forwarding Agencies

While roughly 150 Goods Transport Terminals existed in the Southern Circular Road area a decade ago, today these have increased to approximately 320. The majority are located on main Circular Road, while some are on main Shah Alam road. Their main function is a) the transport of domestically and internationally imported goods mostly from Lahore Dry Port and some from Lahore Railway Station, to the Walled City-Circular Road area for wholesale and retail, and b) the transporting-out of goods to clients and traders in cities outside Lahore. Goods include a vast range of items such as chemicals, sweets, cosmetics, jewellery, items of daily need, garments, medicine, and raw materials.

Although goods transport terminals have narrow frontages opening onto the road, their inner areas are equipped with large courtyard spaces used for the parking of trucks, loading and offloading of goods, and some office space. The work of Goods Forwarding Agencies runs a twenty-four hour cycle, and employees include drivers, managers, book-keepers, and labour. Trucks are only allowed to circulate on Lahore's roads between 10 am and 6 pm daily. Trucks use GT road for Punjab's cities Gujranwala, Sialkot, Faisalabad, Jehlum, and Rawalpindi, and NWFP cities of Peshawar and Abbotabad; and Multan Road for Sindh and Southern Punjab. A medium sized Goods Forwarding Agency occupieies 20,000 square feet³ of space, and in a twenty four hour cycle, a medium sized Goods Forwarding Agency 'sendsout' approximately fifteen trucks, 'receives' approximately nine to ten trucks. Functional needs and recurring costs include proximity to petrol pumps and workshops for the purchase of diesel and the constant need for servicing of trucks, and toll tax paid on leaving and entering Lahore. According to the interviewee, a strong mafia controls and benefits from the business of goods transport terminals.

Interestingly, in 1988 a government attempt aimed at shifting Goods Transport Terminals to Bund Road by providing land on subsidized rates. This was however largely unsuccessful, as

The Dynamics of Land-Use in the Lahore Inner City:

³ Kanal is a local unit of space and 20,000 square feet is equal to 10 Kanal

owners used allocated space for the construction of warehouses and shifted goods terminals back to Circular Road.

Bhatta

For the use of open space for sorting, kabari *addas* pay monthly *bhatta* to the market management. Hawkers usually pay a daily sum to the shop in front of which they locate themselves. *Tonga* (horse-drawn cart) owners pay the CDGL a bribe of Rs 500 per month, and 'loader' trucks pay Rs 2000 per loader to the Mochi Gate police. Rickshaw and Ching-Chi drivers paid Rs 10 per trip to traffic police, wagon owners paid Rs 100 per wagon, and goods transporters paid Rs 5000 per 'circular', however since the induction of the new traffic warden system, this has not occurred.

Gaps

Several grave environmental health issues are generated by the existing practise of waste separation by 'unprotected' scavengers, the manual lifting of solid waste at CDGL bins by sanitary staff, and the open dumping of solid waste at the Mochi Gate main drain. All of these put individuals at a high risk for disease. Secondly, little facilitation is given to labour from either the State or employees, such as residence, job security, medical support etc. Finally, the practise of collusion subjects workers of the informal sector to harassment by authorities, and is hence a constant source of mental stress.

4.2.1.4 Circulation

Street space within inner Mochi Gate and road space on Circular Road are the principal circulation channels. On average the streets of Mochi Gate span between 8 to 10 feet. Circular road on the other hand is a dual-carriageway with one way traffic along each arm. A large portion of traffic is related to transport, while some is residence-related.

The predominant use of road and street space is for the transport of goods. Inter-zonal transport of goods is by means of hand, hand-carts, animal driven carts, and some rickshaws. Out-of-city transport of goods is by private Goods Forwarding Agencies discussed above under 'Services'. Only a small portion of goods are destined to locations within Lahore; these are transported by 'loader' trucks operating from an informal *adda* on Circular Road.

The composition of traffic is extremely wide in range, and includes slow moving and fast moving, as well as local and through traffic. The majority of local traffic on Circular Road is related to commerce. Through traffic on Circular road is directed from or towards the Lower Mall, Data Darbar, Nisbat Road, Lahore Railway Station, and Badami Bagh General Bus Stand. Pre-dominant modes within the narrow streets of Mochi Gate are pedestrian, hand-carts, and some rickshaws and ching-chis, while on Circular Road a diverse mix of all modes is seen.

Effective circulation space is only a portion of the constructed road/street width, as this serves the function of parking as well as the loading and off-loading of goods into shops and goods transport terminals. Encroachments in the form of shop extensions onto streets and footpaths are also common.

⁴ A 'Circular' refers to an allocated area for traffic police; there are 3 Circulars in the area, namely Rang Mahal, Akbari Mandi, and Lower Mall

Gaps

Traffic & transport-related gaps relate largely to an absence of segregation, weak traffic design, and the mix of land-uses (the latter will be discussed under 'Analysis'). The mixing of slow-moving and fast-moving and local and through traffic causes circulation to slow down, as well as vulnerability to non-motorized traffic such as pedestrians, hand-carts, and animal-driven carts. Also, a shortage of parking space causes much of circulation space to be used for parking.

Further, circulation within the Walled City is a problem for residents, as streets are dominated by commerce-related traffic and remain highly congested during most hours of the day. As a result, inter-zonal commuting within Mochi Gate such as for school/college trips, household shopping, and so on are largely hindered. For commuting outside the Walled City, residents travel on Circular Road. Due to commercial traffic congestion during the day, and the movement of trucks at night, this too is a major obstacle in the use of Circular Road at night, particularly in the case of emergencies, leaving only holidays for residents to commute freely within and outside the area.

Motorized traffic on Circular Road and Inner Mochi Gate also creates severe air and noise pollution, which is both an environmental and health hazard for those living and working in the area.

4.2.2 Inter-Linkages between Land-Uses

The following matrix provides an overview of the two basic land-uses of commerce and residence, and their degrees of dependence upon other services and land-uses- '0' denoting least necessary, and '5' denoting most necessary.

Table 2: Matrix of Inter-Dependent Land-Uses 0=not necessary; 5=very necessary

	Commerce	Residence
Warehousing	5	0
Manufacturing	4	0
Goods Transport Terminals	5	0
Hand-Cart Operators	5	0
Basic Urban Infrastructure	4	5
Urban Social Services (Schools, Colleges, Hospitals)	1	5
Recreational Space	3	5
Circulation Space	5	5
Banks	4	2
Public Transport	2	4



Figure 8: General Land-Use Mochi Gate

General Land-Use Mochi Gate: Legend

- 1. Commerce: Wholesale/Retail small shops
- 2. Commerce: Neighbourhood shop
- 3. Commerce: Wholesale/retail plazas
- 4. Parking: a) Informal, b) Formal
- 5. Kabari *Adda*
- 6. Motorcycle Rental Adda
- 7. Animal Shed
- 8. Hand-Cart *Adda*
- 9. Rickshaw/Ching-Chi Adda
- 10. Loader Adda
- 11. Hawker
- 12. Tea Shop
- 13. Local eatery
- 14. Mosque
- 15. Development Institute
- 16. Police Station: a) Rang Mahal, b) Mochi Gate
- 17. Mochi Bagh
- 18. Mochi Ground
- 19. New Mochi Park
- 20. Vacant Plot
- 21. Fountain

4.3 Analysis

The characteristics of the existing system, and its physical, functional, and managerial gaps are discussed below.

4.3.1 The Existing System

As evident from the research, the existing system has the purpose of meeting one large ends, namely the sale of certain specialised products, and all its parts are working towards this with or without its awareness. Together, these parts interact and enable the function of the 'system'; this can be likened to a factory assembly line, or the components of a machine in which the efficient working of all parts is necessary for the function of the whole.

The existing system is organised on the basis of land-use, with each land-use having its respective set of actors. Land-uses in the area are determined by factors such as functional 'needs', the comparative advantages of certain locations, connections between interdependant parts, and the multiple uses of space. Further, land use is 'enabled' by various mechanisms or support systems, such as informal networks, institutions such as traders and transporters associations, collusion with police and other agencies, and so on. Importantly also, the two major contributions or positive outcomes of the existing system are the generation of employment, and the contribution of the informal solid waste recycling sector to environmental sustainability.

Organisation

4.3.1 Inter-Linkages Between Land-Use Activities

It can be said with surety said that no land-use exists independently or in isolation from other land-uses. All land uses and activities are part of a 'chain' leading to the procurement of certain goals, the production of certain services or goods, or the meeting of certain desired end results.

4.3.2 Need is the Mother of Invention

While in general residence and its related activities are supported by State facilities such as urban and social infrastructure, the State plays a negligible regulatory role in commerce, and as such provides no facilities to the commercial sector. Actors related to commerce and its support services have organised themselves according to demand and business potential, and cater to their needs through various mechanisms, discussed under 'Support Systems' below. It is in this regard that the principal of 'need is the mother of invention' that has given birth to land uses and activities, and all basic needs related to trade have been catered to through a creative use of available resources. Examples are kabari *addas*, motorcycle rental *addas*, tea shops, and the location of Goods Forwarding Terminals in the South-Eastern belt of Circular Road. The location of banks too within South-Eastern Circular Road cannot be excluded from this phenomenon.

4.3.3 Location and Its Advantages

Locational advantage as in Porter's theory of the Inner City is one of the main determinants of the organisation of land-use in Mochi Gate. All commercial and related land uses are based on locational advantages vis-à-vis a) economic advantage, b) basic services and infrastructure needed for commerce. The majority of land-uses have located themselves out of functional necessity, in locations where a) space and services required for their operation are available, and b) there is relatively easy access of groups involved in the activity.

An example of this is the location of kabari *addas* along the drain and main street of Mochi Gate (See Land-Use Map), making them 'central' with respect to the catchment area of waste collection (Mochi Gate, Circular Road, and its adjoining localities such as Gawal Mandi), enabling easy access of *kabaris* and the easy circulation of animal driven carts transporting separated recyclables to recycling factories.

Also importantly, those land-uses which are not able to take advantage of a desirable or 'suitable' location, intends to relocate itself. The main instance of this is residence. Because inhabitants feel a deficiency in the 'residential' and residence-related qualities of the Mochi Gate area, they plan to relocate to newer residential areas outside the Walled City.

4.3.4 Organisation of Land-Use

The research makes evident the basic principle of the organisation of land-use in the small firm economy, namely that it consists of inter-connected parts that are organised in space, and require physical proximity or propinquity (Verma 1990). It is only by physical proximity that functional inter-linkages are made possible by physical proximity.

These are of two kinds: a) Functional inter-linkages *within* the area requiring physical proximity, b) Functional inter-linkages *with other* city areas requiring physical proximity with the Walled City-Circular Road area.

4.3.5 Dissolved & Overlapping Nature of Land-Use

Contrary to the modern planning paradigm of segregated functions, space-use in the study area is 'dissolved' or serves multiple functions as opposed to being defined by a single use. An example of this phenomenon is the use of road and street space, of which circulation of traffic is only one among many other uses, such as loading and offloading of goods, parking, the location of addas, etc. Another example is the *thara* or the step, which while being designed as a 'step', also serves the purpose of seating space and acts as social platform and interface to the street.

4.3.6 Cluster Organization

Locational advantage brings to the fore the related phenomenon of the 'clustering of land uses.' Urban land uses tend to group together for reasons of economic advantage (FAO 2007). It can be said that this practise is more widespread in the small-firm economy of third world cities. This factor also explains the phenomenon of specialised markets in the area, as opposed to the modern 'mixed' market where various types of retail and produce co-exist.

Like attracts like. Similar types of wholesale, retail, manufacturing, and even service-related land uses such as goods transport companies, and kabari *addas* have located themselves collectively in groups or clusters. Not only does physical clustering support common economic and infrastructural needs of the trade, but is also a necessity of informal land-use to be physically consolidated for the protection of the interests of the group. The outcome of the hence self-created competition between similar businesses is seen as secondary or less impactful than the drawbacks of not being grouped together.

'Enabling' Mechanisms

There are several support mechanisms that enable the existing system's land uses and functions.

4.3.2.1 Informality and the Role of Police

A major outcome of informality is the practise of bhatta or informal tax, also referred to as bribes. These are usually paid to police by those engaged in a legally unaccepted activity, trade, or service. This ranges from shopkeepers who continue supplying fireworks and kites despite the ban by government, to bhatta paid on illegal parking spots along Circular Road, to the use of services not provided through the official channel such as the use of water by an informal tea stall, or the use of electricity at a kabari adda. The latter two may also pay bhatta to the concerned water or electricity providing partner.

4.3.2.2 Physical/Functional/Managerial Support

This includes minor provisions such as the provision of water coolers outside shops for the use of all passers-by, as well as more organised functional support within shopkeepers for example the collective employing of a night watchman for the bazaar.

4.3.3.3 Political/Social Links and Organisation

Organisation for the protection of trader's common interests exist in the form of well-developed institutions such as Qaumi Tajir Ittehad. These are highly effective as a semi-political platform in putting pressure on government on various issues, and securing desired ends.

4.3.3.4 Informal Networks and Social Support

While formal 'associations' in the area secure the interests of traders and transporters, informal network serve the same purpose without an institutional structure. This is made necessary mostly with the informal use of land and services, where groups engaged in similar trades act as consolidated networks to protect each other's common interests, such as hand-cart operators. On the other hand, informal social support includes cultural habits and norms among residents and shopkeepers of the area. Within residents there is a high degree of informal social monitoring, for example a sense of group responsibility to look out for the general security of co-residents; this is a typical cultural quality of the Walled City. Within shopkeepers, a high level of trust and a similar co-monitoring of activity in the market creates an environment of security, in which a shopkeepers is able to momentarily leave his shop (eg for prayer at the mosque) un-locked with the assumption of it being 'watched' by other shopkeepers.

Recent Changes

The Growing Role for Banks in the Area

Among the changes that have occurred in the 'system' over recent years, the one occurring most due to technology is the nature of monetary transactions. Buyers of wholesale goods are making greater use of online banking services as well as a greater dependence on long-distance banking. As a result of this technology as well as for security reasons, money is not being transferred less through the physical movement of individuals, and more from bank to bank. This has resulted in a major land-use development, namely the opening up of a large number of both national and international bank branches in the South-East Circular road area, in the close vicinity of goods forwarding agencies and in the geographical centre of the wholesale market.

The Ban on Kite-Flying

The activity of kite flying is among the main cultural assets of the Walled City, and the kite flying sector had become an industry in the area prior to its banning. The ban was imposed following an increase in kite flying-related accidents, has caused the loss of a large number of livelihoods, and is also seen as a cultural disadvantage. In the view of President Qaumi Tajir Itehad, solutions to the dangers caused by kite-flying other than banning the sale and

manufacturing of kites could have been employed by government. At the same time despite the ban, an 'underground' supply of kites and related equipment still exists, made possible only through the payment of monthly bribes (*bhatta*) to police.

Replacement of Animal-Driven Carts with CNG-Driven Vehicles

Gradually, animal driven carts used for the transporting of goods are being replaced by Suzuki vehicles for economic reasons, more-so since the introduction of CNG fuel in Lahore. CNG fuel is both more cheaper and more environmentally friendly that petrol. On the other hand animal fodder required as feed for animals costs on average Rs 400 per day.

Slowing Down of Economic Activity

Political instability in the country during the time the research was conducted, has also caused a decline in economic activity in the area. According to interviewees, among the indicators one was the decline in traffic volume on Circular Road.

Positive Outputs of the System

4.3.3.1 Employment

Needless to say, the system at hand is responsible for providing employment to a large number of individuals. The Walled City Upgrading Report (1986) estimated this figure to be 8% of Lahore's population in 1986. If Lahore's current population is estimated at 9 million, this comes to the employment of 720,000 individuals supporting countless families. Economic activity over the past two decades has only increased in the area, the figure hence having increased several fold.

4.3.3.2 Environmental Sustainability

The informal private sector contributes to environmental sustainability by bridge the gap between waste collection and waste recycling, namely of recyclables, while at no cost to the state. Waste scavengers and *kabaris* are hence important actors as they along with creating an employment base, are contributing to environmental sustainability in the city. This means that very little plastics, polythene, metals, and glass is actually 'wasted', as most of this reaches recycling factories. In the absence of both a state controlled recycling process and unemployment benefits, the informal private sector hence engages in a largely low-cost process while at no cost to the State. The health risks to scavengers and kabaris from this activity are on the other hand grave, discussed under 'Gaps'.

4.3.3.3 The Living Culture

The traditional social and cultural patterns of the area forms its valuable and often overlooked 'living' heritage. Also it is the presence of residential activity and its inter-play with traditional markets and trades that has to a large extent maintained and nourished this unique 'living culture'. This realisation has often been missing from restoration efforts and models for the Walled City.

4.3.2 Gaps in the Existing System

The gaps in the existing system pertain to aspects related directly to its *management*, its *function*, and its *maintenance*. All of these in turn create various impacts upon actors, as discussed below.

4.3.2.1 The Organisation of Land Use

A majority of existing land-uses have not arisen out of a plan for the area, but through the organic organisation of indigenous processes and activities. This ad-hoc organisation of land use is unable to take broader realities into consideration. A major symptom of this is the intense mixing of residence with commerce and warehousing in particular. This mix necessitates the flow of goods on hand-carts, motorcycles, rickshaws and Ching-Chis, and by hand- into residential areas, utilising the same circulation arteries as residence. On the other hand, commerce-related services such as hand-cart and kabari addas, are located along 'outer' or peripheral areas and contribute far less this problem. This conflict of interests between residential and commercial land use is in turn causing a decline in residence as most current residents intend to move out of the Mochi Gate area.

4.3.2.2 Lack of Political Will

Physical, functional, and managerial gaps are for a large part the result of unmet needs of actors. Broadly, these include work-related needs and residence-related needs. Inadequate or low quality roads and streets, hinderances in circulation, and an absence of formal government acknowledgement of the system accounts for the unmet needs the commerce and services sector. Similarly for residents, hindrances in circulation due to traffic congestion, as well as residential overcrowding, and a shortage of parks and open spaces at the neighbourhood level form some unmet needs of the residence sector. In general, the performance of government, whether the City District Government, or elected representatives is perceived as unsatisfactory. Most interest in the Walled City in the past has been donor driven, and has not been broadly oriented towards actors or stakeholders. The lack of consistent government initiative for the maintenance, development, or rehabilitation of elements causes many of the above-mentioned problems, and is largely the cause of a lack of political will.

4.3.2.3 Shortcomings of the Bureaucracy

It was discovered that a rich knowledge base exists within government agencies, in the form of experience, studies, and several competent professionals. Unfortunately however, the climate, structure, and processes of the bureaucracy are not conducive to utilising this knowledge base to reach effective and creative solutions. Other shortcomings of the State system include a lack of coordination between Government Departments, and the added drawback termed by some government officials as inter-departmental rivalry. It was also noted during research that there are not only inter-department communication gaps, but also gaps within the same department where the perception of any two individuals regarding the same issue was seen to vary considerably. This is perhaps due to a desk-oriented work nature, with few mediums for group learning and interaction. Further, it was discovered that some officials have a desire to improve environmental conditions in the Circular Road area, but lacked an appreciation of the fundamental functional inter-relations between sectors, such as

the inseparable and symbiotic relationship between wholesale/retail and goods transport terminals.

4.3.2.4 Physical and Infrastructural Decay

Needless to say, there is obvious physical and infrastructural decay in the area. Much of the area's original infrastructure has outlived its life and is ready for replacement. Sectors such as roads and traffic clearly need improvements. While some improvements such as the new development of the recreational park at Mochi Bagh and the city-wide introduction of traffic wardens are welcome initiatives, the rate of physical decay in general out-does that of physical improvements.

4.3.2.5 The Institution of Collusion

The practise of *bhatta* strikes a 'balance of convenience' between those needing the use of space or services for their livelihood, and colluding individuals making monetary profit from this. Although not causing obvious harm, the practise of collusion subjects poor users of informal space and services to a high level of harassment by police and officials on whose 'mercy' they depend. Collusion in the form of bribes is also common practise for the purpose of tax evasion, such as 'showing' or declaring mis-information on tax papers by paying an underhand a sum of money to officials. The practise of collusion and bribes is a drain on the provincial exchequer, as it translates into the loss of a large tax base for the government.

4.3.2.6 Commercialisation and the Decline of Residence

Although residential and commercial usages have historically co-existed in the area, the decline of residential use over the last two to three decades, has been the result of an intensification of commercial activity and its growth 'out-of-proportion' with residence. This declining trend in residence may have various repercussions, discussed in 'Conclusions'.

4.3.2.7 Property Ownership Structures

The puggri system of property ownership which caters largely to illegal commercial property, is convenient to the owner and leasee as it ensures benefits for both. It however discourages the upkeep and maintenance of such property and infrastructure surrounding it, and can be seen as one of the causes of physical dilapidation in the area.

4.3.2.8 Loss of Historic Building Stock

The historic building stock in the Walled City has reduced substantially over the past three to four decades. Although according to interviewees the Mochi Gate area more remaining historic buildings than in other localities, observation points to only approximate 30% of the existing built fabric to consist of 'older' buildings. Older buildings are being increasingly demolished and replaced by new structures. A major reason for which is the weakening of older structures, as well as the growing decline in residential land-use, and the conversion of residential property into commercial plazas. Further, it was found that while there is an awareness of the unique culture and social life of the Walled City and a great sense of pride in its well known historic monuments such as Wazir Khan mosque, Sunehri mosque,

Badshahi mosque among inhabitants, there was relatively less value attached to individual buildings of historic merit such as residences pre-dating partition.				

Chapter 5: Conclusions and Recommendations

What are the Requirements of Successful Upgrading?

Introduction

The thesis sought the answer to the main question 'what are the requirements of successful upgrading' through two sub-questions. Conclusions and recommendations related to these are discussed collectively. Further, trends which are likely to influence future uses and conditions of the area, and 'myths' falsified by research are highlighted. Finally, limitations of research and questions for further research are discussed.

5.1 Conclusions and Recommendations

5.1.1 Sub-Question 1: 'What is the existing system and how is it operated?'

One of the fundamental concepts of the thesis was that of 'visible chaos and invisible order' in the third world city. The research demonstrated that in fact within the apparent chaos and disorder of the area, a system self-managed by its various actors and stakeholders is in place. Though within this system there is room for improvement, it is nevertheless organised and functional.

Secondly as discussed in the theoretical framework, the system is a typical example of the small-firm economy, in which the organisation of land-uses is on the basis of the physical proximity of parts, such as wholesale/retail, warehousing, transport, manufacturing, and support services. Without the physical proximity of land-uses, the system will not be able be function.

The system provides an important economic base for the national and local economy. This must be sustained. It also provides income and employment to a large population consisting mostly of the urban poor. This must also be sustained, and if any justified and rationalised modification must be made to them such as through the 'Sustainable Walled City Project', it must be accompanied by alternate means of livelihood convenient to those being affected by any change.

The system's living heritage is rooted in both the indigenous specialised markets of the area, its unique urban form, as well as its traditional social patterns and cultural norms. These must be sustained as they are the true contribution of the Walled City to cultural heritage.

5.1.2 Sub-Question 2: 'What are the physical, functional, and managerial gaps in the existing system from the point of view of primary actors?'

Land-Use

The current intense mixing of residence with warehousing and commerce, has negative repercussions one of which is traffic congestion, discussed in 'Chapter 4'. On the other hand services related to commerce are relatively less intrusive due to their location along peripheral areas. There is a need to re-organise land-use keeping these factors in mind. This

can only be done by a comprehensive urban plan which is aware of the inter-linkages between different land-uses and the urban needs and mechanisms of the system and its components.

Decay

Decay is characterised as much by tangible physical characteristics as it is by detrimental processes. A major shortfall of the 'system' is that although each of its parts are functioning individually and in conjunction with those of their immediate concern, there is no overall effort for its unified rejuvenation. Symptoms of 'decay' include inter-zonal traffic congestion, a deterioration of historic building stock, air and noise pollution and vulnerability to pedestrians. In sum, these signal the need for land-use re-organisation, investment in the maintenance and rehabilitation of infrastructure and historic buildings, traffic re-design through segregation (of local-and-through and fast-and-slow modes) and improved pedestrian infrastructure, controlling environmental pollution through at-source solutions rather than end-of-pipe methods, government will in recognising and possibly formalising essential services offered by the informal sector, and a transparent regulation of activities.

Informality and the Role of State

Further, the fact that a majority of services serving commerce function informally, points to the simple fact that informality is merely the people's effort in filling the gap left by the State's inability to meet their needs. Little contribution to the commercial sector is made by the State, which both acknowledges the system through collusion with the informal sector, and at the same time denies it through an unwillingness to formally accept its legitimacy. As mentioned above, informally supplied spaces and services should be 'formalised' or supplied under the legal bracket by the State to the individuals requiring them, and hence protect the livelihood interests of the poor, and well as form a larger tax net for the State.

The Declining Trend in Residence

There is a clear declining trend in residence. It is possible that the vacuum left by the outmigration of current residents may be filled by poorer residents such as labourers working in the area and seeking cheap living quarters. On the other hand, if prices of land in the Mochi Gate area increase as a consequence of the Sustainable Walled City Project, this vacuum may not be filled sufficiently and an emptying-out of the area may result.

5.3 Main Research Question: What are the Requirements of Successful Upgrading for the Mochi Gate Area?

Overview

Successful upgrading implies an urban plan and development processes that is inclusive and representative of the needs of the broad range of actors and stakeholders, improves the current conditions and uses of the area, is based on an understanding of the contribution of all actors and stakeholders to the 'system', and incorporates the area's existing land uses with their city-wide linkages.

Re-Organisation of Land-Use

As discussed above under sub-question-2, problems such as traffic congestion are symptomatic of the proliferation of commerce, warehousing and manufacturing into residential land-use. A re-organisation and consequent regulation of land-use is needed, in order to reverse this pattern.

A New Development Paradigm

The success of any upgrading effort will depend upon its basic vision, ideology and *orientation*. In turn these will determine priorities, as well as the actor-group and broad sectors that it is catering to. These can be unified in a new development paradigm for the area. It must be remembered that development is not being done for its own sake, but for the welfare of the populace at large. A people-centred approach which involves citizens in the identification of issues, planning, and decision-making is essential for successful upgrading.

Key Aspects

There are several *key aspects* which must be part of such an effort. These are the citizens and their livelihoods, planning, culture, architecture and the built fabric, and the area's environmental and physical conditions. The majority of the area's population consists of the urban poor, who are by and large 'left to their own resources' in economically sustaining themselves. The issue of livelihoods and people's welfare must form one of the key concerns of any upgrading effort. Further, planning must be integrated and multi-sectoral, and encompass the *broad* range of uses, issues, and actors. Physical and environmental factors such as pollution, infrastructure, and design issues must be part of upgrading, however this should be done in conjunction with issues such as livelihoods, rather than at the their cost. Finally, a sustenance of the urban form and built fabric of the area is no doubt an important element to be addressed in upgrading, however a broader view of culture is essential such an effort. This is because culture does not merely refer to physical artefacts, but to sociological phenomena, and living habits and traditions.

The Upgrading Process

Not only is the ideological and planning dimension important for successful upgrading, but the qualities and characteristics of the *upgrading process* itself are key in determining success or failure. Above all, any upgrading effort must follow an inclusive, just, and transparent process, and seek to address the issues put forward actors and stakeholders. This can only be achieved if mediums and spaces for an interaction between people, planners, and politicians are created. This may be in the form of committees of representatives, public hearings, consultations, and the openness and easy access of information to public. It also follows hence that a process-based approach building on institutions and mechanisms for the inclusion of citizens is suitable to an upgrading effort for the area.

Evaluation of Land-Use Impacts

Further, an important question has arisen as a result of research findings: Is there a need to in any way relocate, or eliminate any of the uses of the area for the good of the collective system? While the research was aimed at a 'mapping' of land uses and activities, an *evaluation of the impacts* of land-use, and a study of the integration of land-uses within Mochi Gate with the larger Walled City-Circular Road area can determine the answer to the above question.

If the Market is Relocated

Relocation as proposed by the government, can only be successful if the entire wholesale/retail market of Southern Circular Road is relocated with the complete *web* of its related functions such as Goods Forwarding Agencies, solid waste recycling, warehousing, and manufacturing. This must be based on a thorough study of the inter-linkages between all actors, processes, and land-uses within the area, and between the Walled City-Circular Road complex and adjoining areas that are functionally linked to it.

An answer to the important question of 'why do such activities and land-uses locate themselves in such areas' will provide clues and cues to any improved re-organisation of functions and land-uses in the case of relocation. The new centre must be equipped and complete in providing all support functions and services, as well as seek the welfare of the system's stakeholders, particularly the poor.

On the other hand, because this 'web' of functions is so deeply integrated with the physical fabric of the Walled City and Circular Road, a 'successful' relocation is likely to bear heavy financial costs. Further, given the many challenges of relocating the complete structure of uses and functions and the current capacity within government, it is likely to fail.

5.2 Influences Likely to Determine Future Conditions of the Area

There are certain ongoing trends which are likely to impact the future conditions and uses of the area.

5.2.1 The Impact of Chinese Goods

As a result of open trade with China, much of the locally produced goods in the area such as toys, shoes, decoration items, candles, etc are being replaced by cheaper Chinese goods in the market. Although these goods are reputed to be sub-standard compared to locally manufactured goods, their lower cost has onset the decline of some manufacturing activity in the Walled City, and may determine a further decline resulting in land-use changes in the case of the shutting down of certain manufacturing sectors.

5.2.2 The SWCP and the Current Development Paradigm

The Sustainable Walled City Project has no doubt brought back attention to the area. Certain noteworthy developments are underway, such as the re-conversion of an informal truck *adda* into a recreational park within Mochi Bagh. The project claims economic sustainability in its commitment to creating a new brand of tourism-related economy within the Walled City.

Unfortunately however, the project overlooks the existing uses of the City, such as the economy of wholesale and manufacturing which are interknitted into the Walled City's architecture and urban fabric. In doing so, the project demonstrates a lack of analysis of current challenges, including land-use related social and environmental issues, and the linkages between economy, culture, and environment. Further, it is very likely that land prices in the project area as well as surrounding localities will see a sharp increase, as a result of development targeted towards tourism. This is bound to encourage the process of gentrification and 'commodification', and will in turn antagonise current residents and workers.

5.2.3 The Relocation of Goods Transport Terminals

It was discovered that officials of the Transport Department intend to relocate the Goods Transport Terminals from Circular Road, in order to rid the area of the problem of traffic congestion and pollution. This demonstrates a dangerously short-sighted view of the problem, as the two activities of wholesale/retail trade and their transport require physical proximity and cannot be separated in space. The government's lack of understanding of urban functions was demonstrated by the failed attempt to shift Goods Forwarding Terminals to Bund Road in 1988, when subsidized land provided to transporters was used for the construction of warehouses, followed by their re-shift to former locations on Circular Road (See Chapter 4).

5.2.4 The Relocation of the Wholesale Market

The ongoing government proposal to relocate the wholesale market may have various repercussions, all depending upon whether this relocation is based on a thorough understanding of the various adjoining components of the wholesale market. This has been discussed above.

5.2.5 The New Traffic Management System

In practical terms, the new system of traffic wardens is seen as an improvement to the old system of traffic police. At this point, it is however pre-mature to judge the future success of this regime, as it has only been in effect since May 2007 (two months prior to research), and the power of 'fine' over traffic violations was not yet given to traffic wardens. Two aspects of this system will determine is continuing success, namely the practise of equity and justice once the power of fine or *challan* is given to traffic wardens, and the financial sustainability of this system.

5.2.6 'Macro'

A new wholesale 'chain store' by the name of 'Macro', is reported to have opened in Lahore. Details of this could not be discerned, however it is feared by traders of the Walled City-Circular Road area that this may create severe competition and prove unprofitable for business.

5.3 The Falsification of Myths

As a result of research, certain common myths or perceptions regarding the area, its actors, and activities were also falsified.

Myth 1:

Contrary to general perception, it was found that both the CDGL and the informal private sector are playing a relatively efficient role in solid waste management in the area. It was realised that determinants of efficient solid waste management are not only the managers but also users of the service. The negative perception about solid waste management is in part due to open dumping of waste by residents and other users, and reflects a negative cultural habit.

Myth 2:

To those that do not live, work, or frequent the Walled City, the area is a distant part of Lahore. In general therefore, citizens, professionals and planners rely on a perception of the area which is not 100% accurate. One such example is the Lahore Master Plan 2020, which notes the incidence of 'delinquents and 'pick pockets' as one of the area's major problems. Contrary to this, it was discovered that a high degree of social monitoring exists due to familiarity among its residents and workers, and discourages crime in general. Perceptions not close to the truth are likely to stray the planner or researcher from accurate problem analysis.

5.4 Limitations of Research

The Walled City-Circular Road complex is a vast settlement spanning 2.5 square kilometres, of which the Mochi Gate area is a small segment. Although in general the Walled City has common characteristics and qualities, it is not homogenous and each of its areas is unique particularly with reference to context. Such differences make many of the findings for the Mochi Gate area non-generalisable.

Secondly, an understanding of the inter-relation of parts of the larger Walled City-Circular Road entity, and its city-wide linkages is necessary for formulating effective upgrading. Both of these were out of the scope of research.

Thirdly, due to government secrecy about plans for the area and the constant threat of the eviction of illegal construction, there was a large amount of suspicion on the part of interviewees and a general unwillingness to share views and information. Although this challenge was a major limitation of research, it was to a large extent overcome through the use of informal contacts for the identification of key interviewees.

5.5 Questions for Further Research

Basing itself on the Mochi Gate area, the given research is a micro-level or pilot study of the larger entity of Walled City-Circular Road, and leads the way to various sectors and questions for further research.

Firstly, a similar micro-level study of all areas of the Walled City-Circular Road complex must be conducted. Secondly, this study can be integrated with a macro-level study of the broader issues and city-wide inter-linkages. Following an exploratory study of this kind, an 'evaluation' of the existing land-uses can be conducted to answer the important question: Do any of these land-uses require modification, relocation, or elimination for the greater welfare of actors and stakeholders. These include those earning livelihoods from the various sectors, residents, and the historical heritage complex of Lahore Fort-Badshahi Mosque and other valuable heritage sites.

An important and large-scale urban function was discovered during research, namely the role of the private informal sector in solid waste management and its contribution to urban environmental sustainability. This can form an important contribution to existing knowledge about solid waste management in Lahore, and can direct its 'successful' improvement with respect to environment, health, management, and livelihood aspects.

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Data Collection

Background Sources, Semi-Structured Interviews, Rapid Survey, Observation, & Land-Use Mapping

3.1 Background Sources

- 1) Khalid Bajwa
- 2) Hafiz Rashid
- 3) Amir Butt
- 4) Ismail Butt
- 5) Mian Mohamad Asif
- 6) Anjum Butt

3.2 Semi-Structured Actor-Interviews

Traders/Businessmen

- 1. Wholesale
- 2. Retail
- 3. Manufacturing
- 4. Goods transport company

Owners of Land/Property

- 5. Wholesale shop owner
- 6. Retail shop owner
- 7. Warehouse owner
- 8. Goods transport company owner
- 9. Manufacturing unit owner
- 10. Residential property owner

Commerce and Services

- 11. Wholesale shop manager/owner
- 12. Retail shop manager/owner
- 13. Warehouse manager/owner
- 14. Solid waste picker
- 15. Sweeper (private or government) Circular Road
- 16. Hand-cart transporter
- 17. Government solid waste picker (from main disposal- truck)
- 18. Traffic policeman
- 19. Bus stop in-charge
- 20. Rickshaw/Ching-chi driver

Institutions

- 21. Anjuman Tajiraan Mochi gate
- 22. Anjuman Tajiraan Lohari (Ismail)
- 23. CDGL (current challenges/issues, future plans for area)
- 24. LDA (current challenges/issues, future plans for area)
- 25. UC Nazim (responsibilities, challenges, taxes levied by UC, financial allocation)
- 26. UC Councillor (responsibilities, challenges, etc)
- 27. Welfare organisations

Residence

- 28. Family owner
- 29. Family rental
- 30. Labourer

3.3 Rapid Survey

3.3.1 Traffic survey of through and local traffic: Mochi gate inner streets, Circular road main.

Indicators: routes, origins, destinations, and types of goods

- a) Passing through Mochi gate area to other areas: coming in, going out
- b) Passing through Circular road area: coming in, going out
- c) Destination Mochi gate area: coming in, going out
- d) Destination Circular road (Mochi gate area): coming in, going out
- 3.3.2 Solid Waste Management (early morning, quality of solid streets wrt solid waste management)

3.4 Observation

- Cart traffic- trips, origin, destination, employment type, speed, congestion etc
- Social cohesion between traders, workers, residents
- Social solidarity between traders, workers, residents
- Communication traders, workers, residents
- Transaction: written/verbal?
- 'Order': written/verbal
- Pedestrian behaviour/facility/comfort
- Cyclist behaviour/facility/comfort
- Rickshaw/Ching-chi behaviour/facility/comfort

3.5 Land-Use Mapping

- 3.5.1 Main land-use Greater Circular Road (based on available maps of greater area)
- a) Main infrastructure (grid stations, tube-well, nallahs/main drains, main solid waste disposal points)

- b) Roads: within area and links
- c) Transport points: intra-city
- d) Transport points: inter-city
- e) Parking spaces
- f) Social (hospitals, parks)
- g) Industrial
- h) Commercial (wholesale, retail, banks/financial)
- i) Religious (mosques, shrines)
- j) Heritage
- k) Residential
- 1) Other?

3.5.2 Land-Use Mochi Gate Area (boundary of study area marked on map)

3.5.2.1 Infrastructure

Indicators: Quality, supply, operation, maintenance, physical design/organisation

- Water (tube-well, piped supply)
- Electricity (grid station, transformer, HT, LT)
- Sui gas (meter, pipes)
- Sewerage/drainage (open/piped, soak pit, main disposal/nallah)
- Solid waste (disposals, frequency of picking by govt., frequency of picking by informal/private workers)
- Street lighting
- Roads/streets (vehicular, pedestrian etc)
- Social (dispensary, clinic, hospital, police station)
- Roads, streets (pedestrian facility, motor vehicle facility, slow-moving vehicle facility)
- Petrol pump
- 3.5.2.2 Built space: residential, commercial, manufacturing, social/recreational,

religious, ongoing construction, other.

3.5.2.3 Open space: recreational/social, infrastructure, other.

List of Interviews Conducted

- 1. Ismail Jatol- Anjum Tajiraan Printing Press Lohari
- 2. Tariq Hussain Labour Councillor UC-28
- 3. Ziauddin Butt- Anjuman Tajiraan
- 4. Rana Iqbal- traffic administrator, new traffic police wardens
- 5. Saira, Faiza, Shabaz- residents
- 6. Mohammad Ishaac- daals shopkeeper
- 7. Shaukat- toys shopkeeper
- 8. Shakeel Ahmed- china candle shopkeeper
- 9. Fazal sweets- Mr Azhar and friend
- 10. Anjum Butt- tourist guide
- 11. Mian Mohammad Asif- resident of Walled City and former Director Engineering katchi abadis
- 12. Fruit hawker
- 13. Faisal- polythene trader circular road
- 14. Mubashir- night manager goods transport company
- 15. Kabaris
- 16. Atish Bazi- Sheikh
- 17. Mohammad Zulfikar (resident), Haji Rafique (sweets business), Councillor UC-28, Zeeshan (youth)-
- 18. Mohammad Shaukat- Hand cart operator

- 19. Riaz Ahmed- Ching-chi driver
- 20. Malik Azmat- Chief Urban Transport Planner Punjab
- 21. Mr Iqbal, Secretary Distt Engineering Transport Authority
- 22. Dry fruit trader on Circular road-
- 23. Salesman Adnan- Diamond Foam retail and wholesale, Barkat Ali plaza on Circular Road
- 24. Nadeem Akhtar Zaidi- Deputy Director Town Planning LDA
- 25. Traffic Warden-
- 26. Kabaris- Gujjar and Khan-1 partnership, Pathan brothers
- 27. Pathan waste picker- early morning
- 28. CDGL sanitary staff- Saeen and Siddiq at CDGL bin/container
- 29. CDGL- Liaqat, Abbas- cleaning truck/machine
- 30. Driver CDGL truck-
- 31. Town Nazim Ravi Town- Yusuf Ahad

Actor Interviews

COMMERCIAL	RESIDENTIAL	NON- GOVERNMENT WORKERS	GOVERNMENT
Mochi Gate Daal Toys Candles/Decoration Fireworks (illegal) Sweets	Mochi Gate Owner Resident	Anjum Tajiraan Printing Press- President	Regional/Provincial: Punjab Transport Department Chief Urban Transport Planner Secretary Transport Engineering
Circular Road Polythene wholesaler Dry Fruit Wholesaler/Retailer Diamond Foam Wholesaler/Retailer	Mochi Gate Rental Resident	Anjuman Tajiraan Mochi Gate- President	Lahore District: Lahore Development Authority
	Hand-Cart Labourer Resident	Goods Transport Agency- Night Manager	Local Government: Nazim Ravi Town Councillor UC 28 Councillor UC 27
		Solid Waste Picker Circular Road	Traffic: Traffic Administrator Lahore Traffic Warden Circular Road
		'Kabaris' x3	CDGL Sanitary Staff:
		Ching-Chi Owner/Driver	
		Fruit hawker	

Interview Questions

1. <u>Traders/Businessmen</u>

- Owner, businessman/trader, manager, or all-in-one?
- Since how long doing this business
- Shop size
- Consumer item or service (eg goods or transport of goods)
- Manufacturing, retail, or wholesale?
- Residence where?
- Commuting to work how?
- Work routine
- Work timings
- Clientele
- Number of employees
- If goods transport: how many *trips per day*, *to where* (railway station, within Lahore, outside of Lahore), and which areas are *most frequent*?
- Costs of work (overheads, production costs, transport costs etc)
- Transport of goods what medium and from where?
- Relationship with Lahore Dry Port?
- Daily/monthly earning?
- What services do you need/depend upon to carry out your work (eg goods transport, solid waste management, water, electricity, petrol pump, street lighting, warehousing, manufacturing unit, roads, railway station, service station, petrol pump)
- What *materials* do you need/depend upon to carry out your work (eg packaging material, manufacturing/production material, petrol)
- What kind of *spaces* do you need/depend upon to carry out your work (eg warehouse/storage, area, parking, basement, rooftop, sunlight, ventilation)
- Quality and maintenance of infrastructure
- Age of building
- Maintenance of building
- Maintenance of public space around building
- Current perceived best-use
- Future perceived best-use
- View on government performance in area
- View on government interventions in area
- Current Land/Property value
- Trends/processes of change
- Property tax
- Sales tax
- Income tax
- Bhatta/Informal tax
- Harassment?

2. <u>Land/Property owners</u>

- Pattern of ownership (rental, self-owned individually, puggri, absent landlord)
- Age of building stock
- Maintenance of property
- Maintenance of public space around property
- Future perceived best-use
- Land/Property value current
- Influences to current land/property value (eg speculation due tp PC hotel, Shahi Guzargah, Mass Transit, etc)
- What institutions do you depend upon (eg government, businessmen, etc)
- View on government performance/role in area
- View on government interventions in area
- Trends/processes of change
- Property tax
- Sales tax
- Bhatta/Informal tax
- Harassment?

3. Workers

- Job (eg government job, labourer, informal solid waste picker)
- Family size
- Domicile
- Residence where?
- Job timings
- Salary?
- Transport/commuting to job how?
- Nature of work
- Work routine
- Safety at work
- Relation of work with Lahore Dry Port
- Relation of work with Lahore Railway Station
- Problems you encounter while working (esp. in case of traffic police)
- Facilities (health, social, recreational, food)
- Residence (where do you live, with whom, how much do you pay)
- Relationship with co-workers
- Relationship with 'boss'
- Infrastructure and services (solid waste- how managed, quality and supply of electricity)
- View on government performance/role in area
- View on government interventions in area
- Out-migration: if you had a choice would you leave
- What changes have you seen
- What improvements have you seen in the area?
- Current trends/Processes of change

- Bhatta/Informal tax, for example for the use of space?
- Harassment?

4. Institutions

- Nature of work: Private/public/voluntary/profit/non-profit
- Institution type: union, association, board, union council
- Objective of institution (welfare of traders, residents, citizens)
- Complaints/Issues/Challenges
- View on government performance/role in area
- View on government interventions in area
- Trends of change

5. Residents

- Residence since
- Domicile
- Family size
- Urban Infrastructure (water, electricity, sewerage, solid waste)
 - types, quality, length of time since provided, schedule/frequency of supply
- Social services (schools/colleges- location/proximity; hospitals/dispensaries, polytechnics, parks/open spaces)
- Quality of space (overcrowded, congested, noise pollution, ventilation, light)
- Quality of neighbourhood (social cohesion, safety)
- Social issues (safety, sense of neighbourhood, crime)
- Maintenance of home (private area)
- Maintenance of public or shared area outside home
- Sense of ownership
- Complaints (against commerce, traffic, government)
- Any value for heritage?
- View on government performance/role in area
- View on government interventions in area
- Taxes
- Crime
- Transport

Data Quality

Sampling for interviews will be purposeful, as the objective of research is to seek reliable information. Informal contacts will be used in the selection of interviewees. Sampling for rapid survey will be rationally based on observation.

Sample selection:

Based on prior knowledge of the area and problem identification, four actor groups have been identified. Within these 'groups' sample selection involves the further identification of actors. This will be done through:

- a. Sources with existing knowledge of the area and the system, such as:
- i) Amir Butt Coordinator of Punjab Urban Resource Centre, who is also a former resident of the Walled City.
- ii) Ismail resident of Walled City and President of Lohari Printing Press Association
- iii) Other sources that may be identified as research proceeds.
- b. Informal contacts.
- c. Identification of actors through the progress of research and the researcher's observation.

Following actor selection through the above-mentioned sources, if it is found that major actors have not been included in the identified 'group' of actors, these may be incorporated during the research process.

Validity and Reliability of Data:

Part of the data is based on mapping and observation, while a large part is based on semistructured interviews and rapid survey. A key obstacle in validity and reliability of the latter two is the possible reluctance of people to give information on 'sensitive' or confidential matters. It is for this reason that sources for interview and rapid survey will be selected purposefully based on prior scrutiny and information will be cross-checked through observation and the tallying of given information with other sources.

Pre-Research Overview of the Walled City-Circular Road

The following overview of the area's 'current situation' is based on the researcher's knowledge and information prior to research. Sources include existing archival data from reports and newspapers, and two interviews conducted as 'background research'.

1.3.1 Land-Use

Land-use in the area is mixed in terms of type as well as formal and informal land-use patterns. The commercial belt along both sides of Circular road has wholesale, retail, and related usages such as goods transport companies, small-scale industry, and braches of major banks. Within the Walled City, land use in the Western wards is largely residential compared to the Eastern wards which are predominantly commercial. In the more 'intermediate' wards lying between East and West, usages

are a combination of upper floor residential mixed with warehousing, small-scale manufacturing and commerce on ground floors. Commercial and industrial activity is concentrated within the walled city and along both sides of the Circular road. While commerce is generally located along major traffic arteries, manufacturing is fairly evenly distributed across the bazaars (markets) and residential neighbourhoods (Akhtar 1992). The majority of buildings within the Walled City are up to three storeys high, with the exception of the Shah Alami commercial area where commercial plazas are the norm.

1.3.2 Housing

In general the building stock of the larger Walled city-Circular road area is structurally sub-standard. During the past several years, incidents of building collapse have increased in which people have lost lives. According to a survey conducted by the local government in 2007, 312 buildings in the Walled City were declared dangerous, of which 259 are repairable while the other 53 are in dangerous condition (Ahmed 2007). In response to this the Punjab government and Lahore City District government have undertaken an effort to demolish and vacate dangerous buildings. However, many of the inhabitants of these buildings are poor tenants and reports suggest that neither financial compensation nor alternative residence is being provided to owners and tenants (Ahmed 2007).

Although by law all new construction is to be approved and monitored by the Lahore Development Authority, this is by and large not the case in the Walled City.

1.3.3 Planning Aspects

The Lahore Master Plan 2020 highlights the major drawbacks of Lahore's wholesale commercial areas: 'Most of Lahore's commercial centres/markets have sprung up as a result of organic growth, and hence are generally unplanned and lack systematic hierarchical order. This has resulted in a number of socio-physical and transportation problems in the downtown area and other unplanned commercial concentrations'.

The extent to which these it is in fact these gaps that are the cause of socio-physical and transportation problems, can only be determined by research rather than (-). Nonetheless, it is an overriding reality that by and large organic and ad-hoc development patterns have determined the shape of Lahore. Weak urban planning has translated into weak coordination and management of the city as a whole, and a 'mal-function' of various segments of the urban system, such as inefficiency in the use of resources, duplication of tasks, etc.

Also this has resulted in a city in which each actor is to look out for his/her own interest, with the welfare of the weaker actor such as the poor often being sacrificed in the process.

1.3.4 Demographic Trends

Over the past few decades, a large decline in residential population has resulted from overcrowding and the proliferation of non-residential activities in the area, and the consequent out-migration of those who can afford to leave the Walled city. Current residents are composed in the majority of low-income families and single male labourers. In general, single buildings have been sub-divided by their owners into multiple residential units and put on rent, with the result of overcrowding.

1.3.5 Land-Value and Property Tenure Systems

The Evacuee Property Trust Board was formed after partition, with the purpose of assessing and controlling property vacated by Hindus and Sikhs at partition (Qureshi 1992). Through a process of claims filed by refugees in 1947, the Rehabilitation Department of the Evacuee Property Trust Board allotted properties at rates fixed at the time of partition. A majority of properties within the Walled city fall under the Evacuee Property Trust Board and rental these rates are largely followed today. A majority of these properties are dilapidated due to poor maintenance and multiple ownership.

Various types of property ownership exist in the area. These include some owner-occupied residences, while the majority are rental occupied. In terms of commercial occupation, there is a mix of rental and owner-occupancy, while a third system of the traditional 'puggri' ownership* also exists. The common instance of structures with unclear titles and absentee landlords discourages maintenance and renewal of buildings and infrastructure.

Land value is known to be relatively high particularly in the commercial belt along Circular road, with high competition for commercial on Circular Road and warehouse space within the Walled City.

1.3.6 Degradation of Historic Stock

Conservation of the built heritage in Pakistan falls under the Department of Archaeology, while the maintenance of shrines is undertaken by the Department of Auqaf. On the other hand, buildings vacated by migrating Hindu and Sikh families at partition have been administered to by 'Evacuee Property Trust' established at partition to house Muslim migrant refugee families. In Lahore's Walled City, the majority of historic building stock is Evacuee Trust Property.

In a survey of historic buildings in the Walled City undertaken by PEPAC in 1986, 3951 buildings most of them dating from before the year 1900, were identified as having sufficient architectural quality and historic value to merit conservation.

In Pakistan it is only recently that plans to conserve old buildings have been integrated into development projects in urban areas (Qureshi 1997), such as the Walled City Conservation Plan (1986). Unfortunately the implementation of these few plans has largely lacked effect. The degradation of the Walled City's historic stock continues today, with the exception of buildings that were re-adapted to public uses such as several schools and colleges. Today much of this architectural heritage, due to being privately owned and in a dilapidated state, is being demolished and replaced with newer 'modern' buildings converted to more lucrative uses, such as commerce and storage. This is happening particularly along the Roshnai gate area at Badshahi mosque and Lahore fort, where the onset of gentrification is also observable. Roughly speaking, less than 30% of the Walled City's architecture today comprises historic buildings.

1.3.7 Infrastructural Aspects

In terms of infrastructure, supply of basic urban services exists however its condition and quality signal the need for improvement. Roads are in weak condition, pedestrian infrastructure is severely lacking, solid waste management exists however occasional heaps of garbage can be seen alongside roads, water supply and electricity are apparently satisfactory however visual clutter manifests deficient infrastructural planning such as randomly-placed high and low tension wires and electric transformers. Encroachments along the Circular Gardens are in a large number and are seen to be increasing. This includes 'encroachments' by government such as water tube-wells and electricity grid stations as well as those by individuals such as shops. Encroachments also exist in the form of shops that have been constructed over the original *nallah* or main drain surrounding the Walled City.

1.3.8 Traffic and Transport

In general, the transport network in Lahore is poorly developed and undermaintained, with insufficient traffic regulation and enforcement. The diversity of the traffic mix in Lahore exacerbates the problem; this includes pedestrians, animal-drawn vehicles, bikes, motor-rickshaws, cars, vans, mini-buses, inter-city coaches and trucks (World Bank 1999). Not only is the traffic and transport situation on Circular Road no exception to this, it in fact typifies the traffic and transport problem in Lahore.

There is a severe problem of traffic congestion on Circular road. This consists of a mixture of local and through and fast-moving and slow-moving traffic, and extreme levels of air and noise pollution.

Within the Walled City, its narrow streets intended originally for pedestrian traffic consist of a mixture of pedestrians, hand-carts for the movement of goods out of the area into the market on Circular road, bicycles, horse and donkey-carts, and small size motor vehicles such as motorcycles and rickshaws.

1.3.9 Investment and Maintenance

Investment in the area's building stock and infrastructure demonstrates negligence and a lack of financial prioritization by both the public sector as well as private owners.

1.3.10 Social Issues

Social issues in the area include trafficking of 'soft' drugs, and socially taboo practices such as gambling. The incidence of crimes such as theft are present however relatively low in the area, and generally occur in commercial areas as opposed to residential theft. Violent crime is low due to the practise of informal social monitoring. Little social interaction exists between the two resident groups- single labourers and families- however in general, a high degree of social cohesion is a known characteristic of the Walled city.

A new practise of social exclusion of the public from the use of heritage areas is undergoing, where according to the government's new agenda of 'city competitiveness', the corporate sector is being encouraged to use heritage sites for commercial events such as commercial fashion shows and theatre performances limited to an upper-income audience, while the general public is being increasingly seen as the antagonist and pushed out of the social and recreational use of these areas (See 'Chapter 2: Theoretical Framework').

1.3.11 Institutional Issues

Both formal and informal institutions exist in the area. Local government is organised into Union Councils, with each Union Council having a mayor, a deputy-mayor and thirteen popularly elected Councillors. The Walled City falls under the administrative division of 'Ravi Town', and is divided into Union Councils 27, 28, 29, and 30.

Civil society institutions exist in the form of unions and traders associations. Land and property tenure can also be regarded as 'institutional', such as the high instance of the informal 'puggri' system of property ownership.

Historic Evolution

i) Medieval to Mughal era

From its beginnings till the British era, Lahore was a fortified city. Its earliest evidence dates to between the 4th and 5th centuries A.D. The Walled City is built on an elevated mound, South of the river Ravi and records show that its existence is due to placement along the major trade route through Central Asia and the Indian subcontinent (Kron).

One of the first historical references to Lahore is found in the 11th century when it was conquered by the Persian Mehmood of Ghazni, who then established a Muslim government in Lahore. At that time the settlement was possibly a mud fort and had little importance (LDA 1980) and was being referred to as a province or region. By the 12th century, under the Ghaznavis the city prospered economically and culturally and became a centre of learning (LDA 1980). Lahore was made the capital of the empire and the fort and city are said to have been rebuilt and rehabilitated.

After the fall of the Ghaznavid Empire, Lahore was ruled by various Muslim dynasties, continuing in the pattern of progress and downfall through attack, occupation and development. The Walled City saw regular invasions and destruction, until 1525 when it was sacked and then settled by the Turkish chieftain Babur, who founded the Mughal Empire in India. Consequently the walled city was developed by succeeding Mughal emperors over the following three centuries.

ii) The Mughal period

The Mughal Empire in India lasted from 1526 to 1857, and at its peak covered most parts of what are now India, Pakistan, Bangladesh and some of Afghanistan. During this time Lahore re-emerged as the political, cultural, and commercial centre of the region (LDA 1980), the "grand resort of people of all nations and a centre of extensive commerce" (US library of Congress).

Some of the most lasting achievements of the Mughals are in art and architecture. During this time Lahore therefore remained a trading junction, where markets developed around its twelve Gates. The present form of these markets has evolved from this original which expanded over time.

During the rule of Mughal Emperor Akbar, Lahore was made the capital of the empire from 1584 to 1598. The architectural development of the Walled City most of which is apparent in its existing form was undertaken largely by Akbar, most importantly the rebuilding of the Lahore fort on the ruins of the older fort, and fortification of the city with a brick wall and twelve gates. Many buildings were added by successive emperors inside and outside the fort and the Walled city, and the Walled city was organized into a series of governmental and administrative, domestic, trade, and artisanal functions.

iii) 17th and 18th Century

Towards the 18th century, Mughal reign in India was weakened by major agrarian crises fuelling local revolts, dynastic struggles, and invasions by Persian and Afghan rulers

(answers.com). Invasions and chaos in local government allowed bands of warring <u>Sikhs</u> to gain control in some areas.

iv) Sikh period

In 1799 Ranjit Singh established Sikh rule in Punjab which lasted for 27 years. Most post-independence literature perceives Sikh control in Lahore with remorse and as a time of loot and plunder. However Ranjit Singh is also responsible for restoring some of Lahore's vandalised and deteriorating architecture, such as the rebuilding of the City's walls in 1812 which had decayed over time and the addition of a deep moat around them (Government of Pakistan 1998).

The population of the Walled City which was approximately 500,000 at the time of Mughal emperor Jahangir, decreased to 200,000 during Ranjit Singh's rule (Bajwa 2007).

The greatest changes brought upon the structure of the Walled City have been in the past 150-160 years comprising Sikh, British, partition, and post-partition periods.

v) British Period

The Sikhs made significant efforts in resisting the annexation of India by the British. The second Anglo-Sikh war however resulted in victory for the British and in 1849 brought Punjab under colonial annexation.

Lahore along with its neighbour Amritsar (now in present day India) formed the administrative, commercial, educational, and industrial heart of undivided British Punjab (Talbot 2006). Lahore also became the headquarters of British India's North-Western Railway.

The British first occupied the Lahore Fort in 1846 brought drastic changes in its structure, demolishing much of the walled fortification of the City, as both a defensive measure to allow the colonists to better control the populous, and as a commercial enterprise in resale of the brick for new projects (Kron). The moat built by Ranjit Singh was filled up where a peripheral green belt of 'garden' was laid out, known today as 'circular gardens' much of which are encroached upon in their present state. The fort's Southern fortifications were replaced with wide ceremonial steps and terraces to demilitarize the fort.

Some physical contributions of the British to the old city consisted of piped water supply and well systems established just outside the former walls, and the building of the railroad and Lahore railway station East of the Walled city largely for purposes of commerce and trade.

Social infrastructure was built during colonial rule in close proximity of the Walled City. This included universities such as Government College and Punjab University along the lower Mall road, Lady Wellington Hospital outside the City's former wall, and Mayo hospital to the South-East.

During the early British period one of the most important developments outside the Walled city was the building of the North Western Railway and the Lahore Railway station to its West. The station immediately set up a whole new network of functional relationships with the Walled City which remain to this day (PEPAC 1993).

Lahore was developed in the typical colonial urban prototype of 'civil lines' in which the prime motive is the control of the local population and the conqueror's sense of pride, fear, and exile (Lynch 1984), The main characteristics of this development were tree-lined roads and spacious bungalow compounds and a Mall road thoroughfare (Talbot 2006), a cantonment south-east of the city, and a civil secretariat to the South of the City. The roads that linked the Secretariat with the Fort on the North and the cantonment on the east largely determined Lahore's future growth (PEPAC 1993).

Lahore was spatially divided by means of an East-West running railway line and a North East-South West running irrigation canal. The axial avenue of 'Mall road' was developed as the administrative and architectural spine of Lahore and a space displaying British military force and civic grandeur (Lynch 1984). The Walled city was meanwhile considered Lahore's 'uncivilized' native quarters (Bajwa 2007).

vi) Lahore's 19th Century Commercial and Industrial Development

In the late nineteenth century, Lahore experienced a modest industrial development. 'Small contracting units sprang up in Mughalpura and along the GT road. There was also the beginning of agricultural processing industries such as cotton ginning and the Punjab Oil and Flour Mills established in 1881. The North Western Railways repair workshops were established at Mughalpura in 1975, which expanded considerably in following years. Lahore's greatest industrial development occurred during the Second World War, when the number of registered factories in the Punjab increased by 537 from 1941 to 1944. Lahore emerged as the largest centre for engineering industry in the province and much of this development and enterprise was undertaken by local communities (Talbot 2006).

In the 1870s onwards, there was large scale change with the British decision to make Punjab the centre of India's crop production, resulting in a huge investment in irrigation and the establishment of 'Canal Colonies' along the river. The canal colonies of Faisalabad, Sargodha, and Sahiwal hence became centres of agricultural produce, while Lahore became its central 'market' (*mandi*) or trading node. By the 1920s, a third of India's total wheat was produced in the Punjab province and 500,000 tons were exported annually (Talbot 2006).

Historically, improvements in transport have made possible the development of trade on which the prosperity of cities has depended (The Economist 2007). And so it was that Lahore became the centre of agricultural trade and chosen as the railway juncture for the North, South, East and West of pre-partition India, from where produce was exported to centres such as Karachi and Delhi (Bajwa 2007).

With a large amount of agricultural produce coming in, the city required both infrastructure and institutions for management, labour and storage (Bajwa 2007). Labour was brought from Western Punjab and settled in Lahore, and the city once again underwent a period of urbanisation. The Walled city's logistic and trading centrality hence once again reoccurred.

vii) Survey by Patrick Geddes 1917

Colonial Britain's pioneering planner Patrick Geddes who produced over fifty town planning reports for urban centres in the subcontinent and Ceylon, visited Lahore in 1917. Unlike the modern British town planning paradigm of 'clearance and redevelopment' Geddes

believed in the idea of 'conservative surgery' to 'improve' old buildings and construct 'quarters beyond' rather than simple demolitions (Talbot 2006).

In his report 'Urban Improvements' Geddes identifies Anarkali as being the 'one great axial thoroughfare extending outward from the Old City', noting rising traffic as early as 1917: 'its width though great in comparison with the old thoroughfares inside the gates, is already insufficient for its traffic'. His comments on Circular Road are equally interesting, where he finds it to be 'as essential as Anarkali' and 'one of the most important, useful, and busy thoroughfares', and suggests that it be made 'far more worthy' of its location by being turned into the 'great Boulevard of the city'. Geddes emphasized that a scheme for the improvement of Circular road would be profitable to the city in general, and would enhance the usefulness and 'return of the various municipal properties along the Circular road'. Importantly, Geddes noted that other than the de-congestion of the road, the more necessary development was a 'scheme of extension to accompany the improvement of the Old City'.

Most interestingly, Geddes' comments on Circular road point to the beginning of its ad-hoc commercial development: 'the indiscriminate and planless erection of shops and other buildings...can only be described as an extreme and grievous case of the business process'.

'Given this Circular road still mostly spacious and even with its damaged points still capable of improvement; given this corresponding long sweep of city gardens, these historic gates, and the picturesque old city behind them, there is no serious difficulty in preserving and enhancing all the beauty and dignity of these; and of meeting even the growing requirements of business without thus squandering what is so plainly the City's main heritage and asset'

viii) Lahore Improvement Trust 1936

The late colonial era saw the creation of Improvement or Development Trusts in major Indian cities. These reflected the modern growth of town planning in Britain with its emphasis on the clearance and redevelopment of congested inner city areas and the creation of integrated new residential areas (Talbot 2006). The Lahore Improvement Trust (LIT) was created in 1936, and continued post-independence as Lahore's principal urban development agency. In 1975 the Lahore Development Authority was created under the LDA Act 1975 and replaced the LIT.

ix) Partition and Independence 1947

In 1947, British colonial India was divided into the Hindu majority nation of India and the Muslim-majority Islamic Republic of Pakistan under the 'Radcliffe Award'. August 1947 was thus the creation of the independent state of Pakistan, when the country was partitioned from India and sub-divided into four Provinces. Lahore was made the capital of the Punjab province.

As a result of partition there was vast migration to and from the two newly created states, with a large-scale exodus of Muslims in India to the new Muslim-majority state of Pakistan, and the exodus of Hindus and Sikhs in Pakistan, to the new Hindu-majority state of India. Large parts of the historic fabric of the Walled City were destroyed in the strife that followed.

Analysts agree that migration from India was a turning point in the history of Pakistan because of the processes it set in motion (Hasan 2004), particularly with reference to the impacts of migration on the cities of Punjab and Sindh. 'The inner cities, where most of the richer Hindus and Sikhs use to reside, were taken over by poor refugee families. Their densities increased within a few months due to the subdivisions of large homes and the occupation of open areas for make-shift residential accommodation. Religious and community buildings were also occupied and turned into residential accommodation. The refugee migration was the beginning of the environmental degradation of a number of old cities and the destruction of their cultural heritage both in physical and social terms' (Hasan 2004). Within the Walled city, migrant Muslim families moved into previous Hindu and Sikh residences, with the lower land-values of the Walled city enabling the concentration in the city centre and wealthier families residing outside (Kron).

x) Post-1947

At partition, the refugee portion of Lahore's population was 43% (Talbot 2006). Lahore's Inner city areas inhabited formerly by minorities suffered riot damage while nearby localities such as Gawal Mandi, Nisbat Road, Krishan Nagar, and Shant Nagar survived largely unaffected and remain refugee dominated areas today (Talbot 2006).

The Evacuee Property Trust Board was formed after partition, with the purpose of assessing and controlling property vacated by Hindus and Sikhs at partition (Qureshi 1992). Through a process of claims filed by refugees in 1947, the Rehabilitation Department of the Evacuee Property Trust Board allotted properties at rates fixed at the time of partition. A majority of properties within the Walled city fall under the Evacuee Property Trust Board and rental these rates are largely followed today. A majority of these properties are dilapidated due to poor maintenance and multiple ownership.

On the other hand, the Punjab Auqaf department is responsible for Muslim *Waqf* property such as mosques and shrines and their repair and maintenance.

In terms of Lahore's development, 1947 acted as a setback. Partition brought with it large-scale inter-communal strife, as a result of which vast areas of Lahore's urban fabric were destroyed. Both the inner city's public space and sacred space underwent dramatic change (Talbot 2006). Some of the damage was repaired through the Punjab Development of Damaged Areas Act 1952 (Kron). However, an active and regulatory state role in the consequent ad-hoc urban transformation of the Walled city was absent, leaving the area to local indigenous market forces. This unregulated synergy translated into physical form (Bajwa 2007).

a) The Fire of 1947 and Shah Alami Redevelopment Project

In 1947 the Walled City area of Shah Alam was destroyed by a large-scale fire triggered by inter-communal riots. In September 1948 demolition work was underway in the area from Shah Alami to Rang Mahal. From 1956-1957, the Lahore Improvement Trust engaged in the Shah Alam Redevelopment project to rebuild Shah Alami and institutionalise the Walled City's commercial sector, under which a large market with approximately 200 shops sprang up in a space previously occupied with Hindu shops and houses (Talbot 2006). The 'cleared' Shah Alami area was divided into plots, made available at auction and offered at fixed rents to developers for the construction of relatively low-density buildings according

to a strict set of building regulations (PEPAC 1993). The Lahore Improvement Trust also built and rented the Lahore Wholesale Shoe Market in the Shah Alami area (Talbot 2006).

Redevelopment replaced the Shah Alami's narrow maze of streets into a major thoroughfare (Talbot 2006). This unprecedented avenue development in the Walled city manifested a new, modern, and rational design paradigm compared to the typical traditional street of the Walled city (Bajwa 2007).

b) Lahore 1950s and 1960s

In the early-nineteen fifties, the Lahore Improvement Trust attempted to clear and redevelop the areas devastated by riots through the Punjab Development of Damaged Areas Act 1952. The objective of rebuilding was either to generate direct or indirect revenues, or solve controversial problems of encroachments and private property ownership (PEPAC 1993).

In the Walled City this redevelopment took two forms: i) medium-rise low-density commercial and office development with ground floors built along a broad divided street to enable expansion of vehicular access into the City (eg Shah Alami redevelopment), and ii) relatively dense development of rows of very small shops to make pedestrian markets (eg Azam Cloth Market redevelopment) (PEPAC).

The 1950s and 1960s saw a development of Lahore's new upper-income areas such as Gulberg and Shadman and upper-middle income areas such as Samnabad and Shadbagh, with inhabitants moving from old traditional areas to 'modern' newly developed localities.

Lahore has developed in the prototype of the sprawling city. Its environs which once used to be distinct and separate settlements such as Shahdarah, Mughalpura, Mozang, Ichra, Nawan Kot have over the years become incorporated into the Municipal limits and have become part of the urban area (Nadeem Akhtar 1996).

c) Lahore Master Plan 1960

The Lahore Master Plan of 1960 was the first post-partition Master plan for the city, and portrays a belief in the growth oriented development paradigm of the 1960s. Developed mainly by the architect --, it was the first plan for which a comprehensive urban survey was undertaken (Bajwa 2007).

d) Population Shift and Degradation of the Walled City's Built Fabric

Between the early 1970s and 1980s, 29% of the Walled city population moved out. This was also a time of migration of young middle-class Pakistani men to the Middle East in search of employment. A study in the inner walled city of Lahore in 1987 suggested that half of all working-class families had at least one close relative working in the Gulf (US Library of Congress).

From the mid-eighties onwards, continuing degradation of the Walled city's built fabric as well as neglect and lack of maintenance, also caused those financially capable to shift to newer locations outside. The vacuum left by out-migrants, combined with weak or non-existent government regulation (Bajwa 2007) was gradually filled by commercial interests and a largely poor rural migrant population.

Since the mid-eighties, population of the Walled City has shown a declining trend, with out-migration related to the shifting of land-use towards non-residential activities such as commerce, warehousing, and small-scale manufacturing.

Despite one-off government efforts at controlling or stream-lining these land-use changes, organic and incremental commercial growth has taken place within and along the periphery of the Walled City. The growth of wholesale activity within the Walled city's narrow streets for example, supports the sales points along the Circular road. Both of these cause a heavy transport demand within the city and along the Circular road.

Within the Walled city itself, open public spaces have also been largely engulfed by the encroachments.

Architect and development professional Reza Ali (1986) remarks that there has been a siphoning-off of financial resources needed for the upkeep and renewal of the Walled City and a growing incapacity of social and administrative institutions to regulate the processes that accompany the urban transformation that the Walled city has undergone in recent decades. This has resulted in a dilapidation of building stock, and functional changes along with disintegrating social structure, including a major new function of housing the urban poor. Kron notes that advantages for speculative developers lie in the absence of the enforcement of building regulations and relatively cheap plots. The resulting 'commercial encroachment' has caused 'an abuse of building stock through inappropriate re-use of structures intended for small-scale cottage industry and residence, as well as the destruction of older buildings replaced with lower quality structures'.

e) The 1980s: Growth of Commerce and Related Activities

In 1986 Reza Ali notes that the Walled City's main economic activities serve regional and national markets, and are linked to the resident population only by virtue of the cheap labour force provided.

The readily available cheap labour force, business centrality of the Walled city, multiple and complex links with surrounding metropolitan commerce, as well as relative anonymity which facilitates the evasion of much of national and local taxation, are the main advantages for commercial interests to be situated here (Kron).

Ali further identifies the supply of manpower, the processing of goods, and the provision of storage space as some of these advantages, resulting in inter-zonal pedestrian, handcart, and vehicular traffic.

f) Change in Historic-Stock

An immense change in the built fabric of the Walled city occurred during the 1980s and 1990s, where old dilapidating structures were replaced by new sub-standard buildings. Very little of the so-called historic stock apparently now remains, especially along the Walled city's main spines, with the exception of pockets where historic structures can still be found (Bajwa 2007).

g) Lahore Today

In 1996 Lahore was one of six mega-cities projected to grow faster than 3% per year during 2000-2015 (UNFPA 1996). Today it has an urban population growth rate of 3.2%.

After local government elections in 2001, the new 'devolved' structure of local government was brought into effect in each Province, through the 'Local Government Ordinance 2001'. Pakistan's larger cities such as Lahore are run as 'City Districts', and are sub-divided into 'Towns' and the Towns into Union Councils. Lahore has nine administrative 'towns' and a total of 150 Union Councils. There are today 150 Union Councils (the lowest tier of government) within the Lahore Metropolitan Area, the total area of which (LMA) is 2,300 square kilometres (Khan 2006). Today Lahore continues to grow in the mode of sprawl, spreading Southwards and having multiple centres.

As discussed above, Lahore's North-South railway line and its canal 'divide' the city spatially into East and West. A deliberate city planning decision by the British as 'protection' against the local populace, today this east-west divide is largely evident in terms of the city's development, where investment, income distribution and quality of housing and infrastructure are far higher in the more 'developed' Eastern part. Most 'modern' urban and spatial development has taken place in the East. The Western part of the city on the other hand is endowed with some of Pakistan's most prized heritage sites and its inner city can be termed the cultural centre of Lahore. Industrial activity is found largely in the Lahore Township (Kot Lakhpat) industrial area and on the Southern outskirts of the city on the Lahore-Sheikhupura Lahore-Gujranwala road. Some industry is also located in the South-West along Raiwind road, while small-scale industry can be found on Bund road along the city's North and West, and Multan road in the South-West. Informal low-income settlements are scattered throughout the city, with a greater concentration in the South of Lahore.

The Lahore Walled City has a higher concentration of commerce and warehousing in its Eastern part, the more residential land-uses in the West, and an overlapping of residence and commerce along the intermediate sectors. The evolution of this land-use has been ad-hoc and incremental as opposed to planned. Warehousing for example, is an informal use of previously residential space.

The Gates and Markets

The Walled city's thirteen historic gates built during the Mughal period, are arranged along the circumference of the city wall and named after emperors and saints, ancient landmarks near them, or for where they led (Qureshi 1988). Today with the exception of two (Lohari Gate and Delhi Gate), none remain in their original form, however the localities leading to them are still known by their respective gates and many of their original specialised trades remain till this day. Much of the Walled City's urban culture and social life has developed around these gates, around and opposite each of which are now located specialised wholesale and retail markets. In an anti-clockwise direction from Badshahi mosque, these gates are:

• Taxali Gate

Named after the nearby landmark of the Royal Mint which stood near the gate a hundred years ago.

• Bhati Gate

Referring to the trade of brick-making practised outside its vicinity.

• Mori Gate

Mori Gate is the smallest of the Walled City's gates, called 'mori' or 'hole' because it was originally used for the garbage of the city. This gate has Lahore's fish market, opposite which are situated the paper market and 'Urdu bazaar' specialising in the wholesale of locally printed books.

• Roshnai Gate

The Roshnai Gate lies between the Bashahi Mosque and the entrance to the fort, and was the main entrance into the Walled City from the Fort, through which courtiers, servants, entourages, and the emperor himself would pass (Qureshi 1988). Today this gate is the principal entrance for visitors and tourists, to the quadrangle holding the Lahore Fort, the Badshahi Mosque, and the Hazoori Bagh.

• Lohari Gate

Lohari Gate is named after the trade of ironsmiths practised outside it. This gate houses the medicine market, opticals market, the paper market and the majority of printing press activity. Opposite Lohari gate is Anarkali market, one of Lahore's oldest markets of finished consumer goods.

• Shah Alami Gate

Shah Alam Gate was named after the Mughal emperor Shah Alam Bahadur Shah, and leads to the Shah Alami bazaar. The Shah Alami area was the leading Hindu commercial and residential centre within the Walled City (Talbot 2006) prior to its destruction during the riots of 1947 and its redevelopment as a commercial area in the early 1950s. The Shah Alam market is the one of the (three) markets of the Walled city that were specifically developed as commercial areas by the Lahore Improvement Trust in the early 1950s. Shah Alam market is Punjab's largest wholesale market for electronics, toys, crockery, plastics, cloth, shoes, fans, and hosiery.

Mochi Gate

The Mochi Gate leads to the shoe-maker's bazaar. Its name is a mispronunciation of 'Moti', the name of Akbar's officer who lived near this Gate. Located on Circular

Road outside Mochi Gate is the market of polythene bags, dry fruit, fireworks, and kite flying equipment.

• Akbari Gate

Akbari Gate is named after Mughal emperor Akbar, and leads to the Akbari bazaar. At this gate is located Punjab's largest grain, lentil, sugar, oils and spice market, as well as the major concentration of goods transport terminals on Circular Road immediately outside it. Also on Circular Road opposite Akbari gate is situated Punjab's largest chemical market, while Brandreth road opposite is the wholesales market for hardware.

• Delhi Gate

Delhi Gate opened onto the road running between Lahore and Delhi. Opposite this is Lahore's 'Landa bazaar', a large market specialising in second-hand consumer products and the location of steel manufacturing units.

Yakki Gate

The original name of Yakki Gate was 'Zaki' after the courageous martyr saint who fell in battle while defending Lahore from the Mughal invaders. His tomb, still a popularly visited sacred site was built in front of Yakki Gate.

• Sheran Wala Gate

Sheran Wala Gate is located along the old course of the river Ravi. It was from this gate that visitors of the City would enter during the reign of Ranjit Singh, and would be greeted by his lions caged on either side of the entrance. Some also refer to this gate as the Khizri Gate, after Khizr Elias the patron saint of running water. Opposite the Sheran Wala Gate are located goods transport terminals and steel manufacturing units and the wholesale market for vehicle spare parts.

• Kashmiri Gate

The Kashmiri Gate opened onto the road that ran between Lahore and Kashmir, hence its name. Around this gate is located the famous brass market of the Walled City.

Masti Gate

The Masti Gate, like the Taxali Gate is named after the nearby landmark of the Masjid-Mariam-Makani, the mosque of the mother of Mughal emperor Akbar. The gate is situated opposite the Lahore fort and the Badami Bagh General bus stand which is Lahore's main inter-city bus terminal. The market specialises in vehicle wheel 'rims'. Opposite Masti gate is also located Punjab's largest vehicle spare parts market.

• Other well-known markets of the Walled City are the Sarafa bazaar or gold market, Lohari Mandi which is considered the oldest main market, Kashmiri bazaar which even today is famous for its woollen shawls, Landa bazaar for its second-hand clothes, Rang Mahal and Wacho Wali Bazaar specialising in leather goods, Azam cloth market in textiles, and Kaisaira bazaar in utensils.

Life Outside the Gates

Excerpt from 'Lahore: The City Within', Samina Qureshi

'As the gates were closed at night, certain teahouses, inns and shrines outside the gates became gathering places for various delights and entertainment: arts, poetry, food specialities, music. Just inside the Delhi gate close to the largest caravanserai was the hammam or bath. A grand building erected for the purpose of reviving the weary traveller; it still stands to this day, housing a school in its vaulted and domed caverns.

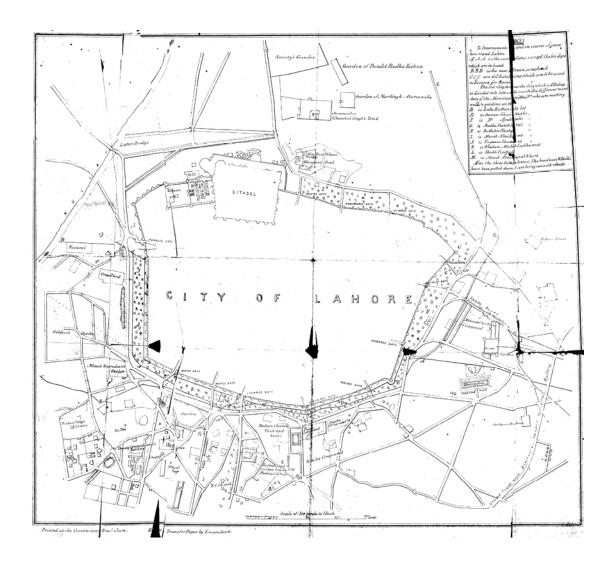
'The caravanserais and resting places outside the walls were places where travellers could find refuge after the gates to the city were closed at night, as well as finding sufficient room for the animals in the caravan. After some time, each developed a particular identity and following, and they were generally referred to as *takias* (pillows) for their warm and comforting role. Certain *takias* became known for their predilection for poetry, others for philosophical discussion or beautiful music. Whether your taste ran to wrestling matches, exotic food specialities, dancing girls, or courtesans, you could find a *takia* in the shadow of the Lahore wall to indulge you. In time, these centres of culture became identified with certain patron saints or seasonal or religious festivals, some of which continue into the present time.

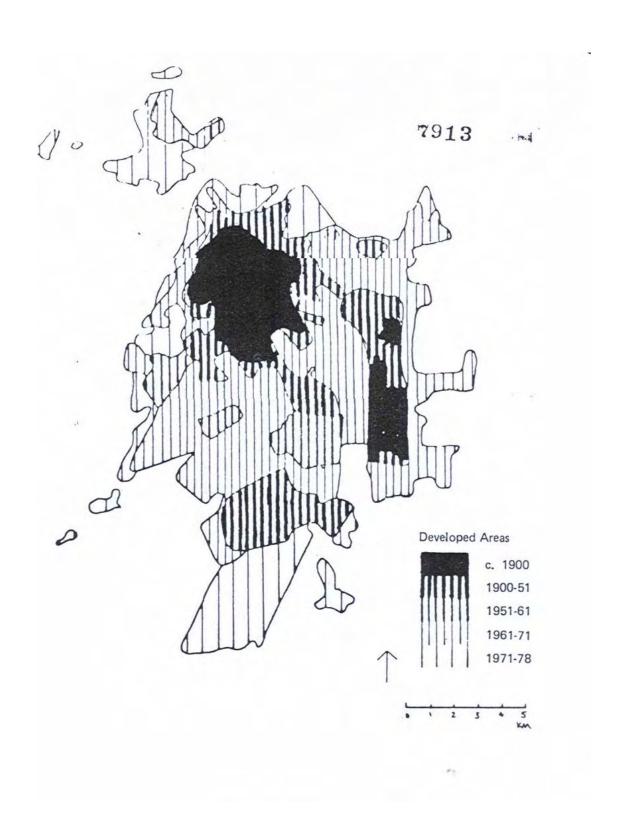
'The new city outside the wall has swept over and erased much of the traces of the old life of Lahore. Still, the wall and its venerable Gates, stand. Like all of Lahore, the Gates are saturated with the heat and dust of the centuries of life that have erupted and simmered around them. It is unthinkable that so much emotion and vitality could have been expended in this red dust for countless centuries without leaving behind some trace, some lingering electric charge or vapour. Perhaps because of that, it requires almost no effort, on a warm night when the jasmine perfume floats in wisps and the stars are like Ranjit Singh's diamonds, to call back the city as it was, in the height of its celestial splendour'.

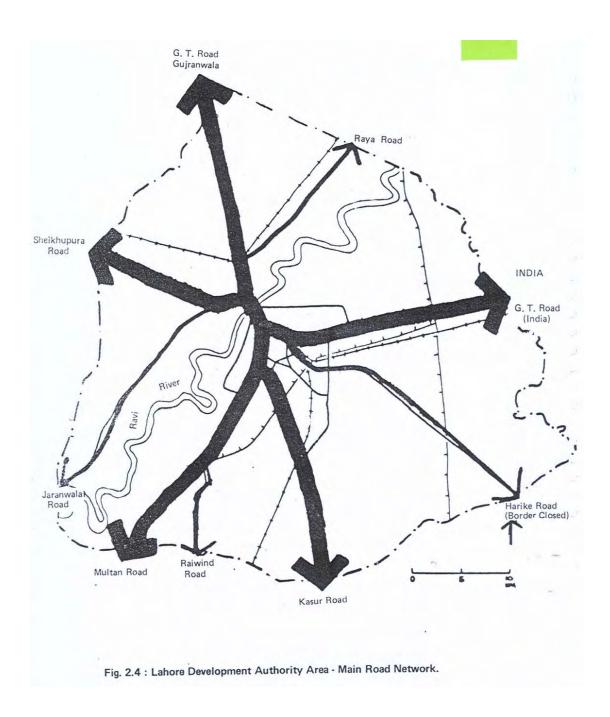
Maps

Courtesy Saleha Qureshi

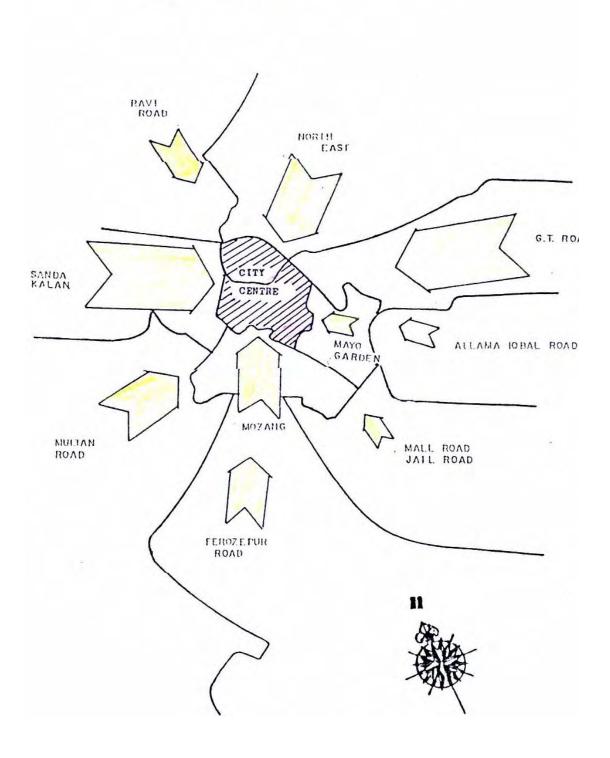
Courtesy LDA







TRAFFIC GENERATION TOWARDS CENTRAL AREA





Annex 11: Photographs

1. Workers















2. Residence







3. Shops







4. Traffic















5. Solid Waste Management

















6. Infrastructure







7. Informal Parking





8. Recreation





9. Historic Building Stock









10. Storage & Warehousing









12. New Construction



13. Social Support Systems





14. General



